



McDONALD INSTITUTE CONVERSATIONS

The Evolution of Fragility: Setting the Terms

Edited by Norman Yoffee



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Norman Yoffee, 2019

Chapter 1

Introducing the Conference: There Are No Innocent Terms

Norman Yoffee

From 2–5 December 2017, the conference on ‘the evolution of fragility’ was held at the Getty Museum, Los Angeles. I presented an introductory paper (‘The Evolution of Fragility: Towards a New History of the Ancient World’), and James Scott offered a response. During the next two-and-a-half days we – that is, eleven participants – discussed pre-circulated papers, the discussions led by a designated respondent for each paper. The sessions were recorded, and notes were taken by Aparna Kumar.¹ The chapters in this volume are the revised papers from the conference. A subsequent volume, provisionally entitled ‘The Unfolding of Fragility: New Directions in Archaeology and Ancient History,’ written by me and the members of the conference, will appear in due course.

Jan Bemmam (who discussed the fragility of early Mongolian cities²) offered an epigram for the conference: ‘there are no innocent terms’. What do we mean by ‘fragility’? and why do we use the term to bring together research into a variety of societies so that we can study both their differences and the ‘differences, which resemble each other’ (as Broodbank, citing Lévi-Stauss, has written [Broodbank 2013, 20]). Much archaeological literature and ‘social evolutionary theory’ treats the appearance of early cities and states,³ and other more-or-less complex, stratified societies as ‘integrated’ (by political or ideological means) and thus ‘stable’. Explanations for the ‘collapse’ (see Middleton 2017) of such societies assumed that this occurred when something bad happened, usually climate/environmental change (whether caused by humans or not) or because enemies overwhelmed them. In fact, many of these early cities and states represented in this volume lasted for a relatively short time (in archaeological reckoning). Others were longer-lived, struggled to overcome structural weaknesses and historical contingencies that eventually resulted in the fragmentation or a large-scale undoing of political orders.⁴

The central theme of this volume is to undermine some of the traditional themes of evolutionary narratives, namely those that naturalize the state and thus legitimize its historical claims to permanence. This, of course, was the view propagated by rulers of early states themselves as well as some scholars who seem to regard the state as having an adaptive advantage over small-scale societies. In this volume, we explore the logic of these claims about early societies. However, we do not relinquish the term ‘evolution’ to narratives of political integration which are façades hiding instability and, at times, the incoherence of state orders. Indeed, the evolution of states includes earlier systems of kinship and local authority that endure and are refocused as part of the development of cities and states.

Our case studies do not seek to elide the variability among early cities, states and civilizations (see Yoffee 2005), their specific histories and socioeconomic formations. Rather, we explore how rulers attempt to impose their goals of governance and how elites, sub-elites and a variety of community leaders tried to resist these goals. That is, we study the social infrastructures and the vulnerabilities of the new political and socio-economic systems of early cities and states, their fragile nature and the means by which rulers sought to manage their fractious infrastructures. We also consider how the collapse of some political systems did or did not lead to the regeneration of rulers and dynasties, and how new systems of political organization emerged from these collapses.

The evolution of the first cities and states, as we can measure these from settlement pattern changes in certain areas, was a demographic revolution in which people from the countryside moved into new urban centres, often quite rapidly. The countryside of these cities was then created as new villages and settlements were founded as peripheral to and dependent on the new urban centres.

That is, long-term population growth and a gradual development of increasingly larger sites don't account for the rise of the new cities. These new capitals/centres of smaller and larger territories consisted of people coming from various places with their own social organizations and beliefs and rituals and migrating to cities for defence, exchange and markets, and celebrations of the high gods. New conceptions were invented justifying why diverse people should live together, how they should settle disputes, why there should be rich and poor, and that everyone should be ruled by kings. This is the stuff of what some commentators call 'integration'. However, local organizations, ethnic groups and their leaders, and diverse cultural systems did not disappear with the appearance of rulers. In fact, the existence of a variety of local (community) organizations could (and did) become cleavage planes of resistance to the goals of the leaders. Whereas 'fragility' appears to be a widespread condition of states, we use the term as an analytic, a lens that focuses the observer's eye on the cracks and fissures that lurk under the ruler's pretensions of sovereignty (Smith 2011, 2015).

In recent archaeological literature, there are discussions of 'cooperation', 'collaboration', and 'collective action' (Halperin 2016, Jennings & Earle 2016, Blanton with Fargher 2016, Fargher & Heredia Espinoza 2016) that rightly draw our attention to 'bottom-up' aspects of early cities and states. They see that small-scale cooperative units, such as households, lineages, or neighbourhoods (Halperin, p. 285) are vital components of early cities and states. However, these discussions also contend that some early cities and states were 'held together' (Halperin) by these putatively cooperating groups – not that local groups could also resist sovereign authority. For example, some authors hold that the putative stability and integration of some early cities and states depended on consensus-making by these groups which 'constrained' the formation of 'a centralized system of government' (Jennings & Earle 2016). The literature on collective action has not included studies that delineate the nature of such collectivities or how such a society was governed by a collectivity and, in many cases of early cities and states, why such societies collapsed.

In our conference there was much discussion about how we need to break-down the notion of the 'collective actions' of non-ruling actors. We point to research, for example, about the interaction of various kinds of elites, for example, mercantile elites, political elites, religious elites, kin and ethnic-group leaders. We find that urban assemblies, community courts and judges, and wealthy landowners co-existed with kings and bureaucrats, royal courts, state military officials,

tax collectors, and various state dependents, including slaves. We also identify farmers, craftspeople, wage-labourers, corvée workers, and others who worked in state-enterprises, and who sometimes received contracts from the royal estate. Early cities and states were mixtures, as it were, of royal enterprises and those outside the absolute control of kings. Many of our authors find the widely used term 'heterarchy' useful because it calls for an examination of various hierarchies in any society and the possibility that an actor could have different roles in several such hierarchies, for example, in kin hierarchies, economic hierarchies, and political hierarchies.

Our studies attempt to discern the local rules of incorporation and the various hierarchical structures that lay outside state controls. Indeed, we find that the 'glue' holding social parts together in early cities and states was not necessarily strong. The evidence for the short(ish) duration of many of our early cities and/or states implies that such social and political integration was fragile. We also perceive instances of local conflicts, external wars, war captives as part of the social fabric, slaves, unfree labour, corvée labour, and the flight of citizens from state-imposed duties and taxation. These characteristics of oppression and dissent are found in most of the examples in this book.

In our studies we foreground the arenas of competition within early cities and states. We ask about the reasons for internal resistance to the power of kings. We speculate about the irony that the most centralized states with the most brutal kings and mighty despots are often the most fragile and subject to dismemberment and collapse. If the rulers of early cities and states seek to 'simplify' their societies (Scott 1998), that is, to regiment them for purposes of bureaucratic control and to disembed resources from local communities, the process of simplification can lead to instability and impel resistance. Resistance, of course is not always successful because resistance, like sovereignty itself, is constrained by historical understandings and cultural commitments. When states break-down, we must also study the products of break-down, why some states regenerate and why some do not.

In brief, the purpose of our conference and this volume is to re-evaluate the evolution of early cities and states. Many of our authors propose that early political systems were 'experiments' (see Wright 2006). Instability was a likely result of unprecedented amounts of population aggregation and the new rules of statehood and divine rulers who had special access to the high gods. And, in instances when instability is balanced by flexibility in the construction of political institutions, and resilience shows the innovative responses to failing experiments, we can consider how and why this

happened. We do this by studying not only political institutions but also the survival of ideological systems or, indeed, their replacement. Peter Robertshaw asks: is apparent stability (for several centuries) in some early states a result of constant adjustments and accommodations with internal and external forces? We submit that by examining the fragility of early cities and states, we provide points of entry into critical social dynamics, and we contest the notion that ancient societies were in any way social wholes. It is perhaps obvious that early cities and states were the products of emergent properties, the roles of kings and the naturalization of social and economic inequality. However, fragility is also an inherent property of early cities and states, part of the evolutionary (or just historical) past, played out in various dimensions, across many stages, and over a variety of chronological scales. Fragility is thus conceptually and empirically the subject of our chapters.

Mapping the chapters

The chapters in this volume are vademecums to their regions. They delineate aspects of fragility, how societies are constructed, and what are sources of political vulnerability which lead to resistance and how, in some instances, resistance is forestalled. The chapters in the volume are authoritative depictions of considerable research and new ideas about research. (A synthesis volume that digests data and condenses explanations and which is intended to reach a public of non-specialists will follow this on-line publication).

Here I introduce the chapters in groups. The groups are not, however, silos but beginning efforts to stimulate comparative studies. They are: (1) long-term apparent stability, including chapters on Egypt, Cambodia/Angkor, and the Indus; (2) the fragility of city-states, but which ironically are long-lived, in Mesopotamia and the Maya. In this volume, we define 'states' as the specialized political system of the larger cultural entities that we denominate as 'civilizations'. Civilizations may be made up of many states, notably city-states, or of one state. The tension between city-states and the attempt to create an overarching and culturally appropriate territorial state is evident. (3) The infrastructural fragility of ideological power in a variety of sub-Saharan African states and in the North American polities at Cahokia and Chaco. (4) Imperial fragilities in early China and the Inka.

Apparent long-term stability

Ellen Morris discusses fragility and 'the art of not collapsing' in Old Kingdom Egypt, a state that persisted for nearly 800 years. Whereas there were many instances of management failure, corruption, graft,

local resentment and resistance to royal power, and constraints on the actions of kings through Egyptian concepts of proper action (*ma'at*), there were also strategies employed to mitigate social and economic problems. Changes in dynasties can be correlated with overt strategies to overcome these problems. Underlying these strategies, furthermore, was the 'exceptional' physical situation of the Egyptian state: the Nile provided 'soil that could not be more fertile' as well as the transportation link that connected regions and various resources. Egypt was also 'exceptional' in being located in a relatively narrow river valley bordered by significant deserts. Not only were invasions from the periphery of Egypt unlikely, but both efficient governments and local communities could be engaged for mutual benefit. Of course, the Old Kingdom state did end, and new strategies of negotiation within Egyptian cultural norms were born in the regeneration of a new Egyptian state. If in the Old Kingdom state there were aspects of fragile social and political relations, there were also norms and institutions of flexibility and a cultural commitment with attendant historical understandings.

Miriam Stark finds an inherent fragility in the Angkorian state in Cambodia which flourished for about 600 years. This state was largely rural with a megalopolis capital in which kings lived, central temples were located, and where ceremonies, parades, and spectacles took place. (These spectacles are characteristic of many early states; see Baines 2015 for an Egyptian example). However, rulers were also dependent on their subjects for rice and other subsistence goods and labour. The state was held together in a Hinduized 'cosmopolis', and kings were tied to priestly elites in Angkor and to local temples in the countryside. Whereas the collapse of Angkor (as centre of a large state, but not as an urban centre) has been variously ascribed to failure of an enormous hydraulic regime and also to the defeat of the city by Thai forces in 1431, Stark also points to the disequilibrating factors of the sponsorship of Buddhism by a late Angkorian king and the failure of the always fragile ability of the royal court to negotiate with the local powers in the countryside. Stark shows that these local social systems survived the disintegration of central authority.

These two chapters both emphasize the continuous adjustments and negotiations within the inner elite (Baines & Yoffee 1998, 2000, 2018) and between the rulers and local systems of organization. The study of fault lines and cleavage planes in the two regions differed significantly, just as the environments, agricultural regimes, nature of belief systems, social systems, and histories are also different. Nevertheless, it is the study of 'fragilities', rather than posited 'successful'

mechanisms of rule that can lead to understanding of political and social change. George Cowgill and I (1988, viii) wrote ‘societies in trouble may often reveal more about what is really vital for their operation than societies in reasonably good shape.’ Now, at the distance of some 30 years, it seems that ‘societies in reasonably good shape’ may well be rarities and chimeras.

Another instance of a relatively long-lived political and cultural system is the Indus civilization, whose half-dozen cities lasted around 700 years. Cameron Petrie uses the term ‘civilization’ because, unlike Egypt or Angkor, the Indus civilization consisted in a number of city-states, politically independent from one another, but with a common material culture inventory and presumably cultural system. The common material data include painted pottery, seals and script, weights, bangles, and beads. The small number of cities in the large territory of the Indus civilization leads Petrie to describe the settlement pattern and demographic character as ‘mostly rural’. Indeed, our knowledge of the rural nature of the Indus civilization is largely due to Petrie’s recent research. Petrie finds significant similarities in the better-known Indus cities, Mohenjo Daro and Harappa. In the former, Petrie reviews arguments of elite residences (palaces according to Vidale 2010) and aspects of planning as well as organic growth. In Harappa, Mark Kenoyer’s research (1997) identifies local, rival communities within the site. The fragility of the Indus cities lies in the ‘predictable unpredictability’ (as coined by Naomi Miller) of the South Asia environment, the increasing reluctance of the rural countryside to support cities, and the intra-urban rivalries among local leaders. The Indus cities, that Petrie describes as ‘experiments’, were abandoned while, as in the Angkor case, rural life was ‘embraced’ without the demands of supporting the cities.

The fragility of city-states in the desert and in the jungle

The political scene in Mesoamerica, particularly in the Maya region, and in early Mesopotamia was dominated by city-states. In Mesopotamia, Andrea Seri and I discuss the fragility of territorial states and the resistance of the city-states to be governed by a powerful king from one of the city-states. Although there was a belief that Mesopotamia should be governed by a single city-state, the reality was that this was impossible. War was the enduring condition in Mesopotamia: there was hardly a year from c. 3000 to 1500 when there was no war. Guillermo Algaze (2018) has considered disease vectors in Mesopotamian cities. Morbidity and mortality in cities and the demands (such as corvée labour) on people led to serial in-migrations

of ‘foreigners’ into Mesopotamia. Within city-states various corporate groups existed, kin-groups, elite mercantilists, temple and palace dependents. Community assemblies decided trouble-cases in courts in which royal authority was notably absent. Constant negotiations and adjustments were in play in order to support any king or dynasty which was normally far from stable. Nevertheless, Mesopotamian cities were long-lived, some for more than two millennia, enduring the vicissitudes of conquests and attempted incorporation into territorial states.

In Mesoamerica, Patricia McAnany discusses urban ‘experiments’. In a dramatic episode the largest city of all, Teotihuacan, which flourished from around 200 BC to AD 550, crumbled. There was not a competitor in sight who could have been responsible for the massive burning of the ceremonial district of Teotihuacan. McAnany supports the view that it was internal resistance to rulers that led to end of the regional dominance of Teotihuacan.

McAnany notes significant differences between the northern and southern Maya regions. As in Mesopotamia, there was competition among cities in the Classic period to establish large, territorial states, but those states that managed to effect a regional hegemony were successfully resisted. As in Mesopotamia, alliances among urban rulers were also unstable. It is striking that new evidence of markets, traders, and crafts people characterizes the diverse nature of Maya cities. The role of kings, especially in the south, was to intercede with the gods and to create ‘monumental time’ as a charter of rulership. This appears to have enhanced fragility and diminished long-term sustainability of cities. Increasingly, kings were reliant on rural agricultural production and labour in the Late Classic when everything was peaking (population, monument dedications, conflict). Kings and their courts abandoned untenable positions, moving to other cities where new conflicts inevitably ensued. In the northern region, cities and their kings were able to adapt to regional instability by changing overarching ideological justifications for their power and to live within increasingly important mercantile structures and among newly wealthy elites.

The infrastructural fragility of ideological power

In the previous sections, our conference considered the apparent stability of political and urban systems, the negotiations and transformations that resulted in kings and cities persisting for centuries. In some cases, urban experiments resulted in abandonments while the resilience of a rural countryside survived politicicide. The research into fragility was not to find a single form of vulnerability of political power or

resistance to the goals of leaders, but to examine the structure of governance and the social infrastructure that rulers sought to simplify and control.

In the examples briefly described in this section, I report on the conference's discussions about fragility in parts of the world in which political systems developed precociously, how societies were transformed by these political systems, and which by any estimation are significant examples of new forms of stratification. The appearance of new socio-political and economic institutions requires explorations into the fragility of these polities.

Peter Robertshaw reports on polities in sub-Saharan Africa, three examples of many states in Africa (see his map of such states). One case is Great Zimbabwe, a territorial state that lasted two centuries, whose monumental capital included a population of around 2000 people. The region included numerous 'peer-polities' and short-lived peripatetic 'capitals'. Nevertheless, the importance of the site in the memory of the region's people and its monumentality are why this ancient capital was chosen to give its name to the modern country of Zimbabwe. Swahili city-states, bound into an Indian Ocean trading network and competing within an Islamic sphere of merchants and clerics, were also embedded in the local system of trade and kinship networks. Kings negotiated with fellow kings and with their own councils of elders. Bunyoro (or Nyoro) states were led by kings who sought to construct multi-clan polities based in part on their claims to healing power. Common to these polities was a struggle to accumulate wealth in followers. These potential subjects constituted at times a 'disgruntled peasantry', and would-be leaders appealed to 'alternate' ideological powers, spirit-mediums, and tried to link into traditional forms of ancestor veneration. These examples are complex and the three regions and their histories are not identical. In all of them, however, Robertshaw notes the resilience of 'the system', that is, local forms of authority and organization, which could be and often were restraints on the various forms of overarching political power.

Whereas Robertshaw could employ archaeological, historical, and ethnographic information for his study of sub-Saharan African states, Tim Pauketat's chapter is based on archaeological evidence, with reference also to oral histories. The data for the rise and abandonment of Cahokia in the American middle west and of Chaco Canyon in the Southwest are impressive. Cahokia was born in a 'big bang' explosion around AD 1050, whereas the Chaco Canyon 'phenomenon' appeared in the late AD 800s (and underwent a major expansion c. 1040). Both arose from modest settlements in their regions; their resulting size was unprecedented.

A native in these areas would have been awed by the major constructions in these places. Cahokia was then effectively abandoned by AD 1250; Chaco was similarly abandoned by AD 1150. In both cases, explosive growth could not be sustained.

The two cases, however, were significantly different. Cahokia was a city, with several major neighbourhoods (including Cahokia itself, St. Louis mounds, and East St. Louis mounds), with a regional population estimated from 40,000 to 50,000 people. Chaco had relatively few permanent residents, perhaps 2000–3000, but was the centre of the 'four corners' area of the American Southwest. In the summer, many 'pilgrims' came to Chaco, and distant Chacoan 'outliers' were connected to Chaco in material culture, by actual and ceremonial roadways, and through a common belief system. Both Chaco and Cahokia were major centres in their regions and influenced far-flung settlements.

According to Pauketat, Cahokia was the scene of much immigration of various people in its region. And, Chaco was also the centre of belief of distant people who were connected to Chaco. In both places leaders were vested in ritual power. Processions of people came to Chaco to celebrate rituals seasonally; in Cahokia Monks Mound was the centre of ritual activities (which also took place in other mounds). Pauketat writes that neither place was sufficiently 'inscribed' in its landscape. In oral histories of Chaco, the place was abandoned by the gods who were displeased by the hubris of its leaders. In Cahokia, the attempted 'integration' by ritual leaders could not succeed in holding together the numerous constellations of people and the social orientations of its many inhabitants.

Imperial fragilities

At 1200 BC the largest city in the world was Anyang, the last capital of the Shang dynasty. It covered roughly 30 sq. km and is estimated to have had 200,000 inhabitants. It lasted less than two centuries. Across the globe from China, the largest pre-modern empire in world history was the Inka empire in South America. It lasted less than a century (AD 1425–1515). These two cases, early Chinese cities of the second millennium BC and the Inka empire, require investigations of their fragility.

The popular conceptions about the Inka – that the empire provided benefits to its far-flung subjects through economic integration and by a bureaucracy whose accounting practices through knotted-strings were as sophisticated as any writing system; and that the 'insatiable appetite' for expansion was curbed only by an armed but modest Spanish expeditionary force – are contested by Tom Dillehay and Steven Wernke. The Inka empire was pre-assembled by the

Chimor, whom the Inka conquered. The royal succession was marked by corruption, crises, and regicide. Although the empire provided material and services to conquered peoples, the far-flung network of roads and infrastructural facilities often left constituent local authorities, in ayllus, with practical control of their everyday lives. The struggle to ‘mediate’ the reciprocal obligations of the state, including provisioning of ancestors, was fraught with vulnerabilities of supply and demand and ‘little cohesion’ over large distances. Spanish invaders found the Inka empire enmeshed in a succession crisis and on the brink of civil war. The empire was already in its death throes.

A few years ago the Longshan culture of central and northern China, in roughly the third millennium BC, was described as ‘Neolithic’. Now, as Li Min reports, cities like Taosi flourished in the late Longshan, and earlier cities like Liangzhu also flourished. The great cities of the second millennium, Erlitou, Zhengzhou, and Anyang are only some of the cities now being studied in this time period. As Li Min makes clear, however, large cities, powerful and brutal kings, vast palatial areas, extensive craft industries, and ‘giant conglomerates of residential communities’ which were migrants into the new mega-sites were not commensurate with stable regimes. There was factional competition at court, and even the mighty kings of the late Shang period were travelling men, their hegemony over territory, and their capture of massive numbers of people were dependent on their yearly campaigns to put down revolts. None of the great cities lasted more than a couple of centuries before they were abandoned. This new research on the spectacular early cities and states in China is matched by the important studies of their fragility.

The challenges of fragility

In this introduction with its bowdlerizations of detailed and complex chapters, I only intend to advertise the data-rich contributions and authoritative analyses of the participants of this conference. What brings the chapters together and makes this book more than a series of excellent studies is the goal of understanding how early cities and states struggled to survive and often did not. The volume represents a new agenda in research, the attempt not only to get beneath the structure of the ruling stratum, but also to recognize the institutional strands of resistance to central power in early states. Whereas many studies have been written about ‘the evolution of complexity’, that is, the rise of states and political hierarchization, new research must consider ‘the evolution of fragility’. Traditional studies have sought to understand how states arose

and how political leaders sought to ‘integrate’ their societies. In short, many scholars have sought to identify ancient states and to understand what states do. The chapters in this volume, while not ignoring such questions, now seek to identify what states do not and cannot do.

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Notes

- 1 Aparna Kumar, PhD candidate in art history at UCLA, was my research assistant during my autumn residency at the Getty Museum.
- 2 Jan Bemann could not contribute a chapter in this volume.
- 3 That is, 'early' in their regions.
- 4 I thank Adam Smith (Cornell University) for his perceptive critique of the first draft of this chapter. I have clarified my text and have shamelessly adopted many of his locutions. I am also grateful to Pete Robertshaw and Vernon Scarborough for their advice on this introduction.

Chapter 2

Fragility of Vulnerable Social Institutions in Andean States

Tom D. Dillehay & Steven A. Wernke

State institutions are of enduring anthropological interest not only for their novel means of formalizing inequality and hierarchical decision-making, but for how they draw upon and reveal forms of cultural rationality which underlie social and economic projects, which in turn give rise to apparatuses of governmentality (*sensu* Foucault) and to wider principles of societal organization. Institutionalized political structure and policy, religion, long-distance trade and exchange, and so forth can be considered a mixture of hegemonic cultural norms, social rationality, administrative techniques, and material systems. Accordingly, our interests in this presentation are not in institutions per se but in what they tell us about the organization, practice, success, and failure of ancient state societies, in this study the Andean region. As socio-cultural forms, states shape the nature of social networks and the pace, capacity, temporality, and direction of their movements, as well as their vulnerabilities, which can under certain conjunctures lead to fragility and breakdown.

The term institution commonly applies to both informal institutions such as customs, or behaviour patterns important to a society, and to particular formal institutions such as administration and bureaucracy, codified religions, and the military. Institutions are constructed networks that facilitate the flow of goods, people, and ideas and allow for their exchange over time and space. Thus, they comprise the primary social and administrative architecture for circulation, literally providing the parameters for the kinds of subjects best suited for rule, thus undergirding subject formation. In this sense, they generate the power-laden ambient environment of everyday life in rural and urban areas of state-ordered societies. When both urban and rural communities rely heavily on state institutions for services, wide-scale vulnerability and breakdown can often leave these communities fragile, especially for

the non-elites within them (Scott 1998). Governmental institutions also can reify and reproduce existing power inequalities by serving only those who fulfil certain requirements, thus perpetuating existing patterns of social status, gender, race, and ethnicity. Together these processes conspire to lend the apparatuses of governmentality an air of naturalness and permanence, despite their objective constructedness and ephemerality when considered within the full sweep of the human story. Much theorizing in anthropological archaeology is dedicated to how this might be. However, the very framing of the problem as the emergence or 'rise' of complex hierarchical societies elides exploration of other forms of complexity (a point made by Carole Crumley long ago [1974]) and predisposes the observer to narratives of how institutions form in the face of various sociocultural and natural impedances and inertias. In short, archaeological theories of social complexity have underplayed the vulnerability and fragility of apparatuses of governmentality *in general*.

In this chapter, we address institutional vulnerabilities of Andean states, especially in procedures of ruler succession and in the symmetrically partitioned and hierarchically nested political organization within urban and rural settings in the states of Chimor and Inka (~AD 1200–1515; Figs. 2.1–2.2).¹ These preconditions of *vulnerability* led to some successes but ultimately to structural *fragility* within these states and to their demise. We also examine the administrative difficulties that Spanish colonial authorities had in adapting their institutions to these indigenous procedures and organizations.

In this paper, we see 'vulnerability' and 'fragility' as serially related processes. 'Vulnerability' is a precursor to fragility, entailing the relative susceptibility of the ideological, political, economic, or military apparatuses of the state to physical trauma (e.g., earthquakes, floods) and social stress (e.g., war,

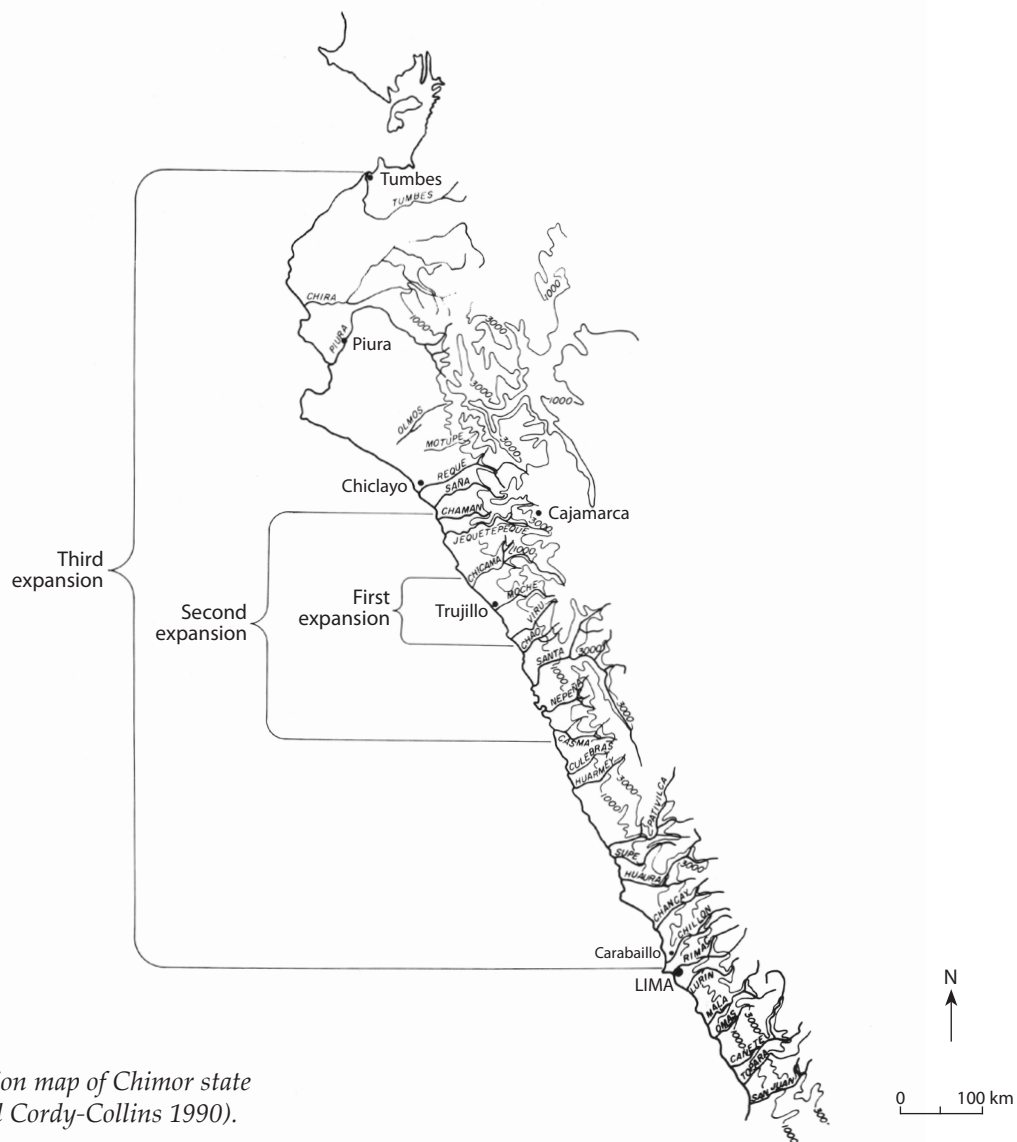


Figure 2.1. Location map of Chimor state (after Moseley and Cordy-Collins 1990).

famine, class conflict).² Vulnerability is thus a necessary but insufficient precondition for fragility. Fragility in turn refers to weakened, disintegrating, or collapsing state apparatuses. That is, before a state becomes fragile, there first must be social and/or environmental conditions of vulnerability that potentially foster its demise. Fragility comes about, to borrow from Sahlin (Sahlins 1981, 2004), as a consequence of a 'structure of the conjuncture': of the interaction of events on the vulnerabilities of a state. Fragility is conditioned by vulnerability (see also Sewell 2005). We thus envision vulnerability and fragility as two different but potentially sequential and recursively reinforcing processes. As discussed below in regard to the Inka, social institutions within the state, such as procedures of ruler succession, were inherently vulnerable to

corruption, manipulation, and coercion, which either led to socially durable and beneficial political outcomes or to ineffective and fragile decision-making and corruption. Furthermore, while the environment may be susceptible to certain types of physical stress, such as excessive flooding during an El Niño year in northern Peru, in the long run inundated land is very beneficial, renourishing soils and increasing agricultural production for decades. Both the vulnerability and especially the fragility of states can have oscillating trajectories that determine the transient, often short-lived, nature of successful or failed states. However, neither vulnerability nor fragility necessarily implies imminent failure and collapse of the state and, in some cases, these conditions can lead to a more effective and efficient political apparatus.

We specifically consider the strengths and weaknesses in procedures of political succession of Chimor and Inka lords from one generation to another and the cleavages inherent in the partitioned and hierarchically arranged nature of Andean social structure. These procedures and structures are viewed as the vulnerable pre-conditions, which when not managed effectively by state systems, fostered fragile social and economic institutions that eventually failed and collapsed. As Andean states generally had a dual role, namely providing security and order for their citizens (internal role) and serving as the building blocks of a functional economic system (external role), state fragility would not only have affected the members of the state and communities in question, but also neighbouring polities

and the wider society at large (La Lone 1982; Kolata 1986). In the case of the Chimor and Inka, fragility was where their central administrative apparatuses did not exert effective control over their own territories or were unable or unwilling to assure the provision of vital services to significant parts of their territories in times of stress, and where legitimacy of their political organizations were questioned or rejected by intermediate- and lower-level social sectors. It should be noted that although the fall of both states was due to conquest by outsiders (Chimor by the Inka and the Inka by the Spanish), the historical and archaeological evidence indicate that it was the weakened or vulnerable internal orders of both, combined with major assistance by autochthonous rivals that fostered their fall.

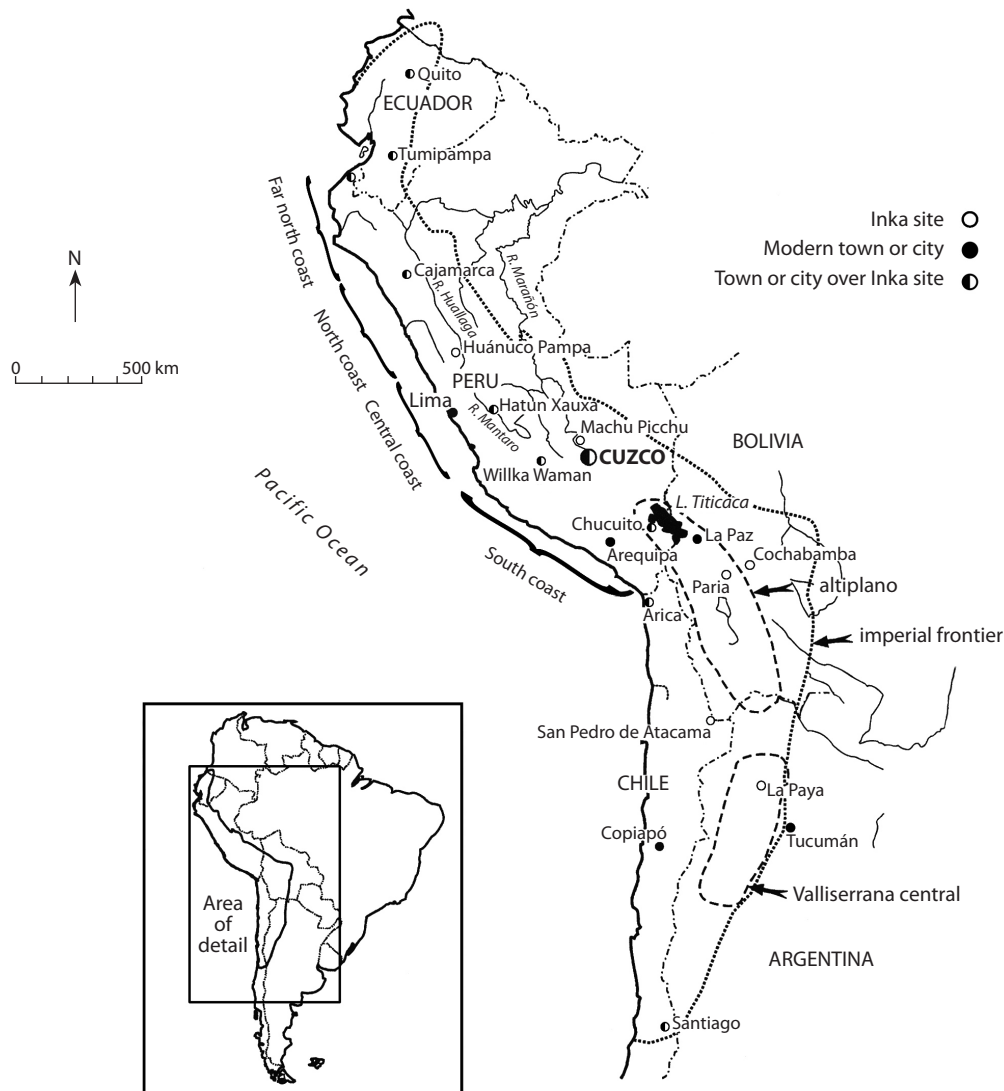


Figure 2.2. Location map of Inka empire (after D'Altroy 2003).

Lastly, in this paper, we do not consider climate anomalies and other processes of environmental change of natural and anthropogenic origin that often severely disrupted Andean societies throughout history (e.g., tsunamis, El Niño floods, earthquakes, droughts). It is well-documented that these processes occurred serially and generated potentially catastrophic changes in the landscape, as well as induced transformations in the social and demographic organization of regional populations. It has been argued previously that innovations in production strategies and economic infrastructures in these societies reflect differential historical social responses to both transient and protracted environmental change (Dillehay and Kolata 2004). There also are many cases in the Andes whereby local communities were only slightly or rarely impacted by environmental stress, thus indicating the differential and intermittent role of physical stress in the survivability of these societies.

Vulnerability and the fragile state

There has been some scholarly debate regarding definitions, terminology and the characteristics of 'successful', 'weak', 'fragile', 'failing', 'failed' and 'collapsed' states (e.g., Boas and Jennings 2007; Chesterman et al. 2005; Rothberg 2004). To say that a state succeeded or failed or collapsed is a normative judgment that is only meaningful in comparison to something else; in the Andes, that something else has most often been Western, successfully expansionistic, centralized states and/or city-states (e.g., Mesopotamian, Greek, and Roman polities) (see MacCormack 2007). People administered by these polities were transformed into subjects by the work of state institutions such as ideological premises, labour projects, religious events, armies, and so forth. Yet, although these states provided for (internal) order, protection, security and conflict management, they also amassed means of violence, control and coercion on a large scale. Thus, they potentially contributed to vulnerability, insecurity, and fragility within their own societal realm.

In the Andes, there is no secure historical or archaeological evidence to suggest unitary rule and that people within any early states had a single ethnic identity (Janusek 2008; Schreiber 1992). Also, none of these states appeared to have shared a common language or even a unitary pan-Andean culture. And from the viewpoint of the ethnic peoples incorporated within them, this process seemingly brought with it significant costs in social, economic, and political terms. Andean scholars have not always recognized this latter point. The state-centred literature in the Andes has been so concerned with emphasizing the benefits of states,

especially for elites, their elaborate infrastructures (e.g., temples, palaces), their great ecological reach and means of economic integration, and their expansionistic tendencies that the other side of the account has gone almost unnoticed (c.f., Isbell 2008; Kolata 2015). Historically, some of this problem lies with the 'exceptional' place of Andean civilization within the archaeological literature. John Murra, dean of Andean studies, was concerned primarily with differentiating the nonmarket, redistributive, and adaptive aspects of Andean states from capitalist or mercantilist states, rather than the diversity of forms and the inequalities that they produced (see Van Buren 1996). Yet, the social costs of state development often included the sacrifice of local ethnic identities and structures that were inimical to the hierarchies of control that states sought to impose. Furthermore, both early and late Andean states appear to have lacked roots in their recipient societies (e.g. Chimor), particularly in places where there was no unitary form of rule or pre-existing centralized government. In short, Andeanists have tended to uncritically assume that state institutions were always accompanied by the development of economic, political, social and cultural structures and capacities that provided the basis and framework for an efficiently functioning political order in the course of the evolution of the state, at least up to the point of its demise or collapse.

We argue here that the conventional perception of Andean states as *successfully expansionistic* is too short-sighted and does not adequately consider the short-lived, weaker, failed and transient aspects of these polities which led to their eventual demise. As a result, environmental or climatic factors often come in as a *deus ex machina* in narratives of the rise and fall of Andean states. As noted above, the discourse on Andean states and state development is traditionally founded upon criteria of Old World states, that is, highly centralized formal organizations with absolute rulers, great art styles, clear distinctions between elites and commoners (e.g., Moseley 1992). Yet this form of state probably never existed in Andean reality. Rather than thinking in terms of successfully built and thriving expansionistic states it might be theoretically and practically more fruitful to think in terms of different types of polities, including weak, fragile and successful ones, as well as states with *mediated* political orders derived from various local and state-wide institutions, including both high- and low-ranking rulers, intertwined urban and rural areas (D'Altroy 1992; Janusek 2002; Schreiber 1992; Wernke 2006), and often with many different cooperative and competitive socio-economic strategies operating within them (Dillehay 1976). (We use the term *mediated* to encompass a variety of local and non-state

forms of order and governance on the traditional kinship side, to focus on a combination of elements that stemmed from different societal sources which followed different logics, yet all fundamentally Andean in origin, and to affirm that these spheres did not exist in isolation from each other, but permeated and generally complemented each other and, consequently, gave rise to different and political orders.) We also argue that Andean states (including early and late ones) should be conceptualized along a continuum of successfully emerging and expanding polities to declining state performances or, from a different perspective, from initially successful expansionistic states to weak states through failing states to failed and finally collapsed ones. As discussed later, we believe that higher-ranking sectors and procedures of political succession in Andean states produced some conditions of vulnerability that often led to social and political fragility as opposed to intermediate- and lower-ranking sectors that managed certain degrees of social and economic independence which allowed them to survive and to sustain themselves after turmoil and political demise.

Instead of adopting a narrow state-centric view, which has and still is currently guiding most theorization of the state in the Andes, we therefore suggest going beyond it and trying to comprehend the context of what may have constituted a wide range of sociopolitical orders. As a first step, it must be acknowledged that speaking of 'vulnerable' conditions and 'fragile' states implies that, comparably speaking, there were other actor states on the stage that were strong or stronger in relation to a weak or failing state. That is, the 'state' was only one actor among others, and a 'centralized state order' may only have been one of a number of orders claiming to provide security, frameworks for conflict regulation, and ideological, social and economic services. (As an example, the Inka state initially competed with the Chanka, Chinchu, Chimor and other provincial actors, which represented various types of expanding, weakened, and failing polities.) In such cases, although state institutions and high-ranking rulers may have *claimed* absolute authority within the boundaries of a given territory, in large parts of the territory only outposts of the state existed. This is certainly the case for the short-lived Inka empire (less than a century), as revealed by scattered newly constructed 'compulsory' towns and cities (Morris 1972), Inka *tambos* (way stations), road and canal networks, and other infrastructures in a vast, highly differential Andean environment that often was to a large extent stateless. In fact, the archaeological record suggests that no Andean state ever really permeated its entire rural territories and extended its effective control to the whole of its society. Statelessness or weak state

representation in these territories, however, does not mean anarchy or total independence, nor does it imply the absence of state institutions. In many places, traditional non-state institutions of governance that had existed prior to the era of the Chimor and Inka states, for instance, may have survived the onslaught of imperialist expansionary strategies from these larger societies. Although these institutions were probably subjected to considerable change and must have adapted to new circumstances, they also appear to have shown remarkable resilience. Customary law, traditional social structures, and local authorities (such as community rulers or *kurakas*, traders, religious leaders, etc.) most likely determined the everyday social reality of large parts of the population, particularly in intermediate- and lower-ranking rural and remote peripheral areas. Thus, while a direct command could be given from the highest political level, it was only an order. For it to be accepted and executed, it had to have been discussed, negotiated, and agreed upon by all intermediate- and lower-ranking levels. Issuing a command and then having it executed were two different yet not always compatible practices. Many of these polities seemed to have developed and demised as a result of continuous trial-and-error.

Mediated political orders: succession and partition

The Inka state was excessively expansionistic (Fig. 2.2). The motives for its sustained aggressiveness are not well understood but we can surmise from historical documents that the first conquest of neighbouring ethnic groups could have been undertaken for vengeance and a desire to consolidate their geo-political position in the Cuzco region (e.g., Cieza de Leon 1984; Cobo 1979). As the power and wealth of the Inka lords and royal kin groups increased, there seems to have developed an insatiable appetite for more, and each new conquest enriched the state and added to the glory of the ruling elite. The royal Inka of Cuzco by privilege grew up in an hereditary aristocracy, exempt from a labour tax, and being polygamous, they increased rapidly. The structure and expansion of the ruling elite were thus in an unbalanced condition, which required expansion in order to maintain stability.

The Inka state had two other inherent weaknesses. One was there was no fixed method by which the ruling lord designated his successor, and any of his sons by his principle wife could be chosen. The other weakness was excessive centralization in the empire. Every official was responsible to the one above him and so up to the highest lord himself, but there was little or no cohesion between those of the same grade, and lords at the highest levels increasingly lost power

and authority as they descended into the intermediate and lower ruling levels. It was a strictly structured hierarchical pyramid, but one weakly built, and when stressed, as it was at the time of the Spanish conquest, it crumbled rapidly.

More specifically, Spanish written records indicate that Inka royal successions were intense and vulnerable occasions that often led to internal strife and bloodshed between powerful families and to political scheming and ideological manipulation by some rulers in order to assure that their chosen sons and supporters gained key positions of wealth and authority (c.f., Cabello Balboa [1586] 1951; Murra 1958; Rostworowski 1961, 1988, 1990; Netherly 1990; Ramirez 1986; D'Altroy 2001). Written records show that the Inka ruling elite treated eldest sons as legitimate candidates to the throne or as bastard sons, depending on the politics of the moment. Regardless of birth order, the son chosen to lead usually was the one most capable of continuing the policies of his ruling father. If a son showed that he was incapable or disobedient, another son replaced him, which often led to several brothers ruling in succession. Clearly, within the Inka state, procedures of royal succession advantaged those who manipulated the situation to their own benefit.

Among the Inka, criteria for succession of rule were both ascribed (consanguinity) and achieved (assessment of fitness for rule), and decisions regarding succession were not under the exclusive purview of the Inka ruler. The nobility of royal descent groups and the ruler's wives both held considerable influence and perhaps outright approval authority regarding the fitness of a successor. The royal insignia – the *maskapaycha* (the tasselled headdress of the ruler) – could be bestowed to a successor by the nobility without consent of the reigning emperor. In part because of these ambiguities, the chronicles are rife with tales of factionalism, succession crises and regicide among the Inka elite (Covey 2006:191–4). Prior to the Spanish invasion, the Inka had never faced a serious outside threat (indeed, all Inka militarism was *offensive* in nature), and the apex of the state apparatus had reconstituted itself several times prior to the Spanish invasion. It was only through the conjuncture of the Spanish invasion during a time of a succession crisis that this vulnerability came to manifest as an acute fragility and the swift decapitation of the state apparatus. That is to say, such conflict – a vulnerability of the apparatus of governmentality – was a feature, not a bug, in Inka courtly politics. Thus, as pointed out by Covey, 'We cannot consider Pizarro to have merely euthanized an empire that was already in its death throes' (2006:194). In short, among the Inka, factional competition implied that successful candidates obtained the throne through

political intrigue, coup, assassination, and even war (Platt 1975; Duviols 1979; Zuidema 1990). Given that the earlier Chimor state had a similar system of succession (Netherly 1990), it is likely that its political system also was equally vulnerable and potentially fragile.

During the colonial period, Spanish administrators often had serious problems with succession to the Inka crown, which did not adhere to the idea of primogeniture and thus no legitimate genealogical successor. Being accustomed to primogeniture, the Spanish were puzzled by Inka succession to power. This often led to local *kuraka* leaders exploiting the situation by playing Spanish and Inka administrative policies against each other according to the circumstances at hand. Most confusing was when younger sons would be given rule, which produced numerous difficult court battles over land and other resource claims, some of which were never resolved by the Spanish.

Inka and other Andean political systems also were vulnerable to internal conflict and incapacity in administrative decision-making due to several layers of ranking or social divisions within the social structure of local communities. Traditionally, communities were organized by at least one *ayllu* (ancestor-based corporate descent group), the most widespread kin group in Andean society, which usually contained with several lineages and hundreds of households. These communities were generally characterized by economic self-sufficiency, an asymmetrical hierarchical moiety of upper (*hanan*) and lower (*hunan*) divisions segmented into additional sub-moieties and other partitions, relatively equal gender relations, and socio-economic reciprocity. Status and rank within *ayllu* lineages and sub-lineages could differ significantly, depending on ancestry, economic holdings, and individual leaders, sometimes making decision-making and alliance-formation unpredictable and complicated. Nonetheless, as local participants within the state, *ayllus* carried out core functions on-the-ground that the state apparatus heavily depended on, especially during times of expansion.

It appears that Inka imperial policies promoting centralized and bureaucratized administration (through decimal administration, a growing network of imperial centres, shrines, and state farms, as well as a growing class of attached retainers and craft specialists) were on the rise near the end of the empire but were truncated by the Spanish invasion. Nonetheless, Tawantinsuyu is best described as a vast *fractal* political landscape, made up in the first instance by its constituent ethnic polities (arranged as described above), each conceived as an assemblage of people, things, and places that were regulated by relations of reciprocal obligation – the circulation of energy (read: labour)

and matter – between humans and their ancestors. Ancestors mediated the productive and destructive forces of the world. Thus, as humans cared for their ancestors through offerings, rituals, incantations, and the like, so the ancestors would in turn care for them through plentiful water, bountiful harvests, and so on. At the apex of each polity was a tutelary ancestral *huaca* (landscape deity), to whom all in the polity traced descent. The paramount lord (*kuraka*) of each claimed privileged genealogical descent from the paramount *huaca*. Thus, subjects likewise owed tribute to the *kuraka* as the embodiment of ancestral magnanimity. As a fractal political landscape, these structural properties and principles repeated down to the level of individual lineage-like arrangements (*ayllus*) and their respective *huacas* and *kurakas*.

The Inka represented himself and the body politic of Tawantinsuyu as merely a natural extension of these properties and principles (see Fig. 2.3). The conceit of Inka imperialism, then, was to naturalize obligation – i.e., labour tribute extraction – by likening the relationship between subject communities and the state to *ayllu* kin relations and their obligations. Indeed, the Inka claimed ancestry to all Andean ethnic polities. The root metaphor of obligation was feeding and being fed – as the patrimonial ancestors fed their *ayllu* descendants, so they were obliged to feed them in return (Mannheim and Salas Carreño 2014; Salomon 1986; Silverblatt 1988). Since the pioneering work of the late Craig Morris (Morris 1982; Morris and Thompson 1985; Morris 2013), we have come to appreciate the theatricality of Inka imperial centres and other installations – with their massive public plazas and ceremonial platforms – as a means for the production and naturalization of obligation through pageantry, and especially, commensal ritual (Coben 2006; Dillehay 2003; Moore 1996; Wernke 2013).

This arrangement facilitated an essential political legibility by which the Inka could claim legitimate rule, but it smuggled along with it inherent imperial vulnerabilities. First, it did not supplant obligations among subjects and their *kurakas* and *huacas*, nor their essential loyalty and intercessions to them. It instead produced partitioned loyalties through each fractal level, and partitioned political economies, as significant labour and resources continued to flow to *kurakas* and *huacas* qua ancestors. Such allegiances and exchanges of matter and energy thus put caps on the kinds and quantities of extractive demands the emperor could make. Second, given the reciprocal logic inherent to the relationship between subject and Inka, tribute rendered produced the necessary corollary expectation that the Inka was obliged to *return the gift*. Effectiveness and justness of rule was largely adduced on these terms.

Seen in this light, the vulnerabilities of the system become more readily apparent. But these logics and dynamics of Inka expansionism are most often cited as part of the unique genius of Inka statecraft – they feature as explanations for how the Inka empire came to expand over such a vast and diverse political and ecological landscape over such a time in the state-centric literature. That is, expansion moved by leaps and bounds as the machinery of the state (via ceremonialism, clientelism, and to a lesser extent coercion and violence) imbricated these large ethno-political blocs into an imperial fractal landscape. However, as we see, the production of authority in this arrangement depended on something like its antithesis: the communitarian ethos of kinship, of community (Silverblatt 1988). Put simply, the emergent system facilitated rapid expansion (clearly a feature of Inka imperialism), but it also created profoundly divided loyalties, limited extractive capabilities, and high expenses. With few levers to oblige more tribute from incorporated populations, further expansion was perhaps the best option. The apparent ‘strength’ or motor force of Inka imperialism carried with it its core vulnerabilities.

Another organizational feature found in the Andes is that lineage rulers on the north coast of Peru, even the highest ranking, shared decision-making with lower ranking individuals. Internally, *ayllu* authority took the form of a *primus inter pares* arrangement. Among *ayllus*, though one lord may have had a higher ranking within the hierarchical political structure, his power and authority (and thus control over labourers) was restricted because he directly administered *only* one part of the intermediate- and lower-levels of his *ayllu* within the polity (Fig. 2.4). Moreover, at any one horizontal level within the hierarchy, there was no political or administrative coordination among local and regional rulers, making the state pyramid of power and authority, albeit centralized, even weaker and more unstable.

The structure of *kuraka* and *ayllu* authority is therefore nested; decision-making from the top to the bottom of the hierarchy was mediated by each subordinate level below. The necessary position of lords of the intermediate- and lower-sections mitigated any unilateral decision-making and political action by the higher-ranking lord of the polity (Netherly 1977, 1990). As a ruler’s command descended farther within each side of the dualistic structure, it required approval from an increasingly larger number of lower-level rulers, which could lead to his diminished power and authority in the intermediate and lower ranks. As Netherly notes, ‘This conciliar political organization is one of the salient features of Andean government. Its efficiency for the mobilization of human energy



Figure 2.3. The Inka ruler (in this case, Tupa Inka Yupanki) addresses the huacas (local ancestral landscape deities) arrayed below the apical huaca Uanacauri (Huanacauri): “Huacas, Willkas! Who among you has said ‘don’t rain, don’t snow, don’t hail?’ Speak! That is all.” To which they reply “It wasn’t us, Inka.” From Guaman Poma de Ayala, *Nueua Coronica y Buen Gobierno*, 1615, f. 261/263. The Royal Danish Library, GKS 2232 4to.

is the reason for the success of the Andean states... and how it was possible for large expansive states to grow so quickly and why lower-level political units did not disappear when the large empires broke apart’ (Netherly 1990:464). But this same political structure

also can make these states vulnerable to lower-ranking protest and rebellions and this rupture.

However, late prehispanic Andean polities were not crystalline structures, given the vagaries surrounding succession and structure of leadership at each of

these levels. Much of the work of Inka provincial politics can be characterized by an attempt to crystallize (and in the case of smaller ethnic polities, consolidate and amplify) latent structures into more enduring hierarchical forms. This was a two edged sword, as such latent structures were readily at hand, but carried with them multiple levels of checks on state-ordered prerogatives. Census taking and tribute assessment was greatly facilitated, but actual mobilization of labour was largely filtered through local authorities (Costin 1996). In the imperial heartland, *ayllus* had begun to be rationalized more formally into decimal administrative hierarchies, though the functional reality of decimal administration is highly variable (Julien 1988; LeVine 1987). Thus, if absolute rule existed, it was only at the highest level of the political order, yet this also was the level with the smallest support population and a population that was highly privileged and thus not involved in state labour and other projects.

This form of political organization was clearly present in Inka and Chimor states and probably existed as far back as the Huari and Tiwanaku polities, despite all the misconception of single kings or emperors in the Andean literature (Schreiber 2001; D'Altroy 2001). It is one of the unique features of Andean political organization. When it worked, the efficiency of this organizational structure for the mobilization of human energy was the primary reason for the developmental success of Andean states. The structure of this organization particularly explains why it was possible for states to expand so quickly and why intermediate- and

lower-level political structures of incorporated ethnic groups and other populations did not disappear once incorporated into an Andean state. The persistence of the polities at these lower levels of organization also explains the lines of cleavage and internal conflict found when the larger aggregation was weak or had broken up, as also was the case of the Inka conquest of the Chimor and of the later Spanish conquest of the Inka empire.

This type of ruler succession and nested social hierarchy was inherently vulnerable, often leading to insecure conditions and at times quite fragile political circumstances. The intermediate- and lower-level lines or cleavages constantly were places of potential resistance to the formal state. The vertically and horizontally partitioned yet complimentary nature of the Andean political structure required much more internal manoeuvring and negotiation among its many different levels and parts than the Spanish monarchy or a single king. These manoeuvring parts often became the subject of power struggles between competing leaders, lineages, and sub-moieties, and were utilized by those groups and leaders for their own benefit, regardless of the needs of the state or the wider citizenry.

The intrusion of large-scale, formal state impacts on local orders was disruptive in many ways. Local systems of order became subjected to deconstruction and re-formation as they were incorporated into central state structures and processes under both the Chimor and the Inka. Some local leaders (e.g., *kurakas*) adopted an ambiguous position with regard to these

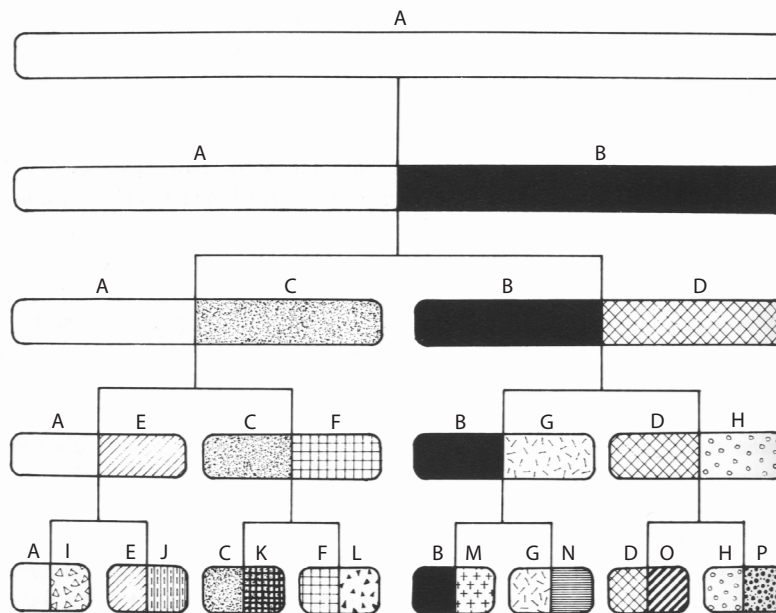


Figure 2.4. Schematic of Andean political organization (after Netherly 1990).

states, appropriating state functions, but at the same time pursuing their own agenda under the guise of the state authority and power. These approaches to state development, however, aimed at instrumentalizing local authorities for state purposes (e.g. taxes, *corvee* labour) and thus as a means for reinforcing the wider authority of the state, did not always constitute a genuine partnership. Under Inka rule, for instance, recognition of local leaders was conceptualized as a practice that confirmed the state's authority. Local leaders on the other hand might nevertheless have utilized their new position to reinforce their authority; but they also were in danger of losing authority in the local context, precisely because they were now perceived as agents of the state. These policies and circumstances made the state vulnerable on all levels to internal conflict and potentially to fragility.

In the best case scenario, the dual role as representatives of the communities and agents of the state put local leaders in a position to merge the local and the state domains, but they also risked losing their authority and legitimacy. Again in drawing on the Inka case, the complex fragile nature of state and local governance was further complicated due to the emergence and growing importance of institutions, movements, and formations that had their origins in the effects of and reactions to the socio-economic linkages between newly formed cities and rural areas. Occasionally, these urban formations seized power in certain regions of the state's territory. Under such expansionistic conditions, there were often combinations of forces from the local sphere – like local lineage rulers, religious authorities and their constituencies – and from the sphere of the wider Inka state itself – like the *mit'a* (rotating forced labour groups) and *mitma* (state colonizers) who often served as labourers on public projects. The protagonists of the traditional societal entities such as local lineages and religious orders, on the other hand, often introduced their own agendas into the overall picture to fill any voids of the state or to outright manipulate state administrators.

To provide an example of the latter, when the Inka state expanded across the Andes in the fifteenth century, it resettled thousands of people on newly formed labour colonies to work on state projects such as land reclamation, road building, craft production, and so forth. Within these colonies, the Inka had intended to create a class of loyal subjects but many of these resettled labourers, who were drawn from multiple ethnic groups from many different areas, manipulated their predicament to re-establish their own identity through different yet often incoherent artefact styles, architectural spatial aesthetics not typical of the state but more in line with their original homelands or

newly constructed hybrid forms derived from their new mixed identities. As Kosiba (2012) has shown in the highlands near Cuzco, many of these identities, in the form of material expressions were deliberately 'unmarked', illegible and inconspicuous to the Inka, in order to purposely create labour communities that were beyond complete state control and surveillance. To be unmarked or beyond surveillance meant adaptation, resilience and empowerment by subjects which *produced weakened fractures within the state apparatus*.

This type of resistance and resilience on the part of transient labourers working under state rule might have been particularly true where not all state agencies were present on the ground and when the state did not deliver efficient services with regard to infrastructure or security. Rather, it is the mixed transient community itself, this case the *mit'a* labourers, that often provided the nexus of order, security and basic social services. In these cases, the state was perceived as an alien external force, far away not only physically (in Cuzco or other urban areas), but also psychologically. Individuals were thus more loyal to their own group, however mixed ethnically, not the state. As members of *mit'a* communities, people were tied into a network of social relations and a web of mutual obligations, and these obligations were much more powerful than obligations as an Inka state citizen. That is, whether under Inka or Chimor rule, people did not always obey the rules of the state, but the rules of their group or community. As Netherly has noted for the Chimor, legitimacy rested primarily with the leaders of local authorities, and less so with the higher-ranking state authorities – or only with state authorities insofar as they were at the same time leaders in a local societal context. We can identify this practice as a *mediated* legitimacy in the Chimor and Inka states: local legitimacy and state authorized legitimacy.

This type of mediated practice was a special problem for Spanish administrators, with their focus on absolute monarchy, concentrated their attention on the higher-ranking Inka royals rather than on the intermediate- and lower-levels of articulation subordinate to them. In fact, local leaders were largely discredited in the Spanish era because they had often been incorporated into (indirect) state rule as instruments of the Inka, and the new political elites of the Spanish crown attempted to do away with them as anachronistic and reactionary forces of the past. This made the Spanish empire vulnerable in many Andean provinces and fostered its fragility because many revolts and uprisings began in these informal lower-levels that had not received legitimate recognition from the Spanish. The problem was that the Spanish never fully understood that the Inka 'outposts' were mediated by both formal

and informal indigenous societal institutions and that local rulers followed their own cultural (ethnic) logic and rules within state structures. Local customary forms of governance persisted, and finally the Spanish authorities – like their former Chimor and Inka rulers – realized that it was more promising to incorporate them rather than try to suppress and displace and dismiss them.

The Spanish also had administrative problems with other Andean cultural institutions. Andean leadership and the political economy operated on the basis of reciprocity at all levels of society, from ruling *kurakas* to *ayllus* and local families. Apart from their administrative functions and their rights to have their lands worked, *kurakas* reciprocated with gifts, food, drink and coca for labour and service from their followers. As the sixteenth century Spaniard Cobo observed, 'In place of paying tribute, [labourers] worked in the service of the Inca, the religion, or their *caciques*... they [followers] were given the tools and...necessary equipment...they did not invest anything of their own except manual labor' (Cobo 1979, 209–10). 'Tribute', thus, consisted basically not of goods or cash but of labour that the indigenous community gave to the state and the *kurakas*.

As noted above, ignorant of the limited decision-making power of *kurakas* and the reciprocal nature of authority and labour in the Andes, Spanish officials believed that all *kurakas* had absolute power over their *ayllu* followers and thus could avoid the traditional obligations of reciprocity and gift-giving and rather easily shift to a cash economy. Due to reciprocity, however, Andeans resisted paying taxes in cash, which stymied the Spanish economy. As the decades passed, traditional institutions began to break down and by the mid-seventeenth century, Spanish administrative reforms loosened the reciprocal communal relationships central to Andean political economies. Spanish insistence gradually eventually forced Andeans into a cash economy, which eventually promoted more private than communal conceptions of property among local communities. But the traditional system never fully broke down until modern times and even today many communities still operate under reciprocal rules of labour and goods exchange. As a result, Spanish administrators spent enormous amounts of time attempting to turn a system based on multiple sets of reciprocal relationships between multiple and varying tiers of leaders and commoners into a better defined, more permanent, and neatly ordered hierarchy with power flowing from the top. Reciprocity and gift exchange were institutions that complicated and often prohibited the Spanish ability to exploit Andean peoples.

To summarize briefly, our argument is that fragility in the Andes generally occurred in times of diverse and competing claims to power and when differing ethnic logics of social and political order co-existed, overlapped and intertwined, namely the logic of the formal state, the local 'informal' societal order, and the associated social cleavages within this social order (which also likely existed in other forms: ethnic, religious, kinship, economic). In such a social environment, the state did not always have a privileged position as the political framework that provided security, welfare and representation; it often shared a mediated authority, legitimacy and capacity with other usually intermediate- and lower-ranking structures. These mediated structures were the cultural bedrock on which attempts at Andean state-building were constructed and sustained. These conditions also made the Andean state vulnerable and thus fragile and usually short-lived.

The mediated state

We believe that despite the types of structural and procedural problems discussed above, the best hope for a successful Andean state may have been in the explicit pursuit of a mediated structure – in which a central state government with limited power and capacity relied on a diverse range of local authorities to execute core functions of government and negotiated relations between local communities and the state. In this approach, the top-down project of building a central government and the organic emergence of informal polities should not be viewed as antithetical (though in some cases they may have been invariably political rivals, coexisting in uneasy partnership), but instead be seen as harmonized or nested together in a mediated division of coexistence. Such positive mutual accommodation may have resulted in Andean states that might look very different from, or not conform to, previous ideals of what absolute authority structures were supposed to have been in the Andes and thus might appear to us to have been 'weak' or 'fragile' with regard to institutions and enforcement capacities. But this very weakness also may have been a strength as the state gained legitimacy in the eyes of the intermediate- and lower-ranking people, because it acknowledged the strengths of those people and their local institutions and did not always attempt to impose its absolute supremacy, and because state authorities did not try to displace all local orders of governance, but worked with them, providing a coordinating or harmonizing organizational framework. Constructive interaction between state and local governance thus was vital in the Andes, as a formal centralized state

was not only a problem of political will, capacities, functions, institutions and powers of enforcement and implementation, but also a problem of expectations, perceptions and legitimacy. State weakness or fragility thus had two sides to it: weakness with regard to capacities of effective implementation and enforcement, especially as it expanded into new territories, and weakness of legitimacy outside of local lineages.

In particular, some Andeanists preferring to employ traditional state-centred models may have a hard time imagining that life continued in the Andes in the absence of the formal state. In reality, however, alternative actors such as local rulers performed the core state functions that the state never or no longer fulfilled when it abandoned a certain space. Accordingly, it is perhaps important to stress some of the positive potential rather than the negative features of so-called weak or fragile states – de-emphasizing weakness, fragility, failure and collapse, and focusing on mediation, negotiation, generative processes, innovative adaptation and ingenuity. This also entails perceiving local community resilience and customary institutions not so much as resisters, protesters, and problems, but as assets and sources of solutions that could have been drawn upon in order to forge constructive relationships between local kin groups and communities and centralized state governments, and between customary and introduced political and social institutions. Local kinship-based societal formations were valuable social support networks that had their own checks and balances. Through engagement and mobilization, these networks could have positively contributed to political order. Engaging and mediating with communities and non-state customary institutions was just as important as working with central state institutions and governments. For at the end of the day, the extent to which Andean state institutions were rooted in society was decisive for the state's stability, effectiveness and legitimacy. Of course, encouraging local governance on the one hand could have been at odds with building and expanding central institutions of the state on the other; strong local communities might have lacked the incentive to support central state institutions, which was the case with many provinces within both the Chimor and Inka states.

Conclusions

This paper has argued that a central driver of fragility in the late pre-Hispanic Andean states of Chimor and Inka (and probably others before them) is weakly structured social institutions such as rules of succession and hierarchical decision-making. It seems to us that studying the way social and political institutions

were arranged in each type of Andean state can provide a useful way to categorize the state's regime or the specific form of government and its strengths and weaknesses.

Traditionally, Andean archaeology has been a polity or state-centred discipline, focusing heavily on the Inka, Chimu, Huari and Tiwanaku societies and not always giving consideration to the significance of local customary institutions and alternative actors such as *ayllus* and other on-the-ground socio-economic units that performed core functions not always fulfilled by the state. We have underestimated how the actions and internal inconsistencies of these institutions and units could potentially have made states vulnerable and fragile on administrative levels well below high royalty and upper-level hierarchical decision-making. The reality is that state institutions co-existed with and depended on the family, religious, economic and cultural institutions of these lower units. The extent to which state institutions were rooted in these customary institutions, especially kinship structure, could be decisive for the state's stability, effectiveness, and legitimacy (Dillehay 2018). While the state, in the final analysis, had a coercive capacity to determine outcomes which local units lacked, this does not necessarily mean that state institutions were always the primary determinant of integration, security, welfare or legitimacy. It was institutions at all levels within society much more critically determined these factors. But when state institutions did work, it also was because they were embedded in local social and cultural norms and practices. The challenge to archaeologists is to find appropriate forms of mediated complementarity and interaction at all administrative levels.

By re-conceptualizing some Andean institutions as mediated political orders and as structurally and procedurally vulnerable to certain conditions and administrative levels of social and/or environmental stress, some states became weak or fragile and thus demised or collapsed. The possibilities of internally influencing procedural structures should be re-examined in the Andes, shifting our focus from narrow models of centralized state-building to understanding and engaging with a full spectrum of strong to weak mediated institutions. So far, in the Andes, we have tended to impose our Westernized idea of what a successful state is on the past. Closely related to this attitude has been a functionalist understanding of the state as a set of institutions that delivered like a product, using certain principles of institutional organization and techniques of social engineering such as large-scale public ceremonial feasting, road and canal building, etc. This approach ignores (or conceals) the fact that states were not merely technical and ideological exercises

governed from above, limited to enhancing the capacities and cost effectiveness of state institutions and their expansion into new ethnic territories. Rather, state development and sustainment were difficult political endeavours that likely involved serious internal and external political conflicts as existing distributions of power were threatened. Hence a techno-ideological approach to Andean state development, primarily guided by a centralized administrative view of the state, tends to gloss over its political and its top to bottom and horizontally across socially partitioned kinship character.

The challenge in state-level Andean archaeology is to find appropriate forms of socio-political complementarity and interaction across institutions within all types of states. These kinds of problems related to different degrees strong to weak states (or moments of weakness during the demise of a previously successful state) have attracted relatively little scholarly attention, particularly in relation to local traditional forms of governance and their interaction with state-based endeavours. Instead, dominant approaches to Andean states have rested on a narrow understanding of the sources of political and social order, mainly the place and role of elites and their control of state institutions (e.g., corporate labour) for public projects. The reality is that state institutions co-existed with and depended heavily on local kinship, religious, economic and cultural institutions. While Andean states, in the final analysis, had a coercive capacity to determine outcomes that other institutions lacked, this did not mean that state institutions were the primary determinant of integration, security, welfare or legitimacy. Andean state institutions worked because they were embedded in a wide range of legible social and cultural norms and practices at inter-regional and local levels. These institutions seemed to have been more successful when combining state institutions, local customary institutions and new elements of the wider society in networks of governance which were not introduced from the outside, but embedded in regional and local societal structures on the ground. But in the end, state failure is largely man made, not accidental. Institutional fragilities and structural flaws contribute to failure, but those deficiencies usually hark back to decisions or actions of people. So it is that leadership errors across history have destroyed states for personal gain.

Several themes require additional study. In studying the pressures, or risk factors, associated with ancient state fragility in the Andes, we need to take into account that there was no simple causal process and that each case, whether it be Chimor, Inka or earlier states such as Tiwanaku and Huari, probably

shared both commonalities while being distinguishable by their unique outcomes from contingent chains of events and interactions. While each context was historically different and each vulnerability within each state distinctive, research in the Andes points to a set of common and interrelated factors that affected, either in causing or sustaining, fragility. These include: weak political institutions, economic decline, ideological rupture, environmental stress, and violent conflict. A state's geography and history could also have played a role in driving fragility, as in the case of the Inka empire spread over several thousand kilometres in highly diverse and rugged mountainous terrain. And there are other factors, such as regional influences that are linked with fragility, but also these require further study.

Another theme worth pursuing is whether states were strong beyond their centres or homelands of control, but fragile at home or the reverse. In contrast to strong states, failed states probably could not control all of their borders, losing authority over some sections of territory. Furthermore, the expression of official power might have been limited to a capital city and one or more ethnically specific zones. Plausibly, the extent of a state's failure can be measured by how much of its geographical expanse was genuinely controlled by the ruling government, if this can be documented through archaeology and ethnohistory. The issue is how nominal or contested was the central government's sway over provincial towns and rural roads, and who really expressed power in the hinterland.

If we assume that some failed or failing states were tense, deeply conflicted and contested by warring factions, then what are the archaeological indicators of these conditions? In most failed states, if armed conflict is involved, then the material correlates are more visible in fortresses, weaponry, and perhaps physical trauma on human skeletons. Furthermore, most failed states probably had disharmonies between communities, which should be revealed in varieties of civil unrest, different degrees of communal discontent, and a plethora of dissent directed at the state or at elite or administrative groups within the state, some or all expressed in iconographic forms or destruction of temples.

We also need to establish clear criteria for distinguishing collapse and failure from generic weaknesses or apparent distresses (e.g., social or physical), and collapse from failure. We also should examine the nature of state weakness and advancing reasons why some weak states succumbed to failure, or collapse, and why others in ostensibly stressed circumstances remained weak and at risk without ever destructing, at least in the short term. It also would be helpful to

contrast failed and successful states. Characterizing failed Andean states is thus an important and relevant endeavour for archaeologists, especially because the phenomenon of ancient state failure or success is under-researched, without precise definitions and a paucity of sharply argued, instructive, and well-delineated cases.

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Notes

- 1 It is difficult to examine this topic for earlier Andean states, such as Huari, Tiwanaku and Lambayeque (AD 500–1200), because there is no reliable evidence to infer their socio-political organization and thus their strengths and weaknesses. It is likely, however, that their organizational structures were similar to those of the Chimor and Inka since these states derived their fundamental cultural logics from the earlier ones.
- 2 Vulnerability is usually more closely related to environmental hazards and the potential for loss and recovery. Socially, vulnerability is perceived as those populations living in a marginalized state of emergency or potential emergency as a result of negative power relations resulting from social and economic living conditions (Wisner 1993).

Chapter 3

Why Early Cities Failed: Fragility and Resilience in Bronze Age China

Li Min

Henry Wright (2006, 316) defines the dynamics of early statecraft as processes of political experimentation which ‘characterize the organization of successive efforts to build successful political or social formations, and the factors that led to failures and successes’. ‘Experimenting’, Wright (2006, 315) argues, involves ‘the building of knowledge based on understandings of the past’. The concept of political experimentation highlights the fragility and fluidity of state formation wherein instability, collapse and regeneration frequently occurred.

The experimental characteristics of the Bronze Age cities in early China contributed to their fragility. Through the second millennium BC, five phases of urban development in early China, namely Late Longshan, Erlitou, Early Shang, Late Shang and Western Zhou periods, each lasted approximately a quarter millennium before their collapse and deurbanization (Fig. 3.1). This paper explores the rapid rise of these early urban centres, their political incorporation of diverse groups, their rapid downfall, the limitations of state power associated with them, and the legacy of each urban episode in the formation of a historical tradition in early China. I argue that tension between the state dominated political order, often represented by a homogenous material culture, and the heterogeneity of political networks present in major cities, some associated with the deurbanized centres of the fallen regimes, contributed to the fragility of Bronze Age cities in early China.

Taking the recurrent issues of emergence, fragility, collapse and resilience as touchstones of this investigation, my archaeological inquiry is guided by these questions: What were the built-in tensions that contributed to their crises and deurbanization? What were the parallel networks and diverse traditions that the leaders of Taosi, Erlitou, Zhengzhou, Anyang, Zhouyuan had to cope with? What is the evidence of

political resistance within Bronze Age society through the second millennium BC? How did the cultural resilience of past legacies contribute to the fragility of newly forged regimes and become the basis for resistance? The shift of central political theatres eastwards over time: Taosi, Erlitou, Zhengzhou, Anyang, respectively, set the stage for the Zhou state-building enterprise at the end of the second millennium BC. As the western power of Zhou developed its political framework to accommodate these complex legacies spanning approximately 1000 km, architects of the Zhou state evoked political legacies associated with the past traditions for their dramatic reconfiguration of the political landscape in early China.

The first quarter of the second millennium BC: collapse of the great Longshan centres

Emergence

Prehistoric societies in early China saw the extensive collapse of the major mound centres in lower and middle Yangzi in the south as well as the rise of large Longshan centres in the highland basins and the lowland plains of the Yellow River Basin and the Huai River Basin in northern China (Zhang Chi 2017; Renfrew & Liu 2018). Both the prehistoric cities at Shijiahe in middle Yangzi and Liangzhu in lower Yangzi collapsed in approximately 2300 BC leaving behind no urban traditions in these two regions. This dramatic change in the configuration of political landscapes coincided with the increase of agropastoralism in the Neolithic economy derived from expanding Eurasian interactions. The Jinnan Basin and Ordos in the middle Yellow River Valley saw the most significant political development in the Longshan world.

The proto-urban centre of Taosi stood out in the Longshan society for its large population, marked social differentiation, cultural diversity, instability,

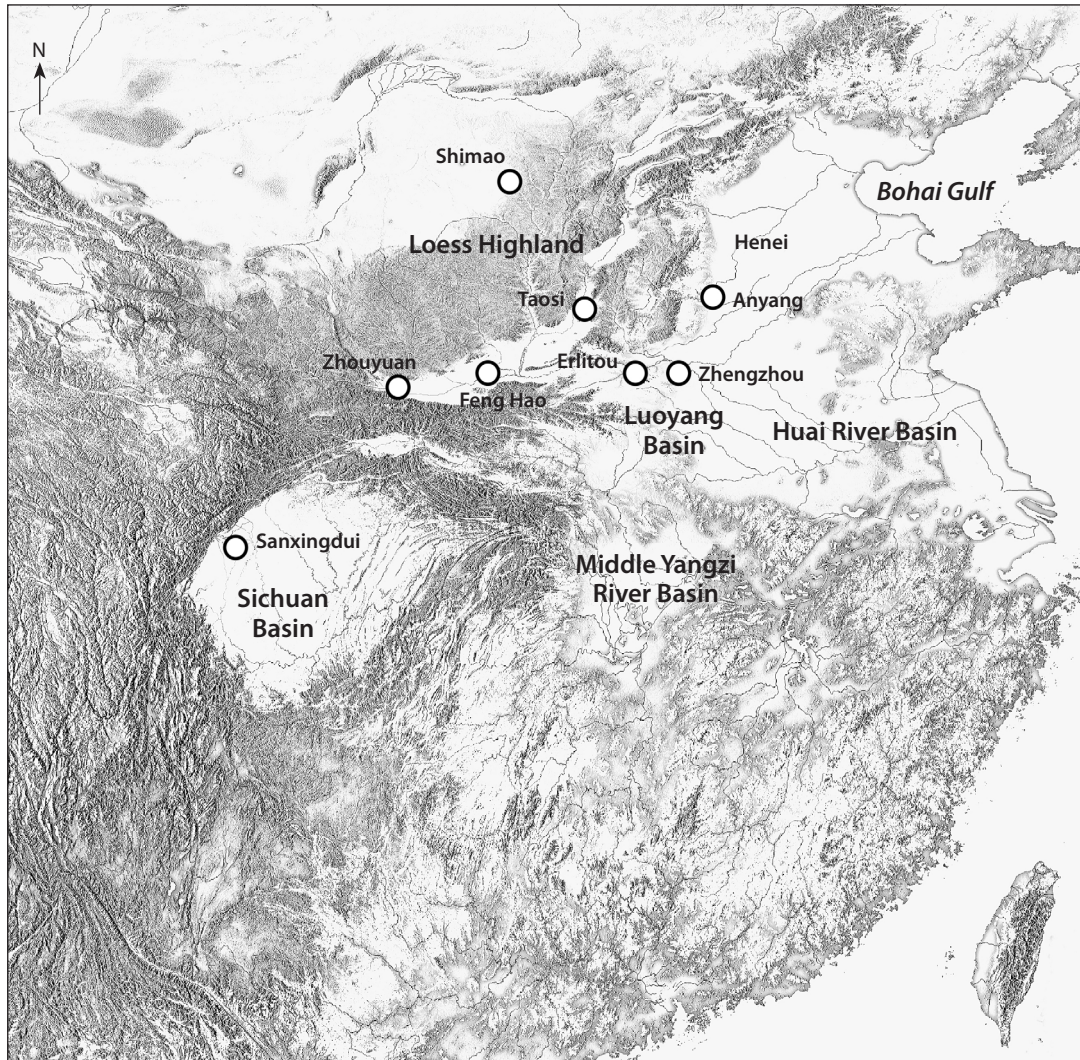


Figure 3.1. A map of major sites mentioned in this chapter.

and the emergence of defining attributes of early kingship in Bronze Age China (Zhongguo & Shanxisheng 2015). An unprecedented population concentration took place in Taosi during the final quarter of the third millennium BC. Various groups from the countryside migrated into Taosi, whose settlements grew from 50 hectares in the Early Phase to 300 hectares in the Middle Phase (He 2013). The large cemetery associated with the settlement had approximately 10,000 tombs, an unprecedented scale in early China (Gao 1993). The awe-inspiring tomb M22 of the Middle Taosi Phase rivals the tombs of the Shang and Zhou high elite in scale (e.g. the tombs of Fu Hao in Anyang and Duke of Guo in Sanmenxia, both associated with high elite of the Shang and Zhou states) (Zhongguo et al. 2003). Instead of making distinctions between a paramount

leader and a king, Su Bingqi (1994, 71) used the notion ‘the aura of kingship’ to describe the exceptional grandeur that the Taosi rulers attempted to project.

The heavy concentration of the burials at Taosi and their alignment towards the central peak of Mt. Chong reveal that the proto-urban growth occurred in a landscape that symbolically inaugurated the sacred peak as the focus for new social identity for migrants with diverse cultural backgrounds. Several urban-size centres created by major aggregations of population emerged in basins on both sides of the Chongshan mountain range (Su 1994, 29). This circum-Chongshan settlement conglomerate may represent a confederation of polities. Its presence made the Jinnan Basin the most densely populated and politically significant region in Longshan society.

Crisis and decline

Expanding interactions during the late third millennium BC brought extraordinary diversity to Longshan cities like Taosi, including key components of the Bronze Age society (e.g. metallurgy, a metal-based conception of political and economic landscapes that involved prospecting and mining) as well as new notions and apparatus of kingship shared by the second millennium cities. At the same time, the emergent political and ritual authority at Taosi seems not to have developed a political framework to accommodate this diversity, resulting in the violent rupture in its urban history.

As a critique to the categorical difference of complex chiefdom versus state as represented by Taosi and Erlitou, Henry Wright characterized Taosi as a major episode of political experimentation in early China (Li Min 2018). This proposal captures the challenge of early state building, wherein the attempt at integration itself contributed to the risk of failure. During the Longshan period, increasing interactions between the Neolithic farming society and the agropastoral communities further contributed to tensions in Taosi society and became the source of the fragility of cities.

The mortuary inventory at Taosi revealed a conflicting trend of the failed social experimentation. On the one hand, pigs occupied a central place in the mortuary assemblage of Taosi elite. The top tier elite burials featured the ritual display of whole pigs split in halves and the culinary assemblage of pig heads and pig feet on cutting boards, which highlight the culinary refinement of the Neolithic farming tradition. The second-tier burials also included extensive display of pig mandibles, up to a hundred in each grave, presumably curated from the feasting events sponsored by the deceased during their lifetimes (Zhongguo & Shanxisheng 2015).

On the other hand, the presence of cowrie shells and copper objects at Taosi indicated a growing agropastoral component at the site, which seemed completely underrepresented in elite mortuary displays – no signs of cattle and sheep bones were represented in Taosi's mortuary context. Cowries were brought into the highland Longshan society from the coast of the Persian Gulf and Indian Ocean through Eurasian exchange networks since the late third millennium BC (Peng & Zhu 1995). Their appearance was concurrent with the spread of cattle and sheep herding in the highland. The closest sources of Taosi's metal objects were Ordos to the north and western highland regions of Qinghai and Gansu to the west, where highland Longshan centres of Shimao, Lushanmao, and Qijiaping flourished (Fitzgerald-Huber 1995, 2003; Li Min 2018).

An overwhelming emphasis on the Neolithic pig feasting tradition in the Taosi elite mortuary ritual and

the expansion of an agropastoral economy revealed the divergence between changing socioeconomic circumstances of Longshan society and the conservative ideology of the Taosi leadership. This fault line in the great proto-urban centre probably contributed to the crisis at the transition between the Middle and Late Phase. At Taosi and its secondary centres, the elite tombs from the early and middle phases were systematically plundered and the palaces were levelled at approximately 2000 BC (He 2013). Whether it is the work of external conquests or internal conflicts, the widespread destruction of elite tombs at Taosi and nearly every major contemporaneous site in the region was a defining characteristic of the political instability prior to the emergence of any consolidated form of political structure.

The purpose of these looting activities was ritual destruction of the body, as many grave goods surrounding the coffins were left intact. In contrast to the pig dominated assemblage of the Early and Middle Phases, the fauna remains of the Late Phase displayed a significant increase of cattle and sheep bones, which suggested that the highland infiltration and intra and inter community conflicts at Taosi were probably caused by the failure to accommodate a culturally diverse population (Brunson et al. 2015). Clearly, the landscape cult and the emergence of a new set of ritual traditions that defined the Taosi social identity were not successful in removing the tensions within a rapidly changing Longshan society. The presence of other highland Longshan centres (e.g. Shimao in Ordos and Lushanmao in Yan'an) suggested that the tensions among multiple highland centres contemporaneous with Taosi might have contributed to their instability (Jaang et al. 2018). The relationship between Taosi and Shimao is currently the most contested issue in Chinese archaeology (Shaanxisheng et al. 2013, 2016).

However, Late Taosi society did not experience a demographic decline after the destructions of its elite cemetery and palatial structure. Instead, the great Longshan centre as well as its neighbouring communities south of Mt. Chong saw population growth during the Late Taosi phase, presumably from the influx of population from the loess highlands to the north of the basin. Evidence for political authority, however, was absent from these large sites, as no elite burials were identified from this period (He 2013). An extensive collapse took place during the nineteenth century BC, which was part of a widespread Longshan collapse in early China. The Jinnan Basin appeared to have been deserted and the remaining residents scattered into tributary valleys of the loess highland. When Erlitou expanded into the Jinnan Basin during the second quarter of the second millennium BC, its

outpost Dongxiafeng was disproportionately smaller than those of the great Longshan centres and the outpost appeared to have moved into a no-man's zone (Zhongguo et al. 1988).

Legacy

The momentum of the political experimentation at the Jinnan Basin against the backdrop of extraordinary socioeconomic change left its legacy both in the repertoire of symbols for political representation and in the emplaced social memory. Taosi was experimenting with new ritual institutions by marking social distinctions through a syncretic process. Unlike a redundant display of grave goods in prehistoric tombs of the pre-Longshan era, the Taosi elite burials featured a formalized mortuary syntax that highlights an elaborate culinary set revolving around pig feasting and musical apparatuses consisting of wooden and earthen drums and chimestones (Zhongguo & Shanxisheng 2015). The distinctive elite objects and their configuration indicated an emerging high culture and these resulting forms will later become primary symbols of political authority in Shang and Zhou civilizations.

The discovery of a cast copper waist bell in a Late Taosi tomb presents the first evidence for metal acoustic instruments in early China (Zhongguo & Shanxisheng 2015). Its production technology was likely derived from the North Asian bivalve bronze casting technique with suspended core for spear production in the northern Altai. Bells were powerful instruments in shamanistic rituals. It is striking that the ritual aspects of early metal production were present at Taosi while the military aspect was absent. Over the centuries, the production of bronze bells evolved from this modest prototype into grade sets, matched with chimestone sets, in marking elite status in Zhou society during the first millennium BC. Two characters written in vermilion on a pottery bottle in Late Taosi represent a potential source of Chinese writing, based on their close resemblance with the Late Shang oracle bone inscriptions of the late second millennium BC (Zhongguo & Shanxisheng 2015). Chinese writing, therefore, was probably invented at a critical moment from indirect interactions with Bronze Age society in West Asia through Eurasian and Central Asian intermediaries. This could explain the cowrie-based value system in later Chinese writing (Li Min 2018).

Although the Jinnan Basin experienced a demographic recession through the second millennium BC, the Taosi legacy was shared among highland Longshan memory communities that survived the collapse. Evidence can be seen from their preservation of Taosi vessel forms and ritual configurations in elite mortuary contexts. As I will argue later in this chapter, when the

next major urban episode was set in motion at the end of the second millennium BC, the Zhou military colony granted to the Lord Tang Shu Yu was established with reference to the legendary landscape of the Jinnan Basin in the third millennium BC. The discovery of the Zhou military colony and the lineage cemetery of Lord Tang Shu Yu at Tianma-Quncun (1100 hectares), approximately 20 km south of Taosi, provided the touchstone for the archaeological landscape and the historical legacy in textual narratives.

The second quarter of the second millennium BC: the emergence and decline of Erlitou

Emergence

Erlitou (c. 1750–1500 BC) emerged after the collapse of Taosi and other great Longshan centres in the Jinnan Basin and in the lowland regions in the east. This new episode of development unfolded in the Luoyang Basin to the southeast of Jinnan, which was previously a sparsely populated region during the Longshan period. The ceramic assemblage indicates the influx of population from all directions outside of the basin (Zhang Li 2012). The size of Erlitou was approximately the same as Taosi, but secondary sites around Erlitou were smaller and fewer of than those around Taosi during the Longshan period. Overall, the population of early China during the second quarter of the second millennium BC appears to be significantly lower than that of the Longshan period (Sebillaud 2014). The rise of Erlitou was not the direct cause for the depopulation in the surrounding regions. Rather, its emergence represents a reconfiguration and regeneration of population that survived the collapse (Fig. 3.2).

The rise of Erlitou involved contributions from the east and the west of the Luoyang Basin. Influx of communities associated with the lowland ceramic tradition from the upper Huai River Basin to the east and the south of the Luoyang Basin led to the rapid increase of settlement size, while highland immigrants contributed metallurgy to this highland gateway to the lowland plains. Moving eastward down the Wei River Valley, highland groups associated with the Qijia material culture crossed the Qinling mountain range at Lantian and established the highland outpost at the Donglongshan site at the northern end of the Shangluo Corridor. From Donglongshan, they crossed the narrow watershed in Luonan, entered the Luoyang Basin along the Luo River Valley, and prospected the rich turquoise mines near the southern end of the corridor and the copper mines in the middle Yangzi further downstream (Shaanxisheng & Shangluoshi 2011). The southern expansion of this western highland agropastoral network into the highland gateway

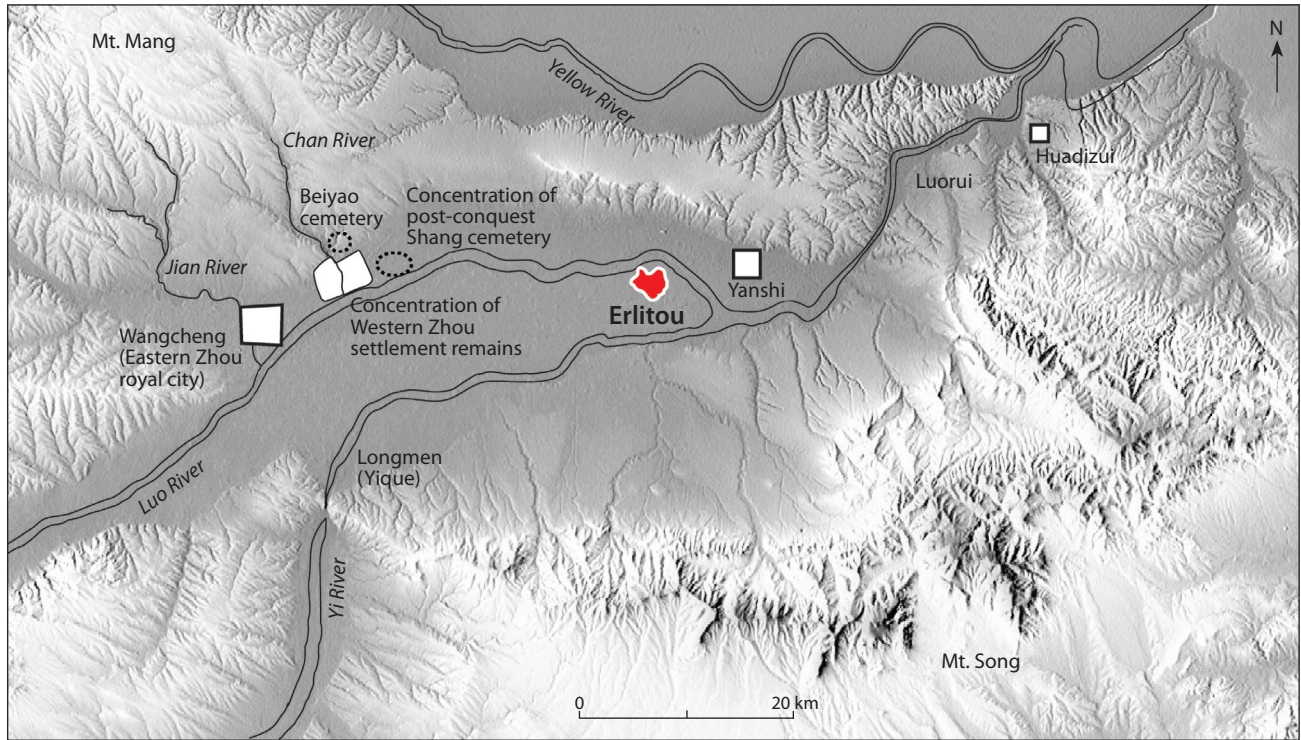


Figure 3.2. *The archaeological landscape of the Luoyang Basin.*

regions of Luoyang and Shangluo linked the two key components of the Bronze Age political landscape – establishing the political base in the heartland of the historical Central Plains and maintaining access to the copper ore of middle Yangzi.

Access to these resources accounted for the strong focus on bronze production and turquoise works at Erlitou, which laid the foundation for the political economy of Shang and Zhou states in later periods. The Erlitou ceramic assemblage displayed a hybrid character. Round pots of the western highland tradition were added with solid tripod construction characteristic of the lowland culinary tradition. The drinking assemblage from Erlitou represented sources as far as the northern communities associated with the Lower Xiajiadian material culture in the Chifeng region along the eastern edge of Mongolian Plateau and the coastal communities associated with the Maqiao material culture in the lower Yangzi (Xu 2009; Zhongguo 1999).

Besides ritual and commensal consumptions, social solidarity at Erlitou was achieved with the performative experience tied to Erlitou ritual tradition. Instead of being buried as warriors with bronze weapons, Erlitou elites were buried with a set of distinctive consumption apparatuses fabricated in bronze or pottery, wearing garments adorned with

turquoise mosaic inlaid bronze plaques, waist bells, and cowrie shells brought in through the Eurasian exchange network that had been established since the Longshan period. Erlitou elite occasionally holding black jade sceptres that was found in massive quantities in the Longshan centre of Shimao in Ordos, which might have had some temporal overlap with the early Erlitou urban centre.

The discovery of elite burials and palatial compounds attests to the presence of political authority at Erlitou, but the nature of the leadership is difficult to decipher (Zhongguo 1999, 2014). In contrast to the large cemeteries at Taosi, the cemeteries at Erlitou were small and scattered, each representing only a lineage group. The mortuary syntax highlighted the performative aspect in the social definition of the Erlitou elite persona, instead of military ethos, whereas ritual dance might be associated with the religious efficacy of Shamanism associated with the metallurgists. An elite in a burial at the centre of a palatial courtyard was buried with a turquoise mosaic serpent with a copper bell suspended on it (Zhongguo 2014) (Fig. 3.3). Some lesser elites were buried in sunken plazas at the ritual precinct with layers of trampling surfaces, wherein trampling activities continued over new soil layers added on top of the layers cut by the burials.



Figure 3.3. Turquoise inlaid objects from Erlitou elite burials (Left, the turquoise inlaid serpent in tomb 2002VM3 from the courtyard of the No. 3 palatial compound, after Zhongguo 2014, Colour Plate 120; middle and right, two turquoise inlaid bronze plaques from Erlitou elite tombs VIM11 and 81YLV4 after Deng 1998, Plates 257 and 258).

Colour, sound, ritual dance, consumption of psychoactive substances, and the metallurgical transformation taking place at Erlitou collectively defined its urban spectacle and enhanced its attempts at communal solidarity. Many elite regalia in Erlitou burials were elaborations of highland Longshan tradition (Li Min 2018). The ritual emphasis on pig feasting in Early and Middle Phase Taosi elite tombs disappeared in Erlitou burials. Instead, the abundance of cattle and sheep bones in Erlitou faunal assemblages highlighted the consolidation of an agropastoral economy in the region historically known as the Central Plains (Yang 2008). The Bronze Age tradition of placing cattle limbs in elite burials gradually prevailed through the second millennium BC in early China.

The absence of significant destructions at Erlitou through its four urban phases suggests different tactics towards integration than at Taosi. This is also attested by the absence of defence walls around Erlitou, where the great city probably used the mountain range around the Luoyang Basin as its defence perimeter. To the east and southeast of the Luoyang Basin, a series of Erlitou walled strongholds were constructed in river valleys connecting the basin and the lowland plains (e.g. Dashigu in Zhengzhou, Dongzhao in

Xingyang, and Wangjinglou in Xinzheng), which provided security to the major lowland gateways to the Luoyang Basin.

Beyond its heartland, Erlitou outposts were established along major trade routes to the middle Yangzi River Basin and the Jinnan Basin, appeared to control the metal ores, turquoise, salt, cinnabar, and other resources critical to the Erlitou political economy (Liu & Chen 2003). The emphasis on the production of bronze vessels at Erlitou and the expansion toward metal producing regions suggests the rise of a metal-centric ideology of political landscape characteristic of Bronze Age China (Li Min 2018).

Crisis and decline

The differences between Taosi and Erlitou were present in their formation process and social circumstances instead of an evolutionary difference between complex chiefdoms and states. There were no signs of political centralization and administrative apparatus to set Erlitou apart from its Longshan predecessors. It is also difficult to characterize Erlitou as a territorial state. Its expansion did not represent episodes of conquest and incorporation of well-populated cities and communities. Rather, the spread of Erlitou

settlements appeared to be a repopulation in deserted regions, incorporating refugees from the aftermath of a significant social collapse.

Current archaeological evidence suggests that Erlitou's failure to incorporate the regions immediately north and east of the archaic lower Yellow River contributed to its demise and deurbanization during the middle second millennium BC. While it was successful in incorporating the Jinnan Basin, and the Huai River Basin into its political orbit, Erlitou did not incorporate the Henei Basin and the loess highland north of the archaic lower Yellow River, as well as the plains in western Shandong east of the river. After its Longshan towns were deserted during the early second millennium BC, the Henei Basin was repopulated by highland communities moving downstream from the Taiyuan Basin west of the Taihang mountain range, brought along with them the diagnostic highland ceramic assemblage centred

on the *li* pouch-legged tripod vessels (Zou 1980). After the collapse of its major Longshan centres in Shandong, post-Longshan communities associated with the Yueshi material culture inhabited the lowland plains to the east of the archaic lower Yellow River, which exhibited a much lower population density and reduced technological repertoire in comparison to their Longshan predecessors.

The decline of Erlitou did not result from an abrupt invasion. During Phase III of its urban occupation, Erlitou saw a gradual increase of Xiaqiyuan style *li* vessels from the Henei Basin (Zhongguo 1999) (Fig. 3.4). The change suggested an increasing infiltration into the basin from communities north of the Yellow River which contributed to the increasing cultural heterogeneity of the Bronze Age city. At the same time, these vessels appeared in the Jinnan Basin, the Guanzhong Basin, and the Shangluo Corridor. The Xiaqiyuan style *li* vessels eventually

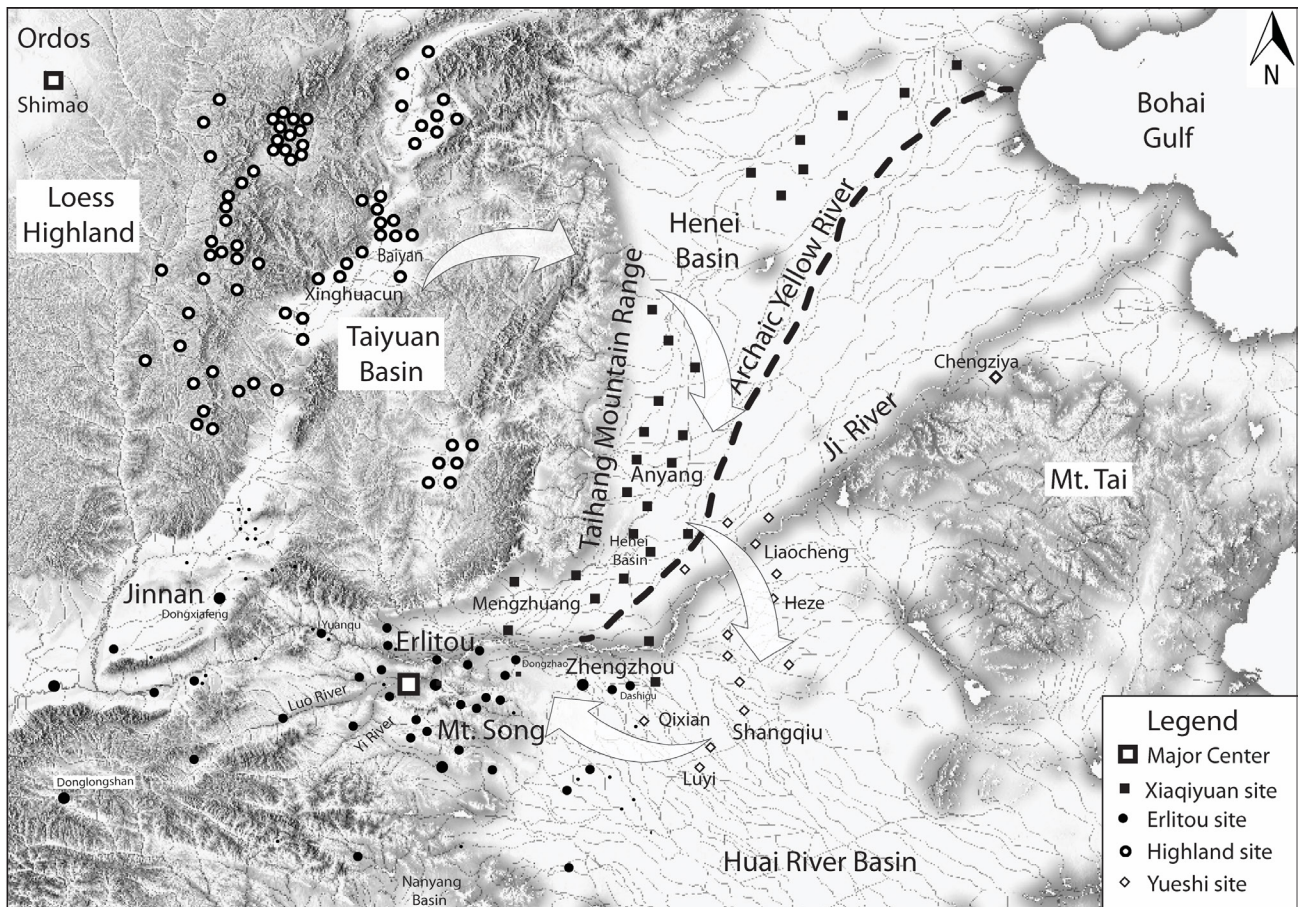


Figure 3.4. The distribution of archaeological sites associated with the Xiaqiyuan material culture in the Henei Basin in relation to sites associated with the Erlitou material culture to the south, the Yueshi material culture to the east, and highland sites to the west of Taihang mountain range.

dominated the ceramic assemblages of Erlitou Phase IV (c. 1560–1520 BC), the final phase of Erlitou's urban occupation, and of the post-urban phase at Erlitou. This change in ceramic assemblage coincided with the abandonment of the Erlitou palaces during late Phase IV and the construction of a heavily fortified city in Yanshi, approximately 6 km east of the undefended urban centre at Erlitou.

Built around the early sixteenth century BC, the walled enclosure (approximately 80 hectares) at Yanshi was first constructed to secure its palatial foundations and several warehouses, probably to provide military surveillance over Erlitou. It was subsequently expanded to 200 hectares with the construction of an outer wall that extended its protection to the craft production areas (e.g. the bronze foundries, pottery kilns, and bone workshops, and storage facilities) (Zhongguo 2013). In contrast to the hybrid characteristics of the Erlitou ceramic assemblage, the new assemblage found at Yanshi displayed a remarkable resemblance to the Xiaqiuyan ceramic tradition in the Henei Basin, extraneous to the Luoyang Basin and the lowland plains south of the archaic Yellow River.

The stylistic and technological consistency of this vessel type was created by the lineage-based craftsman tradition, in which techniques and knowledge were transmitted within close-knit kin networks. Members of each lineage group shared ideas about elements of their technical process as part of their cultural identity: 'raw materials, source of energy, tools, actors, where and when things should take place, etc. And these technical representations are part of wider symbolic systems' (Lemonnier 1993, 4). Given the lineage organization and the social transmission of ceramic production techniques, the distribution and use of these distinctive cooking vessels reveal intriguing connections between a larger sociopolitical phenomenon of state expansion and domestic life at the household level.

The rise of the new centre at Yanshi inside the Luoyang Basin and at Zhengzhou immediately east of the basin, both associated with the Xiaqiuyan ceramic assemblage from Henei, coincided with the deurbanization of Erlitou during the middle second millennium BC. By the end of Erlitou Phase IV, the great urban centre at Erlitou was abandoned and its population appears to be absorbed into the newly constructed walled cities, Yanshi and Zhengzhou (Zhongguo 1999). With the construction of two well-defended cities associated with a ceramic assemblage from north of the Yellow River, the dramatic shift in the configuration of political landscape and material culture in the Luoyang Basin strongly favoured a scenario of military conquest from Henei. Like Taosi,

the failure to cope with an increasing highland component in the early city led to the demise of Erlitou.

Legacy

The Erlitou incorporation of the Jinnan Basin and the upper Huai Basin into its political hinterland marks the beginning of the Central Plains as a geopolitical entity that straddles the highland basin and the lowland plains (Li Min 2018). The early Bronze Age city transformed the Luoyang Basin from a highland gateway to a pivot of the four quarters, where the basin rose to political eminence for the first time in early China during the Erlitou period. It started a long geopolitical tradition in Chinese history, where successive regimes repeatedly returned to the Luoyang Basin for legitimization.

With the deurbanization of Erlitou and the subsequent abandonment of Yanshi fortress, the political significance of the Luoyang Basin declined during the second half of the second millennium BC. The next urban episode came at the end of the second millennium BC, when the emerging Zhou state built a new royal centre in the Luoyang Basin, in the name of returning to the old place of the legendary Xia regime. As I will argue in the later part of this paper, this spatial definition of legitimacy was likely a tribute to the Erlitou legacy.

Besides the emplaced social memory, an important Erlitou legacy was its repertoire of ritual vessel forms and its introduction of the first assemblage of bronze vessels in China. The ritual and commensal consumption activities revolving around various sprouted wares for the consumption of alcohol-based psychoactive beverages were part of the deliberate effort to foster a new cultural and religious tradition at Erlitou. The earliest bronze vessels in early China were produced in Erlitou's bronze foundry according to these shapes (e.g. the tripod beaker and the enclosed tripod pitcher with tubular extension) which attested to the cultural significance of these consumption activities in shaping the Erlitou urban experience.

The need for using these bronze vessels for precision heating and mixing of psychoactive ingredients became the major impetus for the technological innovation that ushered in the piece-mould casting technology which was a significant elaboration from the bivalve bronze casting technology used primarily for the production of weapons, tools, and accessories in the northern Altai. The close association with the palatial precinct suggested that the Erlitou bronze and turquoise workshops were strictly controlled royal production. Through the second and first millennia BC, this bronze assemblage had outlived the lifespan of the Erlitou regime and became the primary symbols of the *Sandai* Bronze Age states in the Central Plains.

The third quarter of the second millennium BC: the rise and decline of Zhengzhou

Emergence

Current evidence suggests that Zhengzhou and Yanshi were both constructed during the end of, or right after, the urban phase of Erlitou. From the perspective of geopolitical configuration, the change in the archaeological landscape of the middle second millennium BC could be characterized as a shift from a Luoyang-centred political order to a Zhengzhou-centred one. The construction of the Yanshi city in the Luoyang Basin served as the critical link for political transition.

Built approximately 85 km to the east of Erlitou, the fortified city of Zhengzhou (approximately 15 sq. km) had two rammed-earth enclosures built over the site of an Erlitou settlement. The rectangular inner city (300 hectares) was roughly the same size as Taosi and Erlitou. A palatial precinct consisting of dozens of rammed-earth foundations spanned over approximately 50 hectares at the northeast quarter (Henansheng 2001). Some featured an audience hall with a courtyard enclosed with roofed corridors. Located approximately 1 km south of the inner city, an outer wall flanked the bronze foundries, pottery kilns, bone workshops, and other craft production facilities in the southern half of the city.

The rapid rise of Zhengzhou as the new political centre likely benefited from the transfer of technological expertise, manpower, and administrative apparatus from Erlitou. Two bronze foundry sites in Zhengzhou produced a large number of clay mould fragments for the production of bronze vessels, tools, and weapons (Henansheng 1989). The clay piece-mould production techniques and the functional assemblage of Zhengzhou bronzes strongly resembled the Erlitou bronze industry, which had ceased to operate around the time that Zhengzhou foundries started. With expertise from Erlitou artisans, the products from the Zhengzhou workshops reached an impressive size. This expansion of vessel size occurred in tandem with an increased emphasis on cattle in elite feasting activities and royal rituals, which marked an important departure from the millennia-old Neolithic tradition based on pigs as seen in Taosi elite burials (Okamura 2005; Yuan & Flad 2005).

The Zhengzhou expansion followed Erlitou's footsteps. With the exception of Henei and Shandong, Zhengzhou outposts were either built next to or constructed on top of Erlitou strongholds (Li Min 2018). Unlike the Late Shang royal centre in Yinxu, there are no archaeological inscriptions that identify Zhengzhou and Yanshi with specific early Shang capitals named

in later historical texts. However, the shared design attributes, orientation of their architectures and cities, patterns of the temporal and spatial framework in historical geography, and cultural continuity with the material culture in the Late Shang capital of Anyang served as compelling evidence that these fortified cities represented the early royal centres for the emerging Shang state (Sun 2009).

From the first introduction of these distinctive pouch-legged tripod vessels among the Longshan communities in highland basins to the west of the Taihang mountain range, to their spread to the Henei Basin to the east of Taihang, to their increasing presence in the Luoyang Basin during the final phases of Erlitou, and finally to their rapid spread from Zhengzhou across a vast territory, the consistency in its production techniques, stylistic attributes, associated assemblage, and distribution of the highly diagnostic *li* pouch-legged tripod vessel marked it as the 'index fossil' of the Shang state formation process (Zou 1980). It provided us with the empirical basis to link Yinxu, the only site with inscriptions identifying itself as the Late Shang royal centre, with its outposts and with its predecessors in Zhengzhou and Henei (Li Min 2018). Its distribution pattern concurred with the descriptions in later textual sources of the Shang as a major cultural and political group active in the Central Plains during the second half of the second millennium BC.

The homogeneity in material culture, however, concealed the potential fault lines within the Bronze Age city of Zhengzhou. Based on our current knowledge on the density of sites associated with the Xiaqiyuan material culture, the population of the pre-conquest confederation from Henei was low relative to the Luoyang Basin. Even with the contribution of its allies from the plains of Shandong associated with the distinctive Yueshi material culture, the population is still far from meeting the need to populate two great cities of Zhengzhou and Yanshi as well as manning the Early Shang outposts that were established in all directions. The apparently homogeneous material culture of Early Shang sites, therefore, masked the complex makeup of the cultural groups that were incorporated into the Shang political enterprise. The end of the Erlitou ceramic tradition after the deurbanization of the city, in particular, suggests that the Shang state deliberately erased the cultural identity of the subjugated communities after its conquest.

Besides the highly homogenous material culture, the Zhengzhou political tradition placed significant emphasis on military ethos, an important deviation from the Taosi and Erlitou mortuary traditions that highlighted feasting, music, and ritual dance. In addition to bronze vessels for ritual and commensal

consumption, bronze weapons held a prominent place in elite tombs from Zhengzhou and its outposts. These elite burials belonged to lineages of elite warriors, which constituted the main forces of the Shang expansion out of Zhengzhou. Evidence for massive ritual violence were found across the Zhengzhou political network. The victims presumably were captives of many military campaigns waged by Zhengzhou's forces. Previously, human sacrifice was primarily observed at highland Longshan centres at Shimao and Taosi. Being a highland force, the Shang brought the violent practice to a new level. This emphasis on violence revealed that the early Shang state was largely a coercive enterprise, which is often overlooked by scholars who emphasized the monopoly of religious communication by Shang kingship (Chang 1983).

Crisis and decline

The Early Shang expansion from Zhengzhou soon reached its limit, and a series of crises weakened Shang hegemony. The Yanshi fortress in the Luoyang Basin was abandoned at the end of the fifteenth century BC (Zhongguo 2003, 218). The palatial buildings, workshop, and water management facilities in Zhengzhou appeared to have been gradually abandoned a century later without evidence for deliberate destruction (Zhongguo 2003, 228). After the decline of the palatial quarter, the Zhengzhou bronze foundries operated for some time before the city was completely deserted by the turn of the thirteenth century BC.

Three impressive hoards containing large bronze *ding* vessels were placed between the outer and inner wall enclosures at Zhengzhou, not long before the end of Early Shang occupation in the city. Two of these hoards were symmetrically placed near the two corners of the inner city, with cinnabar and charcoal layers deposited over the bronze vessels, suggesting that they were ritual dedications sponsored by the ruling elite in Zhengzhou, possibly to counter the forces making the city uninhabitable before its eventual abandonment (Henansheng & Zhengzhoushi 1999). These ritual events would have taken place with elaborate ritual protocols and contributed to the grandeur of Zhengzhou as an extraordinary place.

Located some 13 km northwest of Zhengzhou, Xiaoshuangqiao (150 hectares) flourished as an important royal centre in the final phase of Zhengzhou's urban occupation during the fourteenth century BC (Henansheng 2012). The discovery of palatial structures with rammed earth foundations, bronze foundries, and large-scale ritual sacrifice involving human victims and domestic animals inside the walled palatial precinct (9 hectares) defined the site as an important ceremonial and political centre in the immediate hinterland of

Zhengzhou. The massive deposits of cattle for royal dedications at the site marked the beginning of a cultural focus on cattle in state ritual as seen in oracle bone inscriptions of the Late Shang period (Okamura 2005; Yuan & Flad 2005; Lü 2015). The Xiaoshuangqiao ceramic tradition combined techniques associated with three cultural traditions, namely Xiaqiyuan from Henei, Erlitou from the Luoyang Basin, and Yueshi from Shandong, indicating that the construction of a Shang identity through material culture remained an ongoing process.

Partially overlapping with the late Upper Erligang Phase (c. 1450–1300 BC) occupation in Zhengzhou, Xiaoshuangqiao was either a ritual centre attached to the royal capital in Zhengzhou or a new royal capital established after the decline of Zhengzhou (Henansheng 2012). The flourish of Xiaoshuangqiao was very brief – less than five decades after its construction. Its palaces were burnt down and the city was abandoned at the end of the fifteenth century BC (Henansheng 2012, 725). The causes for the abandonments of Yanshi, Zhengzhou, and Xiaoshuangqiao remain unknown. The unusual appearance of Yueshi material culture at Xiaoshuangqiao seemed to indicate that the factional politics among the Shang alliances could have contributed to the brief flourish and decline of the site. By the end of the fourteenth century, the urban settlements at Yanshi, Zhengzhou, and Xiaoshuangqiao were all abandoned and the centre of political gravity shifted back to the Henei Basin.

Legacy

The construction of Zhengzhou and Yanshi immediately east of the Luoyang Basin reinforced the Central Plains-based political framework first laid out by Erlitou. This was further consolidated by the Shang incorporation of the Erlitou network of outposts in middle Yangzi, Jinnan, and the Huai River Basin. This vision of a political landscape centred around the Luoyang-Zhengzhou regions around Mt. Song left a long-lasting legacy in the political history of China (Li Min 2018).

Elaborating upon the Erlitou prospecting, mining, and metalworking foundations, Early Shang bronze workshops in Zhengzhou produced some of the most impressive bronze vessels of early China, and the technological knowledge of piece-mould casting was brought to Shang outposts such as Panlongcheng in middle Yangzi, Taijiashi in the middle Huai River Basin, and Daxinzhuang in Shandong. With the decline of Shang state power during the Late Shang period, these technologies became the basis for the political representation of emerging regional powers, which filled in the political vacuum left by the withdrawal of the Shang military presence (Bagley 1999; Steinke & Ching

2014). This decentralization of bronze casting technology effectively undermined the political authority of the Shang states, whose claim to power was partially based on the monopoly of this technology.

The fourth quarter of the second millennium BC: the rise and decline of Anyang

Emergence

The political dynamics between the abandonment of Xiaoshuangqiao in Zhengzhou and the construction of the Huanbei city in Anyang remain unclear (Tang 1999; Thorp 2006). Later textual sources mention a period of chaos and disruption in the Shang political order, which might have been caused by a crisis in royal succession, as seen in irregularities in the Shang king list. The Shang royal power might have moved its capitals around, as suggested by later textual sources, or disintegrated into multiple centres. If this was the case, these crises were certainly not great enough to generate major disruption in Shang material culture, unlike the change observed in the Erlitou-Erligang transition in the Luoyang Basin. Instead, ceramic typology of the pouch-legged *li* tripod vessels displayed strong continuity from Erligang to Yinxu phases. The Shang royal power eventually settled at Anyang in the Henei Basin, the very region where the archaeological assemblage defining the Zhengzhou tradition originated.

The first royal centre was established at Huanbei (470 hectares) on the northern bank of the Huan River. Within the walled city, there was an impressive palatial precinct (10 hectares) with dozens of rammed-earth foundations. Both the city walls and the buildings were orientated about 13 degrees east of true north, which was a characteristic of Shang walled cities, palatial foundations, and royal burials in Yanshi, Zhengzhou, Panlongcheng, and Yinxu (Jing et al. 2013; Sun 2009; Tang et al. 2000). After less than a century of occupation, however, the royal palatial precinct at Huanbei was burnt down like Xiaoshuangqiao, presumably from civil wars or highland raids. An elaborate gatehouse of the main palatial complex collapsed in intense fire and filled its entranceway with burnt architectural debris. The walled city was abandoned after this crisis. Its residents relocated to the south bank of the Huan River where they established a new royal centre in the area historically known as Yinxu, the Ruins of Yin, in operation from the middle thirteenth to middle eleventh century BC.

The discoveries of the royal cemetery, palaces, inscribed oracle bones at Yinxu present compelling links with the Late Shang kings from the twenty-first king, Wu Ding, to the twenty-ninth king, Di Xin, in historiography (Chang 1980; Keightley 1978, 1983, 2000). Based

on the king list in Han Dynasty sources, the Huanbei city was probably established by the nineteenth king, Pan Geng, who was responsible for relocating the Shang capital to the place of Yin in historical accounts. The late second millennium BC, therefore, presented the beginning of a convergence between textual and archaeological representations of history.

Unlike the Early Shang royal centres, however, the Late Shang royal centre at Yinxu was not walled. Instead, it was a giant conglomerate of residential communities, craft workshops for bone, jade, bronze, and ceramic production, and cemeteries located around the royal compound at Xiaotun. Yinxu grew from approximately 12 sq. km in Yinxu Phase I (late thirteenth century BC) to 30 sq. km in Phase III (late twelfth century BC), which was disproportionately larger than any of the major settlements within or beyond its political orbit.

Like all great urban centres before its time, Anyang incorporated diverse populations. Ceramic evidence identified urban enclaves inhabited by communities from the coast. Given the scope of human sacrifice that took place at the city, Anyang should have had quarters for the confinement of war captives. For example, the *zhang* sceptre-shaped clan emblem on bronze vessels from a recently discovered jade carver's tomb suggested that the deceased likely came from an elite artisan line of the Longshan-Erlitou tradition, where the *zhang* sceptres held a significant place in its rituals (Zhongguo 2017). Although this prehistoric jade form was not incorporated into the Shang ritual tradition, the artisan lineage had retained its ancestral symbol while offering their service to their Shang patrons. Beyond the Shang political domain, the Longshan-Erlitou jade form was still revered by the highland communities (e.g. the Sanxingdui-Jinsha civilization in the Sichuan Basin). As I will elaborate in the next section, these highland communities under the Zhou leadership played a significant role in the demise of the Shang hegemony.

The massive use of cattle scapulae for royal divination relied on a well-developed agropastoral economy, in which cattle herding rapidly expanded as part of the Shang ritual economy (Okamura 2005). In contrast to preservation of merchant records written on clay tablets that informs on the Assyrian commercial system, the Late Shang inscribed oracle bones came from a much more restricted source – royal lineage and inner elite lineages. Outside of Anyang, only one inscribed oracle bone was discovered in the entire Shang domain from a secured archaeological context, which came from the eastern outpost of Daxinzhuang across the Shang domain (Li Min 2008). From these inscribed bones, we can catch a glimpse of the geopolitics and elite life in the Late Shang world from the

perspective of the Shang royalty and its inner elite. The special nature of these inscriptions also meant that information on parallel networks of power (e.g. local assemblies, councils of elders, and the like that represent the 'community' in the Mesopotamian texts) was absent from this earliest repertoire of archaeological writing.

This ritual bias in the perspective of the early archaeological writing, however, does not mean that commerce did not exist. The flow of cowrie shells, for example, suggests an extensive trade network linking the Shang cities in the Central Plains with Eurasian societies and ultimately to the shores of the Persian Gulf and the Indian Ocean. Trade arrangements were made with highland intermediaries and continued to operate through the first half of the first millennium BC, until the antagonism between the rising Xiongnu empire and the centralized states in the Central Plains severely undermined the cowrie trade during the Warring States period.

Fragility and decline

Although Yinxu was the largest city in early China during its time, the inherent fragility of governance in the Shang political structure accounted for its relatively short urban lifespan. Several factors stood out as the

sources of its tensions. First, succession through brothers was a major fault line for factional politics within the Shang political structure (Wang Guowei 1917). The Shang king's list had nine generations where the throne was transferred among brothers. Many of these transfers involved factional conflicts that weakened the Shang state power.

Second, the overwhelmingly large city of Yinxu did not have a well-functioning network of intermediate-level authorities and was vulnerable to highland raiding. There were signs of economic, institutional, and military difficulties after the long reigning period of Wu Ding in the early Yinxu phases. Hedged by a few strongholds, the last Shang kings clung to their royal city albeit with reduced hegemony while Shang forces folded back from other key positions in the middle Yangzi, the Jinnan Basin, and the Luoyang Basin. While the vacuum left by the Late Shang withdrawal from the Panlongcheng garrison was filled by indigenous groups of the middle Yangzi, both the Jinnan Basin and the Luoyang Basin became sparsely populated zones after Yinxu Phase II (Liu Xu 2014). The Late Shang state could no longer hold on to these basins for its own prosperity, economic integration, and security. These two empty basins became huge gaps between the Shang strongholds and royal heartland, which

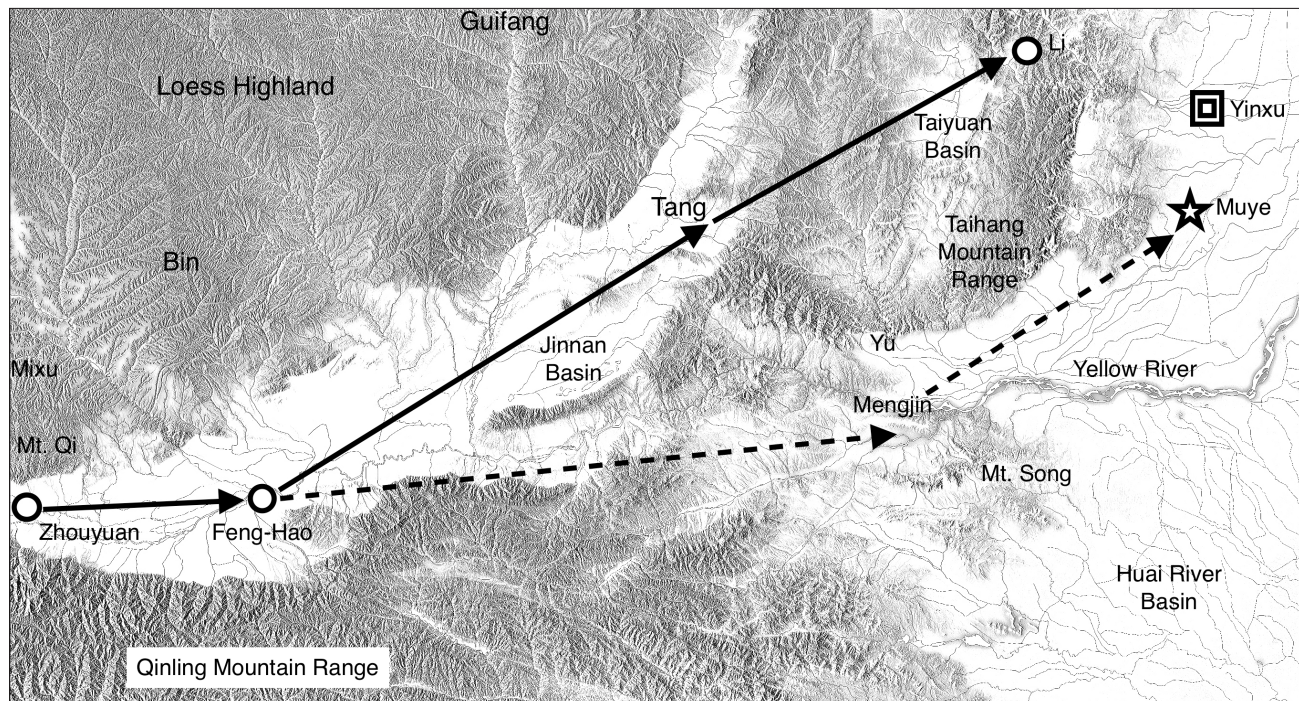


Figure 3.5. The routes of eastern campaigns led by pre-dynastic Zhou kings, whereas the northern route represents King Wen's campaign through the Jinnan Basin, and the southern route represents King Wu's campaign through the Luoyang Basin.

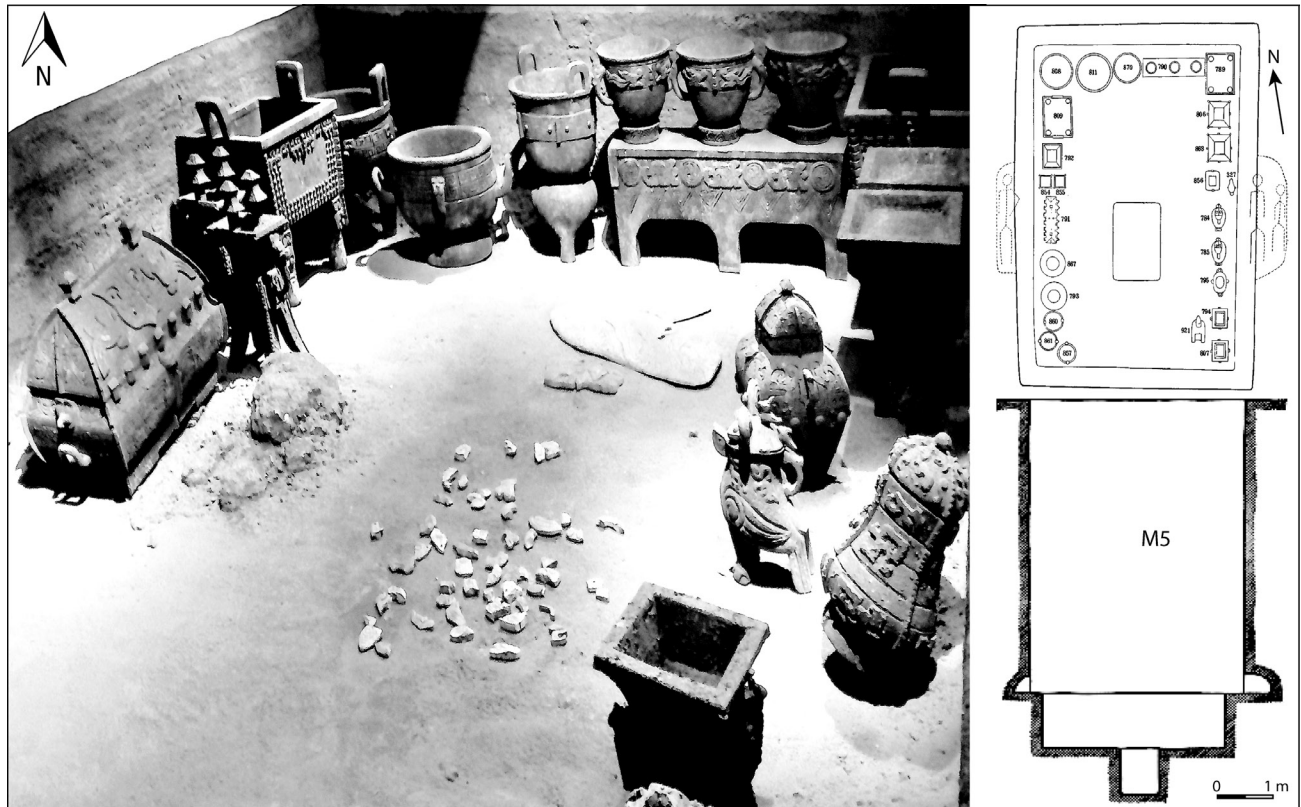


Figure 3.6. The mortuary context and the distinctive double niche construction of Fu Hao's tomb.

increased the fragility of the late Shang state. Once the frontier defence was breached, the rival groups could reach royal hinterland without encountering major resistance in between the frontier and the heartland (Fig. 3.5). This was evident in the eventual fall of Yinxu to Zhou campaigns.

Third, royal oracle bone inscriptions from Yinxu suggests a lack of formalized administration in Shang kingship. While the Late Shang oracle bones inscription might have projected an impression of Anyang domination over northern China, its constant references to armed conflicts with highland groups and coastal confederations under the labels of numerous *fang* suggested the limit of Shang hegemony. Besides the immediate deterrence of royal inspection tours and royal campaigns, the Shang king frequently called upon the hereditary leaders of Shang strongholds for military duties. These elite warriors were often addressed by their lineages rather than by their office, indicating the segmentary characteristics of the Late Shang political and kinship structure. This was also attested by the widespread use of clan emblems on inscribed bronzes, some of which allowed us to link the Shang elite lineages dispatched in Shandong with the members of cadet lineages buried in the royal

cemetery at Yinxu. The widespread use of oracle bone divination practices indicated that these elite lineages each had their own access to religious communication, which was a counternarrative to assertions of monopoly of religious communication by the Shang kingship (Li Min 2008).

Fourth, with the great geographic span of Shang strongholds and the absence of a formalized administrative system, the Shang political ties became increasingly fluid. Political marriages were one among many of the strategies for consolidating Shang royal power. Lady Fu Hao's distinctive highland style double niche burial construction and entries in oracle bone inscriptions about her highland campaigns against Shang's rivals suggested that this royal consort might have been a highland elite woman among the three dozen royal women married into King Wu Ding's household (Zhongguo 1980) (Fig. 3.6). The role played by the predynastic Zhou state also presented an example of the highland alliance-building. While the Shang king was preoccupied with the coastal campaigns against the *Renfang* confederation, the Zhou leaders were designated as the Western Lord to curb the revolts of the nine states in the Xia territory (Li Ling 2003). The subsequent Zhou conquest of the Shang was a

consequence of such Shang fragility of relying on a fluid network of allies and vassal states.

Finally, the highly porous structure of Shang political tradition was detrimental to the Shang claim of legitimacy. David Keightley's (1983, 2000) characterization of Late Shang society as full of holes like Swiss cheese (and not solid like tofu) was critical for the understanding of the presence and operation of different non-Shang traditions and memory communities in the broadly defined Shang world. The transmission of social memory associated with the pre-Shang legacy among elite lineages of the regional powers between or beyond Shang military strongholds posed significant challenges to successful political integration.

This was particularly important for understanding the political dynamics on the loess highlands (Cao 2014). These highly mobile agropastoral groups could be described as the highland Longshan memory communities, who were never fully incorporated into the political orbits of Erlitou, Zhengzhou, and Anyang. Their ancestral claim could be traced back to the Taosi-Shimao legacy of the late third and early second millennium BC, when they actively resisted the Shang hegemonic order based in Anyang to the east of the Taihang mountain range (Li Min 2018).

The Shang political efforts to build allies behind enemy lines in the Guanzhong Basin only led to the expansion of the Zhou political influence. When the last Shang king was committed to his royal campaigns on the eastern front, his western front was poorly defended by an archipelago of outposts and subsidiaries. Nearly a month of travel from the Shang royal centre, many of these subsidiaries were subjugated polities and were not fully incorporated into the Shang political system. Once the major Shang strongholds in the Guanzhong Basin fell to the Zhou campaigns, the rest shifted their loyalty and joined the western alliance force in its march toward Anyang. Without major Shang strongholds in Jinnan Basin, Luoyang Basin and Zhengzhou, the fully exposed Late Shang royal heartland soon fell to the Zhou conquest around 1046 BC.

Anyang remained as a major urban centre for some time after the Zhou conquest when its artisan lineages were busy casting commemorative bronze vessels for the Zhou victors. These vessels came in Late Shang form, with inscriptions honouring participation in victory ceremonies and the distribution of royal rewards. They would be brought to the new settlements granted to their patron as a part of the Zhou military colonization and also to the Zhou political base in the Zhouyuan-Baoji region which was located in the Guanzhong Basin, where they would be displayed in the ancestral temples of these prominent elite lineages.

The crisis of fragility soon set in. Three Zhou lords established around the Shang heartland to monitor the fallen Late Shang royal city contested the order of the Zhou rulers and allied with Shang revolts led by the leader of the Shang royal lineage at Anyang. The Zhou order was at the edge of collapse. In its second campaign of the eastern territories, the Zhou army defeated the groups that participated in the pro-Shang revolt and deported tens of thousands of people from Anyang and other major Shang settlements into the Zhou heartland in the Guanzhong Basin as well as the military strongholds newly established in the Luoyang Basin and other strategic locations. These deportees worked under the supervision of Zhou administrators in the new capitals and regional states granted to Zhou lords as builders and craftsmen, a scenario very much parallel to the Assyrian case described in Yoffee's and Seri's paper in this volume.

At 1200 BC, Yinxu was the largest city in the world. At 1000 BC, no settlements of any demographic significance remained. To destroy the potency of Anyang as a Shang ancestral place, Zhou troops systematically plundered the Shang royal tombs at Xibeigang, north of the royal palace in Xiaotun. The region never regained its political eminence as the seat of a great royal centre in Chinese history.

The first quarter of the first millennium BC: addressing fragility and resilience in the Zhou political order

Besides cultural and political differences, vast distances in geopolitical space was in itself a source of fragility for the newly forged Zhou political order. At the turn of the first millennium BC, the newly established Zhou state faced a great east-west divide in the political landscape with Guanzhong and Henei as the bases of two great political powers separated by nearly 1000 km and a constellation of resilient legacies associated with each episode of major political development in between. When Anyang flourished in the Henei Basin during the final quarter of the second millennium BC, the great basins hosting previous urban episodes were already deserted.

With the Zhou rising from the Guanzhong Basin to the far west of these central theatres of political development during the second millennium BC, these deserted basins served as a major fault line for the Zhou subjugation of Shang communities in the Henei Basin in farther east. The Zhou also faced the political challenge of incorporating this diverse landscape endowed with resilient political legacies from different urban episodes through the second millennium BC. Since these earlier urban episodes took place in the now

deserted basins lying between the Zhou and Shang heartland, the geopolitical and historical considerations were entangled.

To consolidate Zhou political integration, the Zhou set in motion a grand reconfiguration of the political landscape by systematically establishing a network of military colonies in strategic places and deporting subjugated Shang lineages to the Zhou heartland and strongholds. Zhou lords were granted domains as far east as Shandong and Beijing, approximately 1100–1200 km east of the Zhou political base in Zhouyuan. Shang elite warrior lineages from the Qufu region in Shandong were deported to places as far west as Gansu in western China, a distance of 1100 km, whereas these political refugees eventually became the ancestors of the Qin state (Zhao 2014; Liang 2017).

Historical geography served as the blueprint for Zhou’s grand scheme of state building in the Jinnan Basin and Luoyang Basin (Li Min 2016) (Fig. 3.7). From a demographic perspective, these efforts could be

considered as regeneration or reurbanization of these two basins. In both cases, the Zhou founders evoked the Xia and predynastic legacies associated with these historically important basins. The Zhou royal speech incorporated into the *Yi Zhou Shu* outlined the symbolic and logistical considerations for the choice of building a new royal centre in the Luoyang Basin, which had been deserted for nearly five centuries after the abandonment of Erlitou and Yanshi during the middle second millennium BC:

To secure Heaven’s protection, we must reside near the Heavenly Chamber. We must single out the evil people and remove them as I did to the King Zhou of Yin. Day and night we must reward and comfort the people to secure our land in the west. I shall promote my works until my good deeds are clear to all. From Luorui (the bend in the Luo River) to the Yirui (the bend in the Yi River), the land is easy to settle and without

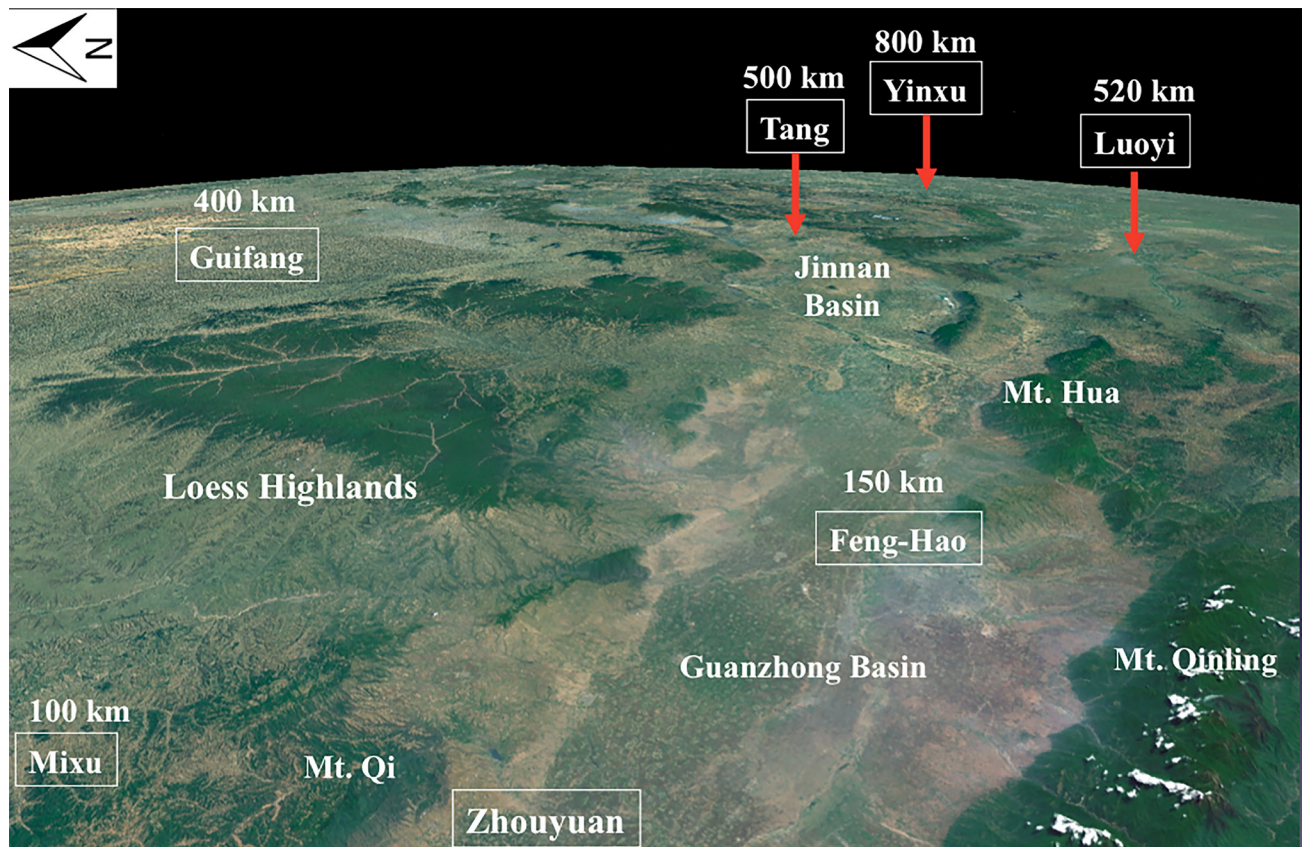


Figure 3.7. The political landscape of early China imagined from the perspective of Zhouyuan at the turn of the first millennium BC, wherein the Jinnan Basin and the Luoyang Basin were located between the Guanzhong Basin in the west and the Henei Basin in the east.

obstructions. Here was the old place of the Xia. If I might gaze south to Mt. Santu and north to the settlements at the foot of the Sacred Peak, if I might look back to the [Yellow] River and look out to the Luo River and the Yi River, this place would not be far from the Heavenly Chamber. (adapted from the translation of Nienhauser 1994, 63–4; the original transliteration has been changed to Pinyin)

The Heavenly Chamber refers to Mt. Song on the southern edge of the Luoyang Basin, which was regarded as the *axis mundi* in the cultural landscape of early China. While this account comes from a later transmitted text, inscriptions from bronze vessels commissioned not long after these events supported its general accuracy. The He *zun* vessel cast during the reign of King Cheng, for example, highlighted the association of axis mundi with the newly established capital Chengzhou in Luoyang:

It was when the King initially laid out his royal seat at Chengzhou. The King returned from extolling King Wu in the feng sacrifice, with sacrificial meat from the [Hall of] Heaven. In the fourth month, on *bingxu* day (ganzi no.23), in the ancestral temple, the King exhorted the junior princes of the royal lineage, saying: ‘In the past, your fathers were able to aid King Wen, whereupon King Wen received this [Great Mandate]. When King Wu conquered the great state of Shang, he reverently announced to Heaven: “Let me dwell in this central territory and from here govern the people.” Hark! While you are still minors lacking in understanding, look to your father’s scrupulous respect for Heaven. Comprehend my commands and respectfully follow orders! Your sovereign’s reverential virtue finds favor with Heaven, which guides me in my dullness.’ The King’s exhortation having finished, He was presented with the thirty strings of cowries used to make this treasured sacrificial vessel for (his father), Lord [X]. It was the King’s fifth year. (translated by David W. Pankenier in Cook & Goldin 2016, 18)

As seen in Figure 3.2, the new Zhou royal centre was only 40 km west of Erlitou and Yanshi. At 1000 BC, the deported Shang subjects were building a new royal centre for the Zhou in the very basin where their royal ancestor overthrew the Erlitou regime around

1600 BC. Zhou described the choice of this royal centre as the pivot of the world and the old place of the Xia regime – thus evoking a pre-Shang notion of world order to regenerate the urban tradition in the Luoyang Basin. This was one aspect of resilience – the deeply entrenched legacy of a historical place and its place-world, which had survived deurbanization and deportation of its urban dwellers in the middle second millennium BC.

In the Jinnan Basin, the Zhou state-sponsored regeneration was under the command of Lord Tang Shu Yu, a brother of the King Cheng. The royal investiture address incorporated into the *Zuozhuan* (compiled in the fifth–fourth century BC) detailed the historical relics, lineages of highland colonial subjects, lineages of Zhou administrators, and the political instructions to the Lord of Tang. The royal speech used the legacy of the predynastic polity of Tang (a legendary polity active in the Jinnan Basin during the late third millennium BC) and *Xiaxu*, the Ruins of Xia, the legendary first dynasty attributed to the early second millennium BC as its geographic and political touchstone for Zhou state-building:

To Tang Shu was allotted a grand chariot, a Mixu drum, Quegong armor, a Guxian bell, nine ancestral lines of the Huai clan, and five regulators for overseeing official duties. He was given his command in the Tang Proclamation and enfeoffed at the Mound of Xia. He led his people by means of Xia regulations and surveyed the land in accord with Rong models (Durrant et al. 2016, Lord Ding 4.1e).

Although the account was put in writing centuries after the investiture of Lord Tang at the turn of the first millennium BC, the archaeological landscape offers the touchstone for understanding the Zhou colonizing mission. Separated by Mt. Chong, the Zhou military stronghold at Tianma-Quncun, the site of the lineage cemetery for the descendants of the Lord of Tang, was 20 km south of the great Longshan centre of Taosi and was surrounded by some of the largest Longshan sites from the turn of the second millennium BC (Li Min 2016, 2018) (Fig. 3.8). Evidence for marriage alliances between Zhou and highland elite lineages at Quncun and Dahekou reveals a pattern previously observed in Fu Hao’s tomb in Anyang.

The convergence of historical and archaeological landscapes at the turn of the first millennium BC revealed that Zhou was fully aware of the pre-Shang legacies associated with the two great basins and used their legacies for military colonization and

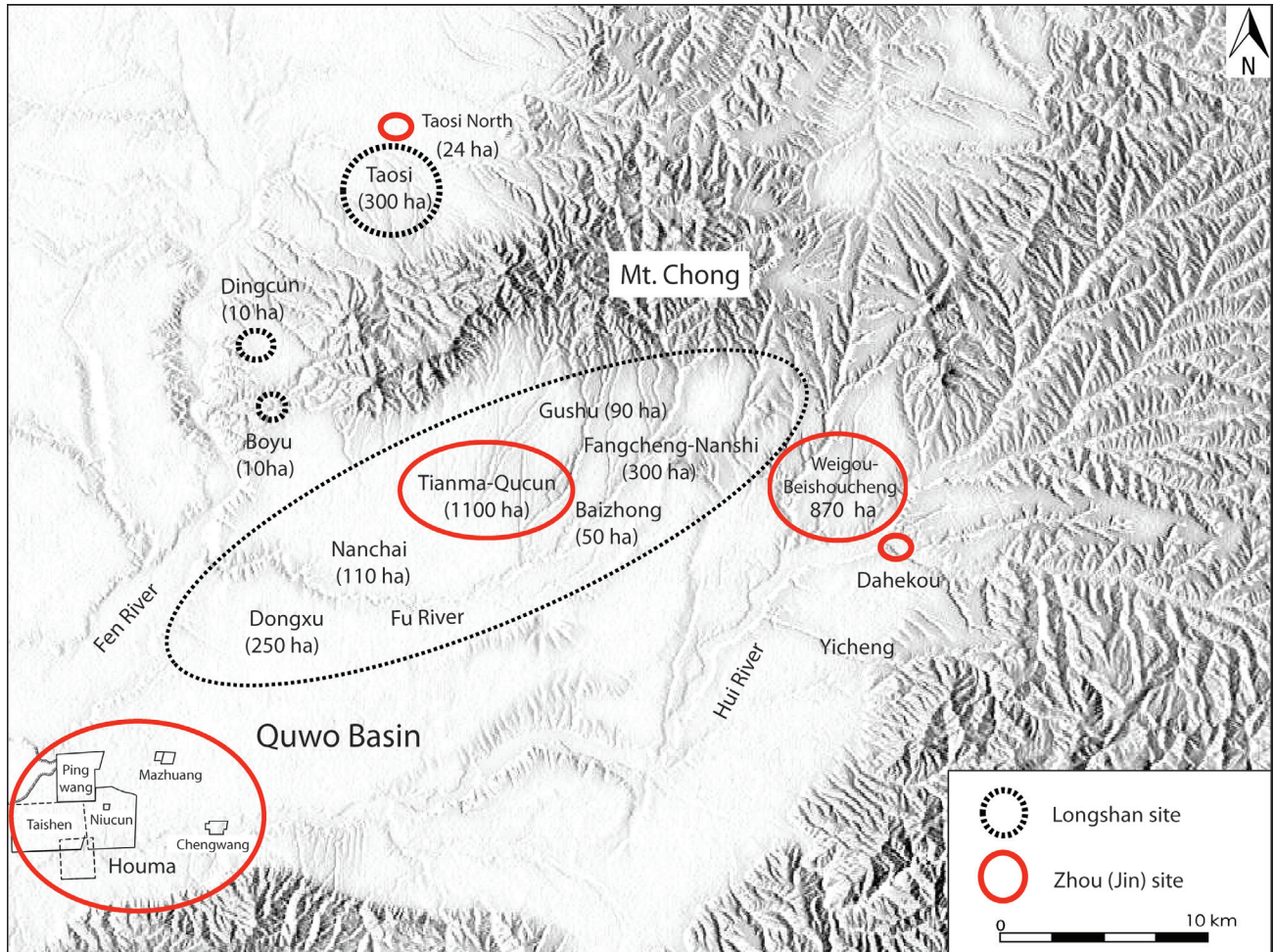


Figure 3.8. The Archaeological Landscape of the Quwo Basin in Jinnan. The dashed line in the Quwo Basin outlines the area of high concentration of the Taosi period settlements.

political consolidation. The important role played by the Longshan memory communities in the political development of the Shang-Zhou transition suggested that the pre-Shang legacy defined the shared political ideology among the Zhou and its highland allies. The Zhou did not have to invent the pre-Shang history of the two great basins – the descent groups of these pre-Shang powers were still active in the political arena during the final century of the second millennium BC. These highland communities served as major sources of Zhou’s historical knowledge and fought as Zhou’s allies in the campaigns against the Shang.

By adopting the historical modes of governance specific to each region, the Zhou state founders recognized the resilience of the past legacies (e.g. the Zhou adoption of a dual calendar system, Xia calendar for the Tang (Jin) state and Zhou calendar for the rest of the political domain, and the Zhou request of Shu Yu

to lead ‘his people by means of Xia regulations and surveyed the land in accord with Rong models’). The Zhou unified these historical legacies with the notion of Mandate of Heaven, which defined an overarching cultural order for Zhou governance (Li Min 2018). Zhou political rhetoric frequently connected the dynastic fortunes with their major landmarks: ‘In the past, when the Yi-Luo River dried up, the Xia regime failed. When the Yellow River dried up, the Shang regime failed’ (Guoyu 1978, 26–7).

In this historically configured political landscape, the Zhou leaders acknowledged that each basin was endowed with its historic legacy and highlighted that the Zhou’s claim to legitimacy upstaged that of the descent groups of the great powers in the past. The Zhou, therefore, used the political ideology of the Mandate of Heaven to neutralize the potential for resistance within a society with diverse historical

traditions. By acknowledging the historical shift of the heavenly mandate, the descent groups of the past regimes found themselves a legitimate place within the Zhou political framework (Li Min 2018).

This historical conception of the political landscape allowed the Zhou to work its way into a stream of tradition starting with the Xia civilization in the Jinnan and Luoyang Basins in the middle, followed by the Shang civilization in the Henei Basin in the east, and succeeded by the Zhou civilization in the Guanzhong Basin in the west. This strategy privileged the emplaced historical legacy associated with the two great basins in the middle and contributed to the consolidation of the Zhou political order by closing the fault line between the Shang and Zhong heartlands. At the same time, however, this attempt to articulate the Zhou into the great historical tradition of the Central Plains centred at the Luoyang Basin left the Zhou homeland in the Guanzhong Basin suspended in the west. Without a well consolidated hinterland, the Zhou royal centres in Guanzhong were vulnerable to infiltration by highland groups unincorporated into the Zhou political domain.

Although the Zhou had moved away from the fragile Shang succession system involving the transmission of power among siblings, beginning with the revolt of the three Zhou lords against the Regency of the Duke of Zhou at the onset of Western Zhou, factional conflict continued to unfold in court politics. During the reigning period of King You, factional competition in the Zhou court over succession triggered the fall of the Guanzhong Basin to highland invasion in 771 BC. Zhou's ambitious plan of colonizing the vast domain to the east with military strongholds, therefore, laid the conditions for its disintegration – at the time of highland crisis, no major states from the military strongholds in the east were capable of providing aid in time (Li Feng 2006).

After the death of the Zhou king, the two western states, the Tang (Jin) state granted to Lord of Tang and the Qin state established by the Shang lineages deported to Gansu, worked together to aid the safe transfer of King Ping to the sole remaining royal centre in the Luoyang Basin. The royal house lingered on for another five centuries before it was finally annexed by the Qin state in 255 BC. By then, Qin had moved into the Guanzhong Basin left behind by the Zhou and grew to be the greatest military power among all the Zhou states. With the unification of the empire in 221 BC, the Shang elite warrior lineage from the far east, deported to the western highlands by the Zhou conquerors at the turn of the second millennium BC, finally returned to its homeland in eastern China.

Conclusion

The five episodes of political developments reviewed in this chapter grant greater insight into the nature of fragility in ancient states of early China during the second millennium BC. Lineage organization and historical legacy constituted the focal points of cultural resilience and provided the potential for resistance when incorporated by a new state. Amidst the rise and fall of early cities and ephemeral states, an overarching *Sandai* (Three Dynasties) political culture developed in the historical Central Plains and set itself apart from the Bronze Age peers in continental East Asia (Li Min 2018). It was defined by the graded instruments of food and music that first took shape in Taosi and the Longshan society at the end of the third millennium BC and further elaborated through the Erlitou, Zhengzhou, YinXu, and Zhou royal centres. This stream of tradition persisted through the second millennium BC despite the political shift at an approximately quarter millennium timescale.

Despite the frequent dynastic change, the resilience of the lineage organization worked also as the sources of fragility for new regimes. The historical narrative of the predynastic Zhou lord being ordered by his Late Shang king to suppress the revolts of the nine states of Xia manifested such a fault line among the historical and geopolitical traditions (Li Ling 2003). In these historical circumstances, memory communities of past regimes often functioned as foci of resistance to the goals of new political leaders.

Fragility due to the divergent interests of different power networks became a constant concern of the early thinkers who had observed these historic episodes of breakdowns. Confucius' solution was to make good governance of the rulers mimic the role of lineage leaders thus merging the interests of kingship and kinship. This ideological pursuit, however, did not always work to satisfy the need of the expanding state. As legalist Hanfeizi (c. 280–233 BC) of the Qin state warned: 'A man who is a filial son to his father may be a traitorous subject to his lord.' (*Hanfeizi* juan 19) Legalist reforms implemented by the Qin and other states were aimed at bypassing powerful elite lineages and the exercise of direct state control over the population.

After the Qin unification, the political emphasis on elite lineage lines in the Zhou system was thoroughly abolished. The ambitious political experimentation of the Qin Empire, however, did not outlast its second ruler. The imperial Qin collapsed due to rebellions that arose from all of the fallen states. The decision of the imperial Han government to adopt a hybrid system that combined state appointed

administrators and hereditary governance by members of the royal lineage aimed at resolving tensions and hence the fragility within early states.

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Chapter 4

Fragile Authority in Monumental Time: Political Experimentation in the Classic Maya Lowlands

Patricia A. McAnany

Notions like fragility or its obverse, robusticity, have at their core an idea of durational time. Entities that are fragile may not last very long, are prone to dissolution or breakage, and may be unstable arrangements. Conversely, entities that are robust are said to possess staying power and to be sustainable. But how long must an entity survive to be considered sustainable or how briefly before it is perceived to have been fragile? Quantification of these qualities is problematic although Yoffee (2018) notes that many early states – here defined as fragile constellations of power with aspirations of long-term societal integration – tended to last about 200 years, perhaps four generations. By way of comparative analysis, Feinman & Carballo (2018) argue that more authoritarian modes of governance in Pre-Columbian Mesoamerica tended to flame out more quickly while those asserted to be less authoritarian and more collectively organized were sustained over longer periods of time. I return to a critical analysis of these assertions in the pages to follow but by way of introduction point to the important cross threading of political strategies with notions of time and temporal duration.

In certain regions of Mesoamerica – the southern Maya lowlands particularly – this cross threading constituted a central strut that supported governance along the lines of hereditary rulership. A ruler was positioned metaphorically within vast folds of time that created the supra-reality of rulership or, as Paul Ricoeur (1985, 106) has written – monumental time: ‘To this monumental time belong the figures of authority and power that form the counterweight to the living times experienced....’ In the southern Maya lowlands, the fleeting evanescence of a human life combined with strategies of governance emphasizing authority and social difference were yoked to monumental time, which lent an aura of stability and durability regardless of the reality of the situation.

If we equate, as Yoffee (2018) has suggested, the evolution of fragility with the evolution of complexity, there are large implications. Basically, we are asserting that humans moved from a lived experience of small groups (very successful over the long run) to large-group aggregations (which are prone to hierarchy and violent ruptures). This transition took place quite possibly with full knowledge that the latter posture was inherently more fragile, prone to authoritarianism, and ultimately to dissolution. As Wright (2006) has suggested, the term *experimentation* seems to capture appropriately this transformation in which new modes of self-governance were tested for efficacy and durability. Scott (2017, 183), likewise, emphasizes the improvisational qualities of early states.

In the pages to follow, I first discuss how experimentation might be relevant to the topic of fragility and then refer to some early experiments from across the globe. Thereafter, the focus narrows to the Maya Lowlands where early experiments in large-group aggregations share commonalities but later exhibit pronounced divergences in the manner in which authority was anchored in monumental time and hereditary (dynastic) rule. Based on empirical patterning, such anchoring produced a political constellation of considerable fragility.

Political experimentation

In an effort to depart from a paradigm that seeks to understand political formations in terms of ‘rise and fall’, I consider the human proclivity towards experimentation. Here, the term *experimentation* is used to mean a test or trial to see if something works. Deployed in this way, experimentation is conceived as social practice with political import. This usage is less formalized from that of nineteenth-century philosophers Auguste Comte or John Stuart Mill who codified the

use of experimentation as a critical component of the scientific method (Loizides 2014), although their usage does not preclude the central role of experimentation in early state formation.

Because political forms codify relations of power and positions of authority, they are frequently contested and sometimes ephemeral constructions as noted by Scott (2017, 183–218). Blanton & Fargher (2008, 5) link such fragility to rational but selfish social actions. But rationality is not always relevant to the construal of authority that oftentimes was rooted in mythic time and cosmic forces. Nonetheless, political forms tend to be unlike social, religious, or economic forms, although all can be imbued with significant relations of power. There is a resiliency – particularly to religious constellations – that is not often seen in political forms. By nature of their negotiated status, political arrangements often are finite, with an emphatic beginning (or founding event) and a muddled yet definitive ending. As Wright (2006, 316) notes, resurgent political entities frequently fine-tune more fragile aspects of earlier structures and in the process become more resilient. Such Lamarckian ‘descent with modification’ is observable in the Maya lowlands. In Postclassic Yucatán, rulers were called true men or *halach uinic* rather than the title of holy lord (*k’uhul ajaw*) in use during the Classic period. Elsewhere, Yoffee and Cowart (2010) have emphasized the distinction between political cycling and cultural resilience – the former tends towards dynamism and instability while the latter often prevails against all odds. Examining the fragility of political forms does not equate with cultural fragility or negate the possibility of political resurgence or ‘descent with modification’ as mentioned previously.

In their reiterations, political forms parallel the structure of scientific experimentation. Thus, archaeology – although not an experimental science – may be thought of as *the study of political experimentation*. What might we perceive as the range or continuum of human possibilities vis à vis political experimentation? Like the human imagination, variations are nearly endless (more on this shortly), but through time a funnelling effect occurred that resulted in surprisingly similar structures of authority among early states, such as those discussed in this volume. The polar extremes of this variation can be grossly characterized as authoritarian leadership, on the one hand, and voluntary collaboration (some would use the term anarchism, others collective action) on the other (Blanton & Fargher 2008; Graeber 2004; McLaughlin 2007). In between are councils, elected officials, and other variations on hereditary, achieved, elected, and appointed positions. Wright (2006, 314) argues that the experiments

archaeologists refer to as ‘early states’ often emerged from a milieu of intensely competitive polities, which often is argued to have been the situation in the Pre-classic Maya Lowlands (Clark & Hansen 2001; Freidel 2018; Ringle 1999). Frequently there is archaeological evidence of violent termination of places at which authority was concentrated, which is particularly the case throughout Mesoamerica. Nonetheless, why and how humans *disassemble* (à la Scott 2017, 183) political experiments is one of the most persistent (and overdramatized) questions of archaeological research. The popularity of this societal transformation perhaps is due to the fact that political dissolution can cause great suffering and misery for many although Scott (2017) contends that disassembly liberates ordinary people by removing the authority to extract taxes and labour in kind from power brokers.

Before examining how political experimentation might be pertinent to Lowland Maya governance, I range farther and examine some political forms with which humans experimented before a funnelling effect constrained variation and entrained selected forms of political relations – those with a more authoritarian bent.

Large ‘anomalous’ aggregations

Wengrow & Graeber (2015) have written about seasonal experimentation with less equal political relations during the very distant Upper Palaeolithic – a time for which narratives of egalitarianism are more commonly proposed as an accepted correlate of hunting, gathering, and collecting modes of subsistence. By suggesting that humans, as self-conscious political actors, shifted between more and less authoritarian modes of organization, Wengrow & Graeber (2015, 613) argue that ‘no social order was immutable: that everything was potentially open to negotiation, subversion, and change.’ While this assertion is open to contention, such a dynamic model of political relations prior to what is conventionally called early state formation unmoors us from a comfortable stage sequence. That sinking feeling of sand shifting underfoot is compensated by the discovery that providing wider latitude for political experimentation in the Upper Palaeolithic renders more comprehensible archaeological evidence from this period that indicates pronounced differentiation in burial practices and other ritual actions that previously were considered anomalous.

Concomitant with the poor fit between archaeological evidence and stage schemes is the increasingly large array of Post-Pleistocene sites investigated by archaeologists that are characterized as anomalous – a sure indication that something is amiss in the way

we are thinking about the past. Göbekli Tepe, Turkey, comes to mind – a central node of great ritual significance that is too early and too elaborate given our current scheme for understanding the role of religion during this time.

Roland Fletcher (2018) repeatedly has brought together archaeologists who study *anomalous giants* (as they are sometimes called) with the goal of developing terms that might accommodate such anomalies. While new terminology has not been quick to percolate to the surface, discussion of these places has deepened our understanding of sites that violate archaeological assumptions about when and where large sites with evidence of planning and monumentality should occur. We might think of these sites as canaries that give us early warning that political experimentation with a discernible material imprint is entering the repertoire of human strategies of socialization.

Early experiments are present on most continents and some bear familiar names: Cahokia, Hopewell, Caral, Stonehenge, Ukrainian *Trypillia*, *oppida* of Iron-age Europe, C^ô Loa in Southeast Asia, and Zimbabwe in east Africa, along with the many pre-Shang dynasty mega-sites of China (see contributions in Kim et al. 2018). These are places that cannot be explained by reference to our great grandfathers' neo-evolutionary scheme. They are *too big* and *too early* to shoehorn into a preconceived, gradualist understanding of social transformation suggested by older social theories. Rather than evincing a step-like or incremental increase in societal size and complexity (e.g., bands, tribes, chiefdoms, and states), these very large aggregations appear with little prelude and some included population concentrations exceeding 5000 people.

A common feature of early mega-sites is the presence of significant and often monumental constructions – mounds, ramparts, enclosures, and stone walls. Arguably, the cooperative work of building these constructions was not novel but the large scale on which they were conceived must have been highly innovative at the time. Something was changing as places were constructed at which thousands of people would assemble and witness negotiation and conflict resolution, perhaps within the context of spiritual practice. Such places would truly have been public architecture and, as Takeshi Inomata and colleagues (2015) have argued in reference to the 1000 BC E-Group construction (more on E-Groups shortly) at the lowland Maya site of Ceibal, they need not be causally linked to emerging elites.

For the middle Mississippi Valley of AD 1000, Timothy Pauketat (2018) suggests that Cahokia was the product of political negotiation and experimentation with ways of communicating with supernatural forces.

Further, he wonders if the builders of Cahokia intended for the construction to last forever, despite substantial investment in the Monk's Mound complex. Increasingly, we are beginning to understand that it was the *process of building* – the coming together of people to work on crafting something – that was significant. The end product – a built environment of monumental scale – did not necessarily evoke the sense of permanence that we impart to it today. Perhaps this investment in process represented a realistic assessment that political experiments can be fragile and finite.

This increasingly large array of old places – called anomalous, weird, or special depending on your investment in stage schemes – can be viewed as early political experiments in human sociality. Rather than being set aside as anomalous, these places represent key moments in time when humans tried with varying success and durability to thrive, *to express a large group identity*, and to perform their spirituality while promoting group cohesiveness and negotiating internal and extra-community conflict. Stanish (2017) advances the thesis that these 'anomalous' places represent experiments in large-group cooperation among complex but stateless societies. In effect, Stanish argues for the successful scaling up of human cooperation to accommodate large groups (greater than 1000 persons), deal with the free-rider problem, and manage common-pool resources (Ostrom 1990). He envisions a managerial authority structured in a manner that dissuaded authoritarian excess while ritual sanctions, covenants, and celebrations played a large role in promoting group solidarity and adherence to group norms (Stanish 2017, 40).

Whether or not Stanish's thesis is accepted, there is no denying that these evolutionary-stage defying places display more variation than exists among early states, lasted a good bit longer than the 200-year average of early cities, and rarely yield evidence of pronounced authoritarianism or rulership. Empirically, there is reason to suggest that these enigmatic places represent a societal transformation that is qualitatively different from the emergence of archaic states. Their remnant presence on the landscape indicates a deeper and richer well of political experimentation than older schemas of lineal evolution suggested.

In many respects, this realization aligns the study of the past with a perspective expressed by Indigenous leaders of the Americas and Hawai'i. At a 2008 conference on *Indigenous Perspectives on Cultural Heritage* organized by the Maya Area Cultural Heritage Initiative and the Penn Cultural Heritage Center (held at the University of Pennsylvania), Indigenous participants expressed the view that 'ancestral places and social memory are repositories of Indigenous knowledge

and experimentation. They provide a wellspring of innovation and resilience.' By reframing the past as a repository of knowledge and experimentation, the old paradigm of the past as a study of the rise and fall of political regimes is cast aside in favour of an examination of the variable ways in which humans self-organize into large-group aggregations.

Preclassic Maya lowlands: E-Groups and patron deity shrines

As we grapple with newly synthesized understandings of group aggregation and the implications for cooperation, hierarchy, and conflict, the highly enigmatic Preclassic Maya Lowlands provide an important case study. In contrast to the Gulf Coast where Olmec sites dominated the landscape during the Early Preclassic period (2000–1000 BC) with prominent displays of rulership, at this coeval time there is only a faintly discernible footprint of settlement in the Maya Lowlands at resource-specific locales such as the chert quarry at Colha, Belize (Iceland 2005).

At the cusp of the Early/Middle Preclassic and in the absence of appreciable settlement, a particular kind of non-residential architecture has been documented by Inomata and colleagues (2015) at Ceibal in the western part of the Maya Lowlands. Called an E-Group complex after its first recognition at Uaxactun where the complex of structures was found in map quadrant 'E' (Blom 1926), E Groups initially were built for ground-based solar and planetary observation. They are composed of a simple square western platform fronted with an open plaza to the east. On the eastern side of the plaza, a long, thin platform oriented

north-south was constructed (Fig. 4.1). If one stood on the western platform and sighted along the eastern platform, the solstice and equinox (for example) could be observed at pre-marked positions. This construction is now recognized as the earliest nonresidential architecture built for ritual practice in the Maya region (Freidel et al. 2017; Inomata et al. 2015). Contemplating the significance of E-Groups for the archaic states that followed, Inomata and colleagues (2015) question whether a direct line can be drawn connecting the two. E-Groups in their original conception might be closer to the 'anomalous' constructions discussed above than to incipient states. From this perspective, E-Group construction signals the cooperation of persons from a large catchment who came together seasonally (thus the lack of identifiable residences that are coeval with the earliest E-Group at Ceibal).

During the ensuing Middle Preclassic period (1000–350 BC), there was explosive growth of settlements with and without monumental structures. E-Groups continued to be constructed through the Early Classic period (AD 250–600), but during the latter part of the Middle Preclassic period these constructions were eclipsed by massive pyramidal shrines built for deities (Chase et al. 2017). Spectacular examples of massive Middle and Late Preclassic (1000 BC–AD 250) shrines – likely dedicated to patron deities – exist across Mesoamerica and include the Pyramid of the Sun at Teotihuacan (Valley of Mexico); Cholula in Puebla, Mexico; La Venta on the Gulf Coast of Mexico; La Blanca (Pacific coastal Guatemala); Dante at El Mirador, Guatemala; Xocnaceh in the Puuc Region of Yucatán, Mexico; and Lamanai, Belize (Fig. 4.2), to name just a few. Tunnel and trench excavations at many of these massive, squat pyramids have yet to reveal the presence of a royal tomb. This fact indicates that these structures were not funerary monuments dedicated to deceased rulers but shrines built to venerate deities.

Stucco masks that adorn the façades of many lowland Maya Late Preclassic (300 BC–AD 250) shrines represent a range of supernaturals, some of which were local to a place (i.e., a patron deity) while others were more widely venerated. The important point here is that a monument to a locally important deity proved an effective mechanism of large-group integration and identity-building during Middle and Late Preclassic times (1000 BC–AD 250) across Mesoamerica. But massive monuments have a way of massively restructuring a built environment (Love 1999). These colossal constructions created zones of restricted access and thus facilitated practices of inequality. Sacred shrines also engender the need for protection since they become a focal point of both internal contestations and external threat (McAnany 2010, 150–3).

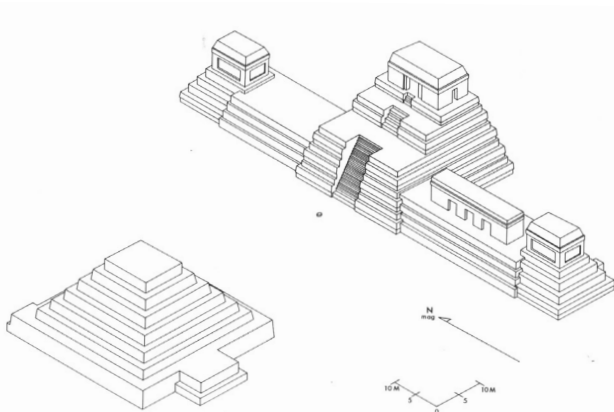


Figure 4.1. Plan of Preclassic E Group at Cenote, Belize (after Chase 1983:1302, reproduced courtesy of Arlen Chase).



Figure 4.2. *The 33 m-tall Preclassic deity pyramid at Lamanai (courtesy of Wikipedia commons).*

Broadening the temporal and spatial focus of deity shrines, consider the fact that widespread burning of ritual structures along the Street of the Dead at Teotihuacan (now thought to have occurred about AD 550) is widely interpreted as an inside job (Cowgill 1997; Millon 1988). Also relevant is the fact that among Postclassic Aztecs, the final task of invading Mexica warriors was to torch the patron deity shrine of a conquered *altepetl* (a city-state entity). Although deity shrines provided a strong and compelling focus for group identity, solidarity, and well-being, such structures also could become the focus of intra and intergroup conflict precisely because they catalyzed group membership and, in the process, engendered categories of ‘other’.

Thus, the presence of a deity shrine did not preclude intense competition and violence both within and between groups; in fact, such shrines probably accentuated identity-based conflict. But these colossal structures certainly did not instantiate governance through hereditary rulership with all of its lineal connotations. The ensuing Classic period (AD 250–600) is the time during which political practices that placed emphasis on rulership through lineal descent crystallized in the southern Maya Lowlands. This impulse towards dynasty stood in contrast to the northern Maya Lowlands where hereditary rulership that passed

through family lines either was not practised or is not visible archaeologically in features such as funerary pyramids that signal a large role for ancestor veneration (Freidel 2018).

Much of the Mexican Highlands also continued to embrace a ritual politics in which patron deities and those of naturally potent forces (such as rain and sun) provided the focus for large-group identity and ritual practice. The Aztec imperium was no exception. The twin pyramid complex at the centre of their capital at Tenochtitlán was dedicated to their patron deity Huitzilopochtli and to the god of rain, Tlaloc. Despite the absence of royal ancestor veneration among the Aztecs, pronounced social strata (in fact, an aristocracy) existed within a highly militarized society. Important decisions – particularly regarding imperial succession – lay in the hands of a high-level council; sodalities also provided an organizational matrix for cadres of soldiers and other professions. The Aztec marketplace at Tlatelolco – avidly described by Spaniards – indicates that commerce was brisk and unfettered. But whether this marketplace activity and other forms of domestic organization can be deployed to assert collective action around common-pool resources à la Ostrom (1990) is highly debatable. Feinman & Carballo (2018) assert that collective action was a strong organizational characteristic of Aztec society (and also of earlier Teotihuacan).

This assertion does not sit well with the highly visible militaristic and authoritarian rulership that existed among Aztecs and earlier at Teotihuacan. As a counterpoint, Murakami (2016) provides a compelling analysis of the standardized apartment compounds of Teotihuacan as indicative not of collectivization but of a dialectic of control and promotion of a corporate ideology. Thus, the absence of named rulers and funerary pyramids is not necessarily an indicator of equality and democratic decision-making about common-pool resources in the manner modelled by Ostrom (1990).

Authority and hereditary rulership hybridized: southern lowland Maya experiment

The divergent pathway followed in the southern lowlands reaches back to Preclassic times but unfolded during Classic times and particularly during the Late Classic period – a short time span of about 200 years (AD 600–800). During the Late Classic period, the southern lowland is thought to have reached a

population maximum of perhaps 3–4 million (Kennett & Beach 2013). Somewhere between 60–80 per cent of ordinary people lived within the satellite orbit of about three dozen royal courts (Inomata & Houston 2001a & b; Martin & Grube 2008; Miller & Martin 2004). Most artefacts and monumental constructions that are considered quintessentially ‘ancient Maya’ were made, inscribed, or painted during this 200-year heyday of royal courts.

During the Late Classic period, the design of pyramidal monuments morphed into taller and thinner pyramids, many of which were associated with or housed the remains of members of ruling families (Fig. 4.3). As at Palenque’s Temple of the Inscriptions, funerary shrines often were erected or completed by sons or survivors of deceased rulers who inherited the throne or sought to make a statement about their right to the throne. Within southern lowland society of the Classic period, rulers were heavily vested in hereditary rulership and unequal access to power and wealth became entrenched. As Joanne Baron



Figure 4.3. Late Classic funerary pyramid (Temple 1) of Tikal ruler, Jasaw Chan K'awiil (photo by author).

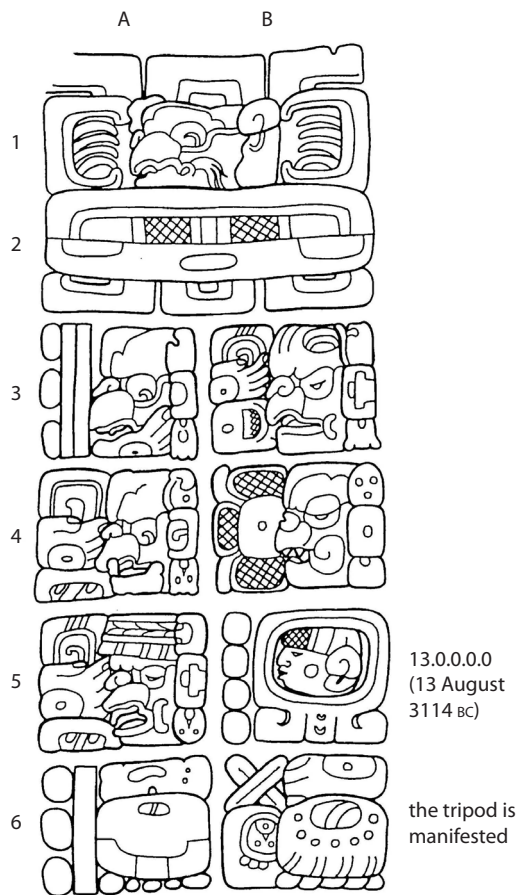


Figure 4.4. Part of inscription from Quirigua, Stela C, that contains a ‘creation’ date of 13 August 3114 BCE or 13.0.0.0.0 in the long count followed by a calendar-round date of 4 Ajaw 8 Kumk’u (reproduced fromLooper 2003:159, courtesy of author).

(2016, 18) has shown, Classic-period consolidation of rulership did not eliminate the need for patron deity shrines. Rather, such shrines became active agents in the political ecology of royal courts. Patron deities were promoted or demoted as part of a strategy of governance by a ruling faction.

Interestingly, long-count dates (five-position calendrical notation associated with Classic royal courts) were deployed to provide ‘birth’ dates for patron deities. With origins in a mythic past, deities bridged the gap between mythic time and lived time. The Palenque Triad of patron deities are probably the best-known examples of local deities with histories that extend back to primordial times but there are many others (see Baron 2016, 173–87; Stuart 2011, 245–51). Since the long-count was capable of expressing bundles of time in excess of thousands of years, the mythic past (and future) could be chronicled

alongside contemporary events. The long-count calendar originated during Preclassic times outside of the Maya region and there is good reason to suspect that this count of monumental time was invented to create deep narratives of place for patron deities thereby rooting group identity in a mythic past. Only later was the long count adapted to the cosmic framing of earthly rulers.

Stuart (2011, 229–51) illustrates how social order and continuity was reaffirmed using massive bundles of time at southern lowland sites. The ability of scribes to extrapolate bundles of days and years to the nineteenth order (Stuart 2011, 237) allowed time to be abstracted in a truly monumental fashion. Rulers could key into auspicious folds of monumental time to emphasize their accession to rulership, martial campaigns, or building dedications. K’inich Akhal Mo’ Nahb of Palenque did just this. His accession took place on a Tzolk’in (Calendar Round) anniversary of the earlier ‘accession’ of the maize god in 2325 BCE and also commemorated the ‘seating’ of a Palenque patron deity (GI) much earlier (Stuart 2011, 248–9). At Tikal, where the k’atun or 20-year passage of time was the focus of much celebration and monument erection, Stela 31 depicts and describes the ruler Siyaj Chan K’awiil as one who tends to the k’atun much as one would a maize field (Stuart 2011, 274). *K’uhul ajaw* were master cultivators of monumental time, which stood for longevity and durability and provided a sharp contrast to the realpolitik of fragile political authority.

The way in which the royal chronicling of the long count meshed with the older agricultural Calendar Round to create a complex whole indicates the perceived importance of grounding the abstractness of very large numbers with the seasonal concerns of farmers who were served by the Calendar Round (Fig. 4.4). Notably, the farmer’s Calendar Round proved far more durable than the long count and the former is still observed in parts of the Maya region. The abstract quality of large numbers – particularly in reference to bundles of time – presumably would *not* have been very effective in mediating the social distance that stood between Classic Maya royals and their supporters who likely were more vested in mundane affairs that included planting, harvesting, and transporting heavy tumplines filled with crops or goods from place to place. Thus, the genius of Waxaklahuun Ubaah K’awiil (thirteenth ruler of Copan, AD 695–738) who is shown on Stela D with a long-count date carved in full figural glyphs (Fig. 4.5). In this extraordinary stela, each unit of time is represented by a figure that carries a bundle (of time) in a tumpline. The message is clear: time is a heavy burden to be borne by those who have authority over (and responsibility for) the wellbeing of



Figure 4.5. *Stela D (back side), Copan, with a long-count date rendered in double-column full-figural glyphs that emphasize the burden of deep time accepted by dynastic ruler Waxaklajuun Ubaah K'awiil: (a) photo by author; (b) drawing by John Montgomery (copyright 2000, JM 00602).*

the kingdom. One cannot help but imagine that such representations strove to create an intersubjective or shared basis of experience between ruler and ruled. Such conventions address what Kurnick (2016, 19–20) refers to as the paradox and incongruity of governance by rulership that simultaneously reinforced social inequality and also promoted solidarity.

The southern lowland experiment celebrated named rulers in both life and death and sought to place them within a grand cosmic order that mimicked the thousand-year folds of time within which deities were placed. Just as patron deities were metonymically linked to place, so a royal court might be founded and conceived as an *axis mundi* – a central place of cosmic importance. Extensive use of the long count lent an air of stability and immortality to the fragile and shifting nodes of power that dominated the southern lowland landscape during the Late Classic period.

Northern ambivalence to monumental time

The northern lowlands differ from the south in a number of ways but despite significant contrasts the two are grouped together as the Maya Lowlands. The points of contrast that are most relevant to the topic of fragility are the underrepresentation of royal tombs and carved hieroglyphic texts with long-count dates in the northern lowlands. The presence of massive Late/

Terminal Classic palace complexes and the popularity of carved stone mosaic façades indicate that there was no shortage of stone or skilled stone workers in the north. Yet an explicit and omnipresent link between political authority and the long count does not seem to have been a central strut of northern rulership. In so far as a hieroglyphic collocation called an *emblem glyph* has been used to signify the presence of a royal court among archaeologists and epigraphers, the underrepresentation of emblem glyphs (and stone-carved hieroglyphs in general) has produced a quandary in nomenclature. Was there a royal court at Uxmal or at Chichén Itza? Few doubt it but the accompanying corpus of texts with emblem glyphs and long-count dates provides weak evidence by southern standards.

The contrast between north and south is displayed in a not-so-subtle manner at Ek' Balam – a northern site located in the eastern part of Yucatán, México. At Ek' Balam, George Bey and colleagues (1998) document a history of occupation going back to the Preclassic (Balam ceramic complex, 600–450 BC) and continuing through colonial times. More recent work by Leticia Vargas de la Peña & Victor Castillo Borges (2017) on the acropolis of Ek' Balam yielded what Alfonso Lacadena (2004, 116) referred to as a 'tomb never seen before north of Calakmul'. The latter site is located about 400 km south of Ek' Balam and considered the northernmost (and a very powerful) player in the nodal



Figure 4.6. Entrance to burial chamber of Ukit Kan Le'k Tok' behind ornate white stucco façade on the Acropolis of Ek' Balam (photo by author).

network of royal courts that dominated the southern lowlands during Late Classic times. As a northern outlier to this network, the royal court of Ek' Balam was founded in the eighth century during the reign of Ukit Kan Le'k Tok'. Referred to as a *kalo'mte'* (a ruler more powerful and possibly more skilled in martial tactics and strategy than a *k'uhul ajaw*), Ukit Kan Le'k Tok' was buried in a crypt within the acropolis (Fig. 4.6). Also found on the acropolis was a room containing a painted mural of 96 hieroglyphs that opaquely describes the arrival in AD 770 of a powerful person who witnessed the accession of Ukit Kan Le'k Tok' to rulership (Vargas de la Peña & Castillo Borges 2017). Of course, Ek' Balam existed before AD 770. As mentioned previously, Bey and colleagues (1998) documented the deep history of this place at which occupation started nearly 1500 years earlier. Rather, this date marks the establishment of a royal court and the founding of a kingdom called Talol of which Ek' Balam was the centre (Lacadena 2004). The mural of 96 glyphs marks the beginning of a northern experiment with southern-style sacred kingship in which hieroglyphic texts and

long-count dates figured prominently in positioning the ruler within cosmic time.

With the accession of Ukit Kan Le'k Tok' there was an explosion of hieroglyphic texts – especially painted texts – at Ek' Balam (Lacadena 2004, 3–84). The abundance of painted over stone-carved texts is significant because long-count dates were more often chiselled into durable stone than painted on to plaster. True to the northern tradition of kingship and despite all the writing at Ek' Balam, only four long-count dates are known and one of them is Stela 1, which bears the image and name of Ukit Kan Le'k Tok' (Lacadena 2004, 98). The four dynastic counts are outnumbered by twelve Calendar-Round dates (Lacadena 2004, 84) – the older calendar that marks seasonal agricultural and ritual events.

Ek' Balam is further distinguished by the fact that its glyphic texts are an eclectic mix of Classic Cholan grammar/vocabulary (identical to southern lowlands texts) and ancestral Yucatec conventions and word usage (Lacadena 2004, 117–20). Houston and colleagues (2000; see also Law et al. 2009) have

suggested that the written and spoken language of royal courts likely was distinct from the language of ordinary people living in the southern lowlands. As such, sacred hieroglyphic texts would have reinforced social differences within a polity. But at Ek' Balam, both the court language of the southern lowlands and the local language of the north were painted on preserved texts from the acropolis. Thus, Ek' Balam, capital of the kingdom of Talol, adopted many characteristics of southern-style rulership including the visit of a foreign dignitary concurrent with the founding of Talol and the spectacular entombment of Ukit Kan Le'k Tok' upon his death. The literacy of the scribal community at Ek' Balam is beyond doubt yet only four long-count dates have been discovered thus far and texts display a hybridity between Classic-period Cholan and ancestral Yucatec languages. The final dated text from Ek' Balam records a date that is less than 100 years after the AD 770 founding date. Thus, the incorporation of southern elements of rulership at Ek' Balam was short-lived and highly selective. Over the long run, the conjoining of monumental time with political authority seemingly was not of extreme importance in the northern lowlands. Successors to Ukit Kan Le'k Tok' chose not to portray themselves as master cultivators of monumental time.

Fragility in its many guises or how political experiments end

As mentioned earlier, political arrangements tend to be finite, with a clearly defined beginning that often is expressed materially as a founding event and a messy ending that in the Maya region is often interpreted as a violent termination. Generally, the founding of a Lowland royal court was textually documented – as at Ek' Balam – and witnessed by an emissary or representative of an overlord from a more powerful court. With a founding event of AD 770, Ek' Balam may have been the last royal court to be founded and to join the intricate network of court alliances that appear to have pivoted around the two influential courts located at Tikal and Calakmul. Freidel (2018) argues that the philosophy of governance differed fundamentally between these two supra-states with Calakmul representing an older, sodality-based system of governance and ruler selection while Tikal embraced hereditary rulership with chains of succession bolstered by reference to monumental time.

Elsewhere, we have reviewed the evidence for the end of royal courts and the abandonment of the southern Maya 'urbanized' landscape (McAnany et al. 2015). Since the long count provided support for the institution of rulership, its absence – in conjunction

with architectural and ceramic evidence of abandonment – indicates that royal courts could not muster the resources necessary to celebrate highly significant dynastic and calendrical events of the ninth century. The seating of a new Bak'tun in AD 830 is one such event that many southern courts did not/could not celebrate. In fact, AD 830 often is invoked to separate the Late Classic from the subsequent Terminal Classic period (~AD 830–950/1000) during which remnants of royal courts were radically reformulated and survived in distinct pockets of the lowlands (Ebert et al. 2014; Kennett & Hodell 2017).

Perhaps the most striking feature of the process of court dissolution is the diversity of ways and variable tempo by which Classic Maya places were terminated (also see Aimers 2007 and Masson 2012). This pattern suggests that one external crisis – such as drought or invasion – was not responsible. Rather, specific vulnerabilities coalesced with stochastic processes (some of which may have been climatic or environmental) to render the congeries of lowland Maya cities no longer livable, initially for royals and then for nearly everyone else. As elaborated elsewhere (McAnany et al. 2015), several trends stand out: (1) royals left first – perhaps fleeing to a more secure environment – while sustaining populations generally remained; (2) within one to three generations, sustaining populations moved elsewhere; and (3) the termination of royal courts cascaded irregularly across the Maya lowlands (Ebert et al. 2014). Islands of more resilient and resurgent Terminal Classic courts re-organized in a less hierarchical manner and – judging from costuming representations – in conversation with polities to the north and west in which hereditary rulership was less emphasized. Nonetheless, Terminal Classic attempts to regroup and reinvent rulership in the southern lowlands met with only limited success, although a greatly transformed style of rulership eventually was reinstated throughout the lowlands and might have coalesced into larger-scale political entities in the absence of sixteenth century Spanish invasion and subsequent wars of conquest.

A reluctance to leave among ordinary people living around royal courts is a determinative factor that contributed to the long-term cascade phenomenon that characterizes the abandonment of the southern lowland landscape. The archaeologically documented sequence of leaving throughout the lowlands unfailingly indicates that royals – who were able to move strategically within a network of royal courts – abandoned their royal courts. Yet, the interdependence between courts and sustaining populations is rarely discussed in collapse scenarios. The fact that most sustaining populations chose to migrate elsewhere

within one to three generations of court abandonment suggests that, over the long run, the experience of living without the social order and hierarchy imposed by a royal court was not easy. Even though the politics of densely networked courts heavily vested in hereditary rulership and monumental time proved unsustainable, so too did life without vertical obligations, royal mediation with the gods, impressive pageantry, and security within a patron-client relationship.

The southern-style experiment in sacred rulership and cosmic time – beautiful to behold and expensive to maintain – was closely tied to local landscape so that subsequent regeneration within the same landscape was either not possible or perhaps not necessary. A kind of path dependency seems to have frustrated attempts at regeneration in the south. Kennett and colleagues (2012, 790) examined the concordance between proxy evidence of dry spells and archaeological data that includes long-count dates and other indicators that the southern courts were in trouble. Droughts between 820-870, around 930, and again from 1000-1100 are clearly indicated and must have stressed lowland Maya populations. But when correlated with hieroglyphic accounts of martial activity and the erection of monuments with long-count dates, it's clear that Maya royal courts were in trouble before the droughts began. Were courts further destabilized by the dry spells? Probably, but droughts likely provided the final blow to a network of royal courts situated within an already politically fractured landscape. To borrow a term from James Scott (2017, 202–9) – *politicide* – rather than *ecocide* appears to be a major contributing factor to the dissolution of the Lowland Maya royal courts.

Even after the southern courts ceased to be political capitals, they were not completely abandoned but rather entered into a new use regime as places of pilgrimage, ritual commemoration, and a focus of hunting activity. Into the twentieth-century, Lacandon Maya visited old royal courts along the Usumacinta River – Palenque, Bonampak, and Yaxchilan in particular – and left offerings to their deities until tourist traffic rendered these practices untenable because of the rampant theft of Lacandon offerings (Palka 2005).

Significantly, in the northern lowlands, where practices of governance were never as vested in hereditary transmission and the trope of monumental time, the political experiment endured for another hundred years. During the Terminal Classic period, Chichén Itzá became the most powerful and influential polity – some would say imperium – in the Maya region. The northern scribal community survived several profound political transitions. Postclassic scribes continued to use a modified hieroglyphic script and taught the

syllabary to Bishop Diego de Landa in the sixteenth century. Extant Maya codices – now held in Madrid, Paris, Dresden, and Mexico City – were created during the Postclassic period. These amazing records of Maya literacy postdate the threshold year of AD 830 by as much as 500 years. Thus, the fragility of Classic-period political constellations should not be confused with the scribal literary tradition, which survived the political transition at the end of the Classic period.

Ek' Balam continued to be a seat of power through the Postclassic period although construction activity diminished greatly. Nonetheless, sixteenth-century Spanish *encomendero* Diego de Contreras stated in a *relación* that (before the coming of Spaniards) the people of Tahcabo (a town just 17 km north of Ek' Balam) gave tribute to Namon Cupul, a Late Postclassic ruler of Ek' Balam (RHGY 1579[1900], 50). By this measure, political authority at Ek' Balam proved vastly more resilient than the southern variants.

Final considerations and conclusions

Rulership meshed with concepts of monumental time as southern rulers assumed responsibility for the *order of days* (Stuart 2011). Such coupling established a durability to political authority that, in reality, can be ephemeral and fleeting regardless of whether we are examining Maya rulership in the eighth-century or the U.S. presidency in the twenty-first century. Because political forms codify authority through governance and the imposition of order, they are more fragile than social or religious constellations. The construction of massive shrines and the origins of the long count in the Preclassic period suggest an initial linkage between patron deities and deep, mythic time, which later was adopted by southern rulers to establish a deep-time temporality to their rule.

Significantly, the practice of yoking rulership to the long-count calendar didn't become widespread in the north – an area in which sixteenth-century Spaniards found thriving populations. Perhaps the practice of framing rulers within folds of monumental time masked a tacit recognition of the fragility of rulership. The northern lowlands – less vested in hereditary rulership although greatly involved in monumentality – appears to have been engaged in a more integrative and resurgent political experiment. Perhaps for this reason, archaeologists continue to draw parallels between the northern Maya lowlands and central México.

Political formations can be approached as fragile yet dynamic social experiments fraught with contestation. By discarding the 'report card' approach to political forms, archaeologists gain an opportunity to

analyse complexity as experimentation and to understand more deeply human political constructions that are beautiful, awesome, and sobering in their capacity to engender inequality. But critically pertinent to this consideration is the limited ability of pre-industrial states to wreak environmental havoc and large-scale destruction to the degree that is possibly today. Our crises were not necessarily their crises and we need to keep this in mind in order to develop more realistic narratives of the past.

As humans experiment with political relations, there is a noticeable pulsing between authoritarianism and more representational styles of governance. Today, we can see that societal trauma – especially economic insecurity and rapid social change – tends to move people in the direction of authoritarianism. Whether or not these factors are relevant to understanding the past requires much more thought. Recognition of the propensity for humans to construct and deconstruct political scaffolding – in evidence today and certainly in the past – provides a strong starting place for examining the fragility of political experimentation. Such an approach lends itself to more productive analysis and moves archaeology beyond the rise-and-fall approach that V. Gordon Childe (1965, 4–5) critiqued over 50 years ago.

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Chapter 5

Ancient Egyptian Exceptionalism: Fragility, Flexibility and the Art of Not Collapsing

Ellen Morris

In comparison to other early states, Egypt cannot be considered fragile. From its first through its eighth dynasty, for instance, pharaoh followed pharaoh for nearly 800 years (c. 2900–2118 BC).¹ Some runners in this relay stumbled, but others invariably picked up the sceptre and ascended the throne. Thus, the state endured as an essentially recognizable and functional entity for a seemingly unfathomable amount of time. This is especially notable given that multiple lines of evidence reveal points of stress and fracture that should have brought it to its knees many centuries before.

This meditation on the extraordinary longevity of the first iteration of Egypt's pharaonic state has three main sections. It begins with a brief consideration of the factors that allowed Egypt to skirt dangers that laid low many comparable polities. This discussion draws heavily on James Scott's *Against the Grain: A Deep History of the Earliest States* and concludes that while geopolitics may have saved the state from many dangers, it could not inoculate it against Scott's category of politicide. The second section investigates three points in Egypt's history in which the downfall of the pharaonic regime must have seemed immanent due to governmental abuses of power, infighting, and societal schism. This section concludes with a short discussion of factors that may have led to Egypt's remarkable resiliency.

All things – good or not – come to an end, and the essay concludes by tackling the question of just what it was that made the demise of the Old Kingdom different. After the last pharaoh of note died (c. 2153), the crown passed to the welter of obscure kinglets who together make up the Eighth Dynasty. Like the regime that came before them, these rulers did their best to maintain the unity of the nation by courting a powerful provincial family and lavishing benefits upon it. After the last of their number perished (c. 2118), however – and quite probably well before that point

– the centralized state broke asunder and remained so for nearly a century and a half. Because the length of this interval between two successive Kings of Upper and Lower Egypt was so entirely unprecedented, the final argument here mounted is that there are indeed climates inimical to political stability.

Dangers skirted, bullets dodged

In contrast to the often-enduring material signatures of ancient states, most were unstable entities that rarely lasted long. This argument animates this volume as well as James Scott's book *Against the Grain*. In a chapter titled 'Fragility of the Early State: Collapse as Disassembly', Scott discusses threats to the stability of ancient states (Scott 2017, 183–218). Reading through the chapter with an Egyptologist's eye, however, one is struck by how many of these potential state-wrecking shoals Egypt evaded by virtue of its location in a fertile river valley at the edge of the Sahara (see Fig. 5.1).

Salinization of the soil

Death by declining yield due to the progressive salinization of soil was not an issue for the Egyptian state. The annual inundation blanketed the Nile Valley with a fresh layer of nutrient-rich soil each year just prior to the sowing season, and thus fields did not need to be fertilized or left fallow. Satiric texts composed in Egypt's Middle and New Kingdoms dwell at length on the supposed miseries of the Egyptian peasant (Camino 1997). Visitors like Herodotus, who came from countries where the life of the farmer was indeed truly miserable, however, were impressed with the comparative ease of farming in Egypt (Herodotus II.14). This does not mean that erratic floods, passing pests, or highly exploitative social and fiscal policies didn't cause misery. It simply means that the soil could not have been more fertile.

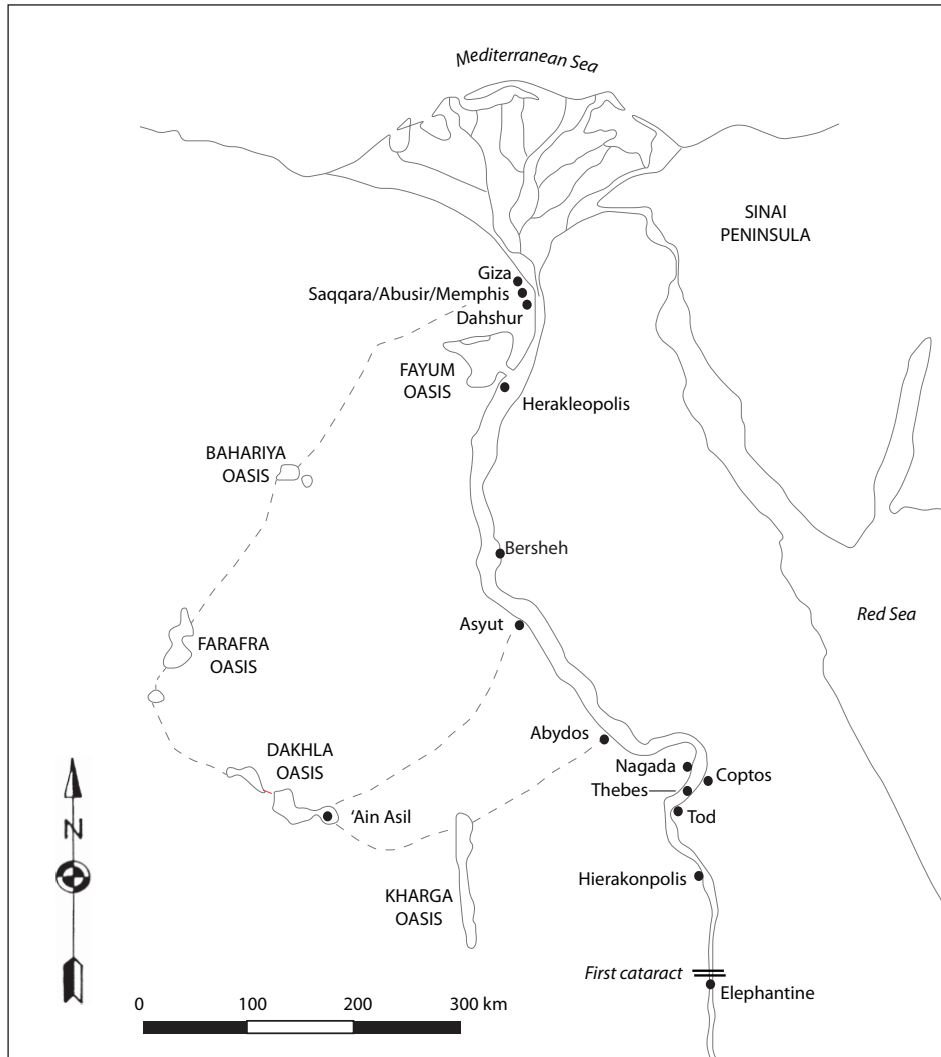


Figure 5.1. Map of Egypt showing sites mentioned in the text.

Deforestation

Deforestation, admittedly, may have posed far more of a threat. Certainly, it is notable that the conspicuous consumption of local woods in monumental architecture largely ceased in the Fourth Dynasty, perhaps in an attempt to mitigate a growing crisis. Although the evidence is frustratingly piecemeal, both text and archaeology demonstrate a growing investment in the importation of boatloads of coniferous wood from the northern Levant as well as acacia wood from Nubia (Creasman 2015, 47–50). The designation of certain trees, and indeed groves, as sacred and/or as state or temple property may well have aided efforts at conservation. So too, it is likely, would a general reliance on the use of charcoal, dung, and other scavenged or harvested combustibles as fuel (Nicholson & Peltenburg 2000, 192).

Disease

Egypt's population was not immune to communicable diseases, as records from Roman Egypt and other earlier evidence indicates. Communal burial pits at Tell el-Dab'a, for instance, suggest that at least some residents of this city died from a fast-acting contagion during the Thirteenth Dynasty. Likewise, a well-attested plague that raged in the Near East and in Cyprus may also have surfaced in Egypt during the late Eighteenth Dynasty (Kozloff 2006; David 2017, 280–4). Both ancient and more modern discussions of pestilence in Egypt suggest that relatively muted episodes of contagion struck on an annual basis, often in conjunction with the *khamāsīn* winds, which occurred during the spring months before the Nile's rise. Indeed, this sickness was known in ancient Egypt as *'i3dt rnpt'*, the 'annual pestilence' (Contardi 2015, 20–3; Mikhail 2011, 220–1).

Deaths due to infectious diseases appear to have accelerated primarily at times when the pathogen was new to Egypt (as may have been the case at Tell el-Dab'a) or when an epidemic occurred in close conjunction with a famine (Mikhail 2011, 217–18, 229). The fact that epidemics alone never proved fatal to the state, however, is likely due to the fact that Egypt was a territorial rather than a city-state. Communicable diseases and plagues thrive in the close quarters of urban settings and thus would indeed ravage a polity whose population clustered for the most part in a single centre (Duhig 2009, 50). From the First through the Sixth Dynasties in Egypt, however, dense populations outside of the city and pyramid-building projects of Memphis are difficult to identify. Disease, therefore, would likely have been localized.

Overreliance on the core

Scott argues that many states failed because the logic of transportation caused them to place too much pressure on territory within a 50 km radius of their centre – the distance a draught animal can traverse with a full load of grain before the cargo is not worth its weight. As Scott recognizes, however, waterborne transport represents a crucial exception (Scott 2017, 205). Linked for 1100 km or so from the First Cataract to the Mediterranean Sea by a navigable river, Egypt experienced little practical difficulty in transporting heavy loads of grain towards its political centre at Memphis. Throughout most of the Old Kingdom the monumental and material signatures of the state were indeed to be found in close proximity to the capital. This was not, however, because it was too expensive to build elsewhere. It was because both grain and manpower were gathered in from the provinces to the capital in an effort to help materialize the ideology that Egypt's elite stood at the centre of the world and at the apex of its social pyramid.

Problems with porous borders

This category collapses two separate dangers to early states. The first is the danger of invasions, whether from predatory 'barbarians' or more organized armies. The other is from population seepage (or hemorrhage in the worst case scenario). Both of these threats were greatly alleviated by the fact that the Nile cut a swath through one of the world's most formidable deserts. Equally important was the fact that neighbouring regions could not easily sustain robust populations and that the country offered very few points of entry and, conversely, escape. Indeed, even in the first millennium BC, when naval technology was far more advanced and at the service of aggressively expansionistic empires, very few seaborne invasions were successful. Shifting

sands around the Nile's many mouths, dangerous currents, unhelpful storms and wind patterns, and the logistical nightmare of the inundation combined to repel enemies and keep them out. Likewise, it is undoubtedly significant that prior to the domestication of the camel, ground invasions launched by sizeable non-nomadic forces simply never occurred (Kahn and Tammuz 2008).

This natural isolation, which served Egypt so well in the third millennium BC also greatly aided the rise and enduring strength of the state which, as Scott has pointed out, depended largely on its own ability to corral its subjects into effective 'grain and manpower modules' and, moreover, to hold them there, so as to maximize the surplus of the state (Scott 2017, 122, 152–3). As Robert Carneiro (1970) argued long ago, many people who live under states and other hierarchical systems that depend for their existence on institutionalized inequalities remain because they feel compelled to do so. If offered an option to leave that was not profoundly disadvantageous or dangerous, they would take it.

Some old chestnuts are true: the pharaonic state was a gift of the Nile

By virtue of its setting, then, Egypt's Old Kingdom state was immunized against many of the factors that often occasioned collapse. As a territorial state based on the banks of a river, the country could easily be protected and policed by government agents. The threat of contagious diseases was minimal, given a dispersed population, just as was the threat of an organized invasion. At the same time, however, the flood ensured that with enough hands to till the soil, the government could count on a robust surplus with which it could supply itself with all the manual labourers, bureaucrats, craftsmen, traders and soldiers necessary to enact its most ambitious agendas.

Ample agricultural potential is worth next to nothing without the means to obtain it, and so it is important to note that the state acted early on to assert its rights to prime agricultural lands through the establishment of 'domains' and 'estates', which transferred ownership of land to living and dead kings as well as to gods. Making use of a coercive system that transformed farmers into serfs, the state concentrated labour near areas of prime agricultural productivity. Moreover, in order to ensure that this labour stayed where it had been gathered, domains may have been walled, and their administration – as well as that of 'royal colonists' – could be paired with that of watch-towers (Strudwick 2005, 423; Wilkinson 1999, 118–20; Moreno García 2010, 9–10, 13–14). In addition, just as Scott observes is entirely characteristic of states (ancient

or modern), the government created regular censuses to assess its resources and then imposed levies on produce, livestock and labour (Wilkinson 1999, 76, 113–14, 220–1; Muhs 2016, 15–16, 29–30).

Politicide, state effects and near death experiences

While Egypt's enviable geographic position buffered it from the dangers described above, its government would have been as vulnerable to Scott's category of politicicide as any ancient state. According to Scott, 'Crushing taxes in grain and labour, civil wars and wars of succession within the capital, intercity wars, oppressive measures of corporal punishment and arbitrary abuse may be called state effects, and they can singly or in combination bring about a state's collapse' (Scott 2017, 212–213). Throughout the nearly eight hundred or so years that the pharaonic state persisted in its first incarnation, it must have suffered innumerable brushes with death due to the backlash of such state effects.

In discussions of collapse, dynasties add an extra element of confusion. In Egypt's case this is certainly so. While some breaks in ancient king lists were occasioned by the cessation of a family line or by changes of capital or in the extent of territory governed, others surely mask a bitter end. As Guy Middleton asserts, viewing history through the lens of dynastic king lists often obscures our view of 'distinct political entities that were independent, rivalrous, and that effectively created new states or empires' (Middleton 2017, 23–4). In the three case studies presented below, I argue that dynastic breaks mark points at which a severe crisis due to James Scott's category of 'state effects' occasioned a radical shift in strategy – a shift deemed necessary, in fact, for the survival of the state. The issues underlying the three dynastic breaks are difficult to understand and were no doubt complex. What follows then are not necessarily correct reconstructions of each scenario. They are, however, interpretations of the evidence that are both plausible and, I hope, potentially generative of productive discussion.

Abuse of power: the break between the First and Second Dynasties

The seven kings and one queen regent of Egypt's First Dynasty (c. 2900–2730) were involved in a radical experiment aimed at divinizing the office of kingship. Given the elaborate royal burials at Hierakonpolis in the late Nagada I and early Nagada II periods, such experiments may have had an early precedent (Friedman, van Neer, & Linseele 2011, 162, 1734). As numerous ethnohistories attest, rulers who claim kinship with the gods do not require the backing of a state. When the resources of a state are coupled with

such an ambitious ideological agenda, however, the combination can be deadly. In Egypt, as in numerous other early states – such as Shang China, Kerma, the First Dynasty of Ur, Dahomey, and Benin – the natural deaths of certain particularly important religio-political figures occasioned the untimely deaths of many others. In some cases the deceased appear to have been cultural outsiders (such as prisoners of war), but almost always these executions were accompanied by the deaths of insiders – the loved ones and/or the servants of the deceased. In First Dynasty Egypt, so far as can be ascertained, the dead were primarily drawn from the latter category. Given that there is no evidence for institutionalized slavery at this time, each sacrificed retainer must be envisioned as firmly enmeshed within an extensive socioeconomic network of relatives and friends (Morris 2014).

The First Dynasty began with an instance of retainer sacrifice the likes of which had not yet been seen. At his death king Hor-Aha seems to have arranged to take forty or so people with him to the grave – providing them with prebuilt tombs situated in the direct vicinity of his funerary enclosure and mortuary monument, both at Abydos (see Fig. 5.2). Intriguingly, the two graves closest to the king's were larger than the rest, and one of these apparently belonged to a person whose name, 'Pleasant (or Sweet)-of-heart' (*Imz-ib* or *bnr-ib*), was inscribed on a comb and other cosmetic items. The presence, then, of two miniature funerary enclosures next to the king's own – enclosures which *also* had been provisioned with sacrificed retainers – led Laurel Bestock to suggest that these belonged to the same two individuals that had been buried next to the king and served to compensate them for willingly having sacrificed their own, particularly highly valued, lives. The rest of the retainers, archaeological remains indicate, consisted of young men of military age, arranged behind their sovereign as if in marching order (Bestock 2009, 26, 100–102).

This initial experiment with human sacrifice seems to have been deemed so successful that at the death of the second king of the First Dynasty the number of sacrifices increased exponentially. In preparation for the funeral of King Djer, graves for 587 retainers had been prepared ahead of time. Now – presumably to sweeten the pot for participants – the dead were provided not only with a grave that was provisioned from royal warehouses and was situated in close proximity to the king's own but also with a stele engraved with their name, image, and occasionally their title (see Fig. 5.3). Legible steles preserve the names and images of two court dwarves, 11 men and 76 women, each of whom received a memorialization that was unparalleled among their contemporaries (Bestock 2009, 33).

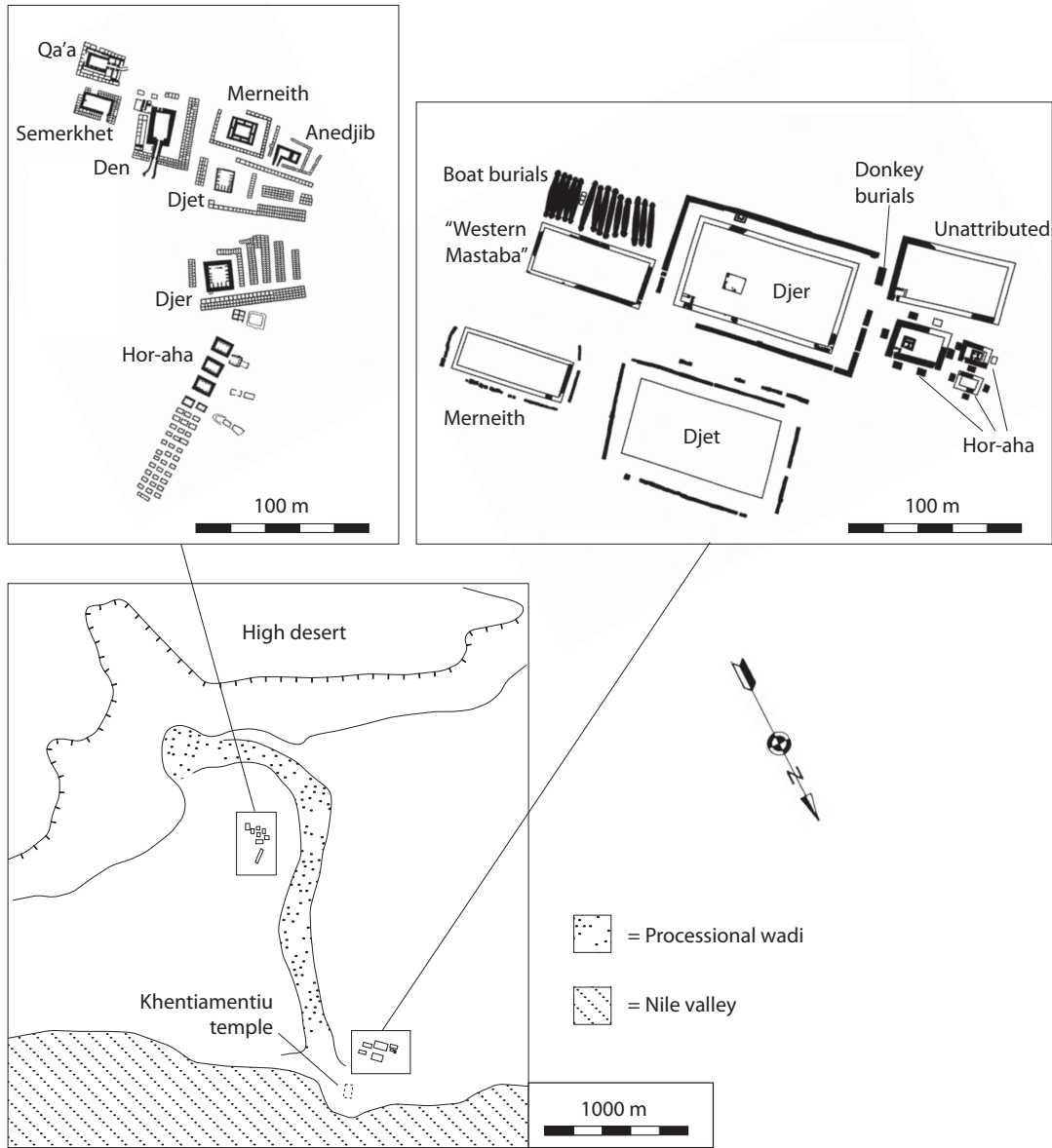


Figure 5.2. First Dynasty Abydos (after Bestock 2009, figs. 1 & 10).

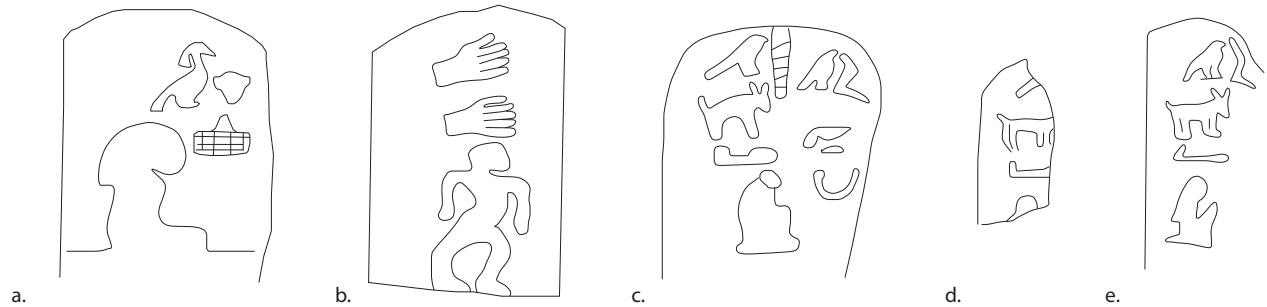


Figure 5.3. Stelas belonging to the sacrificed retainers of Djer [a.-c.] and Den [d.-e.] (after Petrie 1901, plates: a. 26, no. 70; b. 26, no. 58; c. 27, no. 96; d. 27, no. 128; e. 27, 129).

Of all types of conspicuous consumption, that of the lives of loyal subjects provokes the most strenuous societal discussions. It is also the most costly – as the state loses labour that might otherwise have been channelled in its service and often expends resources in compensating the families of those who willingly sacrificed their lives. Thus, in the face of rising costs and increased societal resentment, it is perhaps not surprising that the numbers of retainers sacrificed at the death of First Dynasty kings steadily decreased and that a corresponding emphasis was placed on the quality of royal retainers rather than their quantity (Morris 2014, 85–6). That said, the grave of the last king of the

First Dynasty, King Qa'a, still included chambers for the internment of 26 individuals, one of whom, judging by the length of the titles on his funerary stela, appears to have been extremely important (Petrie 1900, 44–5, pl. 30; see Fig. 5.4). In Zhou Period China, a poem of mourning was written for three similarly socially significant sacrificial victims. About one it was said that he 'was the pick of all our men; But as he drew near the tomb-hole his limbs shook with dread. That blue one, Heaven, takes all our good men' (quoted in Chang 1974, 6–7). Grief and horror, one suspects, must have increasingly displaced awe as the predominant emotion that the custom of retainer sacrifice evoked among those subject to the state.

The apparent termination of human sacrifice at the start of the Second Dynasty (c. 2730) almost assuredly indicates that the custom had come to be seen as an unjustifiable abuse of power. Qa'a had constructed chambers for his sacrificed retainers within the sub-structure of his own tomb, and his successor appears to have buried him according to his wishes (Wilkinson 1999, 82–3). That Hotepsekhemwy himself desired to break with the past, however, is strongly suggested by the fact that he abandoned the ancestral royal cemetery at Abydos. Instead, he moved his burial monument north to Saqqara and, moreover, to a part of Saqqara

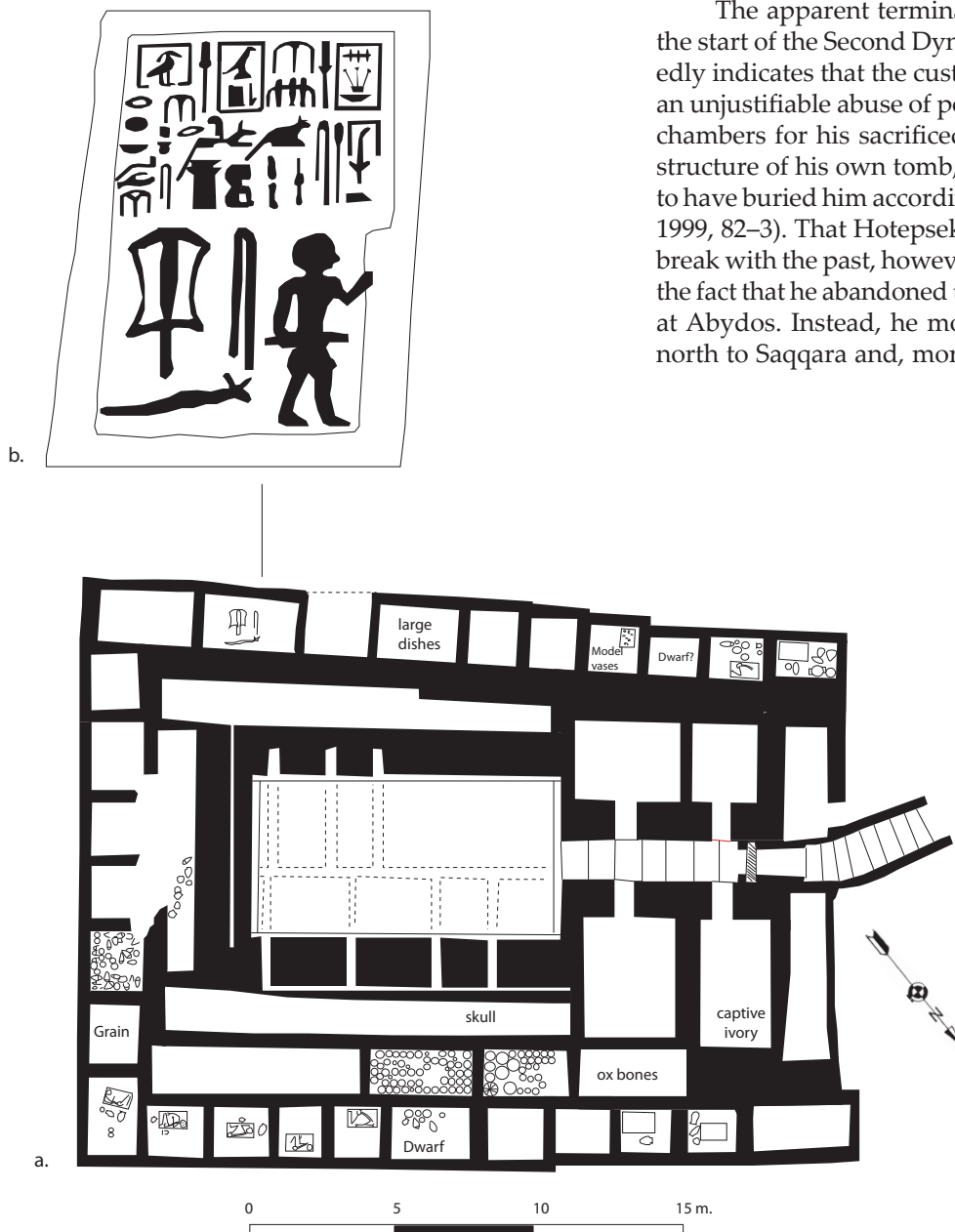


Figure 5.4. (a) Tomb of Qa'a (Petrie 1900, pl. 60); (b) stela of Qa'a's sacrificed retainer Sabef (after Petrie 1900, pl. 31, no. 48).

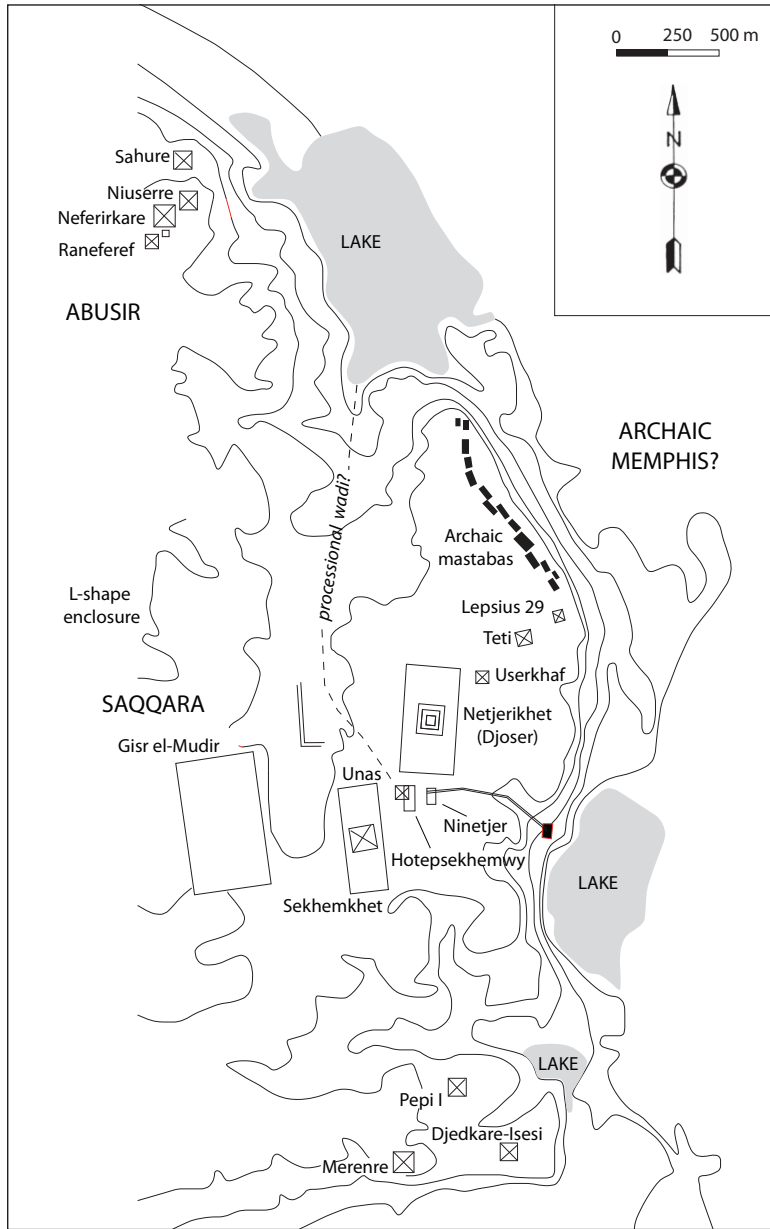


Figure 5.5. Major monuments of Saqqara and Abusir until the end of the Old Kingdom (after Reader 2017, 73, fig. 1).

that bore no associations with the monumental mastaba tombs of the First Dynasty’s innermost elite. The new tomb, which departed from its predecessors in structure as well as locale, however, may have consciously preserved royal resonances. As Colin Reader has argued persuasively, the positioning of Hotepsekhemwy’s tomb with respect to the Abusir wadi echoed the spatial relationship of the First Dynasty tombs to the processional wadi that led to the funerary enclosures at the valley’s edge (Reader 2017, 85–6; see Fig. 5.5). Thus, and not for the last time, a pharaoh might jettison aspects of royal tradition or ideology that he deemed tainted and yet seek to curate others that enhanced the recognizably sacral character of kingship.

Hotepsekhemwy not only changed the location and style of his tomb, he also appears to have eliminated, or virtually eliminated, the custom of retainer sacrifice. While the disturbed state of known and suspected Second Dynasty tombs at Saqqara precludes certainty on this matter, neither skeletal material nor other commemorative or otherwise indicative objects exist. Indeed, this is true not only with respect to the tombs of royals at Saqqara but also with respect to those of the highest elite, who had likewise indulged in retainer sacrifice in the First Dynasty, albeit to a much more modest extent. Thus, the physical relocation of the royal tomb and its radical rethinking undoubtedly marked a movement more political

than spatial. In occasioning this departure from past practice, Hotepsekhemwy may have succeeded in rescuing divine kingship from a dangerous decline in perceived legitimacy. In folk tales, after all, the creature that demands the sacrifice of noble youths is almost always a monster – and one destined, moreover, soon to be slain at the hands of a hero.

Religio-political schisms: the break between the Second and Third Dynasties

The Second Dynasty (c. 2730–2590) ended at some point following King Khasekhem's brutal slaughter of close to 50,000 of his Lower Egyptian subjects. Numbers of the slain and images of their distorted corpses decorate the bases of two statues in which the king is posed wearing a crown of Upper Egypt (see Fig. 5.6a). Fittingly, he dedicated these commemorations to an Upper Egyptian shrine – that of the god Horus at Hierakonpolis (Quibell 1900, pl. 39, 40). What appears at first glance like a drastic response to a regional rebellion, however, may well have been the result of tensions that had both cosmic and terrestrial manifestations. These events are intriguing precisely – and frustratingly – due to the fact that only tantalizing hints remain. What is certain, however, is that the upheaval that marked the end of the Second Dynasty was traumatic enough to persuade the sovereign who followed to make a decisive break with the practices of his predecessor.

By way of background it is vital to understand the ideological importance of the god Horus and also that of his rival Seth. The tradition that Seth had fought Horus, the avatar of the rightful king, for the throne of Egypt but had eventually admitted defeat and worked to support him is a powerful and overarching theme in the Pyramid Texts, Egypt's first corpus of religious literature. In these spells, which are of varying antiquity

and were inscribed in eleven pyramids belonging to kings and queens from the late Fifth until the Eighth Dynasty, nearly 18 per cent of the spells reference the god Seth. In these texts, Seth appears as an enemy of Horus and, like him, to have been grievously wounded in their battles. In the end, however, the injuries of both gods healed, the two reconciled, and Seth utilized his strength to uphold the rightful order of the cosmos (Griffiths 1960, 1–27; Turner 2013, 16–17, 71–84). While it is dangerous to reverse-engineer religion into politics, this story of war and peace – in which 'Seth dwelling in Nubet, Lord of Upper Egypt' (Utterance 222) – played such a starring role likely had its origins in the armed encounters and alliances of prehistory.

In the Nagada II period (c. 3500–3325), the towns of Hierakonpolis and Nagada possessed elite cemeteries and graves that archaeologists have identified as royal. In ancient Nekhen (later designated Hierakonpolis, or City of the Hawk, by the Greeks), it is surely significant that the earliest known (Nagada IIA–B) complete and unambiguous representation of a falcon in Egypt's history was found in an enigmatic pillared hall situated within the funerary precinct of tomb 23, the resting place of a ruler. Fragments of three other falcon figurines were subsequently identified, one from the same complex and two others from subsidiary graves associated with tomb 16, the very earliest royal burial at Hierakonpolis – or for that matter in Egypt as a whole (Nagada IC–IIA). It is worth noting that falcons are not known from Cemetery T at Nagada or Cemetery U at Abydos, the other two cemeteries at which elite graves in the Nagada IIC–D period suggest the presence of local aggrandizers (Hendrickx, Friedman 2007, & Eyckerman 2011, 130–2).

Early images of Seth are difficult to identify with certainty. Canids that bear a resemblance to Seth's cult

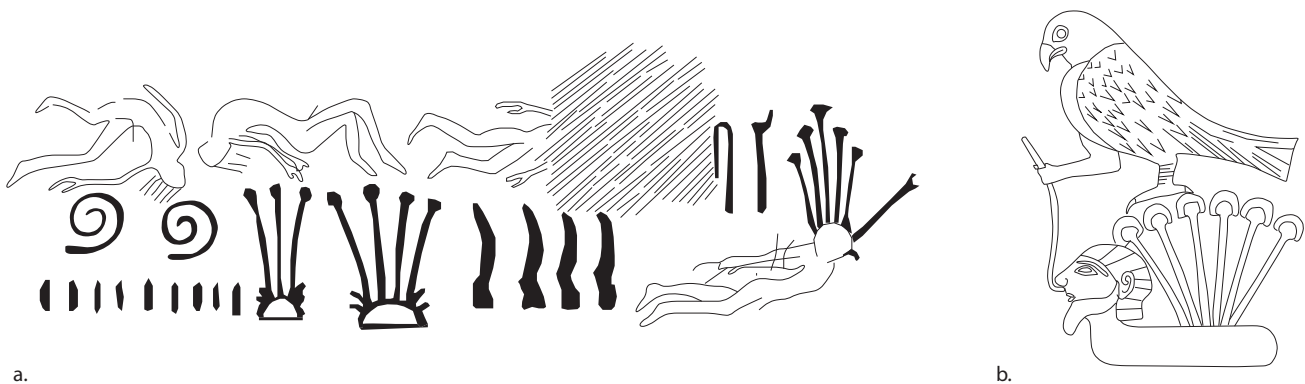


Figure 5.6. (a) The body count of slain northerners depicted on Khasekhem's limestone statue, dedicated at the Horus temple at Hierakonpolis (after Quibell 1900, pl. 40); (b) Horus dominating the personification of the north from the Narmer palette, dedicated at the Horus temple at Hierakonpolis (after Quibell 1898, fig. 13).

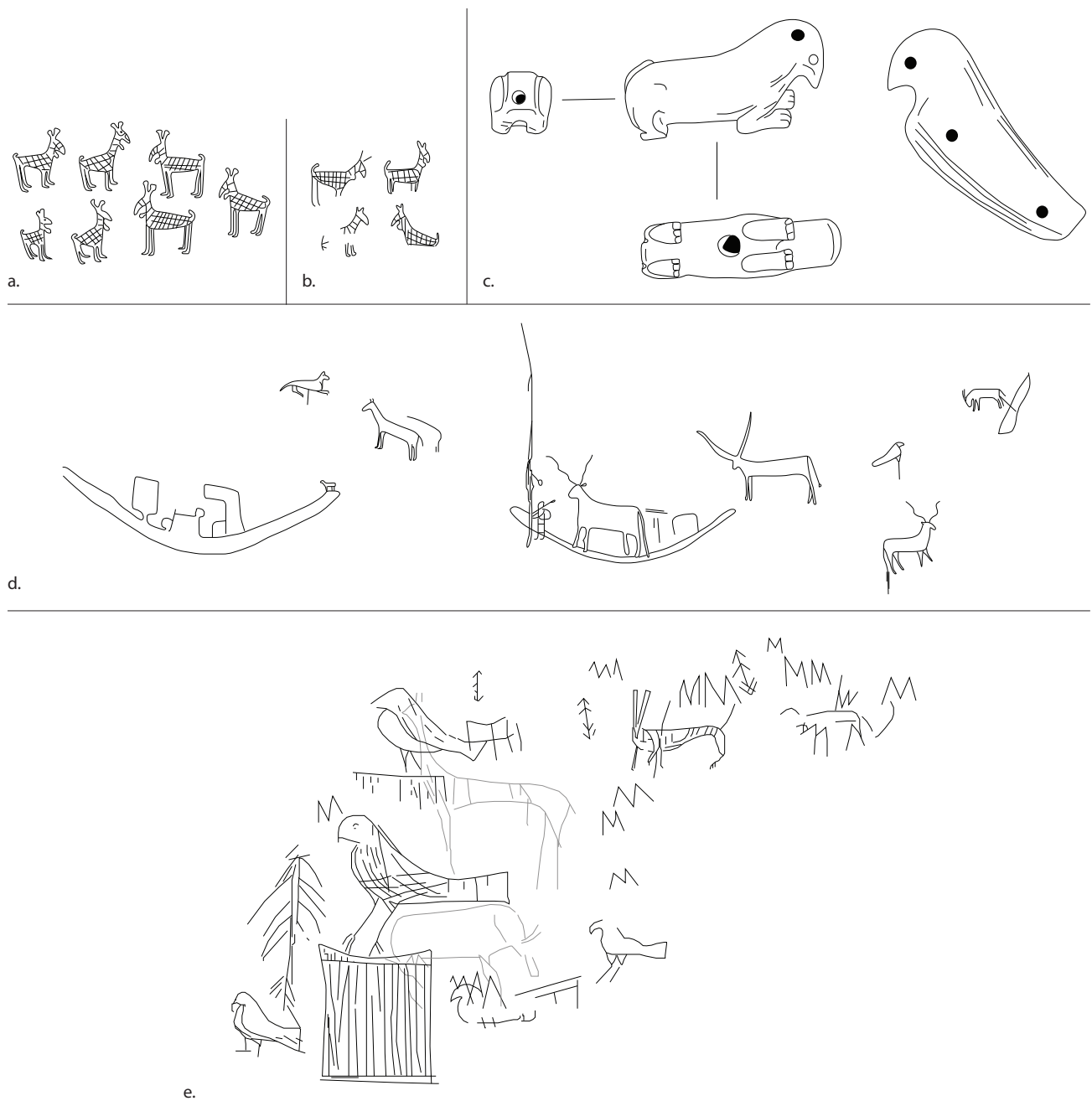


Figure 5.7. Probable early representations of Seth from Nagada and its environs. 7a. From a White Cross-lined vase, Nagada tomb 1644 (after Hendrickx et al. 2009, fig. 18.1); 7b. From a White Cross-lined bowl, Nagada tomb 1644 (after Hendrickx et al. 2009, fig. 18.3); 7c. Three views of a model Seth standard and a Horus figurine, Nagada tomb 721 (after Petrie 1896, pl. 60, nos. 13, 15 and Crowfoot Payne 1993, fig 4, no. 16); 7d. Seth and Horus on standards similar to 7c. Rock art from the mouth of the Wadi of the Horus Qa'a, west of Nagada. (after Darnell 2009, 97, fig. 19); 7e. Rock art showing Seth in the entourage of Horus, Gebel Tjauty, west of Nagada (after Darnell 2002, 19).

creature – and would be contemporary in time with the falcons at Hierakonpolis – appear in conjunction with Barbary sheep in the imagery of White Cross-lined pottery excavated at Nagada (see Figs. 5.7a. and 5.7b).

The identification is far from iron clad, however, and at least two similar vessels are thought to have come from neighbouring polities (Hendrickx 2009, 207, fig. 18, 2 and 4). Even more intriguing are two slightly

later (Nagada IIC–D) figurines excavated from tomb 721 at Nagada. One of these depicted a falcon that may have been encased in lead (Ashmolean 1895.136 and 1895.137). Alongside it, however, was an animal that looks a great deal like the Seth animal, especially if the missing ears and tail (signalled by drilled holes) had stood straight up. What is vitally important about this potential representation of the god, however, is that it was pierced, apparently to serve as the ornament on a model standard (see Fig. 5.7c). Similar standards appear in a contemporary rock carving discovered in the desert west of Nagada in conjunction with a scene involving boats and wild bovids (see Fig. 5.7d).

Standards in the late Nagada II–III periods seem to have done double duty, referencing both deities and the polities that claimed these deities as their patrons. In Dynastic times, the town of Nagada (a.k.a. Nubt or Gold Town) would be defined by its temple to Seth and its allegiance to a deity that was known to be as powerful as he was problematic. It is significant, then, that archaeological evidence demonstrates that the area around this temple in prehistory not only saw the town's earliest urban occupation but remained its symbolic centre even when economic and administrative activity shifted southward (Hassan, van Wetering, Tassie 2017, 91–2, 94).

If Nagada and Hierakonpolis appear to have been the two most powerful polities in the Nagada II period, whose elites likely competed for status and supremacy in Upper Egypt, the true beneficiary of their rivalry appears to have been the rulers of Abydos, who would appropriate the divine personage of the falcon and incorporate the god into their own royal titulary. These Abydene kings subdued both Nagada and Hierakonpolis by the start of the Nagada III period and disrupted their traditional power structures. At Hierakonpolis, the rulers of Abydos supported the establishment of a temple to the god Horus in his role as the patron deity of the rightful king. The fate of Nagada is less certain, but the local elite seem to disappear for a period rather than to have been reoriented and remunerated, as at Hierakonpolis (Bard 1989, 240–5; Friedman 2008, 23–6; Hassan, van Wetering, Tassie 2017, 95–6, 120–2).

By the period just prior to the First Dynasty, however, Nagada may have become a much more active and enthusiastic supporter of the new state. Certainly, on a large votive macehead donated to the temple at Hierakonpolis, Seth animals are depicted subduing rebels for the king alongside the cult fetishes of other polities (see Fig. 5.8). Likewise, a roughly contemporary rock inscription at Gebel Tjauty, west of Nagada, seems

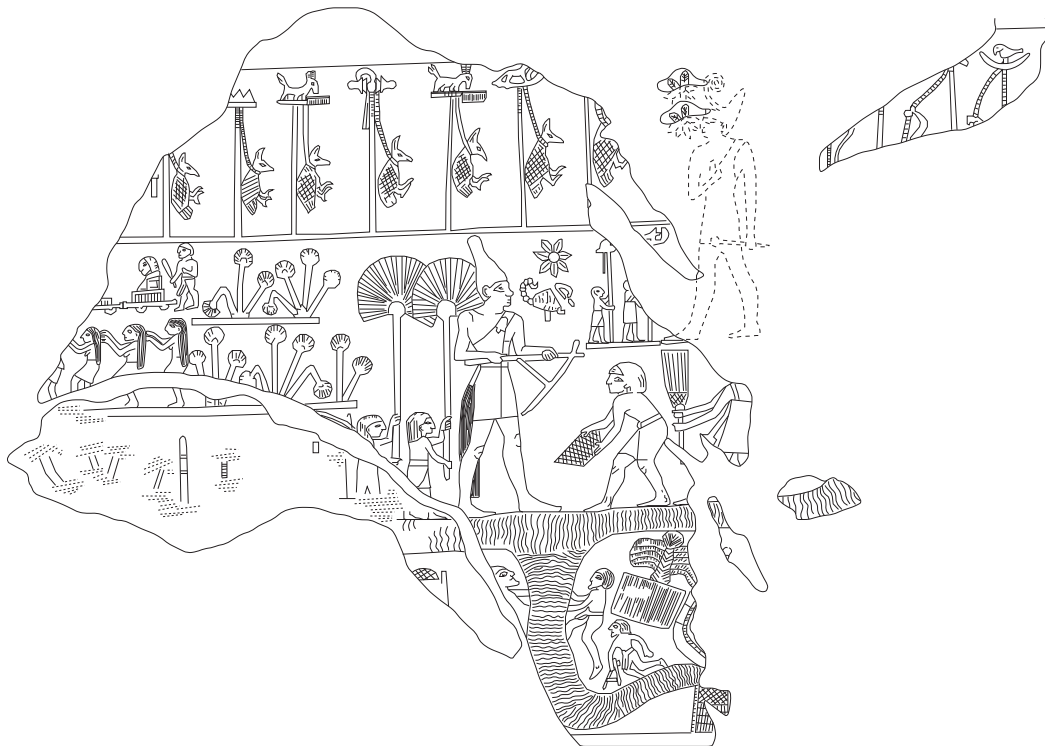


Figure 5.8. Scorpion macehead, dedicated to the Horus temple at Hierakonpolis (after a drawing by K.M. Ciałowicz published in Adams and Ciałowicz 1997, 8, fig. 1).

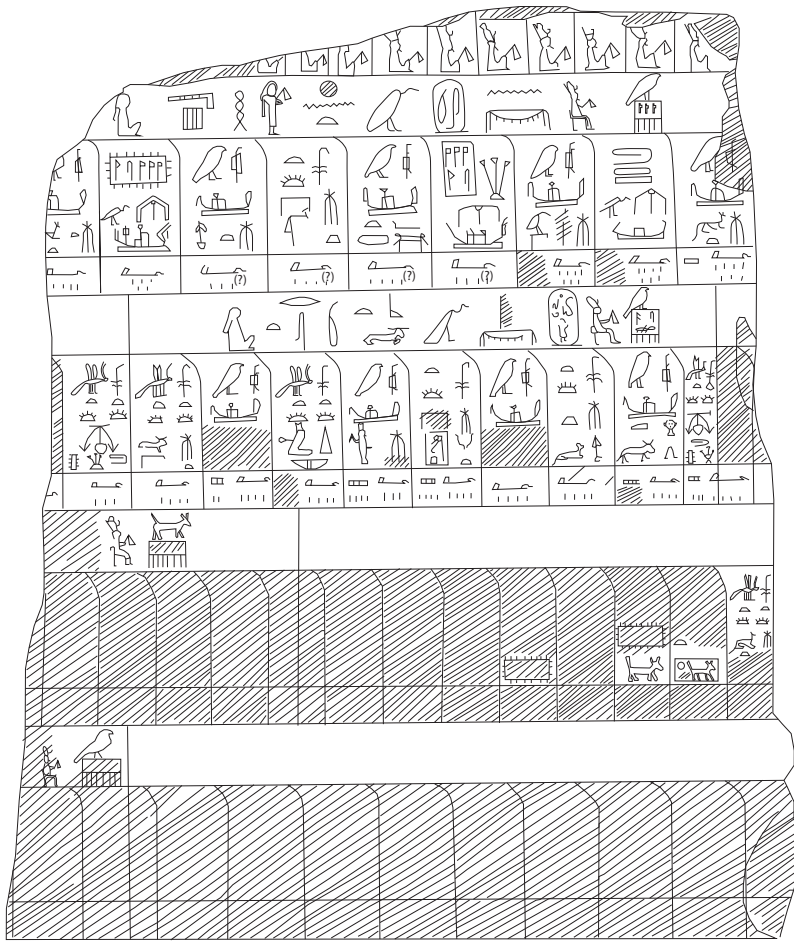


Figure 5.9. Seth makes an appearance in the Cairo Annals, Main Cairo Fragment (CF1), reigns of Ninetjer and Peribsen (Wilkinson 2000; fig 4).

to show the Seth animal in the entourage of the Horus king (Darnell 2002, 19; see Fig. 5.7e.). While Nagada would be the Upper Egyptian site most closely associated with Seth in Dynastic times, the presence of two Seth animals on the Scorpion macehead may suggest that his worship had already spread farther afield. In this context the repeated evocation and apposition of the ‘mounds of Horus’ and the ‘mounds of Seth’ in the pyramid texts is striking (Turner 2013, 74–5, 78, 81–3, utterances 213, 224–225, 306, 308, 359, 424, 470, 474–475, 477, 480, 572, 612, 665).

In seeking to unify the realm, the rulers of Abydos acknowledged Seth as a partner of Horus – one of the ‘Two Lords’, occasionally depicted as two falcons, or even envisioned as a composite entity that could be embodied in the king himself. That this notion was present already in the First Dynasty is indicated by a title witnessed in the steles of three First Dynasty women interred in the posthumous retinue of Djer and Den, namely [She] ‘who sees Horus-Seth’ (See Fig. 5.3c–e; te Velde 1967, 68–71). If these women were subsidiary wives of the king, as the adoption of this same title by queens of the Fourth through Sixth

Dynasties strongly suggests (Turner 2013, 16), it is also worth noting that Seth’s hometown of Nagada may have furnished the First Dynasty with one of its earliest and most prominent queens, Neithhotep. If not, the massive mastaba erected at Nagada in which her name is frequently attested assuredly belonged to her son (Wilkinson 1999, 37–8, 70; van Wetering 2012, 111–5). Regardless, relations between Nagada and Abydos were clearly intimate.

During the entirety of the First Dynasty, Horus far eclipsed his rival-turned-partner in visibility and importance, and no hint of discord is noted. Even the name of the first king of the Second Dynasty – Hotepsekhemwy (The-two-powers-are-satisfied) – appears unsettling only in retrospect. Much about the Second Dynasty remains obscure, and some speculate that a possible rebellion of two towns in Ninetjer’s thirteenth year heralded the fracturing of a unified pharaonic state, though the writing leaves it ambiguous as to whether the apparently Egyptian towns were being founded or destroyed (Dodson 1996, 23)! A badly damaged section of the Cairo annals (see Fig. 5.9) also shows two consecutive years, apparently

from Ninetjer's reign, in which the god Seth was paired with walled enclosures, one crenellated and one rectangular (Wilkinson 2000, 203). If at the end of Ninetjer's reign the god Seth was receiving an unusual amount of attention, the theory that the Horus of Gold throne name in fact referenced the king's relationship to the god of 'Gold-town' is bolstered. Ninetjer, after all, is designated with a 'gold name' – thought to be a predecessor of the Horus of Gold name – on this very same monument (Griffiths 1959, 64–81; 1960; Wilkinson 2000, 119).

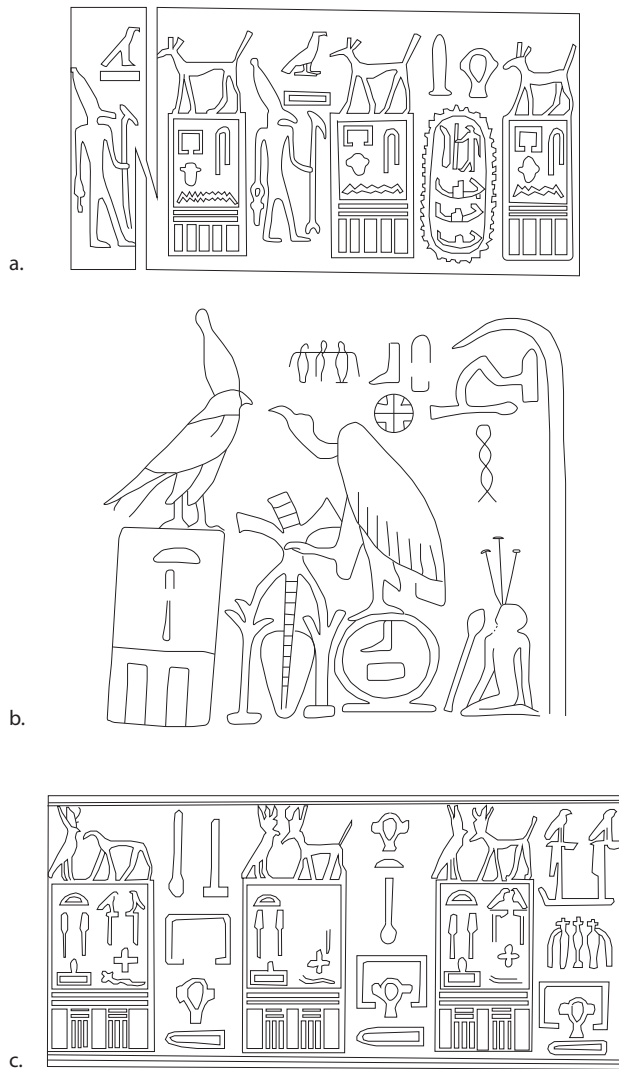


Figure 5.10. (a) Peribsen with Seth atop his serekh, seal impression from Abydos (after Petrie 1901, pl. 22, no. 179); (b) Inscription on a vase dedicated by Horus Khasekhem to the Horus temple at Hierakonpolis (after Quibell 1900, pl. 38); (c) Horus-Seth Khasekhemwy in whom the Two Lords are at peace, seal impression from Abydos (after Petrie 1901, pl. 23).

Seven (all unfortunately obscured) years following Seth's debut in the annals, the ascension of King Peribsen is recorded.² Unlike any ruler before or after, Peribsen replaced the falcon in his 'Horus'-name with a Seth animal (Figs. 5.9 and 5.10a; Wilkinson 2000, 74). This king likewise promoted the message – expressed on a contemporary cylinder seal – that Seth of Nagada had 'given the Two Lands to his son, Peribsen'. As if to clarify that this was no casual change of allegiance, Peribsen even dropped the name of Horus from his funerary domain, being the first king ever to do so. His decision to construct his tomb at Abydos – deep in the royal cemetery of the First Dynasty – must also have been ideologically loaded (Wilkinson 1999, 89–91, 121).

The unrest that presumably prompted Peribsen's abrupt shift in loyalties seems to have continued to percolate in the succeeding reign. Peribsen's successor, King Khasekhem, assumed the name 'The-power-appears' – surmounted, as was traditional, with a Horus falcon – and undertook military action against northern forces. Interestingly, most of what we know of these struggles comes from gifts that he dedicated to the temple of Horus at Hierakonpolis. Inscriptions on two votive stone vases read 'Year of fighting the northern enemy in front of the city of Nekheb,' a locale directly across the river from Hierakonpolis! Directly facing the king's serekh and in front of the year name was a depiction of Nekheb's chief deity, a vulture that grasped the hieroglyphs for 'rebel' with one claw and the symbol for a unified Egypt with the other (Fig. 5.10b).

If the fighting started in Nekheb against northerners or those acting on behalf of a northern rival, it eventually led to carnage. According to the inscriptions on the king's statues, Khasekhem slaughtered perhaps as many as 48,205 northern foes. Considering the findspot of his memorials, it is notable that the king seems to have indulged in some artistic intertextuality with the Narmer palette, which – given the fact that it was interred in the same deposit as Khasekhem's statue – was likely on display at the time he donated his statues. On both monuments, the northern enemy who had to be defeated in order for the victorious king to (re)unify his country lay prostrate, hooked by the nose and sprouting the papyrus-plant ideograph for the north from his body (compare Fig. 5.6a with 5.6b).

At some point following his victory, Khasekhem added a dual to his name, so it read: 'The-two-powers-appear'. Moreover, he topped the serekh of this modified 'Horus'-name with a Seth animal in addition to the falcon, strongly implying that the 'two powers' were none other than Horus and Seth. Khasekhemwy also added the perhaps optimistic epithet: 'The two lords are at peace in him' (Fig. 5.10c; Wilkinson 1999,

91–4). Given that in later times both Horus and Seth possessed cult centres and partisans in the Delta as well as Upper Egypt, the exact nature of the religio-political conflict (and, indeed, even whether emphasis should best be placed on the *religio* or on the *political*) remains frustratingly difficult to determine. What is apparent, however, is that, following this slaughter, Khasekhemwy focused his energy on preparing his mortuary monuments at Abydos, in the same cemetery as his strongly Sethian predecessor.

The degree to which the two powers were indeed satisfied in the aftermath of this late Second Dynasty massacre is perhaps dubious. Certainly, the next king who came to power acted so as to distance himself from his predecessor. Available evidence suggests that Netjerikhet was a son of Khasekhemwy who buried his father with honour at Abydos, just as Hotepsekhemwy had done for Qa'a at the start of the Second Dynasty (Dreyer et al. 1996, 71–2; Dreyer 1998). Like Hotepsekhemwy, however, Netjerikhet intentionally disassociated himself from his predecessor by moving the site of the royal burial back to Saqqara.³ Moreover, as if to enshrine his message of unity in stone, he commissioned an entirely innovative funerary monument that stressed as a central message throughout its architectural programme the unity of both Upper and Lower Egypt and the king's role in maintaining that unity. As a testament to the success of his mission, no king of the Old Kingdom would return to be buried at Abydos nor would any commission offerings, as Netjerikhet had, to Khasekemwy's cult (O'Connor 2009, 176, 178). Moreover, this same king appears to have acted quickly – and perhaps quite literally – to bury old grievances, for the objects on which Khasekhem had memorialized his slaughter were quickly whisked out of sight. Seth too, had had his day and was never again destined to surmount a royal serekh.

Abuse of power: the break between the Fourth and Fifth Dynasties

In terms of the ability of a state to conspicuously consume human lives, the Fourth Dynasty (c. 2543–2120) rivalled the First. At the time that Snefru began work on the first of the three full-sized pyramids completed in his reign, a fundamental restructuring of society had been mandated, for the demands of the state on its subjects had never been higher. In order to complete the Great Pyramid, constructed by Snefru's son at Giza, for example, it has been estimated that one 2611 kg block of stone would have had to have been moved into place every two minutes of each daylight hour of Khufu's reign. Likewise, while it seems that only 1360–2000 men could have been employed in

active construction on the pyramid at any one time, behind these stone-haulers it is suggested that 23,000 additional men were busy quarrying more blocks, providing water, baking bread, building ramps and slipways, sharpening tools, feeding, transporting, and butchering animals, preparing meat and meals, registering tools, repairing tools, and so on (Lehner 1997, 224–5).

This number takes into consideration only those working on the Giza Plateau – not the tens of thousands of others who quarried stone elsewhere, mined copper and fashioned tools, herded cattle, etc. Indeed, the tireless journeys of a man named Merer and his levied team of workmen, as recorded in the earliest papyri yet found in Egypt, is a case in point. In the span of any given ten-day week, this man and his crew made two or three round trip journeys from the limestone quarries at Tura to harbours near the Giza Pyramids – loading stone, ferrying stone, unloading stone, and then beginning the cycle once more (Tallet 2017, 160). It is difficult to imagine that any family would have been unaffected by the demands of the pyramid builders – which continued unabated for over a century.

Egyptologists not infrequently compare the creation of the great Fourth Dynasty pyramids to a public works project in which an essentially beneficent state provided its citizens with income as well as a chance to participate in a collective enterprise that 'would have developed a sense of identity and common purpose with the state' (Tavares 2011, 277). Ethnoarchaeological experiments and excavations in the barracks and cemeteries of the Workmen's Village at Giza, however, tell a story of backbreaking labour, close quarters, and rigid surveillance that render Khufu's reputation as a tyrant – attested in a Middle Kingdom story as well as in tales told to Herodotus – readily understandable. It would appear, then, that to many of those dragooned into building the great pyramids – whether as part of their labour tax or as the sum of their entire working life – such monuments provoked more resentment than pride (Fig. 5.11).

Disaffection with the state may not have been limited to the labouring classes. In seeking to materialize their power via the creation of massive and increasingly technologically perfect feats of engineering, the Egyptian state had to radically increase its supply of literate officials. The creation of this bureaucracy interpolated an educated middle class into a system that prior to the pyramid-building endeavour had only accounted for two types of people: nobles (*iri-p^ct*) and commoners (*r^hyt*). Men like Merer, however, who meticulously kept their records and served the state were neither one nor the other, and their numbers



Figure 5.11. *Some of the millions of multi-ton blocks that make up Khufu's pyramid (Photo published with permission of Franck Monnier).*

increased without any effort on the part of the state to enfold them in its ideology or its governing structure. Fourth Dynasty political power seems instead to have been jealously guarded by the royal family and those Memphite officials chosen to marry into it. From this nepotistic core orders were dispatched and obedience was expected. The imbalance of power must have been acutely obvious, however, for in return for the goods and services rendered, communities located outside the country's capital enjoyed neither local autonomy nor any archaeologically observable signs of royal largess (Bárta 2013a, 162–5; Moreno García 2013a, 95).

While no documentation of contemporary unrest has survived, its existence can perhaps again be surmised given the profound break with previous practice that took place in the last reign of the Fourth Dynasty and in a much more pronounced manner in the Fifth (c. 2435–2306). The last king of the Fourth Dynasty, Shepseskaf, made pious donations to Menkaure's burial cult, however, he emphatically did not follow his predecessor's example. After six or eight years of rule, the king was buried in a mastaba at South Saqqara, and while the brevity of his reign undoubtedly contributed

to the modest nature of his tomb, there are no signs that he had ever set his sights on a pyramid complex (Stadelmann 1998, 70).

Why the Egyptians inserted a dynastic break between Userkaf and Sheseskaf – rather than Menkaure and Shepseskaf – is unclear, given that the former pair seem united both in the unusual formation of their names and also in their decision to situate their comparatively modest mortuary monuments at Saqqara. Indeed, the positioning of Userkaf's pyramid, nestled in the shadow of Netjerikhet's own, speaks volumes (see Fig. 5.5). In choosing this locale, Userkhaf positioned himself as heir to Netjerikhet's legacy rather than that of the Fourth Dynasty pharaohs. In addition, Userkhaf scaled down the size of his pyramid from that of Menkaure, such that it was only 73.3 m to a side and 49 m high (as opposed to roughly 105 m to a side and 65 m. high). In an even more profound innovation, he allowed the interior to be made up of artfully stacked limestone rubble, which rendered the process of building it far less labour intensive. When finished with fine limestone blocks, the pyramid would have occasioned awe but without the accompanying aftertaste of exploitation.

The rest of the Fifth Dynasty kings followed suit in the construction of their own monuments (Lehner 1997, 140–54). While the modest scale of the Fifth Dynasty pyramids is commonly attributed to practical concerns rooted in the availability of state funds or quality bedrock (Bárta 2005, 186), the accompanying religious and governmental reforms issued by this regime suggest that these monuments were scaled back purposefully, and perhaps primarily, in order to signal the Fifth Dynasty's commitment to ameliorating discontent.

The wholesale devotion of the Fifth Dynasty kings to the cult of Re is well known from their lavish royal donations to his cult at Heliopolis, the establishment of sun temples at Abu Sir, and the likely dissemination of propaganda that the Fifth Dynasty's legitimacy came not from any tenuous genetic tie to the Fourth Dynasty sovereigns but rather from their direct descent from the Sun God. In the end, however, their governmental reforms were what likely did the most work towards rendering them legitimate in the eyes of their subjects. These sovereigns acted quickly to eliminate nepotism and to radically expand access to government offices among the class of officials that the pyramid-building project had created and yet failed to embrace. These new officials boasted of their roles and responsibilities in a bevy of biographical inscriptions, and it is perhaps no accident that Fifth Dynasty mastabas constitute the most impressive private monuments of Egypt's Old Kingdom (Bárta 2013a, 165–72).

Fifth Dynasty kings also made a concerted effort to expand their relevance to areas outside the Memphite core. To this end, the kings donated land, labour and workshops to provincial temples and sponsored work at sites like Abydos, El-Bersheh, Tod, and Karnak. Important individuals were newly awarded oversight of state and temple property in their own hometowns and felt free to bequeath these positions to their heirs in documents that they inscribed in their own elaborate provincial tombs (Moreno García 2007, 322–3; 2013a, 196–7). In the words of Miroslav Bárta (2013a, 166), the effects of the Fifth Dynasty reforms were to make kingship more 'socially obliged' such that state revenues were now far more open to mid and high level officials who, in turn, dispensed benefits to their own network of supporters. Such moves to lessen the abuses of power while expanding access to its benefits undoubtedly defused dangerous levels of tension among both upper and lower classes of society.

Resiliency

Resiliency in ecological or sociocultural spheres refers to the ability of a system to reorganize after suffering a disturbance such that, although altered, it still retains

its essential characteristics and functions (Middleton 2017, 42). So far, three instances have been examined in which abuses of power and dangerous divisions in society threatened the fabric of the Egyptian state. The fact that the state recovered its footing at each point of potential (or actual) rupture and persisted, without break, as a recognizable entity would indicate that the pharaonic state possessed an unusual capacity for resilience and reformation. Indeed, considering that each successive iteration of the state seems to have corrected abuses, one wonders whether the Old Kingdom's governing structure might indeed fall into Nassim Nicholas Taleb's category of the 'antifragile' – a concept he applies to entities that not only absorb shock but ultimately become better for it (Taleb 2014, 3).⁴

Early Egypt's extraordinary capacity for resilience is perhaps attributable to two main factors: one geopolitical and the other ideological. The first factor that aided the pharaonic state's capacity for resilience is simply that the Nile Valley affords statehood for reasons already referenced, i.e., it is both extremely fertile and circumscribed. Thus, so long as the government can prove itself either powerful or beneficial (and especially if it is seen as both), dominance is relatively easily established. The second factor is that the ideological underpinning of pharaonic kingship seems to have allowed for the notion that while the office of kingship (*nsw*) was eternal and god given, its occupant was a discrete individual (*hm*) (Goedicke 1960, 17–37, 51–79). Thus, any failure in governance was not the fault of kingship *per se* but rather the failure of a particular king to rule in accordance with divinely inspired righteous order (*ma'at*).

An apparently longstanding 'law of the pharaoh' commanded: 'Let the possessions be given to him who buries' (Kemp 2006, 310). Thus, adherence to their own law may well account for why transfers of power that one expects should have been fraught appear so orderly in the archaeological record. For example, with respect to the case studies presented above, mud sealings demonstrate the involvement both of Hotepsekhemwy in Qa'a's burial and of Netjerikhet in Khasekhemwy's (Wilkinson 1999, 83, 95). Nor did kings of the Fifth Dynasty repudiate their predecessors, though they made every effort to distinguish themselves from them. This royal ideal that privileged the peaceful transition of power lasted for millennia. Thus both Amasis and Octavian granted that royal funerary rites be performed for their bested rivals in a bid, presumably, to placate the partisans of their enemies and to increase the odds that their own assumption to power – irregular as it was – would be regarded as at least somewhat legitimate. Such rites were useful in that they promoted the notion that kingship was larger than any individual ruler or

regime. Indeed, in the wake of deeply unpopular predecessors, the impulse of new pharaohs was to erase all evidence of the offending monarch(s) and to align themselves – through artifice or archaism – with former kings of better repute.

An autopsy report on Egypt's first failed state

Although the Egyptian state was far less fragile than the vast majority of its ancient equivalents, it was not invincible. It failed very shortly after the reign of the Sixth Dynasty king Pepi II from a combination of many of the same ailments that appear to have laid low its less long-lived equivalents. If scholars of failed states can be compared to coroners, the autopsy reports that have been filed for Egypt's Old Kingdom state are typically equivocal. Below, however, a variety of different diagnoses are couched together within three broad categories in an admittedly speculative order of escalating importance: death by management failure and a corrosive loss of legitimacy, death by disaffection, and finally death by a drastic diminishment of spiritual and physical capital.

Death by management failure and a corrosive loss of legitimacy

There is considerable confusion as to the length of Pepi II's reign. The Turin Cannon gives a figure exceeding ninety years, which would suggest that the king had come to the throne unfit to rule and – unless he were truly extraordinary – would have left it the same way. The lack of attested regnal years for the last quarter century of Pepi's reign has often been blamed on the king's increasing irrelevancy to regional rulers and to an ever more impoverished elite. A graffito in Pepy II's pyramid, however, suggests that he died and was buried in his sixty-fourth regnal year. If so, his reign (c. 2216–2153) would have been comparable to Ramesses II's in length, and no extended period of irrelevancy need be posited (Müller-Wollermann 2014, 3). Sixty years, however, would still have been over twice the average lifespan of an ancient Egyptian, and so an increasingly fragile monarch may well have been viewed as an ominous avatar for the troubled state of the state.

Whatever the length of Pepi II's enormously long rule, he must, like Ramesses II, have outlived scores of crown princes. Of the scramble of short-lived kings that made up the subsequent Eighth Dynasty, one was certainly a son of Pepi II and others aggressively asserted kinship with him – however tenuous or fictive it may have been – by virtue of their choice of throne name. If numerous claimants assumed the crown in rapid succession, the lustre of the office would quickly

have dimmed. It may have been, however, that issues of illegitimacy and instability long predated the Eighth Dynasty. The first king of the Sixth Dynasty (Teti), for instance, may well have been assassinated, the second (Userkara) a usurper, and the third (Pepy I) plotted against by his own wife (Kanawati 2003, 4). Thus, of Pepy II's dynastic forebearers, his direct predecessor (Merenre) may have been the only king that was neither a conspirator nor one conspired against – at least so far as is known.

Only one possible attempt to unseat Pepy II is known, and this incident is only hinted at in a much later folktale that survived in at least three iterations. Known from the New Kingdom and the Twenty-Fifth Dynasty, the tale may have little bearing on the actual situation in the Sixth Dynasty, but – like many tales – one suspects it was indeed built around a kernel of truth. The story concerns the attempt of an individual, who had gained knowledge of a clandestine affair between Pepy II and one of his generals, to denounce the king in front of the court. Given that Egyptian religious texts condemned such relations – at least for the passive partner – and that the king was, before all else, mankind's primary advocate before the gods, this revelation about Pepy's sexual behaviour would indeed have been alarming. Each time the official attempted to reveal his sovereign's secret, however, he found that the Overseer of the Court thwarted him. According to the text, 'he made the singers sing, the musicians make music, the acclaimers, acclaim, and the whistlers whistle, until the Pleader of Memphis left without them hearing; (then) they stopped booing him' (Parkinson 1991, 55). A humorous tale from a much later time, of course, is hardly a credible historical source, but if Pepi II's proclivities were an open secret, this may also have led to a diminishment of the office of kingship in the eyes of those who might otherwise have held it in awe.

Some have suggested that if the figureheads at Egypt's core were perceived to be increasingly ineffectual, people in positions of power elsewhere in the country might well have felt free to act in their own interests, however illicitly. Certainly, during or in the immediate aftermath of Pepi II's reign, a high official from Elephantine was accused of embezzlement (lit. 'robbery') with respect to state activity in Nubia (Manassa 2006). One must imagine, however, that corruption and graft occurred at all times among officials whose responsibilities placed them in charge of resources and under only loose oversight. To indict an entire reign for corruption on the basis of an accident of preservation, then, appears premature.

In the end, it is unlikely that blame for the death of the Old Kingdom can be squarely attributed to a

failure of management on the part of its rulers or even to a progressive loss of legitimacy. Even if the lengthy rule of Pepi II indeed induced a feeling of stagnation, upwards of ten Memphite viziers are known from his reign (in addition to seven provincial counterparts), and each should have infused a renewed administrative energy to the realm (Strudwick 1985, 301–3). Hereditary monarchies, after all, are designed from the start to withstand a complete absence of governing from the king: whether that individual might be teething, mentally deficient, deemed deviant, or else increasingly infirm. In such cases, it is high officials who make important decisions, courtiers who meticulously stage-manage official appearances, and palace musicians who do their very best to drown out any incoming complaints.

Death by disaffection

One nearly universal suspect in the demise of the Old Kingdom is a restructuring of the government that ceded an unprecedented degree of power to regional authorities, who were typically members of powerful local families. The radical expansion of Egypt's bureaucracy in the Fifth Dynasty, while no doubt popular among ambitious members of the educated classes, seems from repeated attempts at restructuring later in the dynasty to have placed an increasing strain on the central government. Fifth Dynasty experiments with allowing some provinces a greater degree of administrative autonomy must have been deemed predominantly successful, as by the Sixth Dynasty, the government had introduced the title, 'great chief of the nome' to most Middle and Upper Egyptian provinces. Such men shared power with – or were occasionally functionally equivalent to – other locals who also exercised control over large estates on behalf of the crown and/or who were promoted to positions of authority in the central government as overseers of Upper Egypt or even as viziers (Moreno García 2013a, 124–46).

Prior to the Sixth Dynasty, the profoundly unequal distribution of monumental architecture and other archaeologically visible signifiers of wealth between the government's centre and its provinces suggests that the former's interest in the latter had resided almost solely in what it could requisition. While the crown likely intended its reform to increase efficiency and to lessen the drain on its coffers that the support of an overblown bureaucracy entailed, the advantages of this approach were counterbalanced by risks. In subcontracting oversight of provincial affairs to locals, for instance, the central government lessened its ability both to micromanage revenues and to coopt all significant sources of social power.

Large estates belonging to the king, the gods, or deceased royals formed the backbone of the provincial economy. Depending on their purpose, these estates likely sent varying amounts of produce to Memphite institutions, but much was also stored locally in order to subsidize the travel expenses of court functionaries or underwrite governmental expenses. Such had always been the case. What was different in the late Sixth Dynasty, however, was that the elites who now controlled these stores and increasingly appended titles such as 'overseer of the granary' and/or 'overseer of the treasury' to their vita, stood at the apex of local patronage systems (Kanawati 1980, 129–30; Strudwick 1985, 292; Papazian 2013, 63–6). Such elites thus no doubt found themselves newly empowered to make decisions about how local wealth would be dispensed. Their increasing co-option of offices such as 'overseer of priests' – which might stay in the same family for as many as eight generations – for instance, allowed local potentates to distribute lucrative and prestigious positions to a network of supporters whose fortunes were now directly tied to their own (Moreno García 2013a, 124–7; 2013b, 198–200, 202, 205; Bárta 2013a, 172–3).

Estates yielded soldiers as well as grain, and this too may have played a role in altering the balance of power. Little is known about the responsibility for mustering young men for war or work in the early Old Kingdom, although then, as later, it appears to have fallen to administrators bearing titles such as 'overseer of works of the king', 'overseer of the phyles of Upper Egypt', and 'overseer of the missions of the young men'. By the late Fifth and Sixth Dynasties, however, these men likely lived in the regions from whence they drew labour. Certainly, other officials, such as Weni or Sabni of Elephantine, mustered troops directly from the towns and estates they administered (Eyre 1987, 18–20; Moreno García 2010, 21–3, 25; Spalinger 2013, 466–68). Should a late Old Kingdom ruler have wished to curtail the defacto hereditary authority of a local family and impose his own man from the outside, then, those sent to enact his orders would assuredly have encountered not only a community united against this interference but also a formidable cadre of local militia. Indeed, it is likely no coincidence that the title 'overseer of a troop' is noted with relative frequency at the end of the Old Kingdom (Moreno García 2015, 5).

The likelihood of encountering resistance from local militias no doubt accounted for the pronounced preference of Sixth and Eighth Dynasty rulers for employing enticements rather than brute force to convince local rulers of their relevance. Thus, from the reign of Pepi I on, pharaohs often offered the sons and daughters of provincial families unprecedented power within the core of the kingdom as high officials

and as queens. At the same time, they acted to assert their own presence in important regional temples via the donation of royal statues and the establishment of appended *ka*-chapels (Moreno García 2013a, 122, 137–8; 2013b 199). Royal statues, such as those exhumed from Hierakonpolis, were not, however, likely maintained solely out of an enthusiasm for the cult of the divine king. Royal donations of land and property sweetened the pot for local powerbrokers and – no doubt – further fuelled the centrifugal forces already in motion.

The fact that officials in the late Fifth and Sixth Dynasties took charge of affairs in their own localities to a greater degree than ever before in the history of the pharaonic state, however, need not have occasioned the downfall of the central government. Indeed, the main problem with the disaffection hypothesis is that the state seems to have functioned perfectly well throughout the vast majority of the Sixth Dynasty. Limited local autonomy appears to have been ceded to provinces south of Memphis, yet there is no indication that regional rulers even remotely rivalled the king (Strudwick 1985, 346). In the north, meanwhile, the crown maintained its former hold over property in the fertile regions of the Nile Delta and the Fayum Oasis. Certainly, it is notable that for most of the Sixth Dynasty, kings seem to have had more than enough funds to procure resources from the northern Levant as well as from sub-Saharan Africa (Cooper 2012; Ward 1963, 23–7). So long as the crown possessed unparalleled wealth and a perceived religiopolitical potency – and so long as it shared some of this wealth and continued to refrain from the exploitative and divisive policies of the past – even those located at its margins seem to have been content to support it. What, then, changed at or shortly after the death of Pepy II?

Death by drastic diminishment of spiritual and physical capital

Toward the end of the Sixth Dynasty, state finances took a turn for the worse. This is perhaps most obviously reflected in the mortuary remains of its functionaries. Pepi II, with his unusually long reign, managed to construct a perfectly respectable pyramid. What is notable, however, is that beginning in the reign of Merenre, the numbers of Memphite officials who could afford a high-status burial shrunk precipitously (Bárta 2013b, 269). Indeed, by the latter portion of Pepi II's reign virtually no one in the capital or the provinces could afford an imposing mastaba tomb, save the governors of Dakhleh Oasis.

The practice of granting of tax exemptions to temples and associated funerary establishments (Abydos and Coptos), pyramid towns (Dahshur and Giza), and royal and private *ka*-chapels (Coptos) has been

repeatedly assigned at least partial blame for this sad state of affairs. These tax exemptions – in evidence already at the beginning of the Sixth Dynasty but better attested towards the end of it – generally forbade crown officials from charging their expenses to the protected estate. In addition, the crown promised not to requisition its property or personnel as part of routine *corvée* labour extractions or on an as-needed basis (Strudwick 2005, 102–15).

While the crown would indeed have reduced its access to revenue by virtue of these decrees, especially if the surviving documents were only the tip of the iceberg, three factors suggest that this practice was more a symptom of weakness than a cause. First, in most cases the estate is exempt from only certain impositions and taxes – not necessarily all. Second, the vast majority of institutions were not exempt. Thus, donkeys that were not requisitioned from the funerary estate of one particular queen mother could presumably be requisitioned from those of all other queen mothers and their noble kin, not to mention the pyramid towns of all but the couple of exempted parties as well as the innumerable royal estates that littered the country and were especially prominent in the Delta (Moreno García 2013b, 190–2; 203–4).

Finally, the crown seems often to have exempted sources of revenue that it could afford to exempt. The governors in Dakhleh, for instance, occupied an oasis hundreds of kilometres deep in the desert, and their mastabas were far grander than any others in Egypt during the reign of Pepi II. Thus, it would appear that if Egyptian armies had tried to requisition revenue by force, they would have failed. At the other extreme, however, the exemption granted to the community tending Menkaure's funerary temple would appear far more impressive if this squalid tenement had never been excavated (Lehner 2002, 7; Kemp 2006, 207–9). Indeed, the exemption granted to this 'sacred slum' was most likely intended primarily to provide the priests with an incentive to stay put and to keep the derelict cult functional.

The gradual impoverishment of elites at the end of the Old Kingdom is not in dispute. The role of an ecological downturn in occasioning this impoverishment, however, is. Recent assessments of the period discount any role of the environment in occasioning the breakdown of the centralized state, although no compelling heuristic alternative is advanced (Moreno García 2015, 5; Gee 2015, 61–2; Contardi 2015, 14–8; Schneider 2017, 319).⁵ These authors tend to muster three main arguments. 1. The 28 firsthand narratives of individuals who claimed to successfully protect their people from dangerous food shortages were in fact opportunistically making a mountain out of a mole hill.

Famines were nothing unusual. These local grandees simply took advantage of the lack of a strong king in order to take credit for food distribution. 2. A rash of 'pessimistic literature' set (or reasonably thought to be set) in the First Intermediate Period but penned (certainly or likely) during the Middle Kingdom should be viewed both as warnings regarding the danger of life without a strong king ruling a unified country and also as reflective of an interest in exploring the notion of theodicy. 3. Any ecological downturn that there might have been would have occurred gradually and so the state would have had time to adjust.

In his investigation of the epistemological perspective that has coloured the reconstruction of the end of the Old Kingdom and life during the First Intermediate Period, Thomas Schneider (2017, 319) quotes Ailiezer Tucker's definition of the benchmark for the veracity of historiography: namely that it is important to privilege hypotheses that increase the likelihood of the evidence more than others. I will thus end this essay by arguing that while privileging a monocausal explanation for the end of the First Intermediate Period is undoubtedly naïve and wrongheaded, ignoring testimonies from first-hand accounts, later meditations on trauma, and a rash of scientific studies risks an unnecessarily defeatist approach. That the Old Kingdom monarchy was crippled by its inability to use its privileged position with the deities (on the one hand) and its unparalleled stores of grain (on the other) to help its people in their time of need is indeed a hypothesis that fits Tucker's benchmark for approval.

The hypothesis that deteriorating environmental conditions helped bring about the end of the Old Kingdom is also potentially useful for explaining why it would take almost a century and a half (*c.* 2118–1980) before another ruler could extend his dominion over the entirety of the country. It has been the aim of this paper thus far, after all, to argue that Egypt affords statehood and that even in the face of politicide, the pharaonic system was remarkably resilient. In all past periods of unrest, societal frustration seems to have been quelled by the installation of a new government and by the righting of perceived wrongs. So the important question with respect to the Sixth Dynasty is perhaps less why it fell than why it took so long (by Egyptian standards) before anyone picked up its pieces and put it back together again.

In order to make my case for bringing climate back into the equation, let me begin by marshalling an assemblage of recent and diverse scientific studies that demonstrate that the ecological downturn that coincided with the end of the Old Kingdom was not business as usual and that the reports of eyewitnesses should not be deemed histrionic. With this point made,

I will draw upon evidence for documented famines in later periods in Egypt's history to highlight certain observations about famines that are not necessarily self-evident but which are crucial for gaining perspective on the scattered sources of information pertinent to the First Intermediate Period.

The case for re-considering the role of a climate hostile to the state

Most of the studies that discount climate as an agent for change in Egypt draw upon an article published by Nadine Moeller in 2005. In this valuable essay, Moeller reviewed all of the available scientific studies that had been used to argue that a series of droughts and low floods had occasioned the collapse of Egypt's Old Kingdom. Some of these studies, she found, were more convincing than others. For example, a study of changing settlement patterns at the island of Elephantine, she concluded 'provides firm evidence for relatively low flood levels during the 6th Dynasty' (Moeller 2005, 156). She cautioned, however, that scientists who took climatic change at the end of the third millennium as a given may well have been inclined to a certain amount of confirmation bias when interpreting their data (Moeller 2005, 158). Such studies, she suggested, might include investigations of Nile sediments from the Delta, dune encroachment into towns and formerly fertile fields, and variation in Fayum lake levels.

After reviewing the various studies, she concluded that climate change in Egypt was no doubt real, but appeared to be 'a long-term, gradual development towards generally drier conditions' (Moller 2005, 167), an assessment that agrees with evidence mustered by Miroslav Barta (2015) and colleagues at Abu Sir, re-evaluations of the dating for the collapse of urbanism in the southern Levant (Höflmayer 2014, 132), evaluations of evidence pertinent specifically to the eastern Mediterranean (Finné, Holmgren, Sundqvist et al. 2011, 3169), and with the view that scenes of starving bedouin carved on the causeways of Fifth Dynasty kings were as relevant as they were self-serving (see Fig. 5.12; Morris 2017, 134–5).

Moeller's caution concerning the dangers of confirmation bias and circular arguments is important and well taken. Since Moeller's article, debates about the so-called 4.2-kiloyear BP aridification event have continued. Given that there is at least as much (if not more) prestige in debunking a controversial theory as there is in confirming it, and given that most of the authors involved in subsequent studies are climate scientists and have no investment one way or another in the veracity of Egyptian texts, let me briefly refer to a selection of studies published after 2005 that have

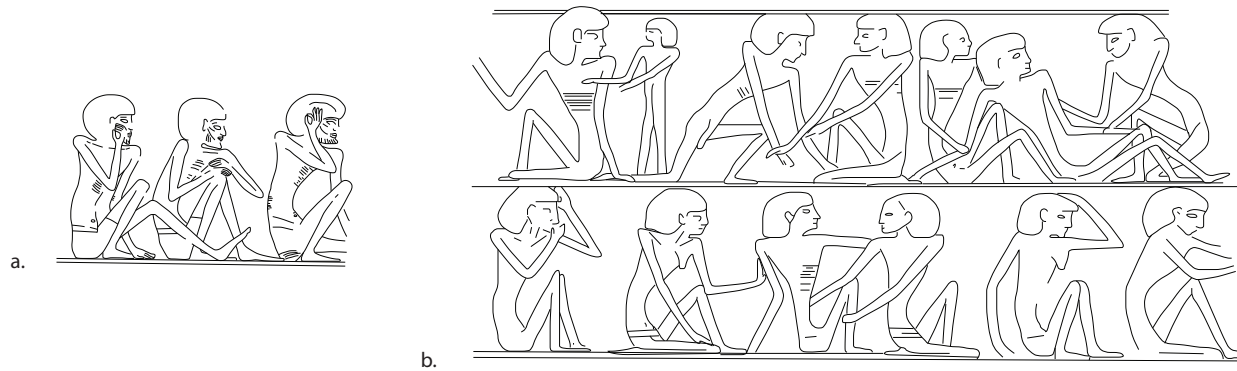


Figure 5.12. *Starving Bedouin from the causeways of Sahure (12a. after Hawass and Verner 1996, 185, fig. 2a) and Unas (12b. after Drioton 1943, fig. 3).*

found additional evidence for adverse climatological events that are posited to have led to an aridification the like of which had not been seen since the dawn of the state and/or to catastrophically low floods. These studies employ a variety of different methods and have examined evidence from numerous locales.

Studies undertaken at the sources of the Nile are particularly important, given that the inundation was far more crucial to Egypt's long-term health than any rain that fell within its borders. At Lake Tana, the source of the Blue Nile in Ethiopia, magnetic and geochemical coring has revealed a drought event at roughly 2200 BC, i.e., during the reign of Pepy II. The effects of this dry spell were aggravated because they coincided with 'a short period when outflow ceased from Lake Victoria, at the source of the White Nile,' convincing the authors to support the position that reduced Nile flow was indeed a contributing factor in the collapse of the Old Kingdom state (Marshall, Lamb, Huws et al. 2011, 147, 159). Even Karl Butzer, who had argued forcefully in the past against climate-driven explanations for the collapse of the Old Kingdom (Butzer 1997, 245, 261) argued in 2012 that the limnological record of Lake Turkana – which indicated that the Omo watershed in western Ethiopia that fed it generated only minimal influx around approximately 2100 BC – suggested that 'Nile failures probably unleashed a severe subsistence crisis that helped trigger an economic breakdown near the end of Pepy II's reign' (Butzer 2012, 3633–4).

With reference to suffering to the north and east of Egypt, Sturt Manning and his colleagues utilized the technique of dendro-¹⁴C-wiggle-matching to examine the tree-ring sequences of a cedar coffin and funerary boat from the First Intermediate Period and Middle Kingdom respectively (Manning, Dee, Wild et al., 2014, 401, 414). Their conclusion was that an off-set within the period of roughly 2200–1900 BC was consistent with

the climate change postulated by the 4.2 ka BP event that has been argued to have caused widespread suffering throughout the eastern Mediterranean world. A team of scientists examining brine sediments in the northern Red Sea reached a similar conclusion. The results of their study led them to state that the timing and strength of the reconstructed environmental changes around 4200 cal yr BP are suggestive of 'a major drought event' that affected northern Africa as well as Mesopotamia (Arz, Lamy, Pätzold 2006, 432, 439–40).

Within Egypt proper, recent coring at Saqqara has revealed a metre thick layer of dune sands over areas that had previously been arable fields (Hassan, Hamdan, Flower et al. 2017, 62).⁶ At this site as well as Abusir, Giza, and Abu Rowash, other geomorphological studies revealed that the deposition of slope and aeolian deposits occurred at the same time as dramatically low floods. These low floods, in combination with unusually intense bursts of rain, triggered catastrophic flash floods that have left ample evidence of their destruction in the Memphite cemeteries and appear even have led to significant archaeological innovations in tomb design⁷ (Welc & Marks 2014, 131; Kuraszkiewicz 2016). The effects of low floods and intense rain may also be seen in the fact that Lake Qarun was effectively cut off from the Nile and received a significant input of sand, likely the result of sheet-floods (Marks, Salem, Welc et al. 2018, 76). These two factors, Fabian Welc and Leszek Marks conclude, 'caused a rapid collapse of the Old Kingdom at about 4200 cal BP' (Welc & Marks 2014, 124).

If adding heavy rains to the list of contributory factors leading to the breakdown of the state appears hyperbolic, a brief foray into more recent history may be illustrative. In his book *Nature and Empire in Ottoman Egypt*, Alan Mikhail writes that the torrential downpours of 1757–1758 and of 1790 set off a chain of events

that led to a governmental crisis. These rains wrecked field systems, ruined crops, and destroyed supplies of stored grain. Further, the unexpected floods also sent thousands of rats to seek dry land together with humans, which led to a particularly devastating bout of plague. Not restricted to the poorer districts of Cairo, the pestilence of 1791 slew Egypt's highest official as well as many in his administration (Mikhail 2011, 218, 227–8). As Mikhail writes, 'The plague indeed caused quite a crisis of leadership in Ottoman Egypt, as no appointed leader could stay alive long enough to rule effectively' (Mikhail 2011, 222). It would appear, then, that the causes and effects of the combined calamity of 1790–1791 may provide a gruesome, if fitting parallel to what archaeology has revealed concerning the end of the Old Kingdom. Mikhail concludes, 'The flood of the fall of 1790, therefore, contributed to the ravages of plague in the spring of 1791. The combination of these forces with drought in the fall of 1791 resulted in widespread famine, severe price inflations, and massive death' (Mikhail 2011, 229). Considering the magnitude of the crisis, it was useful to the survival of the Ottoman state that its sultan resided outside Egypt's borders!

Lessons from the longue durée

Numerous accounts of more modern famines in Egypt's history, particularly those that occurred in the well-documented Mamluk and Ottoman periods, allow for the recognition of a few important patterns. Efficient governments, for example, could generally ameliorate the damage caused by Nile floods that were either dangerously high or dangerously low. In such cases, before inflation caused too much suffering among the poor, rulers and other *grandees* would step in and either sell grain at below the market rate or else simply distribute it. While occasional instances of rioting might occur – as in the famines of AD 1336 and 1394 – the government that acted quickly and efficiently in the face of a short-lived ecological downturn could aid its people and avert disaster (Sabra 2000, 144–5, 148–50; Raphael 2013, 99).

Inadequate floods seem to have occurred at least once a generation. As Fekri Hassan has observed, however, Egypt's most horrific experiences with famine and suffering occurred at much longer intervals – often depriving even the oldest sufferers of a parallel within the living memory of those they'd known. The effects were most acutely felt when inadequate floods persisted over two or more years, occurred within short intervals of one another, and/or coincided with extended region-wide droughts (Hassan 1997, 57–9). From 1294 to 1295, for instance, a serious drought struck the Eastern Mediterranean from Cyrenaica to

Syria, which caused some 30,000–50,000 individuals to immigrate into the Nile Valley in search of sustenance. Two successive insufficient inundations, however, meant that Egypt, too, was in a state of crisis. The price of grain rose to more than 13 times the standard rate, people began resorting to famine foods (including, according to the chroniclers, human flesh), plague spread throughout the country, and at the peak of its devastation it is estimated that as many as 3,000 persons a day perished (al-Maqrīzī 1994, 43–7; Sabra 2000, 141–3).

The fact that most of those that fled to Egypt were pastoralists from Cyrenaica recalls a statement from the record of a campaign that Merneptah undertook c. 1208 BC, right at the beginning of the chaotic half century or so that marked the end of the Late Bronze Age. The report states by way of prologue that Libyan tribesmen had emigrated *en masse* to the Nile Delta in order to 'seek out the necessities (of life) for their mouth[s]' and once there were 'fighting to feed their stomachs daily' (Kitchen 2003, 4). Notably, references to famine abound in contemporary diplomatic correspondence, and Merneptah boasted that he had 'caused grain to be taken in ships, to keep alive this land of Hatti' (Singer 1999, 716–9). Destruction levels and the abandonment of major population centres are evident throughout the Eastern Mediterranean at this time, bearing witness to mass population displacement. While Merneptah kept his throne, Canaan and Nubia attempted to rebel against pharaonic rule, and political chaos soon brought down his dynasty. The succeeding regime (c. 1190–1077) is known for rampant tomb robbery, labour strikes, multiple instances of mob violence, hit and run attacks by desert dwellers, increasing regionalism, and finally for the breakdown of the central state. While the intermittent spikes in grain prices noted in late Nineteenth and Twentieth Dynasty sources may be related more to administrative inefficiency than to famine, it is notable that documents from this period provide more direct and indirect references to hunger and to the extraordinary purchasing power of foodstuffs than those from any period since the advent of the Twelfth Dynasty (O'Connor 1982, 875–6; Kemp 2006, 314, Contardi 2015, 17).

In the late Old Kingdom, evidence for large-scale population movements typical of those catalyzed by drought conditions can be seen in the reoccupation of the Nubian Nile Valley, the Sinai landbridge, and in Egypt's increased confrontations with Bedouin, as the inhabitants of areas dependent on rainfall in North Africa and the southern Levant converged upon the Nile Valley and also threatened Egypt's interests outside of it. Indeed, the pharaonic initiative to colonize Dakhleh Oasis (a region whose water was not

dependent on the Nile) in the Sixth Dynasty may also have been undertaken both to increase Egypt's food supply and to give its traders a means of bypassing the newly reoccupied and politically fractious Lower Nubian Nile Valley. Egypt's emergence from isolationism in the Late Old Kingdom, then, was probably to some degree defensive, and it is notable that once strong leadership re-emerged in the Delta during the late First Intermediate Period or the early Middle Kingdom, border security became a top priority (Jansen-Winkel 2010; Morris 2018, 49–52).

It is possible that an increase in urbanism and in the construction of town walls in the Sixth Dynasty may be taken as the material signatures of an elevated unease that existed within Egypt proper (Moeller 2016, 186). Such a conclusion need not necessarily be drawn. As Juan Carlos Moreno García points out, a burgeoning population might be read as a sign of health, and in the southern Levant, for example, the presence of town walls is often interpreted as an indication of civic pride (Philip 2003, 109–23; Moreno García 2015, 8). Thus, the increased provincial autonomy typical of the Sixth Dynasty could well have motivated local elites to invest in their towns. In the third century AD, for example, Egyptian provincial cities flourished during an extended period of crisis largely because wealthy citizens – newly empowered to act as city councillors – now saw the glory of their city as adding lustre to their own self-worth (Bagnall 1993, 55–9).

Bearing the aforementioned caveats in mind, it may still be safely stated that in pharaonic Egypt nucleation and walls are especially characteristic of unsettled times. Moreover, multiple lines of evidence make it clear that any walls erected were put to good use during the 'long First Intermediate Period', which might be argued to extend up to the point at which Amenemhet I's foes surrendered their arms. Violence – as witnessed in elevated death rates and signs of trauma, biographical inscriptions, and in the unprecedented visibility of soldiers as well as real, model, and depicted weapons – left its scars in the material and epigraphic record (O'Connor 1974; 27–9; Hayes 1978, 277–80; Morris 2006; Duhig 2009, 60–1; Moeller 2016, 244–5).

Dry climates tend to be incendiary

When an efficient administration in Egypt's history mitigated the effects of a short famine, the benefits of paying taxes were obvious. Inefficient, inattentive, or avaricious elites, however, could exacerbate (or even cause) crises and served as lightning rods for discontent during ecological downturns. Perceived abuses of the social contract that bound a government to its people occurred during the famines of 952–953,

963–971, 1294–1296, 1694–1695, 1784 and 1790–1796, which provoked widespread anger and demonstrations in response (al-Maqrīzī 1994, 29–30, 47; Mikhail 2011, 217–218, 229–30). Whether the aftermath of mob violence may also be seen in the scorch marks left over from fires that destroyed the late Sixth Dynasty Governor's palace at 'Ain Asil in Dakhleh Oasis or in the disordered corpses of over 35 people recovered beneath burnt heaps of rubble outside a late Old Kingdom temple platform at Mendes is unclear, but 'Let us drive out the strong among us!' was remembered as a rallying cry characteristic of the time (Enmarch 2008, 223, similarly 228–9 Simpson 2003, 153, 155; Soukiasian 1997, 17; Redford 2010, 46–50).

It is worth noting that in order to temper the effects of famine, Mamluk and Ottoman governments awarded tax breaks and fostered an economy of patronage among their highest elites – two tactics, discussed above, that Egypt's late Old Kingdom administration also employed (Sabra 2000, 135–6; Mikhail 2011, 2016–7; Raphael 2013, 99–100). In these latter periods, such economic interventions often staved off disaster – but it helped that Egypt was only one component of a much larger empire. These same strategies, while they may at first have decreased stress and increased the agility of the Old Kingdom government, would not have worked over a period of ever-increasing aridity. Regional granaries, by their very nature, run dry more quickly than centralized stores, and they do not allow the dearth of one region to be as easily complimented by the plenty of another. Thus, at the very end of the Old Kingdom the centre did not hold, and things fell apart.

The Egyptian state had weathered destabilizing adversities before, including serious and systemic abuses of power, as well as regional unrest, and even regicide. While these adversities prompted abrupt changes of regime, they did not stop the state altogether. Some other ruler had always stepped up to right wrongs and assume the reins. The question, then, is why this case was different. Accounts of historically attested famines may, again, aid our understanding of why Egypt – if it had suffered from a prolonged drought and intermittent low Niles – may have had a difficult time recovering. Adequate inundations, it seems, were no panacea unless arable land could be quickly cultivated. In the aftermath of serious famines in Egypt, finding the animal- and manpower to work the soil was difficult. In areas hardest hit by famine, people had generally consumed both unripe crops and draught animals. Moreover, villages were often almost entirely depopulated as peasants who did not die often left for cities so as to be closer to what aid there was and to escape increasingly lawless conditions

(al-Baghdādi 1964, 55l, 60l, 62r, 63r–63l; 64l; al-Maqrīzī 1994, 41–3, 46; Sabra 2000, 160, 167; Mikhail 2011, 217; Raphael 2013, 67, 73, 85).

Over time, droughts ease, and catastrophically low floods – while more frequent in certain eras than others – tend only to last a handful of years at most. During the First Intermediate Period, it is no doubt as erroneous to envision a time of unremitting misery and peril as it is to ignore attestations that life during this period could be particularly challenging. Even the ‘calamitous’ fourteenth century in Europe, after all, saw feasts among its many famines. Moreover, in the aftermath of the blackest plagues it could happen that ‘the poor moved into empty houses, slept on beds, and ate off silver. Peasants acquired unclaimed tools and livestock, even a wine press, forge or mill left without owners, and other possessions they never had before’ (Tuchman 1978, 117). Those who had always been at the bottom of Egypt’s social order, therefore, may have had little desire to reinstate the state, even if life without its security forces and infrastructure was as alarming as it was exhilarating.

Making Egypt great again

If the breakdown of the central state in Egypt lasted longer than it ever had before during the First Intermediate Period, it was not, in fact, laid low for long (at least by comparison to many other ancient states profiled in this volume). Two dominant theories are often invoked to explain the rise of the state: one coercive and the other managerial (see with regard to Egypt Bard and Carneiro 1989 vs. Hassan 1988). Proponents of the first theory argue that states were won at spear point and maintained by force. By contrast, advocates of the managerial view highlight the state’s scalar advantage in buffering its citizens from the effects of famines, incursions, or other social ills. In light of these two very different perspectives, then, it is important to note that the first individuals who gained power in the aftermath of the state’s collapse were those who boasted of their active involvement in helping the people of their districts survive an extended period of crises (Vandier 1936; Moreno García 1997, 3–92). These boasts, while obviously self-serving, needn’t be untrue. On the other hand, it is equally important to observe that some, like Ankhthify, paired their boasts with tales of aggressive actions against neighbouring polities. Thus, perhaps, the phenomenon of state formation is capacious enough to encompass both paradigms even within a single instance.

After eight hundred years, Egypt had an indelible template for pharaonic rule. As noted at the start of this work, the Nile Valley afforded statehood, and so once the river recovered and steady surpluses were again

in sight, aggrandizers increasingly took up the question of just who should assume the righteous burden of safeguarding the nation’s stores. Within twenty years, strong men, based first at Herakleopolis in the fertile Fayum and slightly later in Thebes, carved out kingdoms that would eventually clash. Like a phoenix rising from the ashes (or like a B-grade horror film, depending on your perspective) the pharaonic state would be reborn. Whether this repeat performance was greeted with relief or depression no doubt depended on individual circumstances. The strength of Egypt’s state lay – almost equally, it seems – in its ability both to help and to harm.

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Notes

- 1 All dates for the pharaonic period are taken from the chronological chart in Hornung, Krauss, & Warburton 2006, 490–3.
- 2 These annals may have omitted the reigns of three poorly attested kings, including that of Sened, whose funerary cult at Saqqara was serviced in the Fourth Dynasty by the same priest who also served Peribsen's cult (Grdseloff 1944, 294; Wilkinson 2000, 203).
- 3 The suggestion that Khasekhemwy may have built a mortuary monument for himself under what would become the Western Massif in Netjerikhet's Step Pyramid (Stadelmann 1998, 53) or else constructed a funerary enclosure at Saqqara (Mathieson, Bettles, Clarke et al. 1997, 53) remains unsubstantiated and is perhaps

doubtful (Reader 2017, 80–2). Given that the king was certainly buried at Abydos, it is unlikely that he would have been the sole Early Dynastic king to provide himself with two tombs, though the notion that the Gisir el-Mudir was intended to serve as a heb sed court or as an arena to celebrate his reunification of the country is intriguing (Regulski 2009, 227–8).

4 The fact that Taleb’s area of expertise lies in modern finance rather than ancient Egypt is apparent from his characterization of the pharaonic nation-state as ephemeral (Taleb 2014, 96).

5 The exception to this rule is Karl Jansen-Winkel (2010, 233–9), who argues that the Old Kingdom fell due to

an outside invasion. Given the difficulties organized empires such as the Assyrians, Neo-Babylonians, and the Persians faced in their own efforts to penetrate the Delta with camels and warships, any organized invasion should be ruled out. That Egypt received numerous unwanted refugees in a time of drought, however, is quite likely.

6 As the Egyptians would put it, ‘the desert is throughout the land’ (Ipuwer 3.1; trans. Enmarch 2008, 223).

7 Ipuwer’s observation is perhaps pertinent: ‘O, yet the many dead are buried in the river; the flood is a grave, while the tomb had become a flood’ (Ipuwer 2.6–7, trans. Enmarch 2008, 222).

Chapter 6

Fragile Cahokian and Chacoan Orders and Infrastructures

Timothy R. Pauketat

Two sprawling early urban or proto-urban complexes – Cahokia and Chaco – developed at about the same time far apart from each other in pre-Columbian North America (Fig. 6.1). The construction of each was based to a significant extent on maize agriculture supplemented by other native plant foods, terrestrial game and, in the case of Cahokia, waterfowl, fish, and other aquatic animals (for overviews, see Dalan et al. 2003; Kantner 2004a; Lekson 2006; Noble 2004; Pauketat 2004; Pauketat & Alt 2015). Both were overbuilt complexes of (politicized) religious activity and, in that form, likely acted as magnets for pilgrims and immigrants, shaping the histories of everyone and everything caught up in their webs (Pauketat 2013; Van Dyke 2007). Yet neither survived the end of the Medieval Climate Anomaly, about AD 950–1250, with major monumental constructions and human habitations dating to circa AD 1050–1250 for Cahokia and AD 850–1130 for Chaco.

As a consequence of their relatively short durations, many researchers have asked *why* these great monumental complexes were organized in ways that could be undone after less than 15 human generations. Unfortunately, such ultimate questions have tended to encourage overgeneralizations, drawing on abstract models of society and overlooking the very real, local, material and infrastructural underpinnings of each case. They typically characterize entire societies as either populous or sparsely settled, hierarchical or communal, political or religious, and rational or animistic and then model the long-term implications of said societies, all while requiring little historical detail about the cases in question.

Instead of such a model-heavy approach to questions of fragility, I would argue that we should be asking proximate, historical questions about specific human, other-than-human, and material relationships. *How* did maize and other non-human agencies, maize-growing agriculturalists, and localized soil and climate

regimes help to produce early urban phenomena? *How* – in material-relational and historical terms – did they or did they not attract human populations? Did they become stratified and *how*? *What* were the political and material histories of their demise?

In my own answers to these questions here, I will focus on the properties and histories of cultural order and infrastructure at Cahokia and Chaco, particularly as entangled through maize agriculture, ceramic production, monumental experience, and water management. I will locate very little of the historical dynamism of the two complexes in communal, urban, ritual, or hierarchical structures per se, which have proven remarkably intractable to archaeologists (in part because they are artificial analytical constructs). Doubtless, both Cahokia and Chaco were variably communal, urban, ritual, and hierarchical – these are dimensions of most human social experience – in ways that were closely tethered to their order and infrastructure as these developed through time.

Their fragility, in the end, was therefore dependent in some ways on their material qualities, on their inclusive or exclusive and intensive or extensive peculiarities, and on the extent to which their boundaries were either heavily incised on the landscape or, alternatively, permeable and susceptible to being transgressed. In the following sections, I first outline and compare Cahokian and Chacoan social and material histories. Then, I stress those immanent qualities of maize, pottery production, monumental construction, and water management key to appreciating the fragility of Cahokia and Chaco.

Cahokian social and material history (AD 950 to 1250)

A millennium ago, a century after the beginning of the Medieval Climate Anomaly (c. AD 950) and the coeval



Figure 6.1. Location of the Greater Cahokia and Chaco regions (map by T. Pauketat).

addition of maize fields to Midwestern landscapes, a city of some 15,000 or more living souls covering 15–20 sq. km – Greater Cahokia – coalesced along an extraordinary stretch of the Mississippi River (Fig. 6.2; Table 6.1). The process produced a cultural region of some 30,000-plus sq. km (Pauketat & Alt 2015). At the centre of it was a complex of three sprawling precincts planned and built around AD 1050 at a scale never before imagined in pre-Columbian North America (Fig. 6.3). Extensive new excavation data from the

second largest of the precincts, East St. Louis, reveals clear neighbourhood patterning, among other things, with official (political or religious) buildings in one area laid out on a grid pattern amid numerous other pole-and-thatch domiciles (Betzenhauser & Pauketat 2018; Brennan 2018; Emerson et al. 2018).

Simultaneously, Cahokian emissaries or converts established shrine complexes and apparent support settlements up and down major waterways across the American Midwest and Mid-South – 1000 river

and overland km to the north at places such as Trempealeau, and 750 river-km to the south at places such as Carson – all as part of a short-lived but far-flung colonial moment during the second half of the eleventh century (e.g., Delaney-Rivera 2004; Douglas 1976; Emerson, Millhouse et al. 2008; Harn 1991; Johnson 1987; Pauketat, Boszhardt et al. 2015). By the twelfth century, Cahokia was a clear presence in the middle Mississippi River valley, with locals in all directions disposed in some ways to adopt, acknowledge, or confront the political, religious, cultural and military challenges emanating from the American Bottom (Emerson 2007, 2012).

As a late eleventh and twelfth century city, Greater Cahokia was a ‘distaniciated’ entity, with open water in between the major precincts (see Amin & Thrift

2002). Within an area of about 20 sq. km, each precinct (Cahokia, St. Louis, and East St. Louis) appears to have been built according to a slightly different orthogonal grid. A few buildings or monuments within each seem to reference still other celestial, terrestrial, and substantial referents (Pauketat 2013). Besides water, prominent referents included the moon and the night (Alt 2018b, 2019; Baires 2017; Pauketat 2013; Pauketat et al. 2017; Romain 2015). Sarah Baires (2017) has argued that a central causeway in the Cahokian precinct – part and parcel of its founding design – was a virtual avenue to the dead (built of earth, through standing water), while Susan Alt (2019) adds that this realm was both a nightly experience and an actual subterranean landscape south and west of the city, superimposed by and accessed via sinkholes built into the St. Louis precinct.

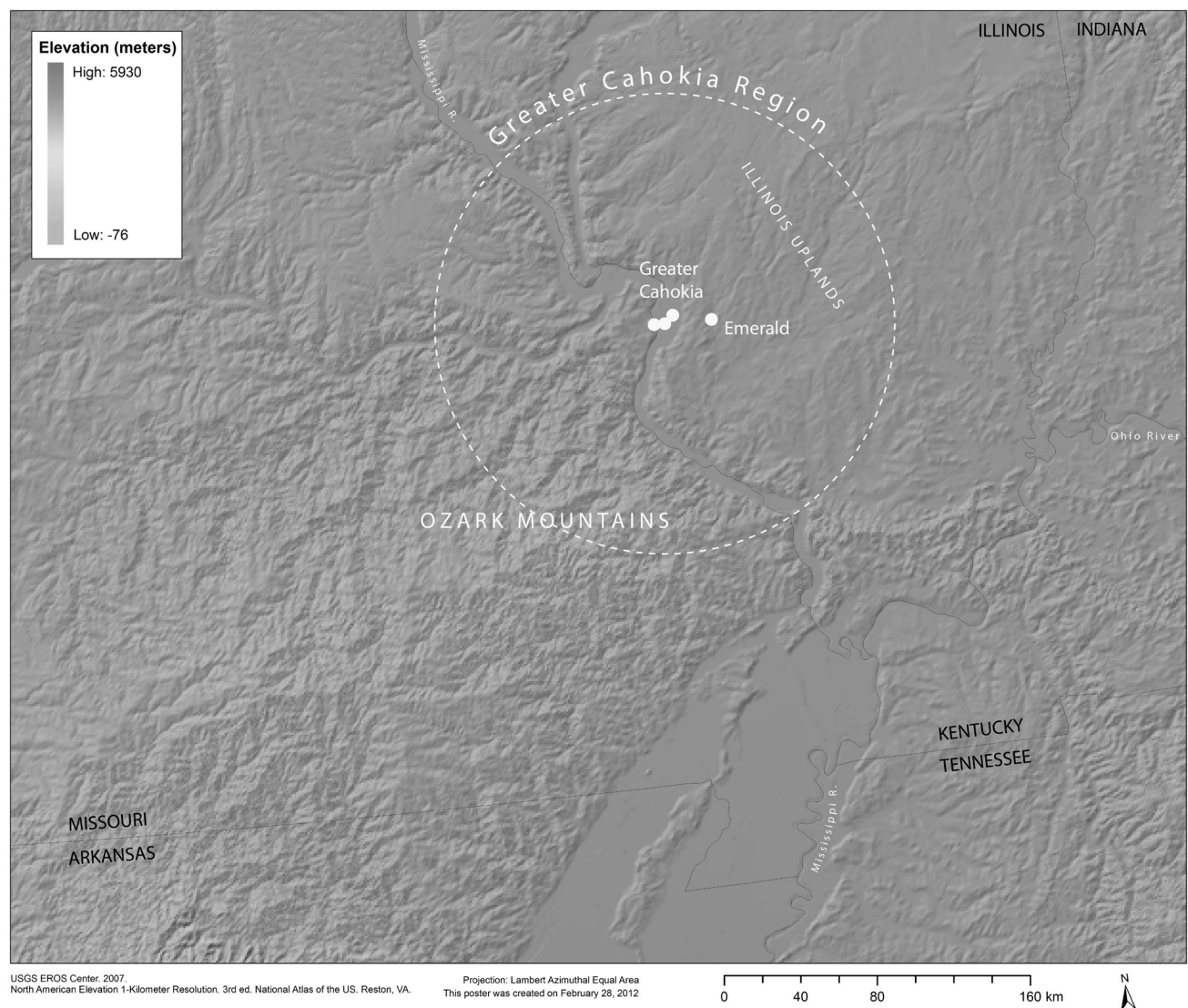


Figure 6.2. The physiography of the Greater Cahokia region (map by T. Pauketat).

Table 6.1. A comparison of Cahokian and Chacoan histories. References: Cahokia (Alt 2018; Benson et al. 2009; Emerson 1989, 1997a, b; Pauketat 1994; Pauketat and Alt 2017; Pauketat et al. 2015); Chaco (Lekson 2007; Lekson et al. 2006; Toll 2006; Van Dyke 2004; Vivian et al. 2006a, b; Wilshusen and Van Dyke 2006).

Date AD	Cahokia	Chaco	Climate
1340			Periodic droughts
1300	Depopulation		
1260		Small isolated sites in defensive positions	
1220	Reduced scale; reorientation; palisade construction Burning and contraction of East St. Louis precinct	Remodelled Great Kivas Pueblo III reoccupation of Chaco Canyon	
1180			
1140	Upland farming district depopulation	Depopulation and emigration	Wetter
1100	Ramey pottery and carved figurines; oversized posts Standardization of pottery and craft production	Reduced scale; McElmo reorientation Pueblo Bonito termination deposit	
1060	Long-distance outreach and shrine establishment Massive constructions; immigration; theatrical mortuaries	Chaco Wash aggradation; water-control features Regional expansion; maize and deer dietary focus	
1020	Emerald shrine centre	Massive constructions	
980			
940	Development of Terminal Late Woodland villages Adoption of maize (and nixtalamization)	Great House construction pulses	Warmer
900		Chaco Wash channel degradation Pueblo Bonito room 33 burial	
860	Mixed Late Woodland horticultural villages	Earliest Great Houses and BMIII-PI pueblos; population concentration in northern San Juan	

There were five ridge-top shaped ‘corporate-elite’ mortuary mounds at the end of or around the causeway. One of these was the well-known Mound 72, found to be the likely eleventh-century resting place both of Cahokia’s founding men and women and of a series of mass human graves and artefact offerings (Emerson et al. 2016; Fowler et al. 1999). Given the more than a dozen such mounds in the Greater Cahokia region, which date as late as the early 1200s, it seems plausible that several leading families may be implicated in the social history of the city and its immediate environs (Baires 2017; Kelly 2005; Pauketat 2010).

As Greater Cahokia’s design and monumentality suggest, fundamental experiences (life and death), pervasive substances (water), and experiential

phenomena (moonlight and darkness) are among the most ‘immanent’ (and thereby religious) of a host of celestial, terrestrial, and substantial referents (*sensu* Deleuze & Guattari 1987). They exist in multiple states and at multiple scales of experience. They have ‘vibrant’ qualities that might affect people in spiritual ways (Bennett 2010; Ingold 2007). As incorporated into urban contexts via infrastructure, they have long-term historical implications (Pauketat 2019).

In the Greater Cahokia region, lesser precincts and outlying religious shrines appear to have been established in the early to mid-eleventh century to position that city-under-construction at the centre of these various imminences (Alt 2018a; Emerson 1997a; Pauketat et al. 2017; Pauketat, Boszhardt et al. 2015).

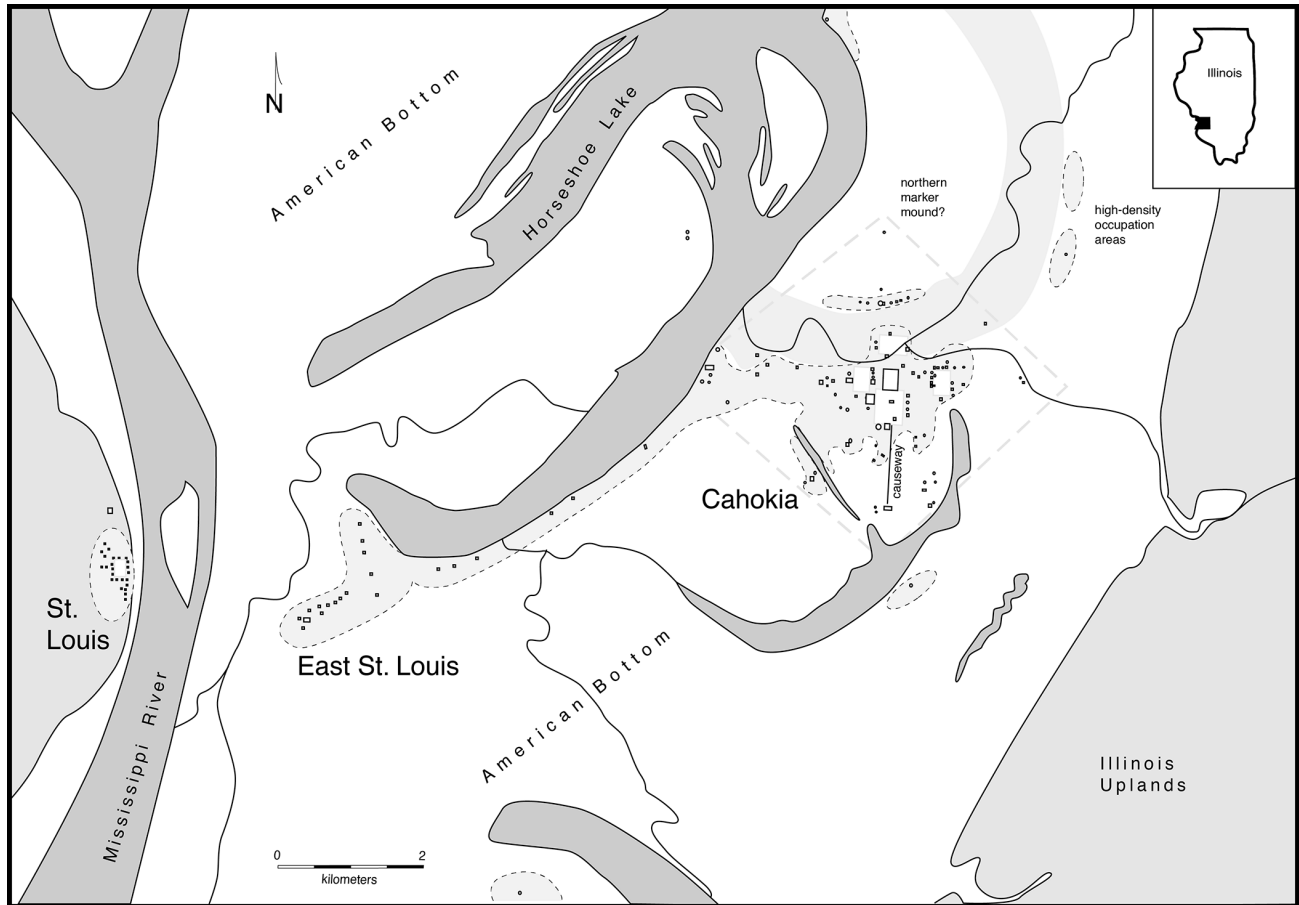


Figure 6.3. The city of Greater Cahokia, showing its primary precincts: Cahokia, East St. Louis, and St. Louis (map by T. Pauketat).

Maize, water, the moon, and feminine lifeforces seem implicated at key ceremonial locations (Alt 2018c). The largest of these was a 10-m-high ‘water-hill’ in the open prairie uplands 24 km east of the Cahokia precinct. Known as the Emerald Acropolis, a few dozen ‘shrine’ houses likely sat atop the hill in the early days. It would be expanded after AD 1050 by levelling the summit and adding a dozen earthen platforms. Afterwards, individual ceremonials witnessed the construction of hundreds of temporary pole-and-thatch buildings covering an area of up to 60 ha (Pauketat et al. 2017).

People came to see the events here and across the region. Immigrants, who had been trickling into the American Bottom early in the eleventh century, poured into the city and its expanding cultural region around the year 1050. The regional population that identified with Greater Cahokia may have reached upwards of 40,000 to 50,000 people in relatively short order (Milner 1998). Many would have moved into one of the ‘wall-trench’ domiciles constructed, probably by work crews, around Greater Cahokia. Others emulated

the wall-foundation style and retained traditional architectural features (Alt 2002; Alt & Pauketat 2011).

Significant numbers of locals were likely relocated within the region, now incorporating the moderately dissected ‘Richland Complex’ uplands both east and west of the ‘American Bottom’ – the stretch of black, humic Mississippi River floodplain that sat at the heart of the region (cf. Pauketat 2003; Pauketat et al. 1998; Schroeder 2004). In the uplands, as in the American Bottom proper, maize agriculture depended on rainfall, and the wetter, warmer conditions of the early 1000s (Benson, Pauketat et al. 2009). Across the reorganized agricultural landscape of both uplands and bottomlands, people grew subsistence goods necessary to fund the great ceremonial events of the bustling new city (Alt 1999, 2018a; Pauketat et al. 2002).

Maize and the medieval warming

The construction of Greater Cahokia had been preceded by a series of large, pre-urban, Late Woodland mounded complexes hundreds of km away in the

Mid-South, the largest being the unfortunately named Toltec site at the centre of the Arkansas River valley's Plum Bayou culture (c. AD 700–1050, see Fig. 6.1). Toltec's impressive concentration of 18 four-sided, flat-topped earthen pyramids sat astride an oxbow lake, surrounded by a semi-circular embankment, and aligned to a once-in-a-generation southern maximum moonrise (Nassaney 2001; Rolingson 1998; Romain 2015). The Plum Bayou people may have begun farming maize as early as the eighth century, perhaps adapting imported strains of the plant from the American Southwest/Northwest Mexico (Rolingson 1998).

Based on limited data, it seems possible that small contingents of Plum Bayou and Coles Creek culture peoples from Arkansas, Mississippi and Louisiana, along with larger numbers of Varney culture people from southeastern Missouri and Yankeetown people from southwestern Indiana, migrated northward during the tenth and eleventh centuries (Alt 2018a; Pauketat & Alt 2003). By then, after AD 900, maize agriculture had taken root in the American Bottom (Simon 2014, 2017).

Maize grows well under the humid, moist conditions of the central Mississippi valley, and maize agriculture likely rearranged Late Woodland village life into a regional social-territorial order dubbed 'Terminal Late Woodland' by archaeologists (Fortier & McElrath 2002). Terminal Late Woodland maize farmers, c. AD 900–1050, were becoming thoroughly entangled with backswamp, bottomland, Mississippi River biomes characterized even today by periodic inundation, organic detritus, mussel shells and smells, and aquatic life generally (Pauketat & Alt 2017). They were also engaged in increasingly intensive intervillage relationships seen archaeologically as assemblages of pots or contingents of potters from one locality in other localities.

Understanding the impacts of maize agriculture in the pre-urban region between AD 900–1050 requires us to recognize the assemblage potential not of the maize plant alone but of the process of nixtamalization. That is, the adoption of this Mesoamerican cultigen seems to have arrived along with knowledge of how to process maize kernels in lye produced from burned limestone and ash (Kelly 1980; McElrath et al. 2000; Pauketat 2018). This linked process – growing and processing maize – is that which likely reconfigured the social relationships between people and landscape. This is because limestone outcrops only along the margins of the American Bottom proper. Maize-growing villagers would have necessarily altered everyday routines and relationships in order to acquire a steady supply of the rock and, as a consequence, complex supra-village networks of people-maize-limestone emerged during

the tenth and early eleventh century. Out of these were born a regional phenomenon: limestone- and shell-tempered pottery-making, mound-building, and maize-agricultural peoples who would become the first 'Mississippians' (Alt 2018a; Baires 2016; Pauketat & Alt 2017).

With the 1050 construction of the new city, such relationships were firmly emplaced in the form of this planned, monumentalized, multi-precinct complex (Alt et al. 2010; Baires 2017; Pauketat, Alt et al. 2015; Pauketat et al. 2017; Pauketat, Emerson et al. 2015). The three principal contiguous precincts noted earlier crisscrossed marsh and river. Indeed, the inner pyramid-and-plaza core of the largest precinct may have been quite intentionally sited between marshes in the wide, central portion of the American Bottom such that it might be regularly bathed in mists, a common morning and evening feature of humid low-lying lands in the Midwest during warm summer months (June–September). Certainly, a kilometre-long earthen causeway was built at the precinct's foundation to connect its central monumental core to a prominent corporate-elite burial mound at the south end of the Cahokia precinct (a.k.a. the Rattlesnake Mound [66]). In reaching the location, the causeway traversed black backswamp clays and murky standing water (Fig. 6.4).

Interestingly, if one adds burned and crushed mussel shells to the clayey and watery mix, one has the recipe for early Mississippian pottery (Pauketat & Alt 2017; Porter 1964). Thus, the watery relations linking people and other-than-human powers were also assembled in the hands of people via the manufacture of the city's pottery wares. Not everyone was making the readily identifiable 'Red-Rim' and 'Powell Plain' cooking jars (e.g., Holley 1989). Ample macroscopic and microscopic evidence exists in the form of multiple assemblages of broken Cahokian pottery to argue that the production of cooking jars made from backswamp clays at the beginning of the urban-construction phase of Greater Cahokia around AD 1050 was restricted to certain times and people (Brennan et al. 2018; Pauketat 2018; Stoltman 2014; Stoltman et al. 2008). Basket loads and sod blocks of the same black, soggy sediment served as the construction materials for earthen pyramids and causeways, and were likely mined from the same waterlogged locations as one might dig pottery clay (Baires 2015, 2017).

Near or overlooking these same wet areas were circular rotundas and steam baths or, simply, water shrines. These pole-and-thatch buildings included both large and small varieties (with floor areas from 5 to 500 sq. m), some apparently occupying the summits of circular platforms, unknown before the Lohmann phase, c. AD 1050–1100. Such platforms were built in

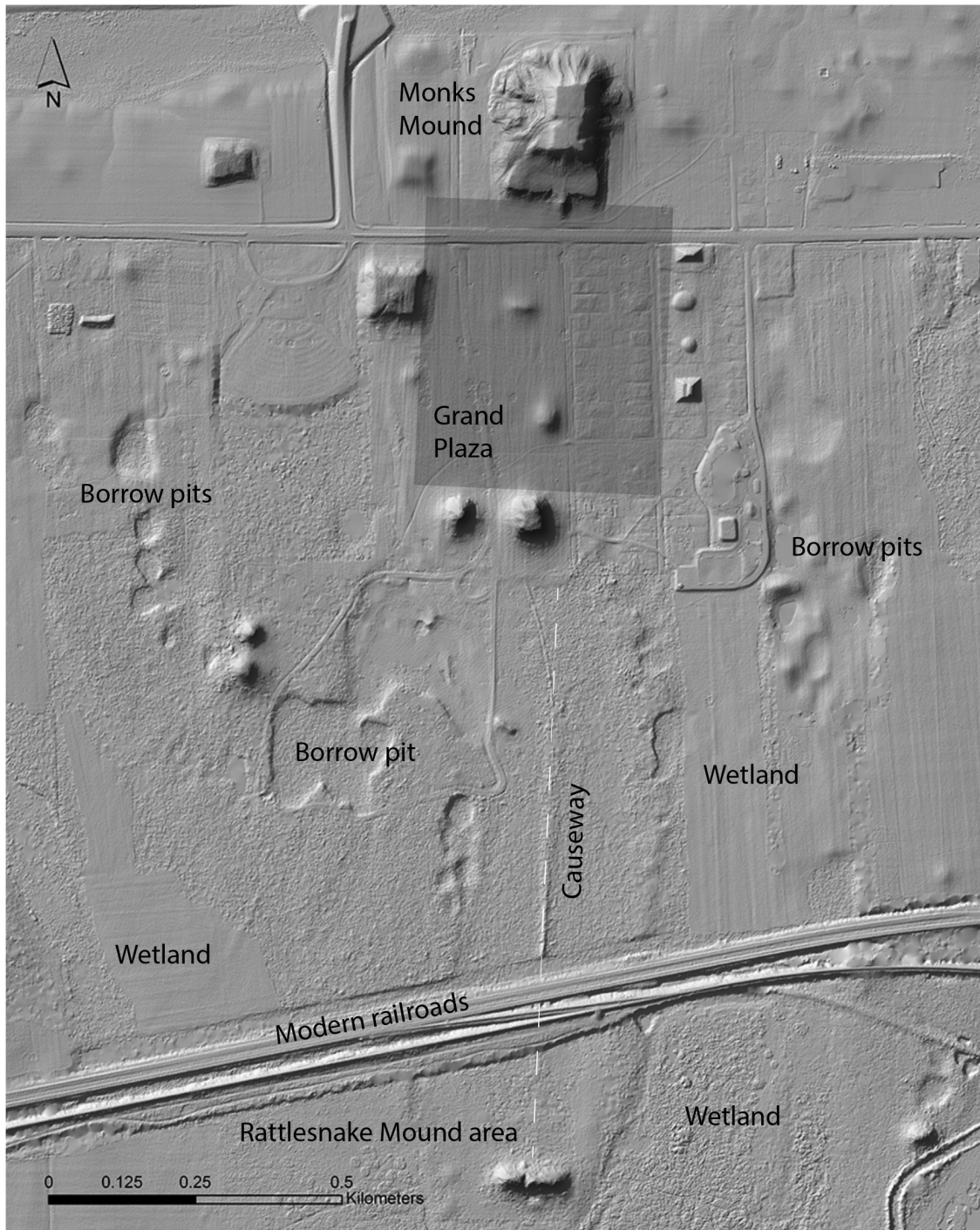


Figure 6.4. LiDAR plan map of the Cahokia precinct, highlighting monumental features that date to the Lohmann phase (AD 1050–1100, map by T. Pauketat and Jeffery Kruchten using public domain data from the Illinois State Geological Survey).

a series of rows overlooking seeps or bodies of water both at Cahokia’s outlying Emerald Acropolis and at its St. Louis precinct (Alt 2019; Pauketat et al. 2017). Emerald’s platforms and pole-and-thatch buildings

were also aligned to major moonrises, as were some at Cahokia proper, tethering the 18.6-year cycle of the moon to the earth, as Cahokia’s Plum Bayou precursors had done before them (Romain 2015, 2018).

There were other official Cahokian buildings and features as well, dating to the period AD 1050–1200, including large square council houses or temples, T- and L-shaped residences (or medicine lodges), and great free-standing posts (Alt 2018a; Emerson 1997a; Emerson, Alt et al. 2008; Pauketat 2013; Skousen 2012). Of these, the latter were cypress logs up to a metre in diameter, probably standing more than 10 m tall. It is unclear whether such great posts were floated upriver from cypress-swamp forests in southern Illinois and Missouri, where they grow today; if so, the labour expenditures involved in hauling many hundreds of such posts in the twelfth century would have been significant (see Lopinot 1992).

When set in rural locations, such special architecture and marker posts define ‘nodal’ farmsteads of various sorts (Emerson 1997a). In larger groupings, these nodal sites appear to define a kind of Cahokian architectural ‘module’ (Alt 2018a). In the central Cahokian precincts, the building module is a defining characteristic of neighbourhoods and other ‘core’ zones (Betzenhauser & Pauketat 2018; Brennan 2018; Emerson et al. 2018). They were also built atop the Emerald Acropolis (Pauketat et al. 2017).

The spatial and temporal correlation between the special architecture and Cahokian urbanity, if you will, is tight and robust, suggesting a causal relationship (Alt 2018a; Emerson 1997a, 1997b; Pauketat, Boszhardt et al. 2015; Pauketat et al. 2013). This causal relationship seems affirmed by two singular region-wide shifts: (1) the introduction of a suite of ritual goods and craft products at the beginning of the so-called Stirling phase (AD 1100–1200); and (2) a political-ritual-demographic contraction and reorientation at the beginning of the Moorehead phase (AD 1200–1275). The former is known for its elaborate carved-stone figures and smoking pipe bowls, along with the introduction of ‘Ramey’ iconography, rich in curvilinear motifs interpreted today as wind, water, and thunder/rain imagery (Cummings 2015; Emerson 1989).

The latter pulse, around AD 1200, brought with it a pervasive downsizing and reorientation of organized social life. Pottery production was simplified, and thirteenth-century corporate feasts were smaller or less often tethered to Cahokia (Baltus 2014). More importantly, the official architecture and associated practices of Greater Cahokia’s steam baths, medicine lodges, and council buildings ceased to be built after AD 1200. These had comprised 17 per cent of the pole-and-thatch buildings in twelfth-century Cahokian precincts (Betzenhauser & Pauketat 2018; Brennan 2018). At the end of the 1200s, however, they were replaced virtually overnight by a class of simple, oversized rectangular houses (Pauketat et al. 2013).

Cahokian fragmentation

Tree-ring (PDSI) data from across the midcontinent reveal that the decades leading up to and immediately following Cahokia’s founding, around AD 1050, saw ample precipitation. Under these conditions, maize crops could have been grown using dry farming techniques in both traditional floodplain settings and upland zones (Benson, Pauketat et al. 2009). That changed, however, after AD 1100, by what may have been periods of drought and downward-trending PDSI values over time (see also Comstock & Cook 2017). An even more severe droughty period followed AD 1150, minimally indicating insufficient rainfall events to sustain upland farming. And, indeed, the second major development in the greater Cahokia region is recognizable in regional survey and excavation data: many upland settlements – which had encompassed thousands of farmers – were abandoned by AD 1150 (Alt 2018a; Benson, Pauketat et al. 2009; Pauketat 2003).

The human population density of the city itself may not have been directly affected until the later 1100s. Then, as early as the 1160s and as late as about AD 1200, the third major development occurred, quite possibly a single event or series of closely related events. A portion of the ritual-residential complex at Cahokia’s East St. Louis precinct was incinerated, likely quite intentionally and in conjunction with the closure of a large corporate-elite mortuary mound.

Generally speaking, this development correlates with the aforementioned disappearance of Cahokia’s official twelfth-century politico-religious architecture – those steam baths, shrine houses, council buildings, and medicine lodges. Seemingly, an entire religious complex was terminated as, perhaps, one or more orders of priests vacated the region. One might presume that a new politico-religious order filled the void, centred on the big rectangular ‘great temple’ atop Cahokia’s principal pyramid, Monks Mound (Reed 2009). Melissa Baltus (2014) has characterized this period, the Moorehead phase, as yet another revitalization, one that may have stabilized the region’s political economy for a few human generations. However, human population concentrations in the Greater Cahokia region never again attained pre-1200 levels. Instead, they slid steadily downward; only a few thousand people would call Greater Cahokia home in the thirteenth century, and only a few hundred at most remained through the first half of the fourteenth century AD.

Chacoan social and material history (AD 800s to 1130)

The ninth century AD witnessed significant social and demographic changes in the San Juan Basin of the

Four Corners region in modern-day northwestern New Mexico (Fig. 6.5). Always susceptible to climatic and environmental perturbations, maize-growing late Basketmaker III and early Pueblo I farmers from the southern San Juan basin relocated northward in the AD 700–800s (Van Dyke 2007:table 4.2; Wilshusen & Van Dyke 2006). Living in scattered pithouse, adobe and jacal homes, the mid-AD 800s witnessed ‘something dramatic ... throughout the San Juan Basin’ (Windes 2007:45). At that time, or within a few years, the first masonry great houses in the region were under construction. Three such ‘proto-great houses’ were built along the 13-km stretch of the high-desert Chaco Canyon (Fig. 6.6): Pueblo Bonito, Peñasco

Blanco, and Una Vida (Van Dyke 2007; Windes 2003, 2007).

In one early interior room (33) of Pueblo Bonito was buried a male who died in his 40s in the ninth century from a ‘lethal blow to the head’ (Kennett et al. 2017; Pepper 1920). A most unusual setting for a burial, the man (Burial 14) was interred with turquoise and shell jewellery, among other things, atop a prepared surface. Covered with clean earth, another individual was placed atop that fill. Then, a dozen more human interments were added to the room up until AD 1130. All appear to have been members of the original man’s matriline (Kennett et al. 2017; Plog & Heitman 2010). Such a matriline likely articulated the powers embodied

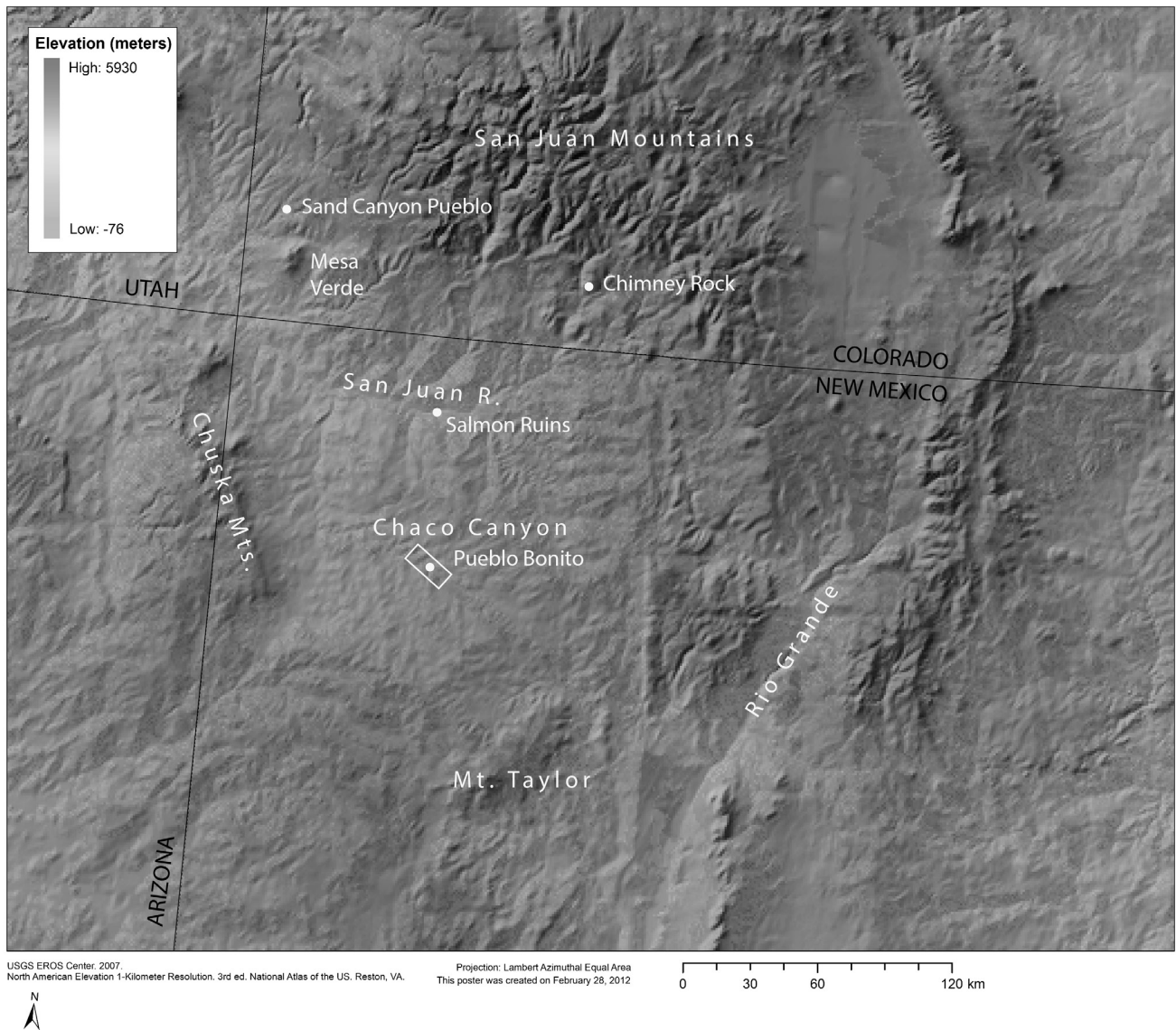


Figure 6.5. San Juan Basin physiography and the location of Chaco Canyon (map by T. Pauketat).

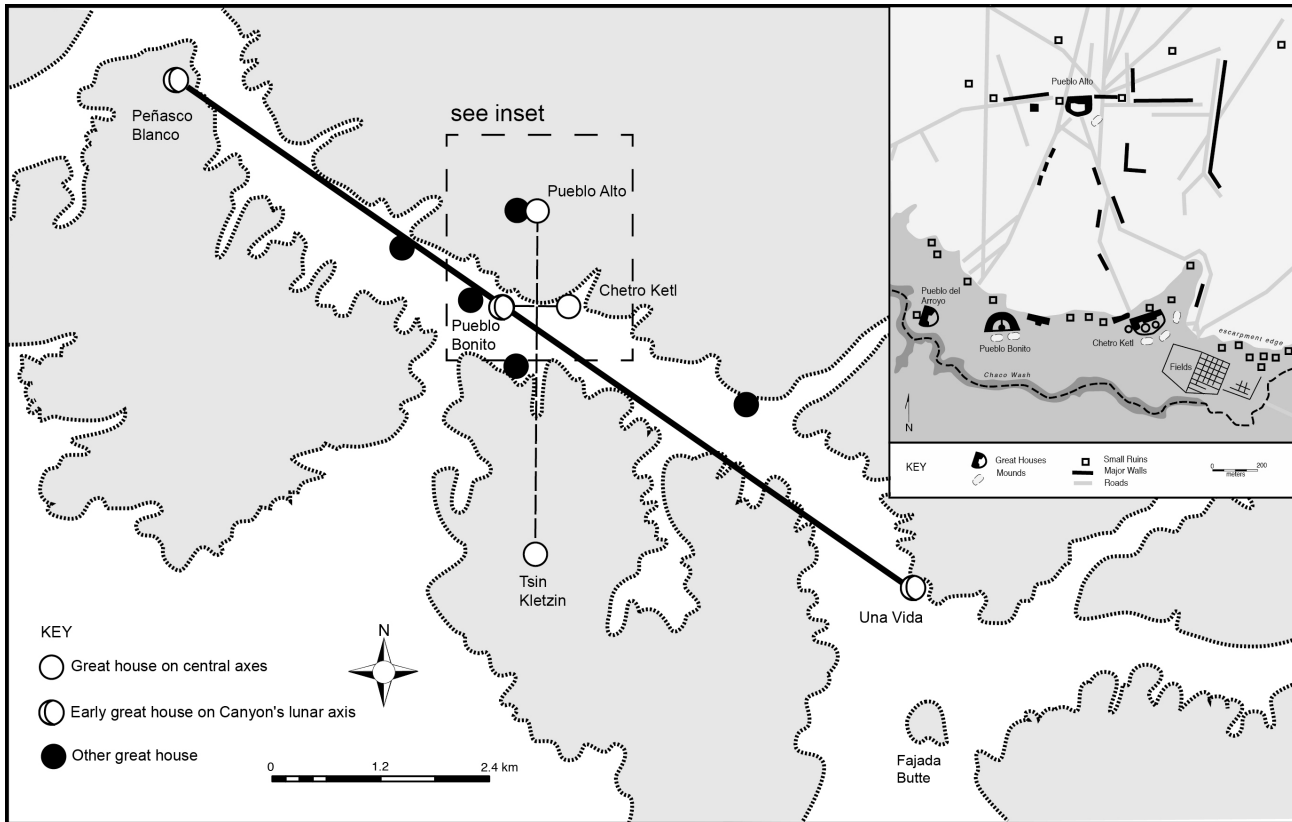


Figure 6.6. Schematic view of Chaco Canyon's great house locations (map by T. Pauketat).

by Pueblo Bonito and Chaco Canyon generally from the beginning.

Some argue that the geological and biological features of the canyon afforded it magnetic qualities even before great house construction and this man's death (Stein et al. 2007; Van Dyke 2007; Weiner 2015; Windes 2004:15). Fossil-bearing rock strata, precariously balanced hanging rocks, and a serendipitously lunar-aligned canyon floor are among the possible attractors. Indeed, the three early great houses are aligned and spaced out in such a way as to suggest a central if not celestially based plan (Fritz 1978; Sofaer 2007).

The alignment and design of the overall canyon aside, each construction iteration of any particular great house is suggestive of some degree of central planning and theatrical or ritualized construction, which is to say monumentality (see Scarre 2011). The evidence of great construction pulses, beginning with a mid-ninth century pulse and continuing through the late Bonito-phase McElmo pulse(s), supports the argument that monumentality was an integral component of Chaco Canyon's social history (Table 6.1). Pueblo Bonito in particular was heavily remodelled through time, with the D-shaped core (Fig. 6.7) and its contiguous Hillside Ruin (not seen in Fig. 6.7) easily

inferred to have been overbuilt and underused (Stein et al. 2007). Thus, it is apparent that Chacoan great houses were more than mere domestic or communal facilities. The same is at least as apparent at a series of Chacoan outliers (see below).

Agricultural production, infrastructure and population

Chaco's great house design and monumentality lies at the heart of the present evaluation of its proto-urban fragility. These overbuilt masonry constructions, both in the central canyon and as part of outlier great house communities, were intimately entangled with the region's agricultural development (Kantner & Mahoney 2000; Lekson 1999). However, the proto-urban dynamics of the Chacoan phenomenon likely cannot be adequately understood only as an *in situ* communal, agricultural development (cf. Tankersley et al. 2016). Then again, this likelihood is the crux of an intellectual disagreement between two scholarly camps today, with some adhering to an *in-situ* developmental model in opposition to what they perceive as 'fashionable' interpretations 'based on vacant cities, festive pilgrims, and... brief but periodic events at canyon great houses' (Vivian 1991:75; cf. Benson 2017; Benson, Stein et al. 2009; McCool et al. 2018).

The two schools of thought both begin with a reconstruction of Chaco Canyon's environment. Today, Chaco Canyon's desert environment has been described as 'bleak' by Frances Mathien (2005:21) and water, she says, 'remains the key variable'. The Chaco Wash, an ephemeral source of water, runs through the canyon. In the past, it has alternately degraded and aggraded its channel, probably in conjunction with the construction of human water management features (Table 6.1). According to one hydrological study, '[d]owncutting seemed to be associated with an increase in discharge and stream power on readily erodible [canyon rock and sediment] material, and it seemed to end when the discharge was adequately handled' by human intervention (Mathien 2005:26). According to another such study, the amount of water flowing through Chaco Canyon might have supported up to 10,000 people (Mathien 2005:34, citing Fisher 1934).

Few scholars in either camp would today infer that 10,000 people lived in Chaco Canyon year round. Rather, a permanent human population of 2000–3000 people is a common estimate. Gwinn Vivian's (1991:74) projection that 5500 residents lived in the canyon is viewed as 'too high' by Stephen Lekson and colleagues (2006:82). Whatever the figure, *in situ* advocates definitely see the Canyon's past environment, including its soils, as capable of sustaining more than 2000 people throughout the year (McCool et al. 2018; Tankersley et al. 2016). These researchers imagine the evidence of water management infrastructure – which includes check dams, retention basins, and water supply and drainage ditches – to indicate a larger year-round population attached to the Canyon's great houses, which they consider less as monuments and more as residential pueblos (Crown & Wills 2018; Scarborough et al. 2018).

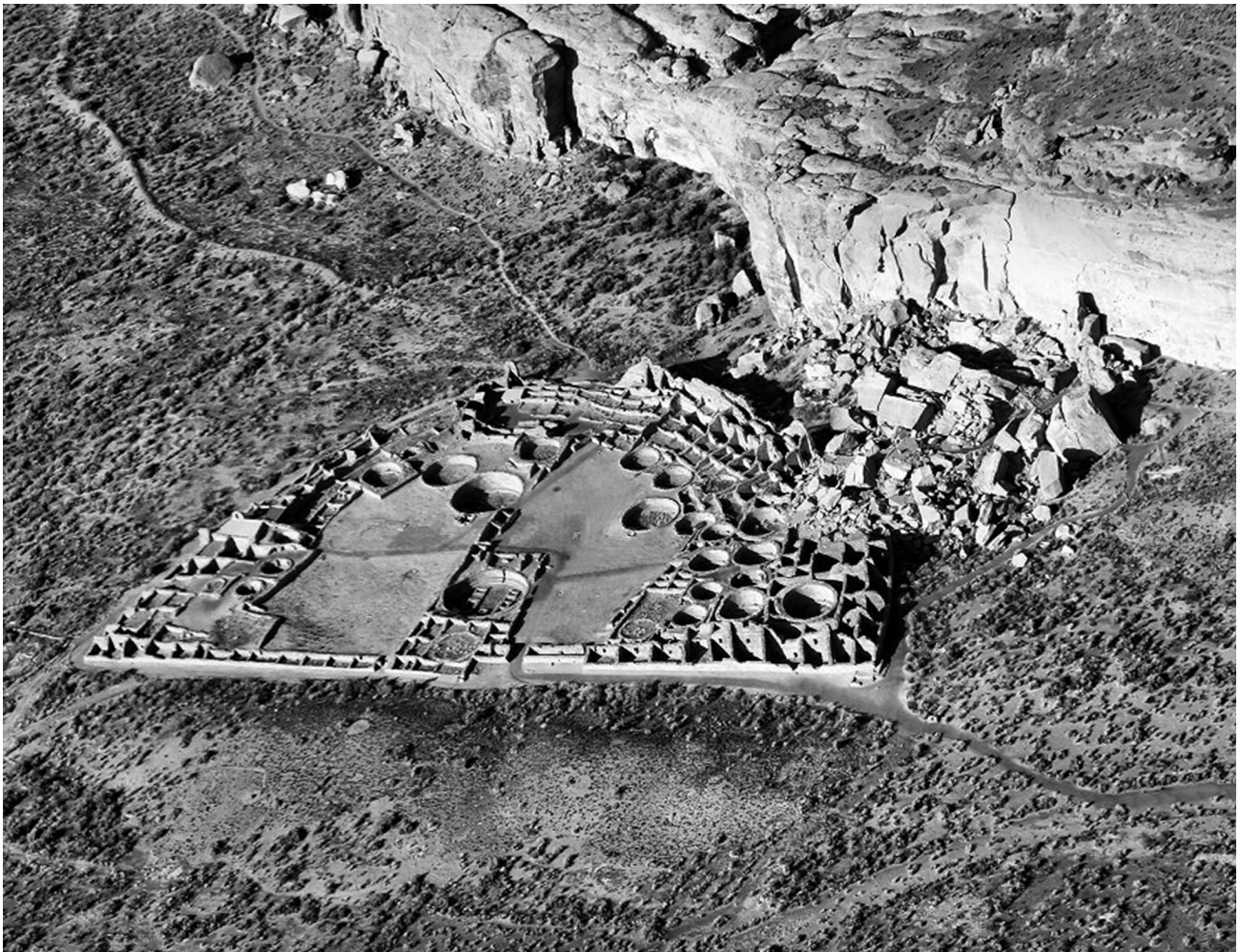


Figure 6.7. Aerial view of the Pueblo Bonito, by Bob Adams, Albuquerque, NM; view to northwest. Creative Commons Attribution-Share Alike 3.0 Unported license, https://commons.wikimedia.org/wiki/File:Pueblo_Bonito_Aerial.JPG.

To be sure, there are both early historical accounts and archaeological evidence of significant water-management infrastructure. A rock-lined sand-dune dam and, perhaps, flood gate occupy the mouth of the Chaco Wash just northeast of the northernmost great house, Peñasco Blanco (Scarborough et al. 2018; Vivian et al. 2006a). In addition, at least one gridded agricultural field exists, likely fed by diverted rainwater and yet visible adjacent to the Chetro Ketl great house (Fig. 6.8). Neither of these necessarily indicates a substantial residential population, though they do point to Chacoan attempts to produce crop yields sufficient to feed sizeable gatherings (probably of both locals and pilgrims).

There are multiple lines of evidence that significant quantities of maize, along with ceramic vessels and other materials, were imported into Chaco Canyon (Benson et al. 2003; Benson, Stein et al. 2009; Grimstead et al. 2015; Mathien 2003; Toll 2004, 2006). Larry Benson (2017) and others argue that much of this maize was grown on the slopes of the Chuska Mountains, more than 60 km (two days walk) to the west of the Canyon. This was the same region from which many of the pots and wooden timbers used in great house ceremonies and constructions originated. Of these, an impressive outlay of public labour would have been

necessary to transport the '200,000 trees ... needed to provide ceiling beams for only 10 of Chaco Canyon's great houses' (Mathien 2003:133–4). Thomas Windes & Peter McKenna (2001) found that local wood sources were more regularly used through the AD 900s, but by the eleventh-century Classic Bonito phase, Ponderosa pines imported from the Chuska Mountains' slopes were the building material of choice.

Classic Bonito expansion and Chacoan outliers

Around the year 1040, Chacoan construction and rituality inside and outside the Canyon experienced a marked intensification and expansion. In the six decades of the Classic Bonito phase that followed, new great houses were built and old ones were enlarged horizontally and vertically. In addition, novel, highly standardized, or exotic objects were manufactured and moved into such complexes (Nelson 2006; Toll 2004). Among these were cylinder jars, used in drinking rituals involving imported cacao and yaupon holly (Crown et al. 2015; Crown & Hurst 2009). These jars were originally manufactured in a variety of sizes and shapes around the Chaco world. However, after AD 1040, these vessels became standardized, probably manufactured under the aegis of a leading kin group or sodality. Moreover, they were restricted in their

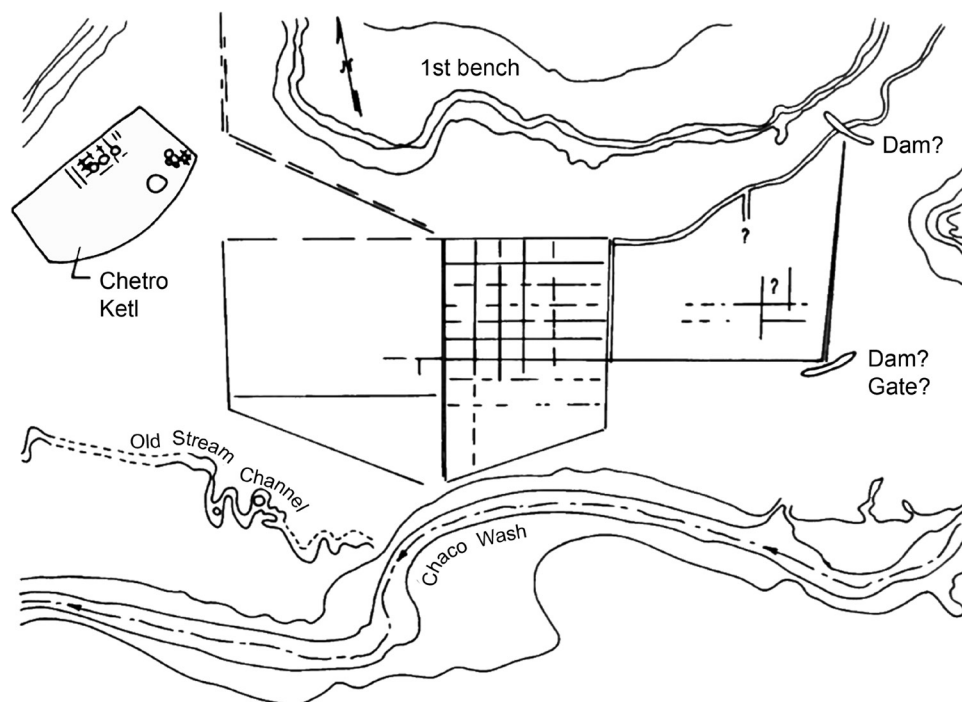


Figure 6.8. Schematic map of original Chetro Ketl field system (adapted from public domain image, National Park Service, via Wikimedia Commons, see https://commons.wikimedia.org/wiki/File:The_Chetro_Ketl_fields.png).

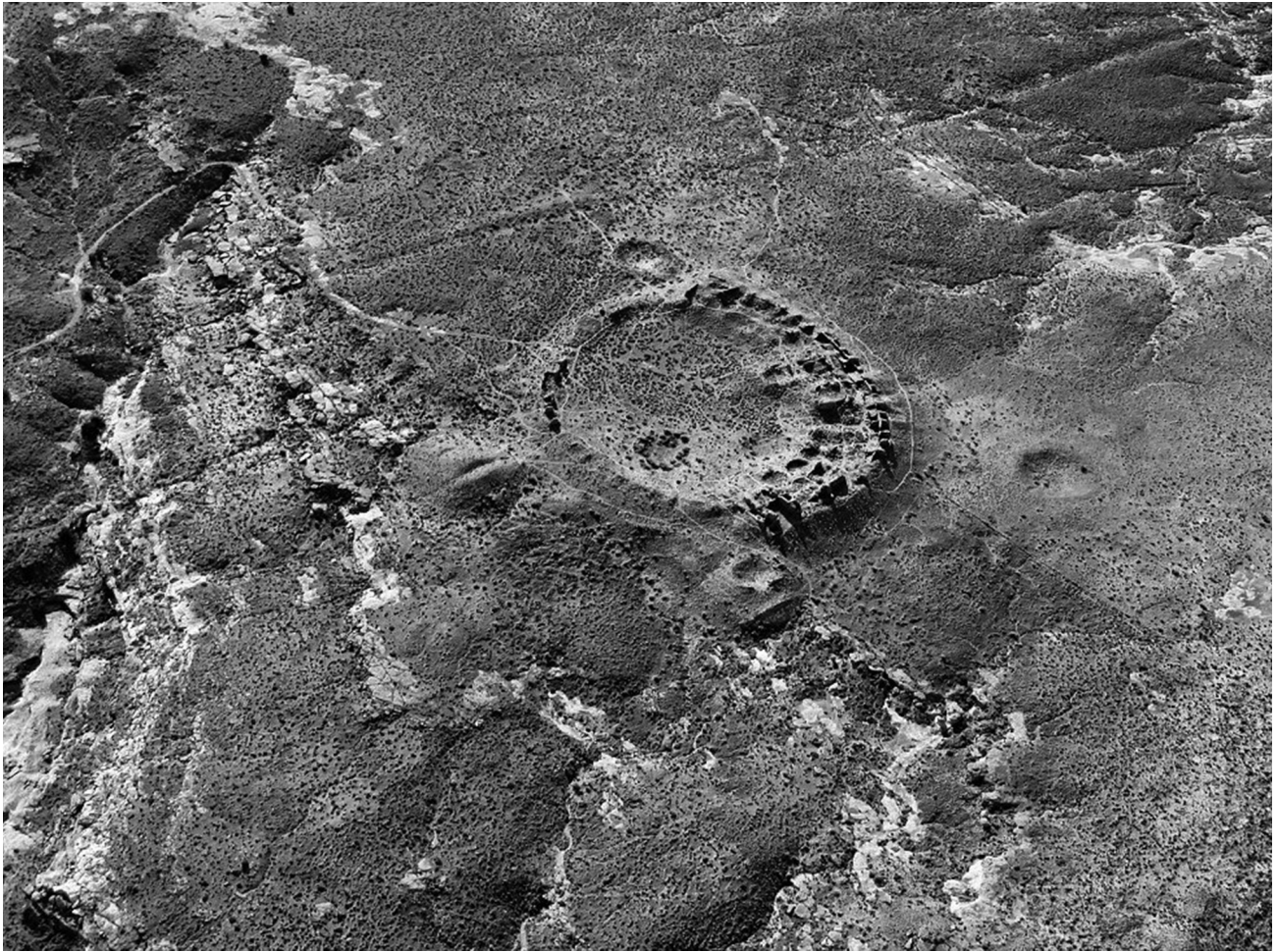


Figure 6.9. Aerial view of the Peñasco Blanco showing four unexcavated great kivas and a Chacoan road segment, by Bob Adams, Albuquerque, NM; view to southwest. Creative Commons Attribution-Share Alike 3.0 Unported license, https://commons.wikimedia.org/wiki/File:Penasco_Blanco.jpg.

usage, with 175 of the 200 known examples associated in some way with Pueblo Bonito (Crown 2018).

At the same time, a ‘highly standardized type’ of subterranean ceremonial building, a ‘great kiva’, was spreading across the Chacoan world (Fig. 6.9).

At least fourteen of the seventeen known canyon great kivas date from the Classic Bonito phase. ... Classic Bonito great kivas are lined with banded masonry, and aboveground portions of the walls are of core-and-veneer construction. Great kiva diameters can range from 10 to 20 m ... [and] are oriented on either a cardinal or a northwest/southeast-trending axis. Entry is often by means of an antechamber.... (Van Dyke 2007:122–125).

All such novel or expanded architectural constructions happened in pulses, with notable ‘waves of great house construction’ taking place in the Canyon at ‘1040 and 1050, and 1070 and 1080, with smaller building and remodelling episodes in intermittent decades’ (Van Dyke 2007:111). Additional insight into the dating of such pulses may be found at other great houses across the San Juan basin and beyond. Presently, there are more than 225 known outlier great houses (Kantner 2004b). At several, such as Salmon Ruins and Chimney Rock, in northern New Mexico and southwestern Colorado, respectively, dendrochronological evidence indicates celestial reasons for major construction pulses (Malville 2004b). This is especially clear at the compact Chacoan great house atop the high, narrow mesa of Chimney Rock. The Chimney Rock great house was positioned to observe the generational appearance of a maximum full moonrise between two great pillars

of rock not unlike that known at Cahokia's Emerald Acropolis. A series of dendrochronological dates on wooden rafters in the Chimney Rock building additions correlate closely to known dates of the lunar events (Malville 2004a; Todd 2012).

Such outlying territories and non-human powers were enmeshed with the central Canyon via a web of roads. The roads leading out from Chaco Canyon might also have celestial alignments in some cases, in addition to alignments to more general terrestrial or directional referents (Van Dyke 2007). In the Canyon proper, stone and wooden staircases climbed rocky escarpments and connected cleared avenues, some sprinkled with small pottery sherds. Some such roads seem to lead to outlier great houses, but others lead nowhere, or were positioned to afford the traveller a visual or phenomenal experience of, or historical connection to, some active or abandoned great house or other landmark. The so-called Great North Road, for instance, is probably a road through time and space to a badlands area thought by Puebloan descendants of Chaco to be a portal to the realm of the dead (Van Dyke 2007). Roads, whether or not intended for the actual physical movements of living people, were also avenues into the spirit world.

Contraction

As the celestial alignments and construction periodicities attest, the infrastructure of the Classic Bonito world was extensive but tightly bound to organized spiritual practices that may have paid few, immediately tangible, material dividends to farmers. This might have been especially noticeable to Puebloan farmers in times of agricultural stress, such as the cooler years and prolonged droughts that followed AD 1100 (Benson & Berry 2009; Vivian et al. 2006a; Vivian et al. 2006b). A major contraction in the social life of Chaco Canyon and many of its outliers happened between about AD 1100 and 1130.

Among other things, certain ritual practices appear to have been removed or ceremoniously terminated at about (or subsequent to) this time. Some kivas were burned and doors and kiva niches sealed (see Mills 2008). Likewise, most of the cylinder jars in existence were buried in a backroom at Pueblo Bonito at about AD 1100, the vessel form itself never to be used again (Crown 2018). The non-Chacoan inhabitants of Chimney Rock left that site in the early 1100s, taking care to avoid Chacoans and their religious practices thereafter (Fowles 2013). Chacoan priests left too, the burial of one found at the site of Ridge Ruin in northwestern Arizona dating to the decades after the 1130 depopulation of Chaco (see Fig. 6.1). Erina Gruner (2015, 2018) argues that he was a member of the same

Chacoan sodality or matriline as individuals buried in Room 33 at Pueblo Bonito. Apparently, upon his death, his ritual materials – an assortment of inlaid wands, prayer sticks, and pots – were buried with him, likely because the living were unable or perhaps had decided not to continue the Chacoan practices. Still other Chacoan people became targets: in the early 1200s, a prominent Chacoan descendant appears to have been singled out during an enemy raid on the Sand Canyon Pueblo (Kuckelman 2008).

However Chacoan governance had been constituted before, during, and after the Classic Bonito phase, it seems clear that leaders were always simultaneously religious, hereditary, and powerful. Chacoan hierarchy, suggests Patricia Crown (2018), might have ended with the burial of the cylinder jars (and the last matrilineal descendants) in Pueblo Bonito. As at Ridge Ruin, it was closely tethered to particular persons. It might also have been based on political gamesmanship, given the descendant oral histories and material evidence of gambling, if not a 'Gambler', at Chaco (Weiner 2018). Those same oral histories speak to the intentionality of the descendant decisions not to repeat Chaco in the future (Kuwanwisiwma 2004).

Discussion

If we start the clock of Cahokian and Chacoan urbanism or proto-urbanism with the Lohmann-phase and Classic Bonito-phase transformations at about 1050 and AD 1040, respectively, then we are left with two clear impressions. First, the historical synchronicity of Cahokia and Chaco is remarkable. These two trans-regional phenomena – dissimilar in some ways and surprisingly alike in other ways (Table 6.1) – happened within a decade or two of each other. Second, both urbanizing phenomena ended or were significantly downsized within just a century and a half of their initial expansions. Cahokia's upland Richland Complex ended around AD 1150, and its East St. Louis precinct was partially burned and downsized in the late 1100s as official Cahokian architecture was discontinued; Cahokia continued in a reduced, reconfigured form. Chaco Canyon experienced an even more dramatic termination, though its legacy lasted, and yet lasts, among its descendants.

Order and infrastructure

On the one hand, founders and builders in both instances appear to have assembled cultural order by aligning, arranging, superimposing, and emplacing fundamental, cosmic and animate powers on earth amid the most ordinary movements and experiences of people. On the other hand, the cultural order appears to

have remained relatively open and permeable, perhaps by necessity. Religious shrines or colonial settlements seemingly intended to gather the cosmic or immanent powers of the wider world were likely essential components of Cahokian and Chacoan formations. Perhaps these shored up the positions of both Cahokia and Chaco as legitimate centres of the world in the eyes of people (e.g., Pauketat, Boszhardt et al. 2015).

Whatever the details of the processes whereby Cahokians and Chacoans established themselves at the centre of things, it took time – roughly a century and a half in both cases. At Cahokia, the Terminal Late Woodland juxtaposing of farmers, maize production and processing, terrain and climate affects, and celestial bodies set the stage. At Chaco, the late ninth and tenth centuries witnessed the establishment of the great-house pattern and its personification by a small group of matrilineal kin. In both cases, the principles of cultural order that appealed to people were fundamentally immanent and pervasive, able to be experienced and related in a wide range and at multiple scales: water in its various forms, earth and clay as pots and monuments, the sky and its light and dark objects against the backdrop of the terrain.

Cultural order at both Cahokia and Chaco was literally and figuratively order – linear or stacked alignments and processional, monumentalized arrangements of substances, phenomena, things and people. Cultural order was also infrastructure, although the degree to which the built facilities and materials at Cahokia and Chaco constituted a distinct stratum that might perpetuate itself without constant human intervention (which is part of the definition of infrastructure) – and hence impart resilience – remains unclear. Cahokia's water management infrastructure may have done little more than position people to move through bodies of water or relate to water in its various liquid and vapour forms. Chaco's retention basins, dams, gridded fields, and ditches may have been responsible for the aggradation of the Chaco Wash in the eleventh century, possible evidence of their positive effects on the Canyon's agricultural production. Then again, the presence of imported maize and other products from the Chuska Mountains casts doubt on the extent to which Chaco's infrastructural potential was realized.

Lacking such unambiguous infrastructural effects, the degree to which governing bodies might have deviated from their religious dedication to the management of cosmic, immanent order also remains unclear. Leaders of some form existed in both cases, evident as high-status women and men buried in highly commemorative or theatrical fashion. Such persons are apparent at the beginning, with some evidence in both

cases of priestly or high status lineages or sodalities persisting in some managerial capacities up to the point of official termination rituals (the cessation of ridge-top mound constructions in the case of Cahokia and the end of Pueblo Bonito's room 33 in the case of Chaco).

Conclusion: fragility is a web

As a source of fragility, one might normally lay the blame on agricultural risk and the management by farmers of their own production, as some researchers do, or on the failures of political administrations, as Chaco's gambler narratives seem to do. However, to do either in the absence of a fuller consideration of historical details would be to ignore *what* and *how* leaders administered in each case. In the cases of Cahokia and Chaco, the *what* was cosmic, and the *how* involved a recognizably expansive articulation of the relationships of people and immanent substances, materials, and phenomena.

In evaluating the differences between early Chacoan and later Puebloan artistic traditions, Elizabeth Newsome & Kelley Hays-Gilpin (2011) described the former as outward-looking and uncircumscribed, as opposed to the latter's inwardly turned, plaza-centric, social and political gaze. The same describes the trans-regional relations of Cahokia, at the beginning of the Mississippian world, in contrast to those of later Mississippian peoples (Pauketat 2013). If we combine such relational orientations with the immanent bases of Cahokian and Chacoan order, we may come close to understanding the essence of Cahokian and Chacoan fragility. To wit, the hierarchical and infrastructural strata of both phenomena were simply insufficiently incised into the landscape to protect them from the external human and non-human perturbations to their wider relational webs. That is, if Cahokia's and Chaco's foundations and agricultural economies rested on rain, on the experience of water vapour inside water shrines, on the routine lived relationships between earth and water and life and death, and on the rising and setting of the moon, then how fragile might be the bodies-politic that effloresced around them? At what point might people feel at liberty to walk away?

These questions might be answered with reference to the striking synchronicity of Cahokian and Chacoan histories. Perhaps Cahokians and Chacoans, living in alternately wet and dry environments and located some 1600 km from each other, might have been aware of each other. Regardless, there is currently little archaeological reason to believe that one caused the other to happen in any direct sense. That said, however, it is conceivable that Cahokian and Chacoan histories could have been synchronized by the localized weather patterns of the Medieval Climate

Anomaly. This seems plausible given the immanent significance of water and maize to both, never mind the likely Cahokian and Chacoan perceptions of water and maize as potentially animate or intimately related to animate and ancestral forces.

Such a suggestion is not the same as inferring that climate change caused the rise and fall of these two North American cultural orders. But it is to recognize that the immanence of water and maize, under the historical, infrastructural, and trans-regional circumstances of Cahokia and Chaco from the ninth to the thirteenth centuries, did afford a restricted set of possible outcomes for both. This means that their fragility was not necessarily or simply an internal structural or organizational property, but a potentiality that might be attributed to the open and permeable configurations of both Cahokia and Chaco.

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Chapter 7

Diversity, variability, adaptation and ‘fragility’ in the Indus Civilization

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Fragile and/or robust? (Re-)Introducing the Indus Civilization

South Asia’s Indus Civilization was a major Old World civilization, though it is not always included in comparative syntheses (e.g. Trigger 2003; see Wright 2010).¹ The settlements of the Indus urban phase (c. 2600/2500–1900 BC) were distributed across an extensive area of the plains, piedmonts and hills of the Indus River basin and adjacent areas in modern Pakistan and India, and were contemporaneous with the late Early Dynastic, Akkadian, and Ur III periods in Mesopotamia and the Old Kingdom and First Intermediate period in Egypt (Yoffee this volume; Morris this volume). This contribution will demonstrate that the Indus Civilization provides a rich yet somewhat restricted cultural data set that is well suited for exploring the dynamics of fragility as well as robustness, resilience and sustainability in a distinctive Old World cultural context.

Part of the distinctiveness of the Indus Civilization derives from the fact that a relatively small number of Indus settlements grew to a substantial size (80+ ha), and they thrived for 600 to 700 years. Typically regarded as cities, these large settlements were polycentric and underwent repeated and potentially constant phases of rebuilding and remodelling. They also appear to have been the exception rather than the norm within the overarching Indus settlement system, as the majority of contemporaneous settlements were town or village sized. This pattern suggests that the Indus Civilization was predominantly rural, which has implications for its social, economic and political structures. Furthermore, it has long been recognized that the extensive area occupied by Indus populations was marked by considerable diversity in climate, hydrology, and ecology, though the nuances of this variability are still being characterized (Petrie et al. 2017). This overarching diversity has important

ramifications for the degree of local-scale ecological variation, and the ways that Indus populations were adapted to those ecological regimes. It also has significance for understanding whether the social, economic and political configurations that were manifested in urban and rural contexts were resilient and/or sustainable in the face of environmental change (Petrie 2017; Petrie et al. 2017, 2018).

The Indus cities (and the Indus Civilization as a whole), present many of the hallmarks of state-level entities, but they frustrate easy categorization, and many fundamental aspects of Indus socio-political organization and economy are debated. Part of the challenge lies in the fact that Indus cities and elites do not present themselves in ways that draw simple parallels to other contemporary complex societies, particularly those of the ancient Near East. This is most evident in the oft-noted lack of monumental religious edifices, obvious palatial structures or portraiture, all of which suggest a lack of rulers (*cf.* Possehl 1998). The reinterpretation of a number of buildings is, however, encouraging re-evaluation of various factors. What can be stated definitively is that there are fundamental differences between the socio-economic and political organization of the Indus Civilization and its Old World neighbours. The polycentric nature of Indus cities is suggested by the use of walls and platforms to formally demarcate distinct zones within cities and other settlements where what appear to be large- and small-scale public and private buildings were present, and economic and productive activities took place. Indus populations do not display overt hierarchical differentiation, but were characterized by heterarchical social structures, and there are strong indications they engaged in both communal activities and collective action (*cf.* Blanton & Faragher 2008, 2016; DeMarrais & Earle 2017). Furthermore, the distribution of Indus settlements indicates that there were distinct relationships between individual cities and between

cities and smaller settlements, all of which have implications for our understanding of Indus social, economic and political structures.

Inscribed objects, seals and sealings were used during the urban period, but the texts cannot yet be translated, and there is a lack of unequivocal references to Indus cities in later historical, mythological or religious texts. This means that compared to ancient Egypt and Mesopotamia, there is much that we cannot comment on with textual support. It is clear, however, that the use of Indus signs diminished and ultimately ceased by the end of the first century of the second millennium BC, and this coincided with the decline and abandonment of all but one of the large-scale Indus urban centres, the cessation of a range of elaborate craft processes, and the reduction of the range and scale of economic interaction (e.g. Possehl 1997a; 1997b). This evidence leaves no doubt that Indus populations witnessed major socio-economic change in the late third/early second millennium BC, and there is at least some validity in describing Indus urbanism as an ‘experiment’ (Petrie 2013). Numerous causes for this process of transformation have been proposed, including climate change, but definitive evidence and consensus remain elusive (Petrie 2017).

Given the evidence for socio-economic change and its potential relationship to climate, it is perhaps no surprise that the urban phase of the Indus Civilization (c. 2600–1900 BC) has been mentioned in discussions of the fragility of early cities and states (e.g. Yoffee 2015, 2016; Middleton 2017; Scott 2017). Importantly, Yoffee (2016, 1062) has previously put the Indus Civilization forward as a case that has potential to disrupt aspects of the developing ‘fragility’ narrative, and explicitly groups Indus cities and Teotihuacan as ‘anomalies in my scheme of the extreme fragility of early cities’. This anomalous status largely appears to derive from the likelihood that Indus cities ‘flourished’ for many centuries and were thus relatively long-lived (i.e. they were ‘robust’), but it is also influenced by our inability to read Indus texts, and the apparent lack of monumentality, obvious palaces and images of rulers. Middleton (2017, 93) has pointed out that for the Indus Civilization, political changes ‘are not visible to us as they are in some other societies’, which is reflected by the fact that Yoffee (2016, 1062) has only been able to note that Indus cities will have had ‘ups and downs’. Does this mean that they were fragile? It is arguable that the relative longevity of the Indus cities, combined with a lack of evidence that would provide detailed insight into their political organization, actually creates a fundamental impediment to understanding the nature and impact of short-term political change that lies at the core of the fragility narrative. The nature of

the Indus evidence therefore encourages reflection on how successful we can be at characterizing and discussing politics, states and fragility in the absence of texts.² Furthermore, given the importance of longevity and chronology for understanding fragility, the Indus case makes it possible to reflect on the appropriate time-scale for considering robustness, resilience and sustainability. Yoffee (2015, 2016) has previously suggested that some early cities only lasted one to two centuries, but with the Indus urban period being notably longer. The Indus case also encourages us to discuss whether there is a difference between fragile cities and fragile states. There has been much consideration of the fragility or robustness of the city-state (e.g. Yoffee 2015, 552–7, 2016; Scott 2017), but ‘the city’ and ‘the state’ each have different socio-political trajectories, and it is worth disentangling nuances – particularly in situations where the nature of political control remains unclear. The Indus case emphasizes the importance of the rural component of society, and there appear to be different trajectories for resilience and sustainability in urban and rural contexts.

This contribution assesses the dynamics of fragility, robustness, resilience and sustainability in the Indus Civilization. It provides an overview of urban and rural Indus settlements, then outlines the environmental contexts within which Indus urbanism developed, and reviews the evidence for how Indus populations were adapted to those environments. Debates about Indus social, economic and political structures within and between cities are reviewed, and the decline of Indus urbanism is considered. All of this evidence has implications for our understanding of fragility, robustness, resilience and sustainability in the Indus Civilization, particularly in terms of the way these concepts relate to urban and rural contexts. The contribution will conclude by outlining how the Indus context appears to be marked by contrasting urban and rural dynamics, where the ostensibly robust urban entities were ultimately fragile and unsustainable in the face of major and long-lasting socio-economic and environmental stresses, while adaptable and constantly transforming rural lifeways appears to have been both resilient and sustainable.

Indus settlements: from village to city (and back?)

Indus cities were the culmination of protracted indigenous processes that began in village-sized settlements dispersed across a variable and diverse environmental milieu, which were characterized by considerable variation in life-ways. The cities appear to have grown to a substantial size over a short period between c. 2600–2500 BC, implying that the shift from small

and medium sized settlements to large-scale urbanism was relatively swift. The vicissitudes of excavation mean that we know little about the formative stages of most of the urban centres, but accepted chronologies (e.g. Kenoyer 1991, 1997; Possehl 1999, 2002) suggest that most Indus cities were occupied for 600–700 years – until c. 1900 BC. Importantly, villages and rural lifeways continued being an essential element of Indus settlement systems during the urban period, and villages may well have housed the majority of the settled population (Madella & Fuller 2006, Fig. 9; Parikh & Petrie in press). To understand Indus society, it is imperative to consider both the urban and rural aspects of Indus life.

Urbanism in the Indus context

As far as we are aware, there were four to five large-scale (80+ha) Indus settlements (i.e. cities; Fig. 7.1): Mohenjo-Daro, Harappa, Rakhigarhi, Dholavira and also potentially Ganweriwala, though it was almost

certainly smaller. These cities were considerable distances apart (between 280 to 835 km as the crow flies; Kenoyer 1997, Table 4.2; 1998, Table 3.1; 2008, 188), and situated in different parts of the greater region occupied by Indus populations (Wright 2010, 333; Petrie 2013, 87, 91, 93). The intervening areas were inhabited by populations living in medium and small sized settlements, with the majority of these being village-sized, suggesting that most of the Indus population were rural rather than urban (Wright 2010; Petrie 2013; Petrie et al. 2017; Parikh & Petrie in press). With the exception of Dholavira, which was on an island in the Rann of Kutch, the Indus cities were each located far out on the alluvial plains and in different ecological zones (Petrie 2017). Their number and distribution clearly contrasts with that of the urban settlements in the late Early Dynastic, Akkadian and Ur III periods in Mesopotamia (Petrie 2013; cf. Adams 1981, Figs 29–31).

The Indus cities (and also a number of smaller sites) are each distinctive, but are also broadly similar

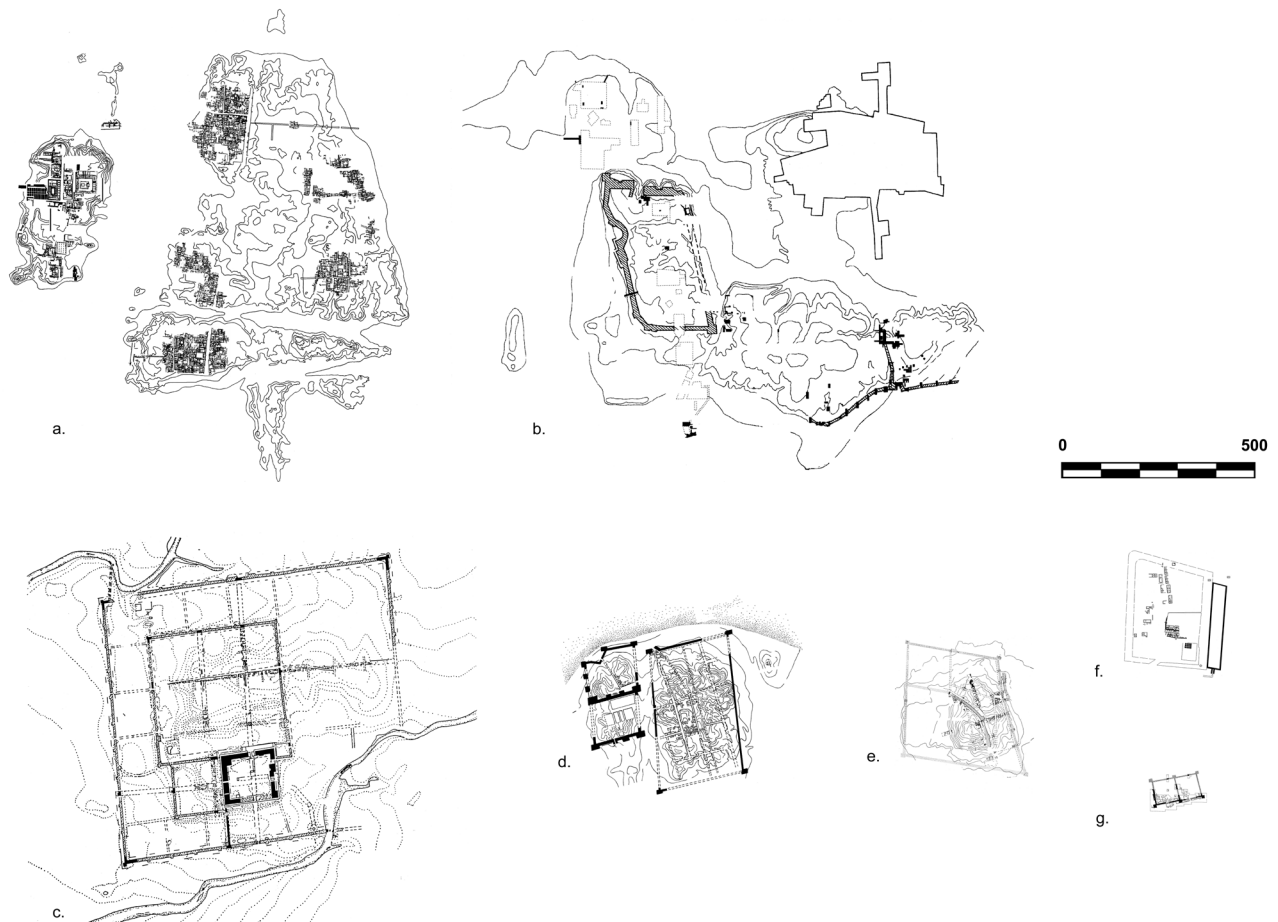


Figure 7.1. Plans of Indus cities and smaller settlements, including a. Mohenjo-daro, b. Harappa, c. Dholavira, d. Kalibangan, e. Banawali, f. Lothal, and g. Surkotada. All plans are oriented to north, and are shown in the same scale (image C.A. Petrie; after Petrie 2013: Fig. 5.1).

in being made up of multiple mounded areas that incorporate major platforms and/or substantial enclosure walls, as well as houses, drains and wells made of mud-brick and/or fired-brick, with stone also being used to varying degrees (Fig. 7.1; Possehl 2002; Kenoyer 2008; Wright 2010; Petrie 2013; Sinopoli 2015). The inhabitants of these cities (and many smaller settlements) produced, used, and exchanged distinctive types of material culture at least some of which is often described as being uniform (e.g. Kenoyer 2006, 55, 62; Wright 2010, 23, 326–30). This material assemblage included black-painted red-slipped pottery, carved steatite seals, cubical weights, ceramic figurines, bangles made of various materials (clay, shell, copper, faience, and stoneware), and beads made from semi-precious or precious stones, and beyond the cities themselves, it is this material that epitomizes the Indus Civilization. Vidale & Miller (2000, 143ff; Vidale 2000, 127ff.) have suggested that the elaborate nature of many of the Indus craft products should be regarded as an explicit display of technical virtuosity.

The painted pottery, clay bangles and figurines are likely to have been made from locally available raw materials, while the jewellery, standardized weights, and stamp seals were made from raw materials often obtained from distant sources (see Wright 2010, 148–66, 182–203; Law 2011). Raw materials and finished products were both redistributed across a broad region, including settlements outside of the main area occupied by Indus populations, in areas including Central Asia, Pakistani Makran, the Persian Gulf and Mesopotamia (Possehl 2002; Wright 2010, 225–32). This broad distribution is indicative of long-range exchange or trade, but it is unclear how the concomitant network of interaction operated and whether access to particular categories of material was restricted. This last factor resonates with the fact that there is no overt evidence from burials, sculptural traditions, or elite structures for prominent individuals (Possehl 2002, 157–76; Wright 2010, 262–71). It also overlaps with unresolved questions about the nature of Indus elites, whether a ruling class dominated Indus cities, whether there was significant monumental/public architecture in the form of major religious buildings and/or palaces, and whether Indus populations engaged in warfare (e.g. Possehl 1998; Cork 2011; Petrie 2013, 2017; Petrie et al. 2017; see below).

Excavations have been carried out at four of the city sites, and although the work at Dholavira (Bisht 2015) and Rakhigarhi (Nath 2015; Shinde et al. 2013, 2018) has been extensive, only limited information about each of these sites has been published, so they will not be discussed in detail here. Mohenjo-Daro was subject to various periods of large-scale excavation from the 1920s to the 1960s, and detailed reassessment

in the 1980s (Marshall 1931; Mackay 1938; Wheeler 1968; Dales & Kenoyer 1986; Jansen & Urban 1984, 1987; Jansen & Tosi 1988; Possehl 2002). It has been argued that Mohenjo-Daro developed quickly (Jansen 1993), but the date of its foundation and the rate and nature of its growth is debated (Dales & Kenoyer 1986; Kenoyer 2008). Harappa was the first Indus site to be recorded and has been subject to extensive excavations over several phases (Vats 1940; Wheeler 1947; Meadow 1991; Possehl 1991). In contrast to Mohenjo-Daro, the most recent surface surveys and targeted excavations at Harappa have provided evidence for the incremental growth of the city (Kenoyer 2008; Wright 2010). To develop arguments about fragility and robustness, it is important to reiterate some of the salient evidence from each of these two city sites.

Harappa (Fig. 7.1) was a large settlement made up of multiple mounds with enclosure walls, which has a relative sequence of development that indicates progressive urban growth and continual change across three sub-periods (Periods 3A–3C; Kenoyer 1991). Kenoyer (1991, 2007) has suggested that Period 3A saw the establishment of dominant elites on Mound E, Period 3B saw dominance shift to Mound AB at the west of the settlement, and the construction of a 'Granary'/'Great Hall' on Mound F, which is the only large-scale non-residential building that has been exposed. The city reached its maximum extent in Period 3C after 2200 BC (e.g. Kenoyer 2008, 194–7), but this period also shows evidence for dumping in streets and structures (e.g. Meadow & Kenoyer 2005, 221–2), which may indicate overpopulation and erosion of civic control, though we have no idea about political perturbations that might have affected the city. A diverse range of craft activities were carried out at Harappa throughout this sequence, including extractive/reductive crafts such as shell working, stone tool production, seal carving and stone bead manufacture, and transformative crafts such as bangle, figurine and pottery production and copper-based metallurgy (see Wright 2010). There is evidence that extractive/reductive crafts were practised together in distinct locations in each mounded area in the city, while transformative crafts and crafts that bridge these approaches were undertaken in relative isolation, though still within the walled area of the urban settlement (Miller 2007).

Mohenjo-Daro (Fig. 7.1) was primarily comprised of brick platforms topped by fired-brick structures and traces of enclosure walls. The highest mound (Fig. 7.2), which is often referred to as the Mound of the Great Bath, was the locus of a number of unusual buildings that Wright (2010, 117–22) has referred to as non-residential structures. These include the so-called 'Great Bath', the 'Granary'/'Great Hall', the 'College

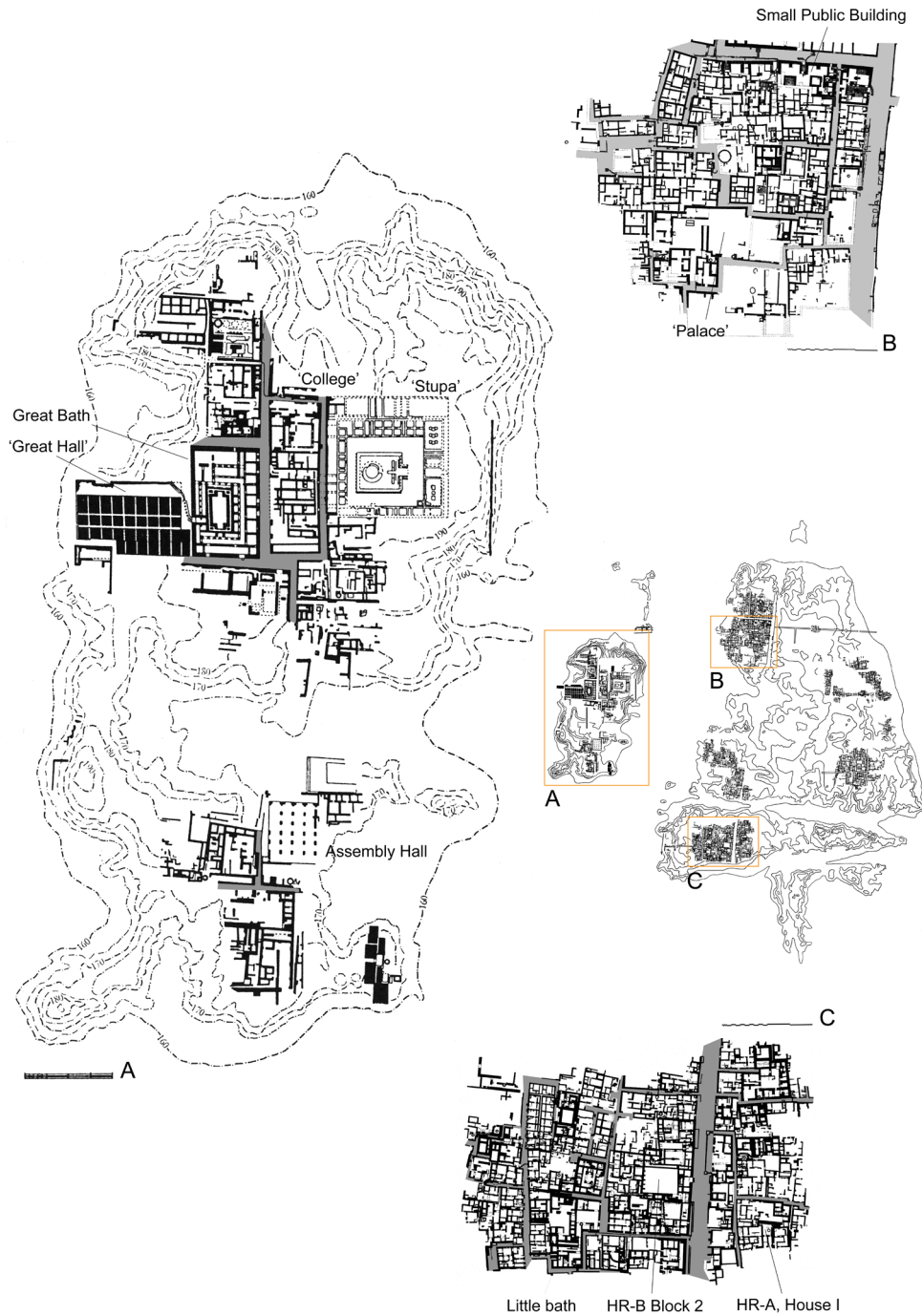


Figure 7.2. Plan of Mohenjo-daro and expanded views of three areas, including: a. Mound of the Great Bath, b. DK-Area, and c. HR-Area. Each of these areas has distinctive large buildings, and all are shown in the same scale (image C.A. Petrie; after Petrie 2013: Fig. 5.1; Possehl 2002: Figs 5.1–5.2).

of Priests', the 'Assembly Hall'/'Pillared Hall', and a structure traditionally described as a Buddhist stupa that has long been presumed to date to the Early Historic period (Possehl 2002). The 'Granary'/'Great Hall' at Mohenjo-Daro is often compared to the similarly named structure at Harappa, though the architecture

of each is distinct (e.g. Wheeler 1968, 33–5, 43–4; see Fig. 7.3). A mud-brick fortification or enclosure wall with at least one gateway surrounded at least part of this mound (Fig. 7.2; Wheeler 1968, 40, Pl. VIb, VII, VIIIa–b; Alcock 1986, 500–1). Many of the apparently non-residential buildings on the high mound may

have been public and/or elite structures (e.g. Kenoyer 1998, 62–5, 100; Possehl 2002, 193), though it is notable that several contained evidence for craft activities in later phases, including lapidary, shell and leather working (Marshall 1931; Possehl 2002; Vidale 2010, 62).

There has been a speculative reassessment of the so-called Buddhist stupa and associated monastery on the highest mound at Mohenjo-Daro that suggests evidence for Indus religious architecture may not be as elusive as previously thought. The placement and layout of these structures align with the neighbouring Indus period structures, and a reassessment of their architecture, construction techniques, and associated

finds has indicated they may be the remains of substantial Indus period structures that stood at the highest and most visible part of the city (Verardi 1987; Verardi & Barba 2010, 2013; also Wright 2010; Petrie 2013). Other structures are likely to underlie this building (e.g. Kenoyer 1998, 62; though see Possehl 2002, 149), indicating earlier phases of construction. The precise function of this building remains unclear, but Verardi & Barba (2010, 2013) have suggested that it may have been a sacred building with repositories containing discarded votive offerings. The close proximity of the non-‘stupa’ to the Great Bath and the ‘Granary’/‘Great Hall’ suggests that the northern end of this mound may

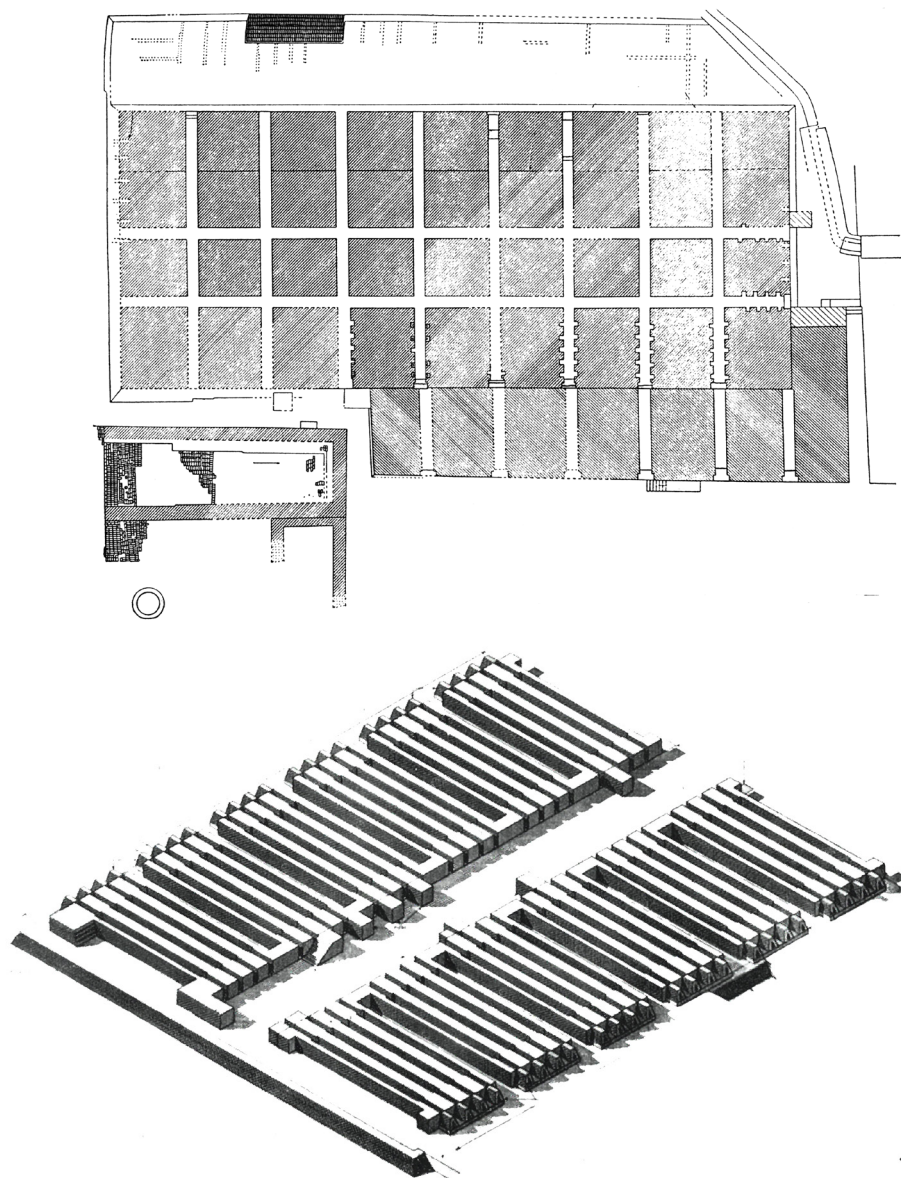


Figure 7.3. Plan of the ‘Great Hall’ at Mohenjo-daro and isometric view of the ‘Great Hall’ at Harappa (image C.A. Petrie; after Wheeler 1963: 9, Plate V).

have been topped by a cluster of important buildings. These buildings appear to have included two structures related to ritual activities, separated by what may have been an elite residence (College of Priests) and flanked by some type of Great Hall. The degree to which any of these ostensibly non-residential structures were public or had access to them was restricted, however, remains unknown.

While the Mound of the Great Bath has long been the locus of suspected non-residential or elite structures, there were unusual buildings on the lower mounds as well. The lower town at Mohenjo-Daro is made up of several distinct sectors and at least two different platforms that were topped with houses of various sizes, workshop areas, and a number of unusual buildings (Fig. 7.2). These structures are enigmatic, but include at least one building that was identified by the original excavator as a palace (DK area, G section, Block 1; Mackay 1938, 46), a building with a unique double staircase that has been described as a possible ritual structure (HR-A, House I; Wheeler 1968, 52–3), and several other buildings that have been proposed as possible temples (Possehl 2002, 149–52; Fig. 2), though these interpretations lack consensus. In addition, Vidale (2010, 64–65, 69–71) has tentatively proposed that Block 2 in HR B area was not comprised of multiple dwellings but was actually a palace or elite residence with an entrance marked by massive columns made from cream or grey limestone 'ring-stones', and also that a small-scale emulation of the Great Bath, a Little Bath, was situated behind it (Fig. 7.2). None of these structures are particularly monumental when compared to the major structures in Mesopotamia and Egypt, and they lack design elements and contents that make their function obvious. The use of the term 'palace' is also loaded, but these new interpretations do suggest that non-residential and substantial residential structures might have been situated in spatially distinct areas of Mohenjo-Daro, which has important implications for our interpretation of Indus civic, socio-economic, and political organization.

The large-scale exposures at Mohenjo-Daro set the model for understanding Indus urban layout by revealing houses arranged in coherent blocks separated by wide main streets, narrow side streets, and alleyways (Possehl 2002), which appear to have persisted over time (Jansen 2010). M.E. Smith (2007) has noted that the structures in the different areas on the lower mounds are arranged in semi-orthogonal blocks that may not have been a result of centralized planning, but were rather the product of the actions of individual builders who made additions to an existing rectangular house or built new houses adjacent to standing structures. Despite the continual rebuilding of the urban fabric,

however, it appears that some form of civic awareness was operating. This view is reinforced by the fact that while many houses at Mohenjo-Daro had their own wells, latrines and bathing facilities, there was an elaborate system that linked houses with drains running along or below lanes and main streets and ultimately off each platform (e.g. Marshall 1931, II.278–82). Several scholars contend that these features indicate that water and its management were critical to the Indus ideology, which Jansen (1989, 1993) has referred to as *wasserluxus* (also Possehl 2002; Agrawal 2007, 139–44). Wright (2010, 122–4) has expanded this line of interpretation by suggesting that these hydraulic structures are evidence of public works, produced by corporate and/or communal activity.

Rural life in the Indus context

There has been a protracted history of arguments asserting that rural life was a critical element for understanding Indus society, particularly in the work of Fairservis (1967, 1971, 1986) and Possehl (1998; see Petrie et al. 2017; Parikh & Petrie in press). Importantly, these arguments have particular ramifications for our understanding of socio-economic and political organization within and between Indus cities. This is in part because the small-, medium- and large-sized villages and towns that lie in the immediate hinterlands of the large Indus settlements and throughout the extensive intervening regions appear to dominate in terms of the distribution of population (Fairservis 1961; Mughal 1997; Wright 2010; Cork 2011; Petrie 2013, 2017; Sinopoli 2015; Petrie et al. 2017; Parikh & Petrie in press).

A number of what might be described as 'smaller-than-city' (<40 ha) Indus settlements were undoubtedly 'urban' within their local context, and potentially played a crucial role in local administrative and power structures (Petrie 2013; Sinopoli 2015). The site of Kalibangan (c. 11.5 ha), for example, is situated on the southern edge of a dried and probably ephemeral river channel in northern Rajasthan, and was several hundred kilometres from the nearest city-sized settlements at Rakhigarhi and Harappa. During the urban phase, Kalibangan comprised two walled mounds, with the westernmost having two distinctive areas separated by a wall (one being an 'elite residential area', and the other having several brick platforms, which the excavators argued had a ritual function), whereas the eastern mound appears to have been largely residential (Lal et al. 2015). Importantly, Kalibangan presents much of the well-known Indus cultural material, though the local style ceramic types used by the pre-urban population continued to be used for at least part of the later period of occupation, suggesting both continuity alongside the importation, and/or progressive emulation, of non-local

material (Petrie 2013). Similar evidence for the growth of small settlements during the urban period and the use of a mix of the pre-existing local material culture and Indus material is seen at other town and village sites throughout northwest India. For instance, at Farmana, Lohari Ragho I, Masudpur I and Masudpur VII, local cultural material – particularly distinctive pottery and bangles – is numerically dominant, and if ‘Classic’ Indus-style pottery is present, it only occurs in limited quantities (Uesugi 2011; Petrie 2013, 2017; Parikh & Petrie 2016, in press; Petrie et al. 2017, 2018; Ceccarelli & Petrie 2018). Many small sites are likely to have been occupied by farmers (e.g. Lohari Ragho I, Masudpur I and Masudpur VII), but there are also small sites that have clear evidence for specialized production (e.g. beads at Chanhu-Daro, bangles at Ghola Doro/Bagasra; summarized in Parikh & Petrie in press).

The numerous small sites across the Indus Civilization typically have evidence of being occupied in single and occasionally multiple periods (Joshi et al. 1984; Possehl 1999; Kumar 2009; see Petrie et al. 2017). These sites are usually low mounds (e.g. Fairservis 1986), which suggests that occupation was relatively short-lived. Excavations in northwest India have shown that occupation was often discontinuous and not protracted (Petrie et al. 2009, 2016), suggesting that individual settlements may have been abandoned and reoccupied within periods and between periods (Petrie et al. 2017). This type of settlement instability was also characteristic of Pakistani Cholistan, where it is likely that settlement was discontinuous at many individual locations, potentially due to the presence of a braided river system that was susceptible to frequent small-scale avulsions when flooding occurred during monsoon rains (Petrie et al. 2017; Petrie & Lynam in press). Such an environment may have required settled populations to be relatively mobile in order to survive a constantly shifting hydrology. Individual families or kin groups may have needed to spread their members between multiple settlements, and people may have moved between those settlements to access available water in times of shortage or stress. Such practices clearly have implications for our understanding of the sustainability and resilience of rural Indus populations to a diverse and changing environment (Petrie et al. 2017; Petrie 2017; see below).

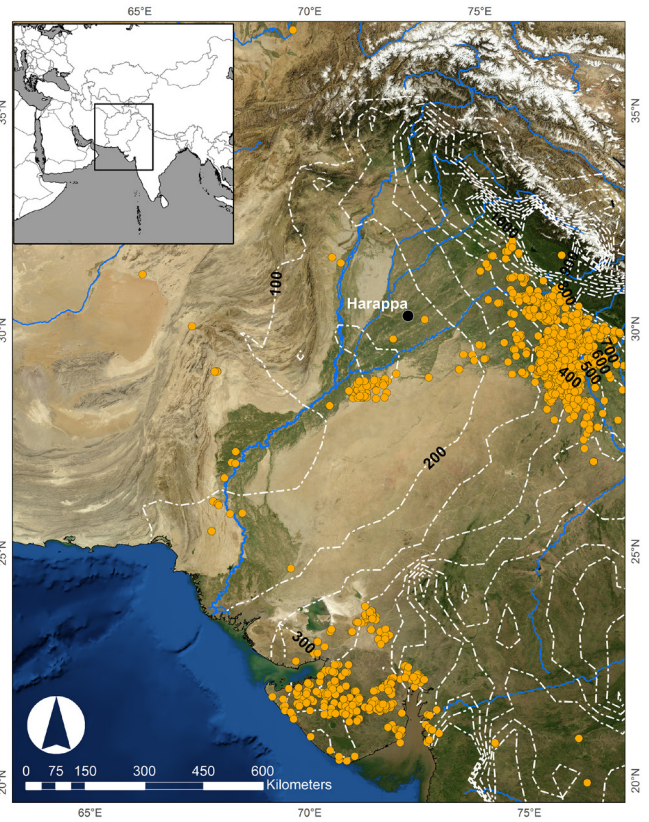
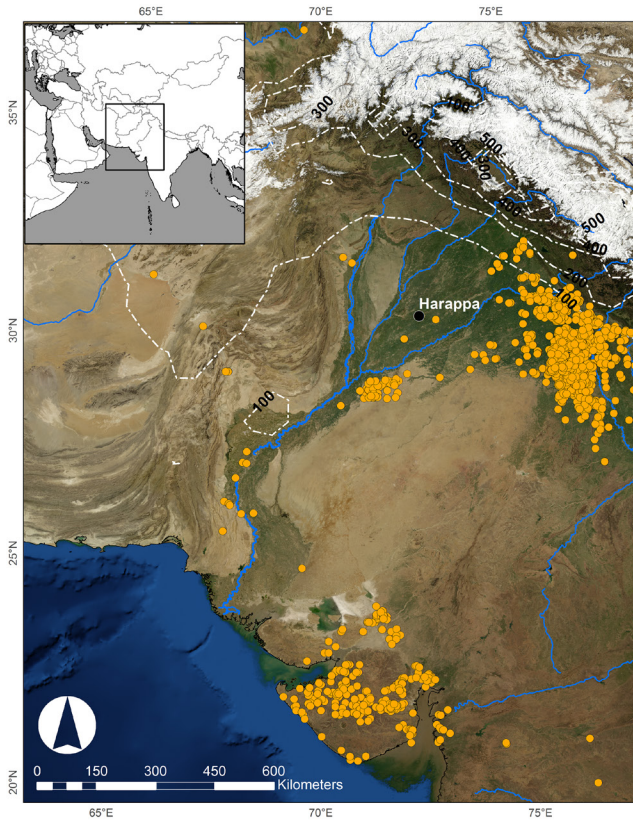
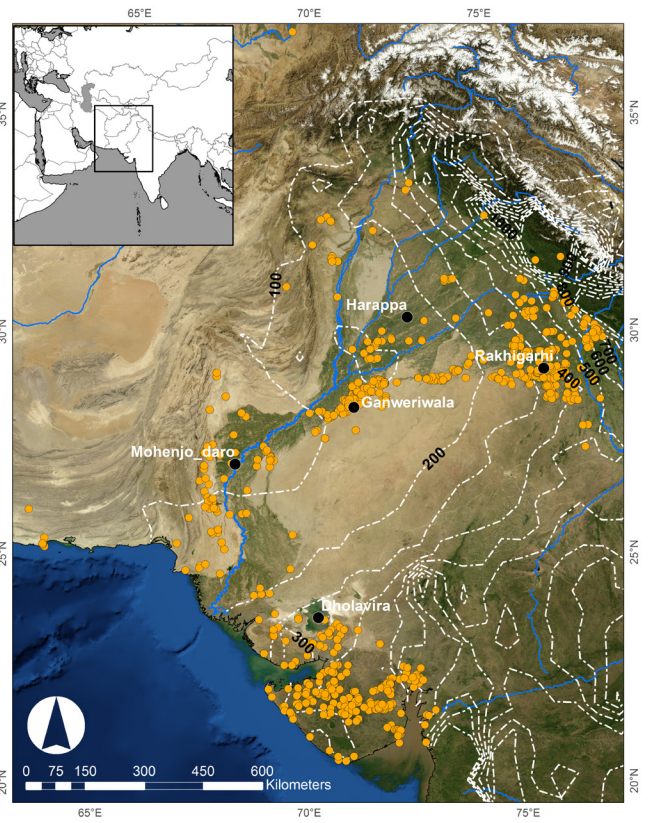
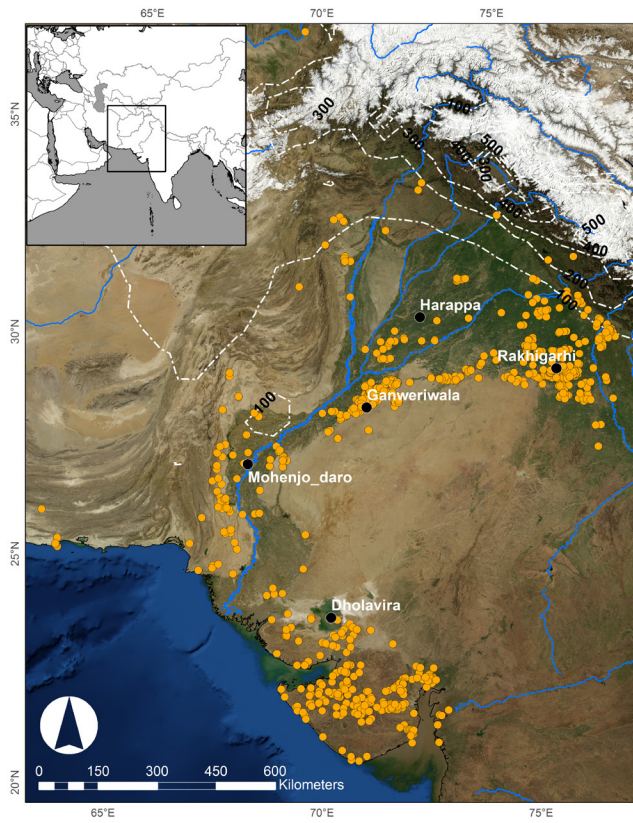
Diversity, variability and adaptation in the Indus context

The Indus Civilization has long been described as riverine (e.g. Marshall 1931), but today there is considerable variation in water supply and availability across the extensive areas occupied by Indus populations, which

straddle an environmental threshold where winter and summer rainfall systems overlap. Both rainfall systems have steep gradients and this contributes to diverse and variable climate and hydrology, which in turn impact on environments and ecologies across the entire Indus zone (Agrawal & Sood 1982; Possehl 1982; 1992; Joshi 1984; Chakrabarti 1999, 153–60; Miller 2006; Shinde et al. 2006; Singh & Petrie 2009; Weber et al. 2010; Wright 2010, 166–70; Petrie 2017; Petrie et al. 2017). Comparison of the distribution of known Indus settlements to modern climate zones and season rainfall patterns, suggests that Indus populations inhabited areas of arid hot desert, areas of arid hot steppe, and areas that are warm and temperate with dry winters and hot summers (Petrie et al. 2017; Petrie 2017), though the precise limits of these zones have probably changed since the mid-Holocene (Figs 7.4–7.5). Within this enormous expanse, there are some regions that today receive water via winter rain, summer rain and perennial rivers (e.g. northwest India), while others benefit from only one of these elements, and are thus relatively marginal (e.g. Thomas 2003; Petrie 2017; see Figs 7.4–7.5). While direct rainfall was no doubt important, across the Indus zone there is considerable variation in the timing of rainfall within any year and variation in rainfall intensity between years, and there are sizable areas that today receive less than 300mm of direct winter or also summer rain (Petrie et al. 2017). Heather M-L. Miller (2006, 104–12) has argued that Indus populations likely exploited a diverse range of water sources that were variable in terms of supply, and involved a degree of inherent risk for food security. It is thus probable that hydrological unpredictability was the norm. Miller (2006, 106) also noted that ‘relatively minor changes in the climate system might have a large effect on the amount, timing, and duration of the two rain systems’. Within such a diverse and variable environment, too much or too little rainfall within and between years can have major ramifications, and

Figure 7.4. (opposite above) Maps of the Indus River Basin showing the distribution of modern winter (left) and summer (right) across the area occupied by the Indus Civilization, in relation to the distribution of urban period settlements (orange circles), and urban centres (black circles) (image C.A. Petrie).

Figure 7.5. (opposite below) Maps of the Indus River Basin showing the distribution of modern winter (left) and summer (right) across the area occupied by the Indus Civilization, in relation to the distribution of post-urban period settlements (orange circles), and urban centres (black circles) (image C.A. Petrie).



borrowing a phrase from Naomi Miller (2011), Petrie et al. (2017) have described the water supply available to Indus populations as being ‘predictably unpredictable’ during the Indus urban period.

Indus farmers were adapted to exploit the diverse environments that they inhabited, making use of varied subsistence practices, involving cattle-, sheep- and goat-based pastoralism and a diverse range of both winter and summer crops (Fairservis 1967, 10, 42; 1971, 169–72, 228–32; Possehl 1982; 1992; Vishnu-Mitre & Savithri 1982; Joshi 1984; Chakrabarti 1988; Weber 1999; Singh et al. 2008; Weber et al. 2010; Petrie et al. 2017; Petrie & Bates 2017). The diversity in Indus agricultural systems reflects the influence of early farming populations from different areas in South Asia who exploited different cultivars (Petrie et al. 2016; Petrie & Bates 2017; see also Fuller 2011; Kingwell-Banham et al. 2015).

Scholars have argued that Indus farmers practised multi-cropping, and that crop diversification increased over time, as suggested by the increased use of summer and or drought tolerant crops (e.g. Vishnu-Mitre & Savithri 1982, 215; Chakrabarti 1988, 96; 1995, 50; Weber 1999; 2003, 181; Madella & Fuller 2006, 1298; Wright 2010, 321). Indus approaches to risk mitigation might thus have included the growing of multiple crops simultaneously on one plot, or using the same land in multiple seasons (Miller 2006, 114), though there are a very broad range of possibilities within the framework of multi-cropping (Petrie & Bates 2017). High-resolution archaeobotanical data from Harappa (Pakistani Punjab; Weber 1999; 2003) and various small village-sized sites in Gujarat (Weber 1991; 1999; Reddy 1997; 2003) suggest that winter crop-dominated and summer crop-dominated strategies were practised in those areas, respectively. The assemblage from Harappa suggests that over time, the major agricultural products of the city were the winter crops wheat and barley, though there is also clear evidence for use of summer millets, and diversification over time, with increased focus on summer and drought-tolerant crops (Weber 1999; 2003; Weber & Kashyap 2016). Data that enable characterizations of the true diversity of practices and the degree to which Indus populations adapted their farming practices to the specific nuances of the local environments are being revealed in northwest India where there is now well-dated evidence from sites in areas that receive markedly different amounts of direct rainfall (e.g. Masudpur VII, Masudpur I, Dabli-vas Chugta, Burj and Bahola) (Bates 2015; Bates et al. 2017a, 2017b, 2017c; Petrie et al. 2016, 2017, 2018; Petrie & Bates 2017). The data from these sites shows that winter or *rabi* and summer or *kharif* cropping were being carried

out before, during, and after the urban period, and that a diverse range of crops were being exploited before an urban centre developed at Rakhigarhi and while it was occupied (Petrie et al. 2016; Petrie 2017; Petrie & Bates 2017). The variation in the cropping strategies between different regions, and at different settlements within specific regions indicates a lack of centralized control over farming practices and potentially also over the type of surplus that was being generated (Petrie & Bates 2017).

We still lack information about the generation, storage and administration of Indus agricultural surpluses, but the diversity and variation in climate, environment, ecology and rainfall must have affected provisioning and storage practices in different parts of the greater Indus zone (Petrie 2017). Although a large proportion of the overall Indus population are likely to have lived in self-sufficient agricultural villages, specific strategies would have been required to feed the urban (and village) inhabitants who were not food producers. It has been assumed that Indus cities were provisioned using a surplus generated by farmers living in their immediate hinterland (e.g. Wright 2010, 127), but this has not yet been demonstrated though co-ordinated investigation of archaeobotanical material from a city and the neighbouring settlements (Petrie 2017). Wright (2010, 205; 2017, 23) has suggested that there is evidence at Harappa for crop processing before storage, which is possibly indicative of communal or even centralized production, but the primary data remains unpublished. Wright (2010, 127) has also argued that the products of farmers and herders were necessary to sustain city-based specialists, but the degree to which cities might have been fed by surpluses generated by city-based farmers as opposed to those generated by village-based farmers in the rural hinterland remains unknown. It was initially argued that granaries existed at both Mohenjo-Daro and Harappa (e.g. Marshall 1926/1927; Fig. 3), but the structures concerned have produced no overt evidence for grain storage, and they are now typically described as Warehouses or Great Halls of unknown function (e.g. Possehl 2002, 66–7, 103–4, 191–2; Meadow & Kenoyer 2005, 96–101). In contrast to the lack of large or more formal storage facilities, pits are common at Indus settlements and some also have evidence for stone lined bins (e.g. Rojdi; Possehl & Raval 1989; Weber 1991). Petrie et al. (2016) have suggested that populations living in areas where winter or summer monsoonal rain was not available are more likely to have needed more substantial and perhaps more centrally organized storage facilities to ensure the availability of cereals year-round. In contrast, populations living in regions that received

water from both rainfall systems are likely to have had access to a more regular food supply, and potentially had different storage requirements (Petrie et al. 2016), though some storage throughout the year remains likely. Furthermore, there is likely to have been considerable variation in what crops were grown and how they were grown within these areas, as farmers may have been in a position to make responsive choices (*cf.* Miller 2015), unless of course there were restrictions on choice, as suggested by Madella (2014, 227–29; also Miller 2015). The potential for flexibility may explain why particular crops or combinations of crops appear to be dominant in some settlements, but not in others (Petrie & Bates 2017). It is also important to consider the possibility that surplus food products might have been exchanged *between* populations living in different regions (Madella 2014; Miller 2015; Petrie et al. 2016), which may be demonstrated in the future through strontium isotope analysis (Petrie 2017). The diversity of the environments in which Indus populations lived, and the discussion of surplus generation, provisioning and storage all have implications for our understanding of socio-economic control structures both within cities, between cities and their hinterlands, and between populations across the Indus Civilization.

There is more to diversity of practices than farming and agriculture of course. The Indus urban period was characterized by the appearance of specific categories of cultural material at each of the urban sites and many of the settlements in the intervening regions (e.g. carved steatite seals, cubical weights, bangles, and beads). Finished goods were also widely exchanged and traded within the Indus zone, and while this material is found distributed in the surrounding areas, there are only relatively limited quantities of 'foreign' finished goods being found in the Indus region (Possehl 2002; also Ratnagar 2001), and the uniformity of Indus material has been used to support arguments for long distance integration across the Indus Civilization (e.g. Kenoyer 2006, 55, 62; Wright 2010, 23, 326–30). While the populations living in the various regions were clearly interacting with each other, and sharing aspects of technology, material, ideas and ideology, it is becoming increasingly clear, however, that the indications of material uniformity across the Indus Civilization mask the degree of regional diversity in material and practices (Wright 2010; Petrie et al. 2017). Several scholars have suggested that the widespread attestation of certain categories of material is potentially a 'veneer' spread by a network of interaction that overlies considerable regional diversity (Meadow & Kenoyer 1997; Clark 2003; Petrie 2013; Chase et al. 2014; Petrie et al. 2017, 2018).

Mediation of politics and power *within* Indus settlements: hierarchy, heterarchy and collective action

Trigger (2003, 73) argued that it 'seems reasonable to conclude that all early civilizations probably had monarchs, even if kingship was defined somewhat differently and the actual political power exercised by such rulers varied considerably from one to another'. As the Indus Civilization presents no obvious evidence for one or even multiple rulers, it may have been an exception. Indus cities and larger settlements appear to have been polycentric, being made up of multiple mounded areas raised on mud-brick platforms and/or surrounded by walls; and having large buildings (residential and non-residential) in multiple locations, which may each have been foci of wealth and/or power (Petrie 2013). This concept fits with suggestions that access to different areas within cities was restricted through walls and gates (Kenoyer 1994; Eltsov 2008) and the delineation of space was important (*cf.* Eltsov 2008). It is also reinforced by the clear spatial distribution of different craft activities at Mohenjo-Daro (Bondioli et al. 1984; Pracchia et al. 1985; Vidale 1990, 2010) and Harappa (Miller 2007, 40–4). The evidence for the constriction of movement and the distribution of large structures in various sectors has led to the suggestion that Indus urban populations were largely heterarchical, and dominated by groups that were broadly equal in terms of socio-economic status, competed with one another, but lived in socio-economically segregated areas (Kenoyer 1991; 1994; 2006; Possehl 2002, 57; Eltsov 2008; Petrie 2013). Whether these dominant groups were elites, and precisely how they wielded power is, however, debated, and there is not a consensus about Indus socio-economic and political structure. A number of scholars have, however, written along similar lines.

Possehl (2002, 57) suggested that the Indus Civilization showed signs of heterarchical structures through evidence of corporate action, perhaps under a series of 'councils' or gatherings of leaders. Kenoyer (2006, 2008) has proposed that the formal division of space and the distribution of workshops at Harappa indicate that there was competition between elites, merchants, landowners or religious leaders within each sector, and between sectors. He has described this as a decentralized system of corporate rule similar to that seen in the Early Historic period in the subcontinent (Kenoyer 2008, 195; also 1997, 2006), though clearly advocates the existence of an overarching hierarchy of wealth and legitimacy (Kenoyer 2000, 2006). For Eltsov (2008), the creation of three-dimensional and segregated worlds with restricted access and hidden monumentality

was an ideological choice that served to demarcate groupings, be they social, religious or professional. Wright (2010, 332; 2016, 234–7) has written of vertical integration and local councils, but also of evidence of heterarchy and collective action. Vidale (2010) has argued that the presence of a palace and associated Little Bath in the HR area at Mohenjo-Daro signals the existence of a social structure where each sector of the lower town was the preserve of a group or groups of elites that were socially, economically, and politically capable of building palaces and ritual structures that emulated and competed with those seen on the Mound of the Great Bath. Sinopoli et al. (2015, 388) have made the nuanced suggestion that power in Indus cities may have been variously distributed among competing and fluid social or economic groups rather than being highly centralized under a single ruling dynasty. They also suggest that political and religious ideologies might have discouraged the materialization of extant hierarchies, thereby maintaining a non-hierarchical political structure (Sinopoli et al. 2015, 388–9). Yoffee (2016, 1062) has built on this interpretation to suggest that Indus cities were ruled by oligarchies.

Taken together, these views suggest that no one elite group dominated any of the Indus cities in a strictly hierarchical fashion. Rather, the polycentric Indus cities may have been dominated by several groups that were potentially elite and broadly equal in term of socio-economic status, but who competed with each other and used mechanisms to limit concentrated power. This pattern may well hold for the smaller centres and towns as well, where segregation within individual settlements is often evident (Petrie 2013). There almost certainly were other social and economic groups within any individual Indus population that were also organized heterarchically, including various types of crafts people, labourers and farmers. Wright (2016, 235–6) has argued that pottery production required a cooperative network of craft workers, who engaged in consensus building and collective action. Thus, while heterarchical structures appear to have been predominant at various levels of Indus society, they likely co-existed with various types of vertical structures (Wright 2016, 226; *cf.* Crumley 1995).

In seeming contrast to the arguments about social and physical structures of spatial differentiation and exclusion lie suggestions that many of the large structures at Mohenjo-Daro that are cognate with Wright's (2010, 117–22) non-residential structures, may have served some sort of 'public' function (e.g. Ratnagar 1991; Kenoyer 1998, 62–5, 100; Possehl 2002, 193; Shinde 2016). The ways in which many of these buildings were used remains unclear, but in some instances, specific functions of 'public' buildings have been discussed. The

most obvious example is the 'Assembly Hall'/'Pillared Hall' in L-area on the Mound of the Great Bath (Marshall 1931, 21–2; Wheeler 1968, 46), which has been described as a market (Mackay 1948), though this suggestion is based entirely on architectural form (Possehl 2002, 194–5). Mackay (1938, 76) also suggested that the structures at an intersection DK-G area - Block 8A and Block 6A - were administrative buildings, and may have had spaces for 'public letter-writers' (Fig. 2). Green (2018) has noted that these structures have a high density of stamp seals, and argued that they were a unified complex providing specialized spaces facilitating community or civic level interaction. He has referred to this particular building as a small public structure and suggests that in such contexts, interaction could take place across social boundaries, and between households, kinship groups, etc., and argued that such buildings were necessitated by the heterarchical urban context (Green 2018). The prospect that there were both small and large public buildings distributed in different parts of Mohenjo-Daro opens up a range of possibilities for speculating about who had access to each structure, and whether both types of buildings made it possible for individuals and groups to interact across social boundaries, as Green (2018) surmises for his small public structure in DK-G. Some non-residential structures may have been exclusive in terms of function and access, while others may have been truly public, and the differentiation of such will be fruitful for further research.

There are other factors that provide indications about the nature of Indus social structures and social interaction. From the construction of platforms, walls, buildings and elaborate waste management and drainage systems, down to the manufacture of pottery and the use of seals for individual transactions, it is likely that there was corporate/communal activities and also collective action in operation. As noted above, Wright (2010, 122, 124) has described the elaborate water supply, washing and drainage infrastructure seen at Mohenjo-Daro and Harappa as 'public works', with the implication that they are the product of corporate action for community benefit. Analysis of several of the major walls at Harappa has shown that bricks were made using different coloured clay, implying that they came from different sources, but also that bricks of different colours are present in the same wall (Meadow & Kenoyer 1994, 457–8; 2005, 221). This pattern suggests that there was not a simple correspondence between the bricks produced using one source of materials and the destination where they were used, and Meadow & Kenoyer (1994, 458) have suggested that individual groups were not responsible for the materials and labour required to complete individual segments of

wall. It is not clear whether each enclosure wall or platform was the product of the communal activity of the population of that particular area of the settlement, or whether cooperation took place at a broader city wide or supra-city scale. Similar questions could be asked about the construction and maintenance of other buildings, including the speculated palaces and religious buildings, as such structures might have been constructed under central management, under the aegis of individual sectors, or by specialists in construction able to work across the social and physical boundaries of the city. Some of these activities may have been taking place exclusive of influence from elites.

Despite the existence of separate walled areas and putative religious and palatial structures, other evidence for socio-economic differentiation is limited in the Indus context, and this poses interpretative challenges. There are indications of some variation in the size and degrees of elaboration in houses (Marshall 1931; Possehl 2002; Wright 2010, 117; Cork 2011, 38–47), which has been enhanced by the reinterpretation of the HR-A building (*cf.* Vidale 2010). Kenoyer (1989, 2000) has suggested that bangles provide evidence for socio-economic differentiation, as they were produced using a range of raw materials (e.g. clay, shell) using technologies that show various degrees of elaboration (e.g. faience, stone ware). There also appears to have been some differential access to finished products, including beads and metal artefacts (e.g. Vidale 2000; Vidale & Miller 2000; Wright 2010, 246–62). Importantly, however, disparity is not clearly reflected in the relatively limited number of burials excavated at sites including Harappa, Rakhigarhi, Lothal, Rupar, Kalibangan and Farmana. In each instance, individual graves are broadly similar in containing distinctive types of pottery vessels and small numbers of personal ornaments, such as bangles and beads (Shinde et al. 2009; Wright 2010, 263–70; Valentine et al. 2015; Lal et al. 2015; Kenoyer & Meadow 2016; Valentine 2016; Shinde et al. 2018). Being cognisant of the similarities in burial form, Kenoyer (2006, 67; Valentine et al. 2013) has suggested that the small size of the known cemeteries indicate that only certain social groups practised burial. Wright (2010, 270) has noted that only two burials have evidence for higher status, one at Harappa (Kenoyer 1998, 124), and one at Kalibangan (Sharma 1999, 87), and speculated that each might have contained the head of lineages interred in the related cemeteries. In contrast to the other evidence, there are six or more large tumuli at Dholavira, one of which had a chamber containing unusual pottery and gold objects (Bisht 2015, 658), and a range of elaborate grave goods have been revealed in the post-urban/Late Harappan cemetery at Sanauli (Sharma et al. 2007; Prabhakar

2013). These findings suggest that there may actually have been regional variation and the delineation of elites through differences in burial style and grave objects in some areas (Kenoyer & Meadow 2016, 164).

We are thus left with an interpretative tension between the desire to identify socio-economic hierarchies at Indus settlements, and the manifest evidence for various heterarchical arrangements. The nature of many of the large non-residential buildings, for example, may indicate the existence of some form of socio-economic hierarchy within Indus settlements, but it was not manifested in the way seen in Mesopotamia and Egypt. It is also likely that there were various types of heterarchy within Indus socio-political life, be it between competing elites, religious specialists, merchants, traders, and/or landowners, or between crafts people, labourers, farmers and others pursuing more quotidian trades. Wright (2016) and Green (2018) have both referred to the evidence for more horizontal socio-economic organization seen at Jenne-jeno in the ancient Middle Niger (*cf.* McIntosh 2005) as a potential parallel to the Indus example, highlighting the importance of considering the resistance to centralization. Ratnagar (2016, 113–29) has drawn attention to the example of the Yoruba, which is further down the Niger, and highlighted the potential importance of the types of dynamics that occur when kin groups, clans, lineages or tribes live together. While these proposals contain considerable potential, we do not yet know enough about the specific distribution of social groups within Indus settlements, and are at present largely assuming that distinct groups were all living in what appear to be segregated areas within urban centres. It thus remains unclear whether the physical separation was driven by socio-economics, ideology or other factors.

Mediation of politics and power *between* Indus settlements: the Indus state debate

The lack of clear consensus about the nature of socio-economic and political organization *within* urban centres carries over into interpretation of the socio-economic and political relationships *between* cities and across the Indus Civilization as a whole. Scholars have advocated a range of suggestions about the nature of large-scale control structures, including the argument that the Indus Civilization was a non-state (Fairervis 1961, 1967; Malik 1968; Shaffer 1982; Possehl 1998), that it comprised 'city-states' (Kenoyer 1994, 1997, 2006; Chakrabarti 1999; Wright 2010; also Sinopoli 2015; Yoffee 2015, 5), and even that it was some form of empire (Ratnagar 1991, 170; Dhavalikar 1995; Allchin & Allchin 1997).

Following Fairservis (1961, 1967, 1992; Malik 1968, Shaffer 1982), Possehl (1998, 282–3) argued that the Indus Civilization was a hegemony of chiefdoms, and that the cities were the seats of the chiefs that ‘had the character of super villages, more complex than villages but not like Ur, Uruk or Nippur, which were centres of vast political power with large temple complexes dedicated to their civic deity’. Such interpretations obviously have implications for the nature of control structures within cities, and the extent to which control extended into the surrounding hinterland. Possehl (2002, 6) noted that ‘kings are hard to find in the Indus Valley cities; nor are there palaces, bureaucracies, or ‘other trappings of “stateness”’, but Yoffee (2005, 228–9) noted that Possehl describes ‘Indus cities, social and economic differentiation, large public ceremonial areas with very large buildings and monuments, record keeping of various sorts, and the restructuring of the countryside around politically independent cities that share a common ideology.’ The key point that Yoffee (2005, 229) makes in relation to Indus control is in fact the key point of his book *Myths of the Archaic State* – there was no *one* form of archaic state. He explicitly notes that ‘Indus Valley city-states look different from Mesopotamian city-states. They were ruled differently and seem to have had different rules about how power was to be exhibited in them and, presumably, about how power was to be contested’ (Yoffee 2005, 229), and this is still valid.

Jacobsen (1986) and others have suggested that the Indus Civilization presents the political and administrative framework of a state (e.g. Chakrabarti 1995, 122–3, 1999, 199–200; Lal 1997, 236–8). Kenoyer (1994, 1997, 54; Wright 2010, 333), has previously speculated that the geographical extent of putative Indus city-states – whose capitals were the large-scale urban centres – ranged from 100,000 to 170,000 sq. km in area, implying that individual cities controlled vast hinterlands. However, these areas are far larger than the site sustaining areas needed to support a city, and areas of direct control are likely to have been much smaller. This likelihood makes it possible that medium and large sized town settlements operated as independent centres of regional power and administration (Petrie 2013; Sinopoli 2015; Petrie et al. 2017; Petrie 2017). In the absence of evidence that there was a hierarchy of cities, it appears that each of the Indus cities was an independent polity, and the smaller urban centres might have been subordinate to the larger cities or polities in their own right.

The production, exchange, and use of similar material in the cities and smaller urban centres and the similar spatial delineation of settlements into separate enclaves suggests that urban populations may have

been emulating each other both within and between settlements (Petrie 2013). Although it was created to explain a very different cultural context, at a certain level, these factors all conform to Renfrew’s (1986) model of peer-polity interaction, where the interaction between autonomous socio-political units is more significant than external links with other areas, and processes of transformation are brought about as a result of interaction between peer-polities in the form of competition (including warfare), competitive emulation, symbolic entrainment, the transmission of innovation, and increased flow in the exchange of goods (Petrie 2013). The element of this definition that does not accord neatly with common perceptions of the Indus cities is the role of warfare, but Cork (2011) has pointed out that evidence for warfare is particularly rare in ancient societies, and a range of Indus material may actually have been weaponry (Cork 2005). I have suggested that a major difference between the Indus Civilization and other contemporaneous societies is in the representation of violence, which could be related to both ideology and the distance between centres (Petrie 2013, 95). Although workable, the model of peer polity interaction is not neatly suited to the Indus case, and the suggestion that there were heterarchical relationships between the Indus urban centres may be more fruitful (Petrie 2013).

‘Crisis, what crisis?; the 4.2 kya event and the Indus

The beginnings of a change in the Indus urban sphere began at the end of the third millennium BC, such that by c. 1900 BC different social, economic and political structures were in place (Petrie 2017). Analysis of the networks of raw material acquisition and redistribution suggest that the final phase of the urban period (late Mature Harappan/Harappa 3C phase; c. 2200–1900 BC) was one of more intensive interaction (Law 2011, 466–7, Fig. 13.6). It was also apparently the period when Harappa was most densely occupied (Kenoyer 1991, 57; 2008), and the ‘Later’ phase of its Great Hall appears to have been (re-)built around 2200 BC (late Period 3B/early Period 3C) (Meadow & Kenoyer 2005, 99–101). However, it is notable that starting perhaps as early as c. 2200 BC, major structures at Mohenjo-Daro, including the Great Bath, fell out of use, and the settlement became progressively depopulated (Possehl 1997a, 215–17; 1997b, 458; Wright 2010). It is possible that the phase of intensive interaction, increased urban density and construction activity is indicative of population stress that put pressures on food production and supply chains (*cf.* Pande & Ersten 2014, 1753). The likelihood that changes were taking place is emphasized by the fact

that by c. 1900 BC, there appears to have been a reduction and reorientation of settlement in the entire Indus region. The largest settlements in Sindh and Cholistan had been abandoned or reduced in size and almost all others were displaced, whereas in Gujarat, Haryana and Indian Punjab it appears that several large-scale settlements were abandoned, and there was an increase in the number of small-scale settlements (Joshi et al. 1984; Mughal 1997, 51–2; Possehl 1997b, 460, Table VII; 2002, 212, 241, Table 13.2; Petrie et al. 2017; Green & Petrie 2018). The networks of raw material acquisition and the range of material being moved also reduced in this post-urban phase (Law 2011, 468, Fig. 13.7).

There is consensus that there was an increase in settlement numbers and density in northwest India in the posturban/Late Harappan period. However, reassessment of older data and new surveys and by the *Land, Water and Settlement* and *TwoRains* projects have shown no increase in the number of village-sized settlements in the central part of the plains during the post-urban phase, implying that there was no substantial increase in the local population in some areas (Singh et al. 2010, 2011; Petrie et al. 2017; Green & Petrie 2018). This observation suggests that the perceived intensification of village settlement post-urban/Late Harappan period in northwest India was concentrated in the areas that are warm and temperate, with dry winters and hot summers that lie along the Himalayan front and at the eastern edge of the plains (Petrie et al. 2017; Green & Petrie 2018).

The one large-scale settlement that continued to be occupied throughout the later Mature Harappan and into the Late Harappan period was Harappa (Petrie 2017). However, analysis of pathologies visible on skeletons from Cemeteries R37 and H, which span this protracted period of transition, has revealed evidence for increasing physical and social stress. Leprosy is attested in the urban period, but the Late Harappan skeletal remains have evidence for increased violence and disease, including cranial and post-cranial trauma, and various infections and diseases, including leprosy and tuberculosis (Lovell 1994; 1997; Robbins Schug et al. 2013a; 2013b; Robbins Schug & Blevins 2016).

Reduction in the density and scale of urban populations appears to be accompanied by the loss of many of the elaborate crafts and their concomitant technical virtuosity (Vidale & Miller 2000, 151–3; Wright 2010, 312–24). The distinctively decorated pottery and bangles of various types continued to be produced during the post-urban period, but the production of items such as long carnelian beads, standardized weights, and inscribed and decorated seals all ceased, as did the use of Indus signs (Possehl 1997b, 460–4; Kenoyer 2006; Wright 2010, 322). This phase also saw

the cessation of long-range trading with the Persian Gulf and Mesopotamia (Cleuziou & Tosi 2007; Wright 2010, 314). After the depopulation of the Indus cities, there appears to have been no large-scale settlements within the regions occupied by Indus populations for up to one thousand years.

A range of natural and human-induced causes have been put forward to explain this overarching process of change and transformation, with the former including factors like declining rainfall, desiccation, and river shift, and the latter including factors like invasion, reorientation of long-range trade, resource exhaustion, social evolution, population increases and responses to natural change (Allchin 1995; Possehl 1997a; 1997b; Wright 2010, 312–14). While invasion theories are now largely discounted, the new potentials of human genetic analysis have meant that they are still being explored (e.g. Narasimhan et al. 2018). More fruitfully, the investigation of the environments inhabited by Indus populations, and changes to those environments has seen ongoing research by a range of projects (reviewed in Petrie et al. 2017). There is also only limited proxy evidence for ancient climate that is proximate to the Indus zone and can thus be keyed into the available archaeological datasets (Petrie et al. 2017). Inferences that assume climate was a driver of culture change tend to look from the 'top-down', and end up in 'correlation equals causation' circularity. It is arguable that an understanding of the transformation of the Indus Civilization can only come from 'bottom-up' consideration of evidence of local climatic and environmental conditions, and human adaptation, sustainability and resilience to both those conditions and changes in those conditions (e.g. Madella & Fuller 2006; Miller et al. eds. 2011; Dixit et al. 2014; Petrie et al. 2017; cf. Aimers & Hodell 2011). Furthermore, to ensure that the impact of climate and climate change on human behaviour is not over-emphasized, it is also essential to consider if and how the interactions between human and the environment intersect with other social, economic and political dynamics.

The theme of water-related crisis has long been core to many narratives of Indus 'collapse', and arguments have been made for (and against) the impact of both flooding and river shift/drying, with the latter potentially being caused either by neo-tectonic processes, or climate change (Ghose et al. 1979; Yashpal et al. 1980; Mughal 1997; Lal 2002; Valdiya 2002; Shinde et al. 2006; Danino 2010; reviewed in Petrie 2017). There have now been several attempts to date the flow of perennial water through various paleochannels within the Indus River basin, and to link this process to urban transformation. There is growing consensus that at least one major paleochannel ceased to be a

perennial watercourse before the Holocene (Saini et al. 2009; Lawler 2011, 23; Clift et al. 2012; Giosan et al. 2012; A. Singh et al. 2017), but there is some evidence of ephemeral water flow through some channels at different points during the mid-Holocene (Clift et al. 2012; Giosan et al. 2012; Maemoku et al. 2012; Saini et al. 2009; Shitaoka et al. 2012; Durcan et al. 2017). It is extremely likely, however, that many if not all of the explanations that have been put forward to explain the processes of hydrological evolution and change in northwest India, and their relationship to Indus populations, are either not complex enough, or do not consider the full hydrological complexity of the region (Orengo & Petrie 2017, 2018).

Across greater Western and South Asia there is relatively limited climate evidence that relates specifically to the period in which the Indus cities were occupied (*c.* 2500–1900 BC). There is, however, a range of evidence for a major climate ‘event’ at *c.* 4.2–4.1 ky BP or *c.* 2200–2100 BC, which appears to be related to a cooling event in the North Atlantic (Bond Event 3; Bond et al. 1997), shifts in the Inter-Tropical Convergence Zone, and marked weakening of the Indian Summer Monsoon (Weiss et al. 1993; deMenocal 2001; Staubwasser et al. 2003; Clift & Plumb 2008, 196–216; Cronin 2010, 235–6). It has been argued that this particular event had a major socio-economic impact in Mesopotamia and Egypt (Weiss et al. 1993; deMenocal 2001; Staubwasser & Weiss 2006; Weiss 2017), and its broad chronological correlation with the onset of Indus de-urbanization has also been noted (Staubwasser et al. 2003; Staubwasser & Weiss 2006; Dixit et al. 2014). It is evident, however, that there was variation in its timing, duration, and impact, with some areas showing acute effect (e.g. Middle East, Arabian Peninsula, Red Sea), while others apparently were little affected (e.g. northern Europe) (e.g. Roland et al. 2014). There is evidence for climate and climate change from within the Indus zone from Lake Kotla Dahar in Haryana, India, which shows that the marked weakening of the ISM affected NW India at *c.* 4.1±100 ky BP/*c.* 2100±100 BC (Dixit et al. 2014). While this record demonstrates that the weakened ISM had a direct impact upon one of the regions occupied by Indus populations, it is not yet clear how this shift affected other regions, and more climate records that increase spatial resolution are needed (Petrie et al. 2017). New analysis of samples from a sediment core close to the mouth of the Indus (63KA) has shown that the weakening of the ISM was preceded by a weakening of the Indian Winter Monsoon (IWM) after a period of peak strength (Giesche et al. 2019). This finding supports the suggestion that the so-called 4.2 ka BP event was a complex phenomenon that potentially involved a range of weather dynamics

that effected regions differentially. The impact on both the ISM and IWM *c.* 4.3/4.2 ka BP potentially had a profound effect on the Indus Civilization.

Weakening monsoon strength (winter and summer) after *c.* 2300–2200 BC does correlate broadly with both the maximum extent of occupation at Mohenjodaro and Harappa and the onset of Indus urban decline, though it is clear that this was a variable process (e.g. Wright 2010, 43; Petrie 2017). The chronological correlation between the data sets is, however, imprecise due to the limitations of radiocarbon dating techniques in terms of precision (Dixit et al. 2014; Staubwasser & Weiss 2006). Monsoon weakening in some areas is only part of the story, and consideration of human responses is critical. For example, it has been suggested that decline in monsoon strength led to the diversification of the Indus crop assemblage through the adoption or intensified use of more summer and drought resistant crops such as millet and also rice (Madella & Fuller 2006, 1298; Giosan et al. 2012; Wright 2010:321ff.). Madella & Fuller (2006, 1298; also Fuller 2003; Madella 2014, 229) have hypothesized that the shift toward drought-tolerant rain-fed crop species that produce lower yield per unit area would have resulted in there being less surplus available to provision larger centres. They also suggested that the cultivation of such crops may have encouraged larger numbers of smaller communities, and that ‘the strategic shifts by farmers to other crops may have contributed to the decline of the economic foundations of Harappan urbanism’ (Madella & Fuller 2006, 1298). The evidence for the exploitation of a diverse range of crops before, during and after the urban phase from Masudpur VII and Masudpur I encourages a recalibration of these hypotheses (Petrie et al. 2016, 2017; Bates et al. 2017a, 2017b, 2017c; Petrie & Bates 2017). Wholesale changes in the efficiency of yield production may not have been an integral part of the de-urbanization trajectory, which has important implications for discussions of fragility and resilience. However, until we have archaeobotanical evidence from the neighbouring urban site of Rakhigarhi itself, or material from settlements in the hinterland of Harappa, it won’t be possible to fully reconstruct the structure of provisioning in urban sites and their hinterlands (Petrie 2017).

Petrie et al. (2017; Petrie 2017) have suggested that the weakening of the ISM around *c.* 2200–2100 BC meant that the climate in the subsequent period became ‘unpredictably unpredictable’. By this we meant that before and during the Indus urban phase, populations were familiar with ‘predictable unpredictable’ conditions and their farming strategies were tailored to make use of water supplied by combinations of rainfall, inundation, small-scale irrigation and/or

lifted water (*cf.* Miller 2006). Populations in specific areas across the Indus zone might have been able to survive one, two, or even more years of drought, either through reliance on their own resources, or through support from other regions. However, when this range was exceeded, such as when populations were faced with protracted periods of drought, the local and medium-to-long range provisioning and support networks may not have been able to sustain the status quo. I have suggested that in such a situation, farmers may have had to engage in constant risk mitigation, thereby reducing opportunities to produce surpluses, and in such situations it is possible that living in large groups (i.e. urban centres) was not an option (Petrie 2017; see below).

A prolonged weakening of the Indian Summer Monsoon would almost certainly have had a dramatic impact upon water availability in the Indus River basin, but this impact would not have been consistent across this environmentally diverse zone. There are, however, clearly significant limitations in the core body of evidence that inform understanding of Indus de-urbanization, particularly in terms of spatial and chronological coverage, and the impact of environmental and climatic factors. Nonetheless, we should speculate about how changes to the climate system of anything more than short duration are likely to have had an impact upon food security and resilience of urban and other populations across this diverse region.

Urban 'stability and fragility' and rural 'resilience'

The Indus Civilization does not fit neatly into a narrative of extreme fragility (*cf.* Yoffee, 552ff; 2016, 1061; also Scott 2017), primarily because of the longevity of its urban centres, which have to cope with environmental variability and chance, and resist 'collapse' for an extended period. I have attempted to highlight how the relative invisibility of prominent leaders, the lack of translatable texts that might provide some succour, and the lack of consensus about how urban centres and the Indus Civilization as a whole were socio-economically and politically organized create practical and interpretive challenges. However, I have also argued that the exploration of the dynamics of fragility, robustness, resilience and sustainability in the Indus context as outlined here provide a way of exploring fragility in a distinctive fashion.

It is important to consider whether we are discussing fragile states or fragile cities. Yoffee (2015, 552; 2016, 1056, 1061; this volume) has made it clear that there was a contrast between infrastructural (state) power and the heterarchically structured underpinnings of Mesopotamian society. In the Mesopotamian

example at least, it is arguable that it is the state-level structures and the power of individual kings and their courts (Yoffee's 'infrastructural power') that is the most fragile component, and not the city itself (Yoffee this volume). While there are examples of cities that disappear with their ruler and or dynasty (e.g. Agade, Ur III period Ur, Dur Sharrukin), there are many other cities that were occupied for thousands of years (e.g. Uruk), and cities may continue to exist without political power (Yoffee 2016, 1060, this volume). This distinction between the political fragility of the state and capital cities, and the relative longevity of 'other' cities is important when it comes to the Indus case, with its lack evidence for kings, queens and courts.

Although a range of political changes across a period of up to 700 years is inevitable, Middleton's (2017, 93) point that for the Indus Civilization these changes 'are not visible to us as they are in some other societies' continues to hold. Without clearer understanding of Indus socio-economic and political structures, and the information documented in the Indus sign system and its associated administrative systems of stamp seals and standardized weights, we can only speculate about political dynamics. It is arguable that the lack of evidence for political change may indicate that Indus cities were robust rather than fragile.

In his paper prepared for the workshop, Robertshaw asked, 'Is apparent "stability" (for several centuries) in some early states a result of constant adjustments and accommodations with internal and external forces?' (see Yoffee this volume; Stark this volume). In the Indus context, the lack of hierarchical political leaders may have facilitated constant adjustments and accommodations taking place via civic councils and/or Green's (2018) specialized spaces for community or civic level interaction. This factor is potentially very important for discussions of fragility in the Indus context. Early interpretations suggested that the Indus Civilization was unchanging and, in many ways, dull (e.g. Wheeler 1950, 28–9), and there is an ongoing narrative that argues that the Indus Civilization is part of a grand and long-term Indus Tradition that is fundamentally linked to the later Early Historic phase of urbanism (e.g. Kenoyer 2006). However, I argue that the Indus Civilization was marked by relatively constant adaptation, change and transformation at various scales, with the Indus cities seeing repeated phases of expansion and development, and the building, rebuilding and remodelling of walls, platforms, non-residential and residential buildings. Across periods and also within the urban period, there appears to have been instances of settlement displacement, which implies the need for

and facility with adaptability. This is in keeping with the suggestion that Indus populations were adapted to living in a predictably unpredictable diverse and variable environmental context. Their ability to be adaptive appears to have made them robust. However, from *c.* 2100 BC, there is clear evidence for the beginning of more profound processes of transformation that appear to have contributed to Indus de-urbanization, with the environmental context potentially entering an extended period of unpredictable unpredictability (Petrie et al. 2017; Petrie 2017).

That the processes of transformation were profound is indicated by the abandonment of major structures at Mohenjo-Daro and other sites by *c.* 1900 BC, as well as ultimate abandonment of all of the cities, bar Harappa. We also see the loss of technical virtuosity, and have evidence for violence, infection and disease at Harappa. In addition to these acute changes, we also see large-scale displacement of settlement concentrations towards the areas of the east that today receive more abundant monsoon rainfall. Significantly, the evidence from Cholistan indicates that mobility and relocation had potentially been common even in the urban period, but the level of settlement displacement between the urban and post-urban periods appears to have been more substantial, and there is similar displacement seen in other regions (Petrie & Lynam in prep). The pattern of the shift is inconsistent, however, and does not just appear to be 'to the east', but to particular parts of the eastern regions – possibly to areas that received the most summer rainfall. The degree to which this process was precipitated by the weakening of the Indian Summer Monsoon remains unclear, though we now know that the climate in the Indus region underwent change significant enough to have plausibly had an impact on human populations.

It is important to consider the limits of adaptability in such a context. What happened to the ostensibly robust Indus cities in the face of these changes? Did the climate become too dry? What if choices made by farmers were too diverse? Did urban fragility in the Indus context result from the climate changing beyond the ability of populations to adapt? Such questions encourage consideration of the degree to which Indus populations were fragile and/or resilient in the face of crisis.

Discussions of resilience in the Indus context have been relatively limited. Zerboni et al. (2016, 61) have suggested that centrally controlled Indus socio-economical structures combined with hydroclimatic stress decreased the resilience of Indus populations. In contrast, Petrie et al. (2017; Petrie 2017) have suggested that while: 'Large cities and high local population densities may have become unsustainable, but sustainability,

resilience and continuity may have been possible by resorting to embracing rural lifeways that saw the maintenance and dispersal of diverse approaches to substance.' It is arguable that Indus cities were inherently robust because of the nature of long-term resource and cultural investment, and the supply chains that were needed to provision them. They may also have been resilient in the short term, and capable of serving as centres of refuge in times of stress. However, in the face of major hydroclimatic stress they may well have been neither resilient nor sustainable in the longer-term. Nonetheless, while they could ultimately be seen as fragile, Indus cities do not appear to have been fragile in the acute sense.

What we see in the Indus cities contrasts with the Indus rural populations. Indus populations appear to have been resilient, sustainable and capable of continuity through simplification and embracing rural lifeways, with farmers having a range of crops to choose from to suit their local environment and water supply (Petrie 2017; Petrie et al. 2017).

Given the diversity and complexity of the environment across the Indus Civilization, it is unlikely that the weakening of the ISM will have had the same impact everywhere (Wright 2010; Petrie 2017). Petrie et al. (2017) have suggested that climate change may have introduced a degree of entropy into what had become a very complex and interactive urbanized system. Risks to food security will have had a range of economic impacts, and large cities and high local population densities may have become unsustainable. Indus populations certainly appear to have embraced economic simplification in the Late Harappan period through the reduction in the scale of settlements and their interaction networks. Sustainability, resilience and a degree of cultural continuity thus appear to have been possible as a result of more fully embracing rural life-ways that saw the maintenance and dispersal of diverse approaches to substance, including a balance of summer and winter crops. Smaller populations would have been far better suited to a situation where risk mitigation was essential, and smaller groups were also presumably social environments where choices about crops, farming practices and cultural behaviour could be the most flexible. I have suggested that the Late Harappan phase of the Indus Civilization might be a feasible example of sustainability through systematic simplification, following Tainter's (1988, 151–2; 2006, 98; 2011, 29–31) hypothesis that the Byzantine Empire was sustainable because it systematically simplified, and thereby reduced its consumption.

In the context of trying to draw some robust conclusions in considering the place of the Indus Civilization in the fragility narrative, I contend that

the absence of unequivocal evidence for 'infrastructural power' makes it challenging to properly discuss the fragility of Indus states or political control. Indus cities appear to have been fundamentally stable as urban entities, and the fact that the production and redistribution economy appears to have been extensive, and Indus urban populations engaged in emulation, suggests that there were layers of socio-economic integration across the Indus Civilization. However, this 'veneer' of socio-economic and cultural uniformity and integration overlay considerable variability and diversity of cultural practices (Petrie et al. 2018). It may have been this veneer that was vulnerable to 'shocks' to parts of the overarching system. Weakened winter and summer monsoons from c. 4.3–4.2 ka BP may have had acute and more long-term effects, including ground water depletion, deforestation, and water stress on plants, animals and people. Each of these factors will have invoked responses from Indus populations, and population displacement may have been imperative. We inevitably come back around to debating the nature of 'collapse' and the ways in which it occurs, and it is interesting that Yoffee (2015, 556) has speculated about Indus 'collapse as emigration'. There is some likelihood that Indus populations were always engaging in regular displacement, so we need to refine our understanding of the scale and locus of this process, and the degree to which it entailed changes in social and economic behaviour. Although Indus cities were stable for a protracted period, they appear to have had the potential to be fragile. This fragility is unlikely to have been acute, however, and urban decline appears to have been protracted. It is arguable that the relative robustness of the Indus cities derives from the fact that they were 'built' upon a rural socio-economic underpinning that was inherently resilient and sustainable, which derives from the need to adapt to a variable and diverse environmental context.

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Notes

- 1 Trigger (2003, 33–4) left the Indus Civilization out of his *Understanding Early Civilisations* because of its lack of textual evidence, but noted that this 'deprived his sample of significant variations in social organisations and beliefs'.
- 2 Although seeking to focus on other material evidence, Yoffee's (2016, 1056) discussion of Uruk refers to texts that demonstrate the division of labour, highlighting the inescapable attraction of such evidence.

Chapter 8

Fragile States in Sub-Saharan Africa

Peter Robertshaw

Although many college textbooks on world prehistory seem to regard only three episodes of the African past as relevant to the human story – the earliest hominins and tools, the advent of modern humans, and ancient Egyptian civilization, a good portion of sub-Saharan Africa was occupied at one time or another by states, albeit mostly dating to well within the last 3000 years (Fig. 8.1).¹ These states varied enormously in size, duration, monumental architecture (or lack thereof), and in hierarchical and heterarchical complexity: contrast, for example, Pharaonic Egypt (see, e.g., Morris this volume) with the Luba kingdom of central Africa (Reefe 1981). There is of course no reason that all these states should share traits simply because they happen to be located on the African continent.

The kingdoms, as they are frequently called, of sub-Saharan Africa are often considered as ‘secondary’ states that have little to contribute to debates about the evolution and collapse of complex societies. This is unfortunate because many of these African societies have rich archaeological, historical, linguistic, and ethnographic records that permit detailed scrutiny of their political, economic, religious, social, and cultural histories. For this reason, they are arguably ideal case studies for a conference on the evolution of fragility in states. But is it acceptable to focus on ‘secondary’ states? Parkinson & Galaty (2007, 114) note that, ‘confusion about the meaning of the term secondary has led to a general presumption that if states were ‘secondary’, their formation did not need to be explained’. However, mere recognition of the fact that a state either emerged as the successor of a pre-existing state or had some connections to a primary state elsewhere is clearly insufficient as an explanation of the state’s development and history. Nevertheless, comparative study of secondary state formation indicates some shared features of interest, viz.:

Secondary states formed in two basic manners: as remnants of larger entities that broke up after an initial florescence or as competing polities that developed at the edge of more mature complex societies. Both processes involved competition between like-sized, similarly organized social units [peer polities], and therefore both resulted in the adoption of older organizational strategies by new, or emergent, corporate groups. (Parkinson & Galaty 2007, 125)

However, many states in sub-Saharan Africa do not fit easily into the binary classification of ‘primary’ (or ‘pristine’) and ‘secondary’ states and their formation also does not always align with the two explanations proposed by Parkinson & Galaty. For example, the first states in the Great Lakes (or Interlacustrine) region of Africa were to all intents and purposes primary states, but they did receive small quantities of exotic goods from much larger states that were part of the Indian Ocean world system in the first half of the second millennium AD. In the jargon of world-systems theory, this would condemn these central African states to the status of ‘peripheries’ whose primary purpose was supposedly to supply ‘cores’ with raw materials in unequal systems of exchange that fostered dependency (see Killick 2009). Such a view courts the danger of overlooking the value of studying these states as functioning entities in their own right. In similar vein, Trigger’s distinction between ‘city-states’ and ‘territorial states’ is also not readily applicable to much of sub-Saharan Africa, not least because many of the states in this region lacked cities (see also Marcus & Feinman 1998, 8–10). Typologies often have heuristic value, but they must not become straitjackets that hamper rather than heed investigation.

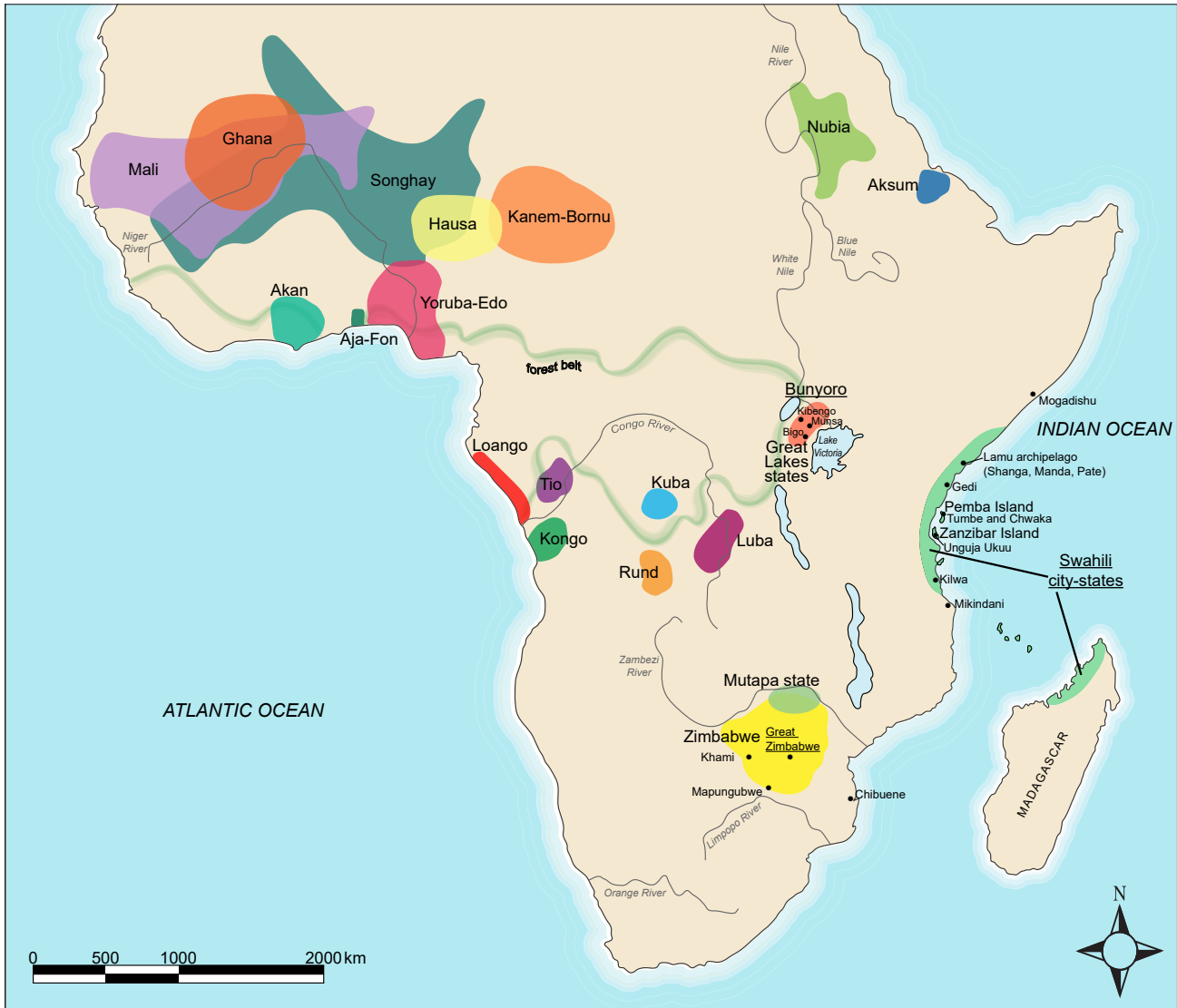


Figure 8.1. A sampling of the precolonial states of sub-Saharan Africa, thereby giving an indication of their distribution, together with archaeological sites mentioned in the text (parts of the map redrawn from Monroe 2013).

One might also ask whether the societies that I intend to examine here can really be described as ‘states’ rather than ‘chiefdoms’, ‘intermediate-level societies’ or some other term. This depends of course on one’s definition of a ‘state’. Connah, in his survey volume of ‘African civilizations’ (2016, 7), claims to follow Haas (1982, 172): ‘a stratified society in which a governing body exercises control over the production or procurement of basic resources, and thus necessarily exercises coercive power over the remainder of the population’, but this definition not only begs the question of how many strata but it is also not a good fit for many African states where there seems to be little or no evidence of coercive power. Baines & Yoffee

(1998, 254) also define a ‘state’ in political terms: ‘the central, governing institution and social form in a differentiated stratified society in which rank and status are only partly determined through kinship’ (see also Yoffee 2005, 17), a definition that is more forgiving in terms of my African examples. Marcus & Feinman (1998, 6) offer a list of seven traits that characterize ‘archaic states’ without requiring that a state must necessarily check all seven boxes, a fuzziness of definition for which Yoffee (2005, 15–16) has sympathy. Certainly, many archaic states in central and southern Africa probably do not always meet the expectation of ‘a change in the settlement hierarchy from three to four levels’ (Yoffee (2005, 16).

Despite the frequent absence of typical traits of states like cities, monumental architecture, and writing, early European travellers in central Africa had no qualms about using terms, such as 'kings', 'courts', and 'armies', to describe the workings of complex African societies that they encountered. They clearly believed that their European models of states were readily applicable to African contexts, a precedent that I intend to follow here in as much as I assume that I am dealing with states that may have lessons to impart about fragility and resilience.

Three African states

The study of African political formations, both state and stateless, represented the birth of political anthropology (Fortes & Evans-Pritchard 1940; Lewellen 1983, 7). However, the colonial-era context in which much of the first archaeological explorations of the traces of early African states took place fostered the view that the development and success of these states should be credited to civilizing influences from outside the continent. This perspective in turn encouraged later researchers to focus on countering colonialist narratives with ones that emphasized the indigenous origins, bolstered sometimes by early radiocarbon dates, and achievements of African kingdoms, often at the expense of overlooking the tremendous variety of African political and social systems (Monroe 2013). Only in the last couple of decades has the emphasis shifted from universalist narratives of cultural development to the exploration of the rich diversity of pre-colonial African complex societies (S. McIntosh 1999; R. McIntosh 2005; Stahl 1999, 2005; Fleisher & Wynne-Jones 2010; Monroe 2013).

I explore three states in detail in this chapter chosen from the cornucopia of African examples of precolonial states. I chose three states with whose archaeology and history I am relatively familiar. They are certainly not a random sample, but they do differ considerably from each other, allowing exploration of variability as well as shared features. Great Zimbabwe in southern Africa is generally considered to have been a 'territorial state', while Swahili 'civilization' comprised several 'city-states' (in Trigger's (2003, 92–4) terminology; see also Charlton & Nichols 1997) distributed along the length of the East African coast (Sinclair & Hakansson 2000; LaViolette & Fleisher 2005). The kingdom of Bunyoro in the Great Lakes region of central Africa was a much smaller entity than my other two case studies, warranting the label of 'early state' rather than 'civilization' because, in Trigger's view, kinship remained the underlying principle of socio-political organization and the gap in wealth between rich and

poor was less marked than in early 'civilizations' (Trigger 2003, 47). Regardless of the merits or demerits of Trigger's classifications, ancient Bunyoro, in its scale and organization, resembles many precolonial African states. Moreover, its rich corpus of oral traditions and ethnographies, combined with abundant historical information gleaned from linguistic studies, as well as some archaeological evidence, permits more in-depth analysis than is often possible for some larger ancient civilizations. Furthermore, this is the early state with which I am most familiar from my own archaeological endeavours. The choice of three states, rather than fewer or more, was based on logistical concerns.

I begin with brief culture historical notes on each of the states in my case studies to provide a context for readers unfamiliar with the past of sub-Saharan Africa.

Great Zimbabwe

Great Zimbabwe (Fig. 8.2) was the capital of a state known to academics by the same name. Great Zimbabwe, the state, was at its zenith between roughly the late thirteenth and mid-fifteenth centuries AD, though settlement at the capital both preceded and outlived this highwater mark. Distinguished by at least a four-level, possibly a five-level site-size hierarchy, Zimbabwe period sites are located across most of the modern southern African country of the same name, as well as in adjacent areas of Botswana, South Africa, and Mozambique (Garlake 1973; Pikirayi 2001). While most popular accounts and textbooks posit that the gold mined in the region and traded to the East African ports of the Indian Ocean world was the source of Great Zimbabwe's wealth, the importance of cattle (e.g. Garlake 1978) or both cattle and agriculture (e.g. Pikirayi 2001) to the economic basis of the state should not be underestimated. Ritual and religion, kinship connections to founding ancestors, ownership of land, as well as possession of other metals and ivory, and the materialization of power in drystone walling all contributed to the acquisition and maintenance of authority among Great Zimbabwe's leadership.

There are two competing models for the emergence of Great Zimbabwe: 1) the state was the successor to an earlier, primary state centred on Mapungubwe (e.g. Huffman 1986, 2000, 2009); 2) the state emerged as *primus inter pares* because of multiple causes, including competition among several peer polities, a view based in part upon new fieldwork (Chirikure et al. 2013, 2014, 2016; Van Waarden 2011; cf. Huffman 2015a, 2015b). Bound up with these competing models is disagreement about the importance of exotic (prestige) trade goods in the development and institutionalization of wealth disparities between elites and commoners (e.g. Huffman 1972, 2009; Calabrese



Figure 8.2. *The Great Enclosure and adjacent stone walling at Great Zimbabwe (image courtesy of Wikimedia Commons).*

2000, 2007; cf. Chirikure 2014; Moffett & Chirikure 2016). Similar disagreements revolve around Great Zimbabwe's decline: 1) Great Zimbabwe itself was largely abandoned and succeeded by two daughter states, the Mutapa state in far northern Zimbabwe and the Torwa-Changamire (Rozvi) state with its capital at Khami (Fig. 8.3) and later at Danangombe (Fig. 8.4), about 250 km west of Great Zimbabwe (Huffman 1982, 2007); 2) there was considerable chronological overlap between Great Zimbabwe and the Mutapa and Torwa-Changamire states, with frequent changes in the location of capital sites (Chirikure et al. 2012). I explore these competing visions of culture history below, which have implications for our understanding of fragility and resilience in these states.

Swahili

The East African coast and adjacent islands from southern Somalia to central Mozambique were and still are home to the Swahili, speakers of a Bantu language, ki-Swahili, and possessors of a shared culture that Connah (2016, 222) notes was 'partly urban, mercantile, literate, and Islamic'. Swahili civilization (*sensu* Yoffee 2005, 17) developed politically into competing city-states whose individual fortunes rose and fell through time because of the complex interplay of dynamic economic and political forces at the western edge of

the Indian Ocean and the eastern edge of the African continent (Pearson 1998; Chaudhuri 1985; Beaujard 2018). Wealth derived primarily from brokering the trade between these two great regions of what has been called the Indian Ocean (e.g. LaViolette 2008, 24) or Afro-Eurasian World System (Beaujard 2018).

As has been noted many times (for an excellent summary see Horton & Middleton 2000, 2), early archaeological work that focused on stone-walled towns (e.g. Fig. 8.5) and imported goods from across the Indian Ocean combined with colonial-era historiography and colonialist mindsets to suggest that the Swahili were an urban elite who colonized the East African coast from the Middle East, primarily Arabia, bringing with them Islam and its associated cultural refinements, and who then intermingled with indigenous Africans to create a Creole society. The Swahili themselves embraced this reconstruction of their origins because not only did it jell with their own historical traditions, but it also served to enhance their status with their English and earlier Omani and Portuguese colonial overlords (cf. Hobsbawm & Ranger 1983). Independence in the 1960s and 1970s gradually encouraged a revision of the consensus academic view of Swahili origins to one that emphasized indigenous African roots. Excavations at the town site of Shanga on Manda Island in the Lamu archipelago of Kenya, where Mark Horton (1996) traced



Figure 8.3. *Khami – restored elite stone walling (image courtesy of Wikimedia Commons).*



Figure 8.4. *Danangombe – a later Rozvi capital (image courtesy of the Archaeology Division, School of Geography, Archaeology and Environmental Studies, University of the Witwatersrand, Johannesburg).*



Figure 8.5. Kilwa – audience court of the Husuni Kubwa palace (image courtesy of Stephanie Wynne-Jones).

the settlement's founding to several small, probably circular houses of perishable materials surrounding a well and dated to about AD 760, tipped the scales irrevocably in favour of an African origin (see also Horton 1986; Nurse & Spear 1985). He also discovered a small, probably timber-framed building at the site, also dating to the late eighth century, that he interpreted as a mosque, indicative of the early introduction of Islam to the East African coast (Horton 1996, 2018). Subsequent research, primarily by Tanzanian archaeologists (Chami 1998; Chami & Msemwa 1997; Juma 1996), demonstrated a longer, developmental sequence for settlement on the coast that involved some maritime trade with the Roman world.

Swahili settlements along the coast in the first millennium AD were mostly villages combining agriculture, the keeping of livestock, with some fishing and involvement in maritime trade. Some settlements, notably Manda in northern Kenya, Tumbwe and Unguja Ukuu on Pemba and Zanzibar Islands respectively, Kilwa in southern Tanzania, and Chibuene in Mozambique, however, were more successful and grew in size and in the number of imported goods

by the late first millennium. Around AD 1000, a suite of major changes in settlement patterns, architecture, and ceramic traditions signalled a reorientation of Swahili society into one that has been characterized as maritime, cosmopolitan, urbanized, and Islamized (Fleisher et al. 2015). This society has endured to the present, albeit one that has survived the vicissitudes of Portuguese, Omani, and British interventions from the end of the fifteenth century onwards (Pearson 1998; Horton & Middleton 2000).

Bunyoro

Bunyoro, also known sometimes as the Bunyoro-Kitara or Kitara kingdom, was one of many pre-colonial states in the Great Lakes region of East Africa. First encountered by European explorers searching for the source of the Nile, the last independent *omukama* (king) of Bunyoro, Kabarega (variously spelled, including 'Kabaleega'), fought a fierce but unsuccessful guerrilla war against the British at the end of the nineteenth century that resulted in his exile to the Seychelles and the establishment of indirect British rule. A succession of *abakama* (plural of *omukama*) occupied the

throne during the colonial period, but the institution of kingship was abolished by the independent Ugandan government in 1967. However, it was reinstated in 1993, primarily as a cultural institution.

Wikipedia (2018) lists 24 kingdoms in the Great Lakes region in the eighteenth and nineteenth centuries, though some of these were small and often short-lived polities. The more substantial states included Buganda, Rwanda, Bunyoro, Nkore, and Burundi. Knowledge of the history of these states began with the collection of king-lists, each of which became longer with time as individual states sought to enhance their status with their colonial overlords by using British standards of worth (Henige 1974). Oral traditions of the history of Bunyoro began to be recorded early in the twentieth century (notably Fisher 1911), while the spread of literacy among the Banyoro eventually led to indigenous histories (notably Nyakatura 1973). These traditional histories divide the past into events associated with three successive dynasties, the last of which is the Bito, among whose rulers were Kabarega and the current *omukama*. Bito dynasty rulers presided over a state with three main social strata, the Bito elite, Bahuma nobles who specialized in cattle-keeping, and Bairu agricultural peasants. Capital sites were peripatetic, with each new *omukama* building a new capital supposedly laid out according to an established pattern that included several large buildings, all built of perishable materials (Roscoe 1923, 73–86). Wars of succession were common, which reinforced the importance of the kingship as the ‘indispensable conditions of security and national well-being’ (Beattie 1971, 111). The ancient kingdom of Bunyoro-Kitara also plays a role in the history of political anthropology; the concept of the ‘segmentary state’ was proposed by Aidan Southall (1956) based on his ethnographic work among the Alur, Ugandan neighbours of Bunyoro. Casting around for other and perhaps better examples of this political system, Southall (1988, 81) pointed to the historical kingdom of Bunyoro-Kitara as a ‘very large, loose, segmentary state,’ which he considered to have been ‘held together by ritual suzerainty, with a centralized core’ (Southall 1999, 33; see Robertshaw 2010).

Archaeological evidence for Bunyoro history has focused on two types of sites, earthworks and shrines, excavations at some of which, in concert with historical linguistic research and analysis of oral traditions, have led to attempted explanations of the development of the state and its subsequent history (e.g. Robertshaw 1994, 1999a, 1999b, 2003; Robertshaw & Taylor 2000; Schoenbrun 1998). It is, however, fair to state that the archaeology of the states of the Great Lakes remains woefully understudied.

State formation

While there is no a priori reason the same factors and processes should have been operative in state formation across Africa, Connah (2016) nevertheless attempted to identify some ‘common denominators’. This exercise led him to conclude that control of highly productive land within the context of increasing population pressures was the ‘crucial common factor underlying the emergence of African elites’ (2016, 351; see also Johnson & Earle 1987). Added to this basic ingredient was external long-distance trade, itself an ‘intensifier’ of social changes that had begun with elite control of limited resources, such as copper, salt, iron, and ivory, which already circulated in ‘extensive *internal* trading networks’ (p.350, emphasis in original). A further important ingredient was ‘religious ideology’ that ‘legitimized and reinforced’ the social hierarchy (p.352). Connah himself bemoans this ‘somewhat mechanistic’ explanation for the origins of social complexity, remarking that ‘surely the reality is more complex than that’ (p.353).

The hypothesis of increasing population pressure and concomitant elite control of productive arable land is problematic for at least some African cases, particularly the states of the Great Lakes and perhaps also Great Zimbabwe and its antecedents. Control of internal trading networks and productive land are indeed mechanisms by which elites may seek power. However, the emergence of an elite and the formation of a state are not the same thing. Thus, Connah fails to distinguish between those factors that might lead to the establishment of a chiefdom and those that might bring a state into existence. Other than the brief mention of ideological legitimation, there is no discussion of how group fission would be prevented in the process of state formation. Moreover, exigencies of the archaeological data, particularly the paucity of regional site surveys, often preclude a firm conclusion about whether population pressure preceded or succeeded state formation. On present evidence, the latter seems likely, except perhaps in very circumscribed areas such as Nubia.

If population densities were low in the earlier stages of state formation, then early elites may still have competed for control of internal exchange networks, but would there also have been a shortage of fertile agricultural land over which competition might take place? This is a difficult question that brings into focus two competing stereotypes of African agriculture. On the one hand, Africa has often been portrayed as possessing poor, easily exhausted, and eroded soils on which rain falls erratically and often so heavily that essential nutrients are washed

away. On the other hand, Africa and particularly its tropical rainforests have been viewed as veritable Gardens of Eden where almost anything will grow. In this context, some scholars have drawn attention to the tremendous productivity of some introduced Southeast Asian crops, especially bananas. Reality probably lies between these two extremes; each part of Africa must be examined separately in terms of its agricultural potential. In the Great Lakes region of East Africa, fertile land appears to be plentiful and in Rwanda supports the highest rural population densities in modern Africa. Historical and ethnographic data reveal that many pre-colonial African chiefdoms and states had very low population densities whereas the opposite was true of acephalous societies (Shipton 1984; see also Fortes & Evans-Pritchard 1940). In the Great Lakes region in earlier periods it was not fertile land that was in short supply, at least in the centuries prior to state formation; it was agricultural labour (Robertshaw 1999a). Therefore, elites are likely to have pursued wealth-in-people rather than wealth-in-things (Vansina 1990, 251; Guyer 1993; Guyer & Belinga 1995; Nyerges 1992).

Control of internal exchange networks is also possible but the evidence for it is far from overwhelming, as perhaps one might have predicted based on Africa's diversity. Examples of control of such networks include the likelihood that Ile-Ife's emergence as a centre of kingship in West Africa was at least in part attributable to its near-monopoly in the production and distribution of beads (Ogundiran 2002, 434), while the monopoly of valuable local products, such as copper and salt, in the Kongo kingdom of central Africa to exchange for exotic items was critical for the acquisition and retention of power (Ekholm 1977). However, in both these cases the society in question was already enmeshed in external trade relations, including a trade in slaves, so control of internal trading networks may have been a product of the desire for external trade goods. Thus, contra Connah (2016, 350), external long-distance trade may have led to attempts at control of internal exchange networks rather than vice versa. Furthermore, Chirikure (2014, citing Mudenge 1974, 1988) has recently drawn attention to the fact that, by the time of Portuguese contact in the sixteenth century, the rulers of the Mutapa state, the successor to that of Great Zimbabwe, did not monopolize the trade with the coast that brought glass beads, cowrie shells, and cloth into the interior, though they did tax that trade, with glass beads being one acceptable form of payment. Under these circumstances, Chirikure (2014, 721) argues for the enduring importance of ancestors, cattle, and land as the bases of royal power. Thus, in summary, discussion of the control of land

and of exchange networks represents too narrow an analytical focus for understanding of state formation in tropical Africa. We are better served by looking at the individual case studies.

Great Zimbabwe

A fascinating, if sometimes acrimonious (e.g. Chirikure et al. 2016), debate has been waged recently over the explanation of state formation in what is often called southern Zambesia, a region comprising the modern state of Zimbabwe and adjacent parts of Botswana, South Africa, and Mozambique that includes Great Zimbabwe and all the sites that may have been incorporated into the Great Zimbabwe state and its antecedents. The model of state formation championed by Tom Huffman (e.g. 1986, 2000, 2009, 2010, 2015a, 2015b) argues that there was only one state at a time for much of the region's pre-European past, with a pristine state, with its capital at Mapungubwe (Fig. 8.6), eventually succeeded by that of Great Zimbabwe. The genesis of the Mapungubwe state could be traced to three major factors: (1) successful control of the accumulation and distribution of exotic trade goods, notably glass beads and probably cloth, acquired in exchange for gold and ivory, elephants being abundant in the Mapungubwe area in the centuries leading up to Mapungubwe's florescence in the thirteenth century; (2) population growth supported by extensive cultivation of fertile agricultural land in the vicinity of Mapungubwe during a period of higher rainfall; (3) rain-making and from it the emergence of sacred kingship that served to provide ideological legitimacy. In this model prestige goods are a more dependable form of wealth than cattle because cows are harder to look after than beads; thus, inequalities of wealth that may have originally been based on the size of one's cattle herd could be materialized and entrenched through the acquisition of prestige trade goods. It should, however, be noted that glass beads are found in the Shashe-Limpopo region, where Mapungubwe is located, from about the eighth century onwards, so Huffman is not arguing that glass beads alone beget states. The third component of the model, the emphasis on rain-making, derives from ethnographic data on the role of rain-making among south-eastern Bantu-speaking peoples, together with structuralist interpretations of their worldview and use of space, as reflected in settlement layouts that could, via ethnographic analogy, be read into the archaeological record of Mapungubwe and other sites. In this model there was a shift in this worldview, epitomized by the emergence of sacred kingship, when the leaders moved their homes (and graves and rain-making activities) to the hilltop at Mapungubwe



Figure 8.6. *Mapungubwe Hill (image courtesy of the Archaeology Division, School of Geography, Archaeology and Environmental Studies, University of the Witwatersrand, Johannesburg).*

away from both their cattle kraal and the houses of the commoners.

The alternative to the Huffman model is, as mentioned earlier, a more multi-pronged approach in terms of both the number of incipient complex societies in the early second millennium AD and their pathways to complexity. Those who champion this alternative do so based on both new and old archaeological data, as well as the anthropology and history of the Shona (the descendants of Great Zimbabwe's inhabitants) and upon 'our own worldview and lived experiences as Africans' (Chirikure et al. 2016, 76). In addition to resurrecting earlier views of state formation in the region, the new perspective also includes a critique of the applicability to southern Africa of the theory that control over the distribution of exotic, prestige goods was a form of economic control facilitating the emergence of differential wealth and power (Chirikure 2014; Moffett & Chirikure 2016).

New archaeological research, particularly at the site of Mapela (Chirikure et al. 2013, 2014) and in north-eastern Botswana (Van Waarden 2011), in combination with a re-examination of other sites suggests that 'Mapungubwe's hegemony amongst the ruined stone-walled sites has likely been exaggerated, suggesting that it is more likely that there were 'several semi-autonomous, autonomous or competing centres (Garlake 1978, 490)' (Moffett & Chirikure 2016, 346; see also Kim & Kusimba 2008; but see Huffman 2015a, 2015b for rebuttals of these claims and the evidence on which they are based). The source of the wealth of these emerging polities is most commonly mooted as having been cattle (e.g. Garlake 1978 for Great Zimbabwe itself), though agriculture has also been mentioned (e.g. Pikirayi 2001). Cattle certainly formed the basis of economic power in the Toutswe polity of eastern Botswana that emerged in the late first millennium AD (Denbow 1986; Denbow

et al. 2008). Gold and imported goods are considered to have been much less important.

Criticism of the prestige-goods theory is founded upon several lines of evidence. Historians of the Shona and of the Mutapa state that followed that of Great Zimbabwe have shown that the leaders of this and other polities did not monopolize imported goods nor did their capitals act as centres of redistribution of such goods (Mudenge 1974). Instead, itinerant traders bought and sold such goods wherever they could, leading polity rulers to levy taxes on the trade in the form of tribute, which could be paid in goods like glass beads but also in the form of grain. Tribute in the form of labour was probably more common and this would, of course, have been vital both to the construction of monumental dry stone-walling and perhaps to agricultural production. Ownership of exotic items was not restricted to elites (see Mudenge 1988; Bhila 1982). Rather than enhancing their status through the display of prestige goods, 'For their part, Manyika kings maintained their prestige by hospitality; they killed cattle and held beer-drinking parties...' (Bhila 1982, 14). Craft specialists and the goods they produced were also not controlled by rulers (Bhila 1982, 37–42), while gold mines were so dispersed that elite control would have been impossible (Swan 1994). However, these historical observations were made after the Portuguese had severely disrupted the trading networks connecting the interior with the eastern African coast (Newitt 2002). Thus, we must be cautious in attempting to project this historical reconstruction back in time to the florescence of Great Zimbabwe and its antecedents. Nevertheless, archaeological evidence provides some support for such an extrapolation: crafts, such as metal production, were not preferentially associated with major centres, while craft production at these centres seems to have been based in individual homesteads rather than centrally organized on a more industrial scale (Moffett & Chirikure 2016, 366). Exotic trade goods, particularly glass beads, are found in considerable quantities in commoner sites (e.g. Antonites 2014) and these beads were probably incorporated into clothing worn by both elites and commoners of all ages and sexes, as evidenced from burials, though it is certainly the case that some royal burials, notably at Mapungubwe, contained many thousands of beads (Chirikure 2014; Moffett & Chirikure 2016; cf. Huffman 2007, 2015).

In addition to the critique of the prestige-goods theory, Chirikure and colleagues (2016, 90–1) also take aim at the idea that the ritual aspect of royal authority at Great Zimbabwe was derived from the ruler's rain-making activities. Citing Mudenge's (1988) history of the later Mutapa state, they note that 'there was a clear

separation of powers between chiefs who were political leaders and *mhondoro* [spirit mediums of deceased kings or chiefs] who presided over spiritual issues' (Chirikure et al. 2016, 90). These *mhondoro* did not always live at the royal capital and 'tend to be associated with the interests of particular houses/families involved in succession rivalries' (Mudenge 1988, 123), suggesting that they could act as a check on the power of the king and influence political rivalries. I return to the question of succession disputes and the role of ritual authorities later in this chapter.

The debates over the rise of states in southern Zambezia indicate that we tend to lack detailed archaeological data, particularly from regional surveys, to reach definitive answers. States may have arisen from a context of interacting peer polities (see Denbow et al. 2008 for a sense of these interactions). Within this framework, Chirikure and colleagues (2016; Moffett & Chirikure 2016) not only urge consideration of religion and ritual in this region in broader terms than rain-making, but also suggest that the basis of power and authority rested on ownership of land, itself derived from ancestral ties, ancestry more broadly, and individual entrepreneurship. All these factors were inextricably intertwined with the concept of wealth-in-people, a concept both developed and widely applied in tropical Africa, in part as an alternative to the common notion of wealth as the accumulation of material goods, and one that may explain why African kings have so little 'stuff' compared to their counterparts elsewhere. This concept has been applied previously to the Great Lakes kingdoms (see below; see also Stephens 2016 for a more nuanced discussion of 'wealth' and 'poverty' in Great Lakes Africa).

Swahili

Much energy has been expended on the question of whether these city-states were founded by foreigners (Arabs or Persians) or indigenes, a polarized and political debate in which protagonists often felt uncomfortable in occupying some more sensible middle ground (Robertshaw 1990; Horton & Chami 2018). Allied with this was a focus on excavations of the larger and presumably more glamorous stone-walled 'towns', with a concomitant neglect of village sites and regional settlement patterns that might have shed light on topics like population growth and agricultural potential. Things have changed over the last couple of decades with some valuable survey projects (e.g. Fleisher 2003, 2010; Helm 2000; Helm et al. 2012; Pawłowicz 2011, 2012; Wynne-Jones 2007) that permit some consideration of the place of towns within their regional context rather than simply thinking of them as urban outposts on the edge of the Indian Ocean, there simply to take

advantage of trading opportunities. These survey projects also served to direct attention away from discussion of the ethnic and linguistic identity of the first coastal settlers towards more processual concerns with the development of settlement hierarchies.

Although there are mostly ephemeral traces of Later Stone Age settlement by hunter-foragers in the coastal regions of East Africa, the advent of farming communities in about the late first millennium BC and early centuries AD may be said to have initiated the process of state formation. These communities combined subsistence activities with iron-working and probably engaged in widespread exchange networks, commonly perhaps in perishable goods that leave no archaeological traces, such as salt, leather, and cloth (Abungu & Mutoro 1993). Settlements were located on the coastal hinterland, with a few right on the coast that were always adjacent to protected beaches where small boats could be hauled out of the ocean (Horton & Middleton 2000, 43). They were also preferentially located on nutrient-rich soils (e.g. Pawłowicz 2012). Very rare sherds of exotic pottery and glass beads have been discovered at both the beach-adjacent and inland sites.

The locally made pottery on these early sites has clear historical ties to ceramics from the Great Lakes region and is commonly attributed to Bantu speakers (M'Mbogori 2015), a connection supported by the classification of ki-Swahili within the Bantu grouping (Nurse & Spear 1985). This early coastal pottery develops into a well-studied ceramic entity known as either 'Triangular Incised Ware' (TIW) or the 'Tana Tradition' (Chami 1994; see Chami 1998; Fleisher & Wynne-Jones 2011; and Horton & Chami 2018, 140 for discussion of nomenclature). Early Tana Tradition pottery, dated about AD 600–900, is found both at early 'stonetowns' on the coast and at farming settlements in the interior, thereby corroborating the indigenous roots of Swahili urbanism (Fleisher & Wynne-Jones 2011, 247). Distributed along the coast from northern Kenya to Mozambique, as well as on the Comoro Islands, and up to several hundred kilometres into the interior, the Tana Tradition tended to be viewed as a monolithic entity but recent analysis has demonstrated considerable variation that does not fall neatly into a geographical or chronological pattern and has been interpreted as evidence of 'a vast interaction sphere in which communities were most in contact with those nearest to them, while cognizant of a larger sphere that included them all' (Fleisher & Wynne-Jones 2011, 274). Beyond this, Fleisher & Wynne-Jones (2011) also note the presence of more vessels of bowl form at some larger coastal settlements that were involved in Indian Ocean trade, which they

suggest may be linked to 'nascent elites' and 'emerging notions of prestige' (ibid., 275).

Although there is a paucity of good archaeological data, scholars assume slow population growth during the late first millennium AD and look to growth in trade as the foundation for the development of social complexity (e.g. Kusimba 1999, 101; Horton & Middleton 2000, 27; Horton & Chami 2018). Kusimba (1999, 201–3) emphasizes interregional and international trade in iron as a catalyst for this development, but the scale of iron production at Tana Tradition sites and its importance as an African export in the Indian Ocean trade may have been exaggerated (Killick 2009). More widely embraced is the idea that towns developed along the coast, as entrepôts for the Indian Ocean trade that took advantage of their favourable locations within the Indian Ocean trading system and their ability to supply the main African products that trade coveted, namely gold, ivory, slaves, and mangrove poles for construction in the Middle East (Horton & Middleton 2000, 99). Within this framework, the early adoption of Islam at the coast by perhaps only small numbers of converts, judging by the size of the early mosques at Shanga (Horton 1996, 2018), is viewed both as an entrepreneurial adaptation to partake in the religion that facilitated Indian Ocean trade and a means to avoid the risk of enslavement, since Islam forbade the enslavement of believers (Horton & Middleton 2000, 51). As the more successful of these entrepôts grew, it is assumed that the countryside filled in with settlers and a settlement hierarchy was established to facilitate trade with the interior and a supply of food to the coastal towns (Kusimba 1999, 101). Along the coast itself, competition between towns for export products from the interior that would supply the transoceanic trade led to independent city-states, within a wider Swahili civilization that developed in the first half of the second millennium (e.g. Wright 1993).

Recent research has predictably shown that this model assumes too much homogeneity along the 2000 miles or so of the Swahili coast. Instead, different parts of the coast may have undergone different trajectories regarding the establishment of towns and their relationship to regional settlement patterns. The Kenyan coast may have seen the development of integrated settlement and economic hierarchies connecting the coast with the hinterland (Kusimba & Kusimba 2005; Kusimba et al. 2013; Shipton et al. 2013). However, the demand for African slaves in the Middle East in the late first millennium, at least until the Zanj Revolt in Iraq in AD 868 (Horton & Middleton 2000, 75), indicates that coast-hinterland relations may have been varied and not always peaceful. Further south, on the island of Pemba, the establishment of towns was

the result of the depopulation of the countryside in the eleventh century, a process termed ‘synoecism’ (Fleisher 2010). The stimulus for this process may have been defence, but Fleisher (2010) argues for religion, noting an ‘enormous investment in religious architecture’ at the new town of Chwaka. Thus, people moved into towns to enjoy a fulfilling religious life that involved community worship at a Friday mosque, public baths, and permanent markets. This emphasis on the importance of Islam and Islamic ritual practice has also been seen more generally as crucial to the development of stonetowns (Wright 1993, 671–2). Further south again, Kilwa (Fig. 8.7) became perhaps the richest port-city in the Swahili world, but during the period of its growth, the regional settlement pattern remained basically unchanged and unintegrated (Wynne-Jones 2007). Finally, it should be noted that state formation did not characterize the entire Swahili coast: in the Mikindani region of southern Tanzania near the Mozambican border, there was no settlement hierarchy, no concentration of population along the

coast itself, and very few imported goods prior to the eighteenth century (Pawlowicz 2012).

Looking ahead to the discussion of fragility within the Swahili civilization, it may be noted that AD 1000 or thereabouts marks a major disjunction in Swahili history with some larger settlements flourishing as others were abandoned. This also marks the end of the Tana ceramic tradition that tied the coast firmly to the hinterland. From a review of the evidence, Fleisher and colleagues (2015) posit that the first centuries of the second millennium AD was the period when the Swahili became ‘maritime’, an idea that encompasses a new Swahili worldview and the development of ‘cosmopolitanism’ as a defining characteristic of Swahili society (LaViolette 2008; Fleisher et al. 2015, 108).

Bunyoro

The explanation of state formation in Bunyoro involves the successful integration of three types of evidence: archaeology, historical linguistics, and oral traditions. In addition (and this may be true of all regions



Figure 8.7. Kilwa – the Great Mosque (image courtesy of Stephanie Wynne-Jones).

of the world), we must be sensitive to the dangers of teleology; we know much about the Nyoro state in the nineteenth century, so it is tempting to develop a just-so story to link farming settlements of the late first millennium AD to that later kingdom in a seamless, but perhaps fictitious, narrative.

To the best of my knowledge I may be the only archaeologist in recent years to have proposed narratives of state formation in Bunyoro, though this is not to deny or belittle the important contributions to the archaeology of the region made by several colleagues (e.g. Posnansky 1966, 1969; Sutton 1993; Reid 1991, 1996; Connah 1991). My narratives began with a relatively straightforward processual model (Robertshaw 1994) that was modified and expanded to discuss gender issues (Robertshaw 1999), then examined within the context of climatic and environmental changes (Robertshaw & Taylor 2000), and then somewhat shoehorned into Blanton et al.'s (1996) dual-processual model (Robertshaw 2003). Recently, in a journal article (Robertshaw 2010), book chapter (Robertshaw 2016) and a couple of conference papers, I have stepped away from processual accounts to emphasize the roles of creative power, ritual, and healing networks in the development and history of the Nyoro state. In this endeavour I have relied heavily on the work of historians, notably David Schoenbrun (1998, 2006) and Neil Kodesh (2008, 2010), as well as on colonial ethnographies (Beattie 1971; Roscoe 1923). A summary of my current view of state formation follows.

Much of Bunyoro seems to have been sparsely settled by farming communities prior to about AD 1000, with much of the region under forest cover. Pioneering farmers in this 'internal African frontier' (Kopytoff 1987) probably comprised small, lineage-based communities who, I surmise, would have been anxious to attract followers to assist in clearing forest for cultivation, to manage their small herds of livestock, particularly cattle, to provide craft specializations, such as iron-working, and for defence. Women, as farmers and as reproducers of labour, would have been needed as much as men. In Buganda, adjacent to Bunyoro, Neil Kodesh has examined the early history of clanship, roughly around the early second millennium AD, to reveal 'how the domains of public healing and politics were intimately entwined in practical ways' (Kodesh 2008, 200; see also Kodesh 2010). The basis for this in early history was the existence of shrines, located on each clan's primary estate, where ancestors were remembered and individuals sought help with their personal problems, such as infertility and poverty. Gatherings at these sites of relatively egalitarian clan members '...drew upon the idea that the public recognition of common spiritual entities generated the

conditions for collective prosperity' while the 'dispersed shrines constituted ritual networks that shaped the framework within which communities sought their collective health' (Kodesh 2008, 204). Analysis of the clan histories also indicates that gatherings at shrines brought together not only people but also knowledge, assembling people with varied skills into communities who could thereby improve a community's economic and spiritual well-being (*ibid.*, p.208). Thus, these shrines, tied to ancestral spirits, served as centres where local leaders could assemble the wealth-in-people that marks many successful African polities (Guyer & Belinga 1995). These community networks of public health and healing could also have served as defensive networks in the face of raiding, most likely aimed at the capture of cattle and women (Robertshaw 1999a). However, these shrines and the spirits they served were territorially based for they were situated on the lands of the ancestors, and the leaders of these communities drew their authority from claiming their primacy on the land and, therefore, a direct link to the ancestral spirits. Thus, opportunities for the expansion of political power, founded upon these communities, was very limited since it was tied to specific clan lands (Schoenbrun 2006, 1424, 1426). This account, based on work in Buganda, applies almost equally well to Bunyoro. As Schoenbrun (2006, 1430) remarked, 'the era of ancient state-building had opened with public healing central to its unfolding.'

A new era was ushered in when territorial spirits were transformed into portable spirits capable of caring for the health of people over much larger regions by embracing spirit-possession. Of course, the process of state formation was far from straightforward; while spirits and their mediums were themselves powerful, they had to cope with changing climatic and economic contexts. The portability of these spirits, linked by kinship and known as Cwezi, and their decoupling from a territorial identity allowed successful leaders, who combined ritual, political, economic, and perhaps military skills, to construct larger, multi-clan polities. Several of the Cwezi spirits, despite the portability of their cults, are linked with shrines, identified in oral traditions, at each of which there was a resident spirit-medium. Excavations at two of these shrine sites have revealed occupation dating back to about AD 1300, though traces of earlier occupation suggest that their thirteenth- to fourteenth-century inhabitants selected sites with deeper roots, perhaps identified with territorial ancestral ghosts (Robertshaw 1994). It is tempting then, albeit speculative, to correlate these thirteenth- to fourteenth-century occupations as the centres of two of these nascent polities. This coincides broadly also with a period of somewhat drier climate.

The later construction of earthworks at some locations in the fourteenth to sixteenth centuries (Robertshaw 2001, 2002) probably indicates competition between these polities.

Whether these Cwezi polities can be labelled 'states' is moot, though an earlier generation of historians interpreted the Cwezi oral traditions as evidence of a vast, short-lived, and 'loosely organized empire' (Nyakatura 1947; Oliver 1953; quote from Ogot 1984, 503–4). Nevertheless, the sixteenth century witnessed the collapse of the Cwezi polities and the immigration of a new dynasty of rulers who established a new kingdom (Bunyoro) which they ruled until the arrival of the British near the close of the nineteenth century (Schoenbrun 2013).

Healing networks, portable spirits, ancestral ghosts, etc. represent an unusual array of factors responsible for state formation, at least when viewed by archaeologists. Taken together they serve to emphasize the importance of creative power in state formation rather than the instrumental power with which most archaeologists of a Western bent feel far more comfortable (Robertshaw 2010). Earlier archaeologists in search of an explanation for state formation in this region tended to latch onto the accumulation of wealth in cattle and control of prime grazing lands (e.g. Posnansky 1966; Sutton 1993), as well as control over regional trading networks, particularly in salt (Connah 1987, 225–6), ideas that were materialist and grounded in ethnography, but not well supported by the evidence (Robertshaw 2003, 152–3). These earlier explanations also ignored agency and ideology and overlooked variation in polity scale and complexity. While marrying the narrative of creative power to the archaeological evidence from Bunyoro may be difficult, despite the existence of shrine sites and later earthworks, at least it offers a novel perspective. In applying the dual-processual model to this evidence, I argued that the harnessing of creative power early in the process of state formation was one of several exclusionary (network) strategies employed by emergent elites, the others being control over the production and distribution of iron and ivory, and participation in a prestige-goods network (Robertshaw 2003, 160). However, in retrospect, evidence for elite control over iron and ivory is slim, while the prestige goods, glass beads in this case, are not only rare but found in the burials of children and adolescents as well as those of adults. Even if we set aside the recent critique of the applicability of the prestige-goods model to Africa (Moffett & Chirikure 2016), we still need to understand the cultural context of these goods in Bunyoro. If the case for exclusionary power strategies is weak in Bunyoro, the succeeding corporate power

strategies seem better supported by the archaeological evidence of earthworks, involving large labour inputs supported by elite control of surplus agricultural production (Robertshaw 2003, 161).

Fragile African states

Norm Yoffee (2015) and James Scott (2017) have recently drawn attention to the vulnerability and fragility of ancient states, the theme of this volume and the workshop from which it stemmed, drawing their examples predominantly from Asia. Looking south of the Sahara most states seem to have barely survived for longer than a couple of centuries, during which turbulent times were common, particularly during interregna. Looking at two of our examples, Zimbabwe and Bunyoro, we can discern what may have been almost constant tension between the need for manpower (see also Scott 2017, 203) and womanpower (for reproduction) and the inherent risks (disease, 'ecocide', 'politicide') that came with population aggregation, making these states ripe for 'disassembly' (Scott 2017, Chapter 6). Tension also probably existed between state-making strategies for population growth that, on the one hand, emphasized such things as healing networks, wealth-in-people, and voluntary aggregation, and those, on the other hand, that resorted to raiding and slavery. It is tempting, but perhaps fallacious, to assume that the latter, heavy-handed methods were a later development when polity population size had reached some critical threshold.

Great Zimbabwe

Continuing the previous paragraph's emphasis on population size and its effects, estimates of the population of what is sometimes referred to as the city of Great Zimbabwe have varied. While Garlake (1973) estimated the population as between 1000 and 2500, Huffman (1986, 323), using different assumptions and more site survey data, suggested that at its peak Great Zimbabwe may have been a city of at least 18,000 people, most of whom lived outside the elite, stone-walled areas. In the media and textbooks, this figure is commonly rounded up to 20,000. However, a new study, using multiple lines of evidence including newer fieldwork at the site, concludes that at its peak (Period IV: AD 1200–1700), Great Zimbabwe may have been home to as few as 228 or as many as 2009 people (Chirikure et al. 2017a), numbers that certainly give pause to the notion that this was a city. The history of stone-walling at Great Zimbabwe spans almost a thousand years so the new, lower population estimates make the settlement's sustainability more comprehensible.

A small population at Great Zimbabwe may also be relevant to discussion over the settlement's history in terms of the dating and functions of different parts of the site. Huffman developed a cognitive model of Great Zimbabwe at its peak that used ethnography, history, and the available archaeological evidence to argue that the core, stone-walled areas of the settlement were laid out according to structuralist principles that reflected and reinforced the worldviews of its inhabitants. Different parts of the site were assigned different functions: for example, the king's residential area (Fig. 8.8), the court, the residences of royal wives, the treasury, and, most controversially, the hypothesis that the Great Enclosure served as an initiation school for girls (Huffman 1996). While cognizant of Great Zimbabwe's long history, this model treated the site synchronically. As readers will have realized by now, that which Huffman has built is ripe for reinterpretation by Chirikure and colleagues, though it should be

said that they were not the first to criticize the structuralist interpretation of Great Zimbabwe (see Beach 1998 and commentators thereon). In place of the synchronic model, Chirikure & Pikirayi (2008; Pikirayi & Chirikure 2011; cf. Huffman 2010) argued that different areas of the site, notably the hill (or 'acropolis' as it used to be known) and the Great Enclosure were the locations of the residences of successive kings. They also argued, reliant heavily on excavations in one part of the site (Collett et al. 1992), that Great Zimbabwe was not almost completely abandoned in the mid-fifteenth century, when Khami became the capital of the later Rozvi state and the Mutapa state was founded to the north, but that it continued to be a major centre.

If Great Zimbabwe itself held far fewer people than previously surmised, what about the state of which it was the capital? We are not only a long way from having any reliable estimates of the state's population, but we also may question previous assumptions of the



Figure 8.8. Great Zimbabwe – the Great Enclosure viewed from a royal residential area on the hilltop formerly known as the 'Acropolis'. The red deposits in the foreground derive from a series of elite structures excavated by the Public Works Department in 1915 to release the pressure from 'African' houses on what was at that time regarded as the 'Phoenician' stone walls (image courtesy of the Archaeology Division, School of Geography, Archaeology and Environmental Studies, University of the Witwatersrand, Johannesburg).

state's geographical extent. While Great Zimbabwe is the largest archaeological site in the modern country that shares its name and stood perhaps at the apex of a four- or five-level site-size hierarchy, there are more than 150 other elite stone-walled centres in the region (Chirikure et al. 2012). Also, in the sixteenth century, following the decline of the Great Zimbabwe state and Portuguese contact, there were ten 'major Shona kingdoms' (Mudenge 1988, Map 3), as well as numerous smaller polities. From an archaeological perspective, AMS dating often indicates the contemporaneity of many of these sites, but the historical reality, as revealed by contemporary Portuguese accounts, oral traditions, and Shona ethnography, was probably much more complicated. Each new ruler of a polity established a new capital, different from that of his predecessor. This was often his existing residence, so a settlement could have a long history during which it may have served as a capital on one or more occasions. Royal succession was also complicated; Mudenge (1988, 81) terms it 'collateral adelphic succession', but this masks a reality in which warfare usually determined the outcome. At least 16 of 28 successions in the Mutapa state between 1692 and 1902 involved military force (Mudenge 1988, 79; see also Bhila 1982, 20, who recounts that all eight Rozvi rulers, spanning a period of less than a century, were killed in internal political upheavals), with the average length of reign being about 14 years (Chirikure et al. 2012, 365). It may also be borne in mind that, as mentioned earlier, the settlements of royal spirit mediums (*mhondoro*) represented additional, alternative centres of power (Mudenge 1988, 123; Chirikure et al. 2016, 90; Chirikure et al. 2017b, 4). Thus, from about 1450 onwards, with the establishment of the successor states to Great Zimbabwe, there were numerous peer polities, characterized by shifting capital sites, as well as shifting cattle camps (Lane 2004, 809, cited by Chirikure et al. 2012, 365) since the royal herds were usually too large to be kept at the capital (Mudenge 1988, 162).

Questions remain, however, about whether the post-1450 pattern of numerous polities with shifting centres can be imposed on earlier times. In particular, the early sixteenth-century disruptions caused by the arrival of the Portuguese along the coast, including their sack of Kilwa in 1505 (Freeman-Grenville 1962, 80–104), and their botched efforts to seize all facets of the gold trade may have destabilized the political and economic order, undercutting possible elite control of gold mining and the prestige-goods trade that it financed. Nevertheless, Chirikure et al. (2012, 365–6) cite evidence from much later periods in other parts of southern Africa to bolster their general case for short-lived peripatetic capitals. While, the very small size of many of the 150 plus stone-walled

centres (Killick, pers. comm.) also casts a shadow over their identification as possible capitals, the new, much smaller estimate of Great Zimbabwe's population provides a scalar context that would seem to allow for such small capitals.

Competition, as well as diplomacy and alliances, between numerous peer polities in the centuries following the demise of Great Zimbabwe's state raises questions about the availability of military forces and the economic foundations of these polities. Historical sources indicate that states did not possess standing armies but mobilized the peasantry in the event of emergency or a decision to take the offensive. A Mutapa ruler could mobilize 3000–5000 warriors within 24 hours, though peasants were probably very reluctant to leave their agricultural labours during the rainy season. Any campaign also had to be short-lived because of the difficulty of keeping the troops fed (Mudenge 1988, 137, 141). Booty in the form of livestock and women was a strong incentive for military service (*ibid.*, 142).

In addition to succession disputes and external threats, rulers were also concerned with the economic foundations of their polities. Agriculture and pastoralism were the mainstays of the economy. Striking here is the importance of corvée labour for agriculture, with peasants spending 7 out of every 30 days cultivating the fields of their kings, provincial governors, chiefs or sub-chiefs (Mudenge 1988, 19, 164). Tribute, particularly from those living far from the capital, was also paid in cattle, grain, gold, iron hoes, slaves, and ivory (*ibid.*, 19). The capital was economically supported by its hinterlands, in part perhaps because capitals were not necessarily sited with agriculture as the first consideration but rather with a view to the control of grazing lands, goldfields or trade routes (*ibid.*, 26–7). Mudenge (1988, 78) even suggests that the supply of drinking water constrained the population size of the capital. Thus, maintenance of the food and water supply for the capital, as well as conscripting labour for agriculture and defence, including the building of the monumental stone walling, must have been an ongoing challenge for the king and his ministers.

With such a high demand for labour and tribute, vigilance was needed to avert or suppress revolts and defection, i.e. voting with one's feet. Loyalty could be bought with booty and gifts of glass beads and cloth (Mudenge 1988, 142, 186). Loyalty, however, was not simply an economic transaction; shared language, identity, and religious beliefs served to integrate each polity, though kinship may have been particularly important. Royal polygamy – kings commonly had hundreds of wives – 'was primarily designed to foster loyalty' (Mudenge 1988, 110), though the flip side of this was the problem of numerous contenders for the

throne. A ruler also chose his own council of advisors, though with some offices prescribed as the prerogative of particular families (ibid., 85). If nothing else, a successful ruler had to be an entrepreneurial politician.

If Great Zimbabwe was the capital of a large state, that state was at its zenith for less than two centuries. The successor states were smaller; the Mutapa state contracted significantly in each century of its existence (Mudenge 1988, 76). Individually the states of southern Zambesia, from the late first millennium to well after Portuguese contact at the end of the fifteenth century, were, it seems, often small and fragile, albeit with exceptions like that of Great Zimbabwe. Collectively the statecraft that pitted those peer polities against each other lasted for about a millennium, a notable case of resilience.

Swahili

The Swahili civilization of the early to mid-second millennium AD was characterized by ‘maritimity’ (Fleisher

et al. 2015), strong cultural, cosmological, and economic ties to the Indian Ocean, and ‘cosmopolitanism’ (LaViolette 2008), two overarching traits that both defined the Swahili and differentiated them from their inland African neighbours. Both traits were materialized in the ‘stonetowns’ (Fig. 8.9) that developed where natural harbours enticed traders to come ashore.² Here were built port facilities, mosques, and the stone-houses of the *waungwana* (‘patricians’), which served as a visual guarantee of the creditworthiness of their owners and as accommodations for visiting international traders.³ Forms of dress and the display of exotic goods, such as Chinese porcelain in houses and on pillar tombs, reinforced this cosmopolitan Swahili worldview. Rice, as well as coconuts, both Asian imports, began to be grown at the coast and rice became the staple grain of the elite, served in imported vessels during feasts (Walshaw 2005; Fleisher 2010).

When we turn our attention to the resilience and fragility of the Swahili city-states, we can look first at



Figure 8.9. Gedi on the Kenyan coast (image courtesy of Michal Golos).

competition between the city-states and second at the internal politics of the stonetowns. Relatively little is known about the military capabilities of the city-states, but they appear to have been generally weak, with the inhabitants of the stonetowns reliant upon their hinterland counterparts for defensive support (Horton & Middleton 2000, 177). Instead, my reading of secondary sources suggests that Swahili city-states engaged, like good Americans, in competitive, free-market capitalism. City-states competed, on the whole peacefully it would appear, to host foreign traders and for access to the routes, markets, and goods of the African interior (Wright 1993). Thus, 'entrepreneurial activity was encouraged and, in fact, became the cornerstone of political authority' (Kusimba 1999, 134). A Swahili proverb expresses this a little differently: '*Biashara ni vita*' – 'Trade is war' (Horton & Middleton 2000, 106). The resilience of the trading system was probably sustained by the fact that much of the commerce was rooted in individual partnerships and patron-client relationships, so that if one merchant failed, another succeeded. Fragility lay, as elsewhere in world systems, in the perturbations of foreign and inland markets that Swahili merchants could not control. It was perturbations in such things as the prices of gold and ivory and the availability and cost of imports, themselves often tied to political upheavals thousands of miles away, that might signal a change in the economic fortunes of individual city-states.

Within city-states resilience and fragility were bound up with governance and relations with adjacent commoner towns and villages that supplied subsistence and other necessities to the stonetowns of the patrician traders (Fleisher 2018). There was no single political system shared by all the city-states prior to European contact, but all seem to have been characterized by a complex interplay of internal ranking and binary systems of social and political order. Our knowledge of these systems is constrained by the available evidence – a mixture of ethnography, Portuguese documents, the accounts of occasional Muslim travellers such as Ibn Battuta in the fourteenth century, and Swahili chronicles that were often as much propaganda as history. As parsed by Horton & Middleton (2000), it seems that many but not all towns had kings and occasional queens, who 'rarely if ever reigned over more than a single town' (ibid., 157) and whose political power and authority tended to be weak (see also Prestholdt 2018, 519). Their functions seem to have been primarily ritual and spiritual, as well as ceremonial. They were 'essentially African kings' (ibid.), not Islamic sultans. This African quality of kingship, in Horton & Middleton's view, with its emphasis on ritual and ancestor veneration served as a bridge in

relations between the stonetowns and neighbouring hinterland groups that were more important where the stonetowns were located on the mainland, rather than islands, and thus prone to attacks.

However, it would be a mistake to focus too narrowly on the notion of 'African kings' because some rulers were indeed Islamic sultans, as in the case of the rulers of the towns of Mogadishu and Kilwa visited by the great world traveller, Ibn Battuta, in 1331, who noted their piety and generosity (Freeman-Grenville 1962, 27–32). Many of these rulers traced their lineages back to a merchant ancestor (Pearson 1998, 43). Moreover, beneath or instead of kings in the political hierarchy of each city-state was a council of elders, commonly comprised of the heads of the patrician lineages (Prestholdt 2018, 519). Patricians, who were an exclusive minority in the city-states, were the cosmopolitan traders whose economic power was masked by their moral superiority, itself founded upon their urbanity, adherence to Islamic tenets, perceived Arabian origins, knowledge, and purity of behaviour (Horton & Middleton 2000). In some city-states there were numerous public offices held by patricians, elevation to which required the wealth to sponsor large public feasts (ibid., 168). Beneath the patricians were a host of commoners, from specialist craftsmen down to slaves. This strongly hierarchical system was balanced by binary oppositions that, in Horton & Middleton's (2000, 130) estimation promoted unity by drawing attention to the equality of those in either half of the binary system and often by the regular rotation of power between the halves. Towns were divided into spatially and socially separated moieties who fought each other in ritualized contests, nowadays often soccer matches, on formal occasions. The moieties were often crosscut by other heterarchical divisions; for example, in Lamu town in northern Kenya, the patricians were divided into two 'demes', members of each of which lived in both moieties. Demes took turns to choose a town leader to serve a four-year term (ibid., 159).

The success of these Swahili hierarchical and heterarchical modes of organization can perhaps be measured by the longevity of the city-states, some lasting half a millennium or more, during which time they were characterized by complex histories. Ruling dynasties were sometimes replaced either violently or when they died out and patrician families might fall on hard times, but states endured. If they fell into irredeemable decline, with the eventual abandonment of the stonetown, the currents of international trade may have been the ultimate cause, though warfare between city-states in a region in the context of declining trade may have been a proximate cause, as might

local environmental changes (Lane & Breen 2018). In the case of Shanga, conquest by the rival city-state of Pate during an economic boom has been mooted as one of two possible causes for Shanga's abandonment, the other being failure of the supply of freshwater (Horton 1996, 427–8).

Bunyoro

Earlier in this paper I argued that healing networks and creative power were key ingredients in the rise of the Bunyoro kingdom because they provided the means for leaders to attract followers, both men and women, whose labour and reproductive capabilities were needed to carve out and sustain polities in wet tropical Africa. The need for labour was constant throughout the history of the kingdom, though as Bunyoro and neighbouring kingdoms like Buganda grew in size and in their degree of centralization, warfare and raiding, mostly for cattle and women, often took the place of attempts to attract followers by more peaceful means. Kabarega, the king who fought the British at the end of the nineteenth century, earlier established a standing army with companies stationed throughout the kingdom, often under the leadership of foreign mercenaries, that engaged in plunder and expanded the kingdom through conquest (Steinhart 1977, 21–2). However, the nineteenth-century kingdom probably differed significantly from that of earlier times because of newfound wealth in the king's hands derived from his control of the large-scale export of slaves and ivory, external markets for which were booming during this period (Robertshaw 2016).

Earlier and perhaps less gifted *abakama* (kings) than Kabarega had to negotiate a more delicate game with their subjects. Some of our knowledge of this is derived from oral traditions and historical linguistics but it is primarily based on extrapolation from ethnography and thus needs to be treated cautiously. It seems that the Bito dynasty, of which Kabarega was the most illustrious member, arrived as a group of intruders into Bunyoro in the sixteenth century following the country's devastation by drought-induced famine. However, this was not simply a conquest because it also involved a negotiation with pre-existing centres of creative power and a new commitment to a separation of powers between spirit-mediums and royal authority (Schoenbrun 2013). The presence of substantial earthworks at some sites indicates that there may also have been warfare, though an oral tradition recounting the slaying of a ruler of one of these earthworks by his disgruntled peasantry suggests internal strife rather than conquest, perhaps in the period preceding the arrival of the Bito (Robertshaw 2001, 2002).

Once settled in Bunyoro, Bito rulers had not only to defend the realm against neighbouring polities but also were required to satisfy their own needs for labour and tribute without entirely alienating a pastoral nobility and an agricultural peasantry who could choose to vote with their feet (Roscoe 1923, 9) or join forces with one of Bunyoro's enemies or a renegade prince of the kingdom. Kings then maintained their balancing act in numerous ways, as is evident, for example, at the coronation ceremonies where the king was both admonished by his subjects to rule justly but also handed artefacts symbolizing coercion, as when he struck a smith's hammer on an anvil to demonstrate that he was both the head of all the blacksmiths and himself like a hammer (Beattie 1971, 112; KW 1937, 296). The king was not divine, but he maintained a state of ritual purity, involving both pastoral and agricultural rites, because his personage symbolized the state (Roscoe 1923).

The king assembled loyal followers at the capital by appointing numerous office holders, many of whose offices belonged in some sense to individual clans (Beattie 1971, 124–5). Moreover, the king was the source of all political authority in the kingdom which he delegated to provincial chiefs and other officials (*ibid.*, 147). Included in this delegation of political authority was ritual potency (*ibid.*, 117–8). The king also regularly toured the country, both collecting tribute and providing feasts. During these tours, he also frequently availed himself of the opportunity to acquire 'wives'. Although he never officially married, a king had innumerable wives; Kabarega is reputed to have fathered 140 children (*ibid.*, 143). Thus, the king bound his subjects to himself in various ways. However, there were a few areas within his kingdom that the king rarely, if ever, visited. These were religious centres affiliated to the ancient Cwezi cults and they seem to have served as tolerated nodes of resistance to state power, outlets perhaps for the safe exercise of disaffection that the state could monitor with relative ease (Robertshaw 2010).

Loyalty to the king came with a price: the payment of tribute – food, beer, ivory, iron, animals, and labour. Royal tax collectors also took the king's due at every market. Thus, it is perhaps no surprise that the term for 'government' in Bunyoro incorporates the idea of 'oppressive weight'. Yet, the desire of the populace to exert its autonomy by fleeing the state and its demands was offset by the fact that the state provided security, not only militarily but also in terms of economic security, notably famine relief (Doyle 2006, 31–2). Indeed, the famed historian, Jan Vansina (1990, 232), has argued that this tension between the populace's desire for autonomy and their need for

state-sponsored security lies at the heart of all politics in equatorial Africa (see also Doyle 2006, 15). The populace was reminded of the value of this security with each interregnum because bloody succession wars were the norm.

Success in maintenance of the loyalty of the king's subjects, while also extracting tribute and their help in defending the realm, may have presented another challenge: how to feed those who congregated at the capital. Finger millet (*Eleusine coracana*) was the staple grain and its importance is reflected in rituals when the king was required to drink millet-beer rather than milk (Roscoe 1923, 107–12); there were also royal daily ceremonies involving cattle and milking. Famines were frequent in Bunyoro (Robertshaw et al. 2004) despite perhaps relatively low population densities. Moreover, grain stores were often looted or destroyed during wars. Nevertheless, one of the expectations imposed on the king by his subjects was the provision of famine relief, so the acquisition of adequate food supplies must have been a continual goal. Each king constructed a new capital on his accession, sited on a flat hilltop with adequate supplies of water for both people and cattle. He could also move his capital during his reign on the advice of a 'medicine-man'. Most of the royal cattle herds were dispersed in prime grazing areas often several days distant from the capital. The king also frequently travelled around his kingdom collecting tribute in various forms, including grain (Roscoe 1923). All these observations suggest that every opportunity was taken to mitigate demands upon the capital's food supply.

Conclusion

In this chapter I have explored three precolonial African states, chosen because I was somewhat familiar with their archaeology and history. They were not chosen as representative of particular types of states nor do they encompass, by any means, the range of variation present among African states. At the outset I did not regard them as either particularly fragile or stable complex societies. Now, almost at the end of the chapter, we may consider their similarities and differences as they relate to the larger project of this volume. First, however, some remarks on the historical context of these three states as it pertains to the quality of the information presented above. In every case, I have made extensive use of historical and ethnographic evidence which I and others have projected further back into the past to allow integration with archaeological data. This is potentially problematic because in each case the historical and ethnographic evidence was collected after European contact disrupted any

status quo that may have been in existence. Thus, for example, in Bunyoro the oral traditions that have been central to the reconstruction of the kingdom's history were recorded and interpreted by historians after the forces of the last independent ruler, Kabarega, were defeated by the British when the kingdom was coming to terms with both its new colonial overlords and its diminished status vis-à-vis the neighbouring kingdom of Buganda. Similarly, we need to be cautious about assuming that the apparent lack of elite control of prestige goods in the Mutapa and later states of Zambesia can be extrapolated to earlier times, given that the disruptions to international trade caused by Portuguese interventions at the turn of the sixteenth century may have undermined earlier trading patterns and regulations.

Both similarities and differences exist between Great Zimbabwe, the Swahili and Bunyoro states. From the perspective of state formation, it is easy to point to the fact that the prosperity of both Great Zimbabwe and the Swahili city-states was intimately connected to the Indian Ocean world system, whereas Bunyoro developed in relative isolation from this trading system. Bunyoro's state arose from complex negotiations interweaving economic, demographic, religious, and environmental factors. Nevertheless, similarities existed between Great Zimbabwe and its successor states on the one hand and Bunyoro on the other. Crucial to their success was not so much access to prime agricultural land, but their ability to accumulate wealth-in-people, a project for which creative power was more frequently exercised than instrumental power. Once established, these states engaged in raiding and warfare to acquire both people and cattle. The people acquired by force may have started life in their new societies as slaves, but there were paths to integration (see Robertshaw & Duncan 2008). Kings took numerous wives and established political and ritual offices at their courts that provided different families and clans with a stake in the states' success. However, religion also offered checks, albeit mild, on state power in the form of the independent spirit-mediums (*mhondoro*) of Zimbabwe and the Cwezi cult centres of Bunyoro. Wars of succession were frequent, and the most successful leaders were clearly highly entrepreneurial, navigating threats from numerous competing peer-polities while maintaining order at home. Individual polities were often small and fragile but the larger system in which they operated was resilient.

At first glance, the Swahili city-states seem very different from the states of the Great Lakes and southern Zambezia. Indeed, literacy, adherence to a world religion, and the overarching economic importance of

Indian Ocean trade do clearly demarcate the Swahili city-states from the inland polities of Great Zimbabwe and pre-colonial Bunyoro. Nevertheless, we can also point to similarities, such as the complex and often fragile nature of political power, the importance of ancestors in legitimizing status, and the dependency on hinterland connections to avert the risk of 'disassembly' (Scott 2017, Chapter 6).

Each of my case studies also has the potential to contribute to our understanding of the concept of fragility explored in the introductory chapter and to demonstrate its explanatory potential. To give but one example from each region, the importance and long duration of healing networks, aligned to the harnessing of creative power, indicates that the people of Bunyoro and the Great Lakes region were themselves acutely aware of the fragilities of the social, political, economic, epidemiological, and environmental systems in which they were enmeshed. 'Fragility' is thus not simply an etic approach to understanding the past, but a concept that was at the core of the worldviews of the ancient people we study. In the case of Great Zimbabwe, the focus on fragility helps to orient our perception away from the grand narrative of monumentality and endurance materialized in the walls of the Great Enclosure and towards the messy and fascinating details of how all the actors involved in the construction of those walls tried to negotiate their varied competing and occasionally consensual ambitions. One lesson perhaps from the Swahili case is that fragility is present at various geographic and social scales, ranging from the competition between patrician households for trading partners, to the politics of town governance, to regional military insecurities, and to the vicissitudes of international trade. These three examples illuminate some of the varied yet complementary facets of 'fragility': as an emic cultural concept, as an analytical approach to exploring the past, and as a phenomenon to be investigated at various scales.

Two of the three examples of African states explored in this chapter were at their zenith for perhaps only two or three centuries, whereas some individual Swahili city-states persisted longer, though their fortunes were often at the mercy of near-global economic forces beyond their control. Fragility and vulnerability appear to have been the norm for all three states, with elites and perhaps commoners too working assiduously to prolong the states' life-expectancy. Their tactics were varied, but frequently involved attempts at manipulating creative power and accumulating wealth-in-people, in addition to efforts geared toward both economic and military security. However, while the fates of individual dynasties and city-states waxed and waned, measured most readily perhaps on a

timescale of decades, the statecraft that characterized the larger system to which these dynasties and city-states belonged proved much more resilient.

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Notes

- 1 The winds of change, itself a phrase with historical resonance for Africa, have finally reached college prehistory textbooks: see Olszewski (2015) for a chapter devoted to states in south-eastern Africa, while the newest edition of Scarre (2018) has a terracotta head from Nok, Nigeria, as the illustration on the front cover.
- 2 The common notion, expressed here, that stonetowns were oriented toward the sea has been challenged; Gedi (Figure 9) on the Kenyan coast, for example, was a major town six km from the sea and three km from the nearest creek that would give boats access to the ocean (Wilson 1982; Pearson 1998, 75–6).
- 3 The identification of *waungwana* as the inhabitants of the elite dwellings of the early to mid-second millennium AD stonetowns is an imposition of later ethnographies on earlier periods that perhaps fails to consider fully the relevant identity politics that shaped the creation of this and other Swahili identities (Wynne-Jones 2018).

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 long-term 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

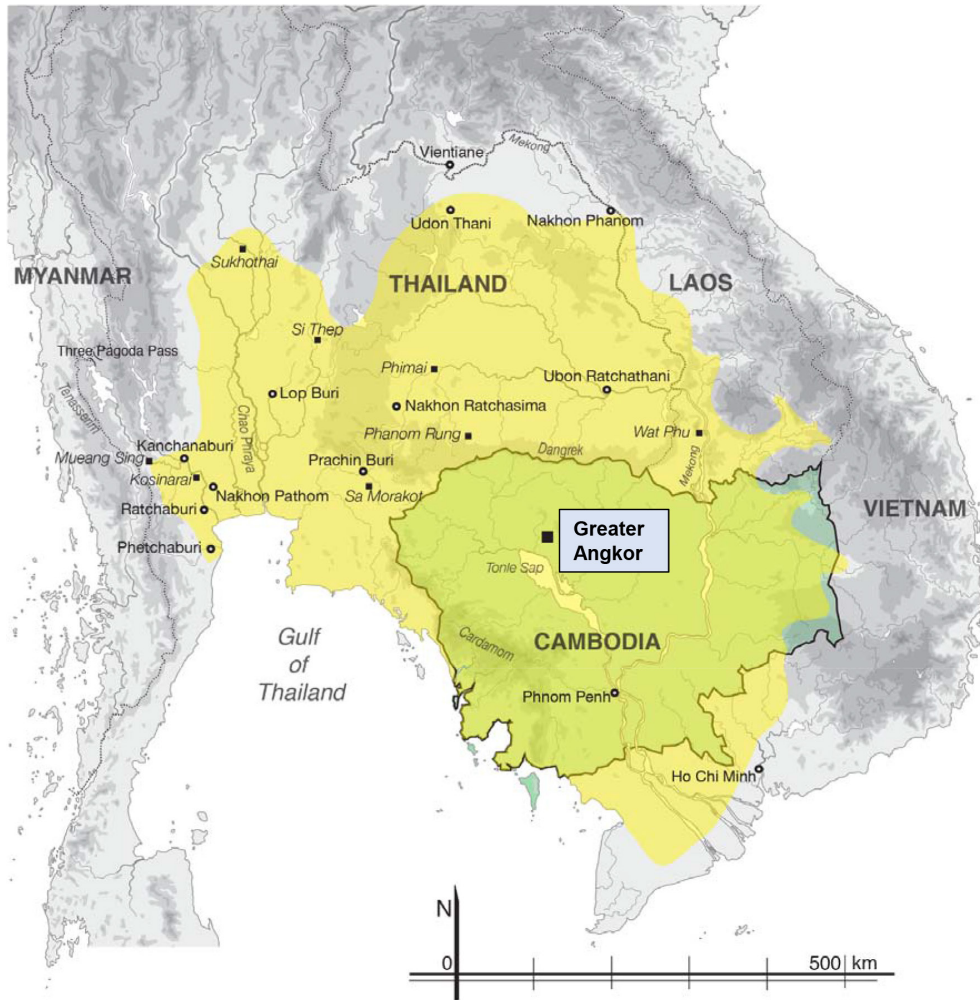


Figure 9.1. One view of twelfth-century Angkor in its broader Southeast Asian World (modified from Mulzer-O’Naghten 2014, with permission).

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 administered – 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 sixth- to 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 elude 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 Angkor-centred 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 Śrī Vēṅkatēśvara (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 life. 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

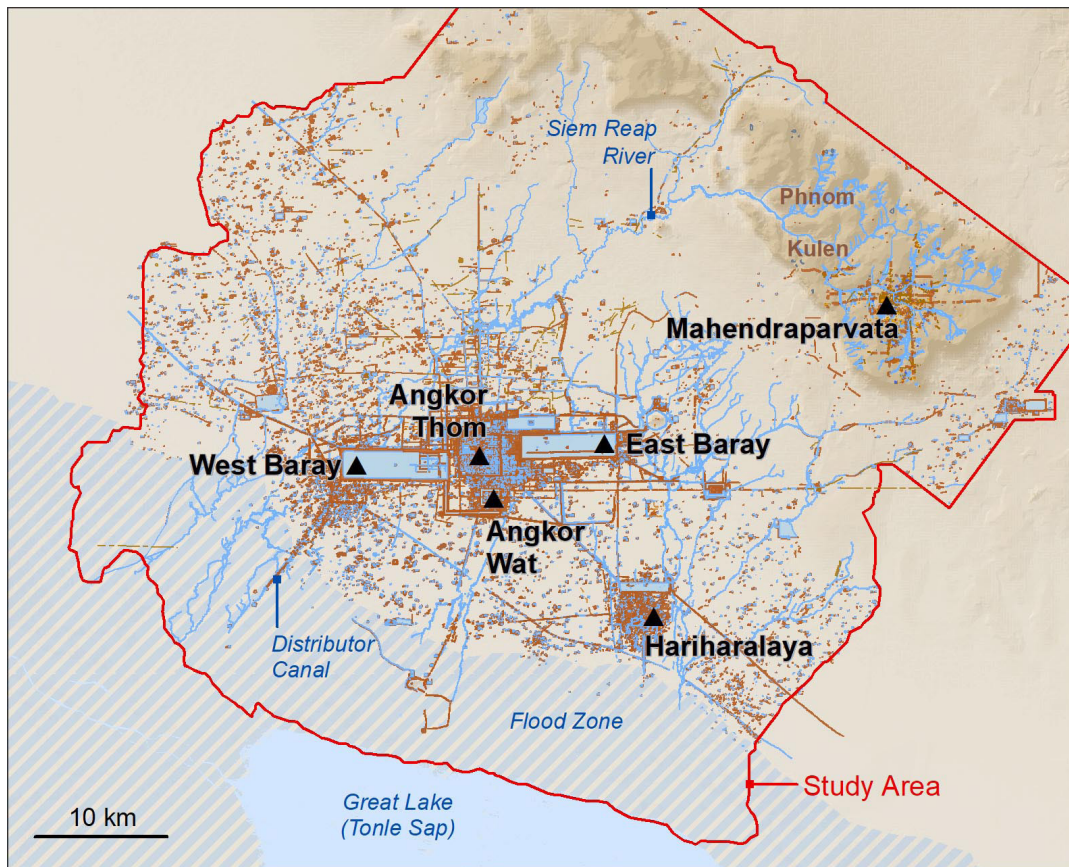


Figure 9.2. Greater Angkor region (NW Cambodia) (courtesy of Christophe Pottier, Damian Evans, Pelle Wijker, Sarah Klassen and Kong Leaksmy).



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,

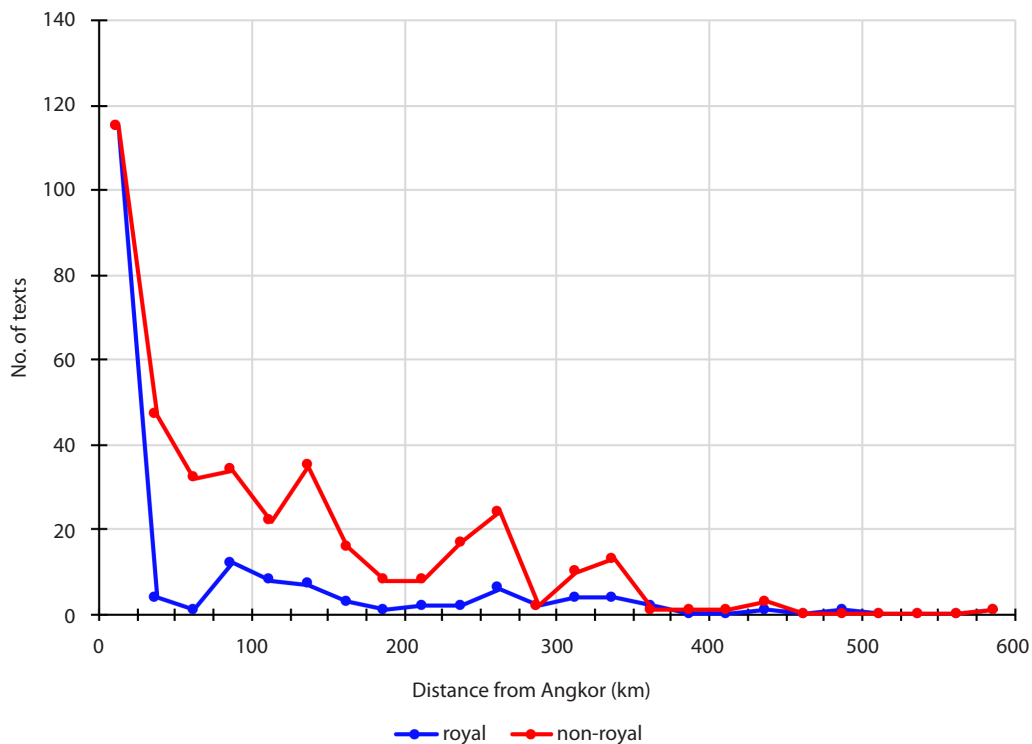


Figure 9.4. Angkorian-period inscripational data: royal vs. non-royal (courtesy of Eileen and Terry Lustig).

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 ninth-century 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 fifteenth-century 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 (*Sūryavarmesvara*) 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; Aug-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 Indic-influenced 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.¹ 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 *mrātān 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).

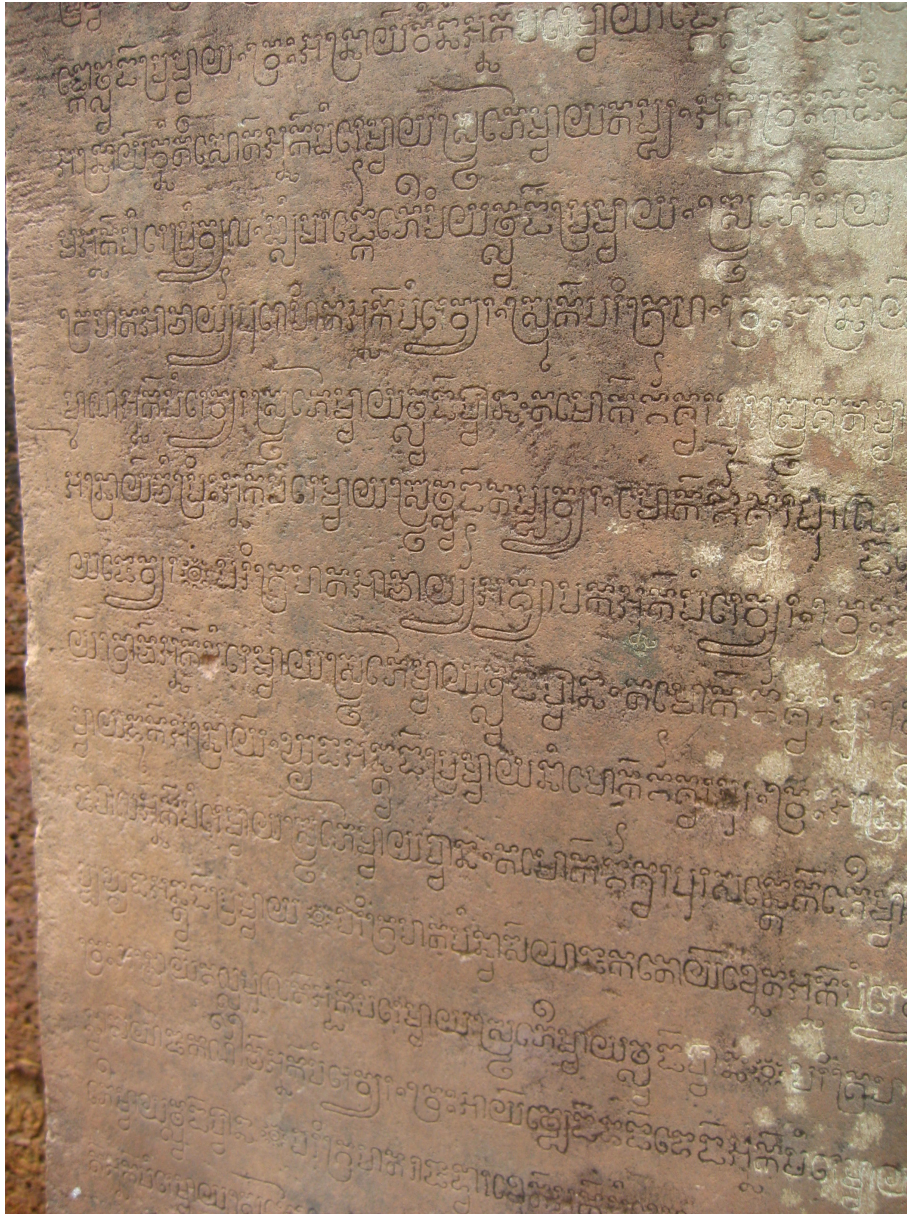


Figure 9.5. Banteay Srei inscription, a tenth-century temple constructed by the guru of Prince Jayavarman V (courtesy of Charmaine Wong).

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-vr̥dda*) 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 viṣaya*, 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,

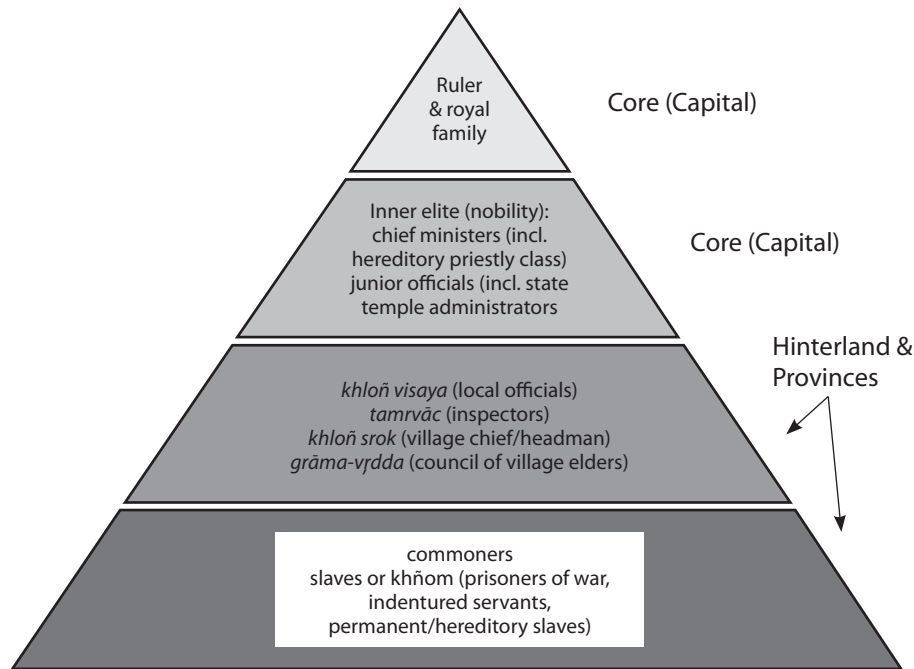


Figure 9.6. *Angkorian hierarchy, derived from epigraphic sources (supplied by the author).*

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 (*çakravartin*, 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 *kamrateñ 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

against periodic droughts. Angkorian rulers had several physical means of establishing their political control (Stern 1951). In AD 889 or 890, Yasovarman I commissioned the construction of 100 *asramas* (hermitages) throughout his domain to house, feed, and care for priests and needy commoners: the aged, the infirm, 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 Śiva, Viṣṇu, 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 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 (Coedès 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 *tamroāc* 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, Tribhuvanādayavarman, 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

khlaeñ hoer tpit khyal' nây thkoeñ tpit bal
raksa oy sukh draby gañ' tpit sri
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 Cpâp' 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 offer 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 Theravādā 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 *saṅgha* (with monks, nuns, and laypersons) drew from local sources to structure political and economic lives. Even as the *saṅgha* 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

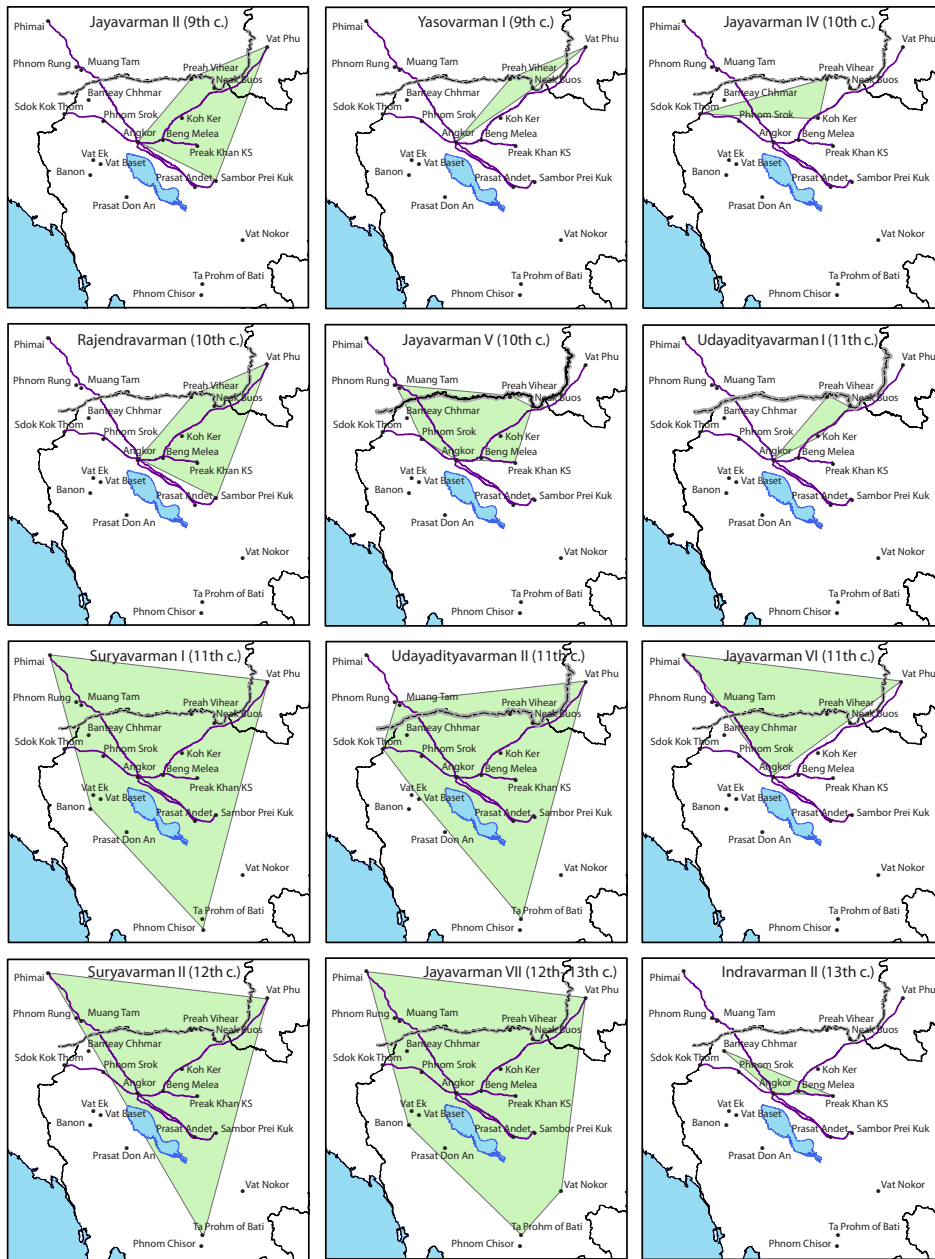


Figure 9.9. Control as 'communication corridor' (areas linked to capital via roads and waterways) by ruler (from Hendrickson 2012, Figure 6.3).

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

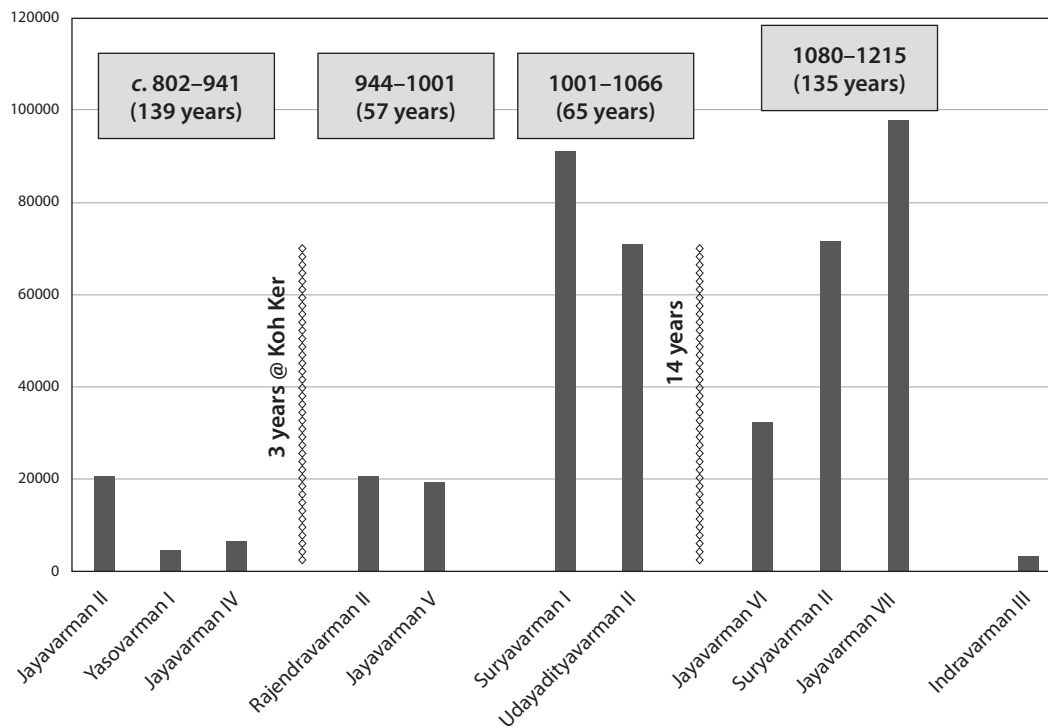


Figure 9.10. Total area under Angkorian 'control' from c. 802–1308 (supplied by the author).

from 'evolutionary' assumptions of self-interest, in which cooperation reflects more than competitive advantage (following Stanish 2013, 85). In providing an increasingly rich archaeological resource, 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.

Acknowledgments

I am grateful to Norman Yoffee, the Getty Institute and the McDonald Institute for Archaeological Research hosting the stimulating conference that produced this volume, and to the late Professor Alice Dewey for discussions regarding ideas of power in Southeast Asia. Her intellectual reach was greater than she likely imagined. This particular paper's genesis lay in a 2001 session that Dr. Laura Levi and I co-organized on 'The Idea of Power in Archaeological Interpretations and the Role of Models from Southeast Asia,' in which Norman Yoffee served as discussant. Those presentations, and multi-year dialogue with Heng Piphall, Eileen Lustig, Jim Bayman, and Mitch Hendrickson have been invaluable. Such discussions emanate out of, and are enriched by, ongoing field-based Cambodian research in collaboration with APSARA National Authority and the Ministry of Culture and Fine Arts. I thank these organizations and Roland Fletcher for supporting my fieldwork through the Greater Angkor Project. Great appreciation also goes to my field crews for their enthusiasm, hard work, and good cheer; I include some of their photographs in this chapter to recognize their contributions. Any errors in this paper are my own.

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Notes

- 1 Interestingly, it is the 'post-Angkorian' inscriptions that best inform on the structure of Cambodian bureaucracy. King Jayajetthadhiraj, 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 *raja guru* 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).

Chapter 10

Negotiating Fragility in Ancient Mesopotamia: Arenas of Contestation and Institutions of Resistance

Norman Yoffee & Andrea Seri

Ancient states – or at least many ancient states – were ironies. That is, many ancient states weren't states at all, at least not as we think of states as territorial entities that included much land, many cities, towns, villages, farmsteads, agricultural fields and orchards. Mesopotamia, for example was a land of city-states (Fig. 10.1). There was no Mesopotamian territorial state, and those cities and their rulers who conquered other cities and controlled much land and access to water didn't last long. There was no Mesopotamia, in effect, in the political sense of the term. What made Mesopotamia Mesopotamia was an overarching cultural web: a shared belief in the same gods, a school curriculum in which the same literature was learned, even a common ideology that there should be a territorial Mesopotamian state.

Furthermore, the most brutal and most successful warrior kings who were celebrated by their scribes as favoured by the gods and who declared they were providing justice for the cities they conquered and the people they ruled set the stage for their own (often rapid) demise.

How do we explain the resistance to forming a long-lasting territorial state in Mesopotamia (especially in early Mesopotamia, the era of the formation of Mesopotamian cities, social and economic differentiation and stratification, and cultural achievements in literature and ritual)? How can we explain why dynasts and dynasties were regularly toppled? And how do we account for the resilience of certain cultural institutions, those things that continued to make Mesopotamia Mesopotamia?

In a recent and glorious essay, Piotr Michalowski (forthcoming) writes how kings who picked up the shreds of fallen or defeated rulers and established new dynasties were 'domesticated' in native historiographic tradition. Michalowski notes despairingly that 'Mesopotamian history [is] the history of kings,

of their unusual deeds and of anecdotal information about them.' He compares this situation in Mesopotamia to historiographic traditions in Europe before the work of the 'Annales group' that wrote history of the world outside of royalty. Disconcertingly, perhaps, Michalowski's essay is then devoted to kings: how Mesopotamian kings were strangers in their own land, and how this advantaged their achievements in seizing power.

In another excellent essay, the archaeologist, Marcella Frangipane (2017), contrasts state formation in three regions of Mesopotamia. She discusses different forms of 'integration' in the first cities in the south, in northern Syria, and southern Turkey, 'control and coordination' of urban economies, and how rulers and their bureaucracies 'resolved conflicts'. Her eloquent analysis, however, doesn't extend to how political systems in all the cities in these areas teetered, why districts were burned or abandoned, and how the politics and the economy changed in their various geo-political circumstances. Frangipane writes of an '*amalgamation* (our italics) of social groups' in cities and early states but refrains from identifying those groups and their likely different social and political orientations. She quotes Richard Blanton that in states there was a 'monopoly of control of power by a supreme authority' (following Weber's dictum).

This essay ventures another perspective on the nature of Mesopotamian cities and states. By citing two recent papers, both of which critically analyse available data on the nature of kings and early states in valuable ways, we establish a point of entry into the biases of many historians and archaeologists. For example, most written tablets from Mesopotamia are not about kings and their heroic deeds. They are economic texts, ritual texts, letters, legal documents, and other non-literary materials. Most archaeological projects have quite naturally concentrated on magnificent

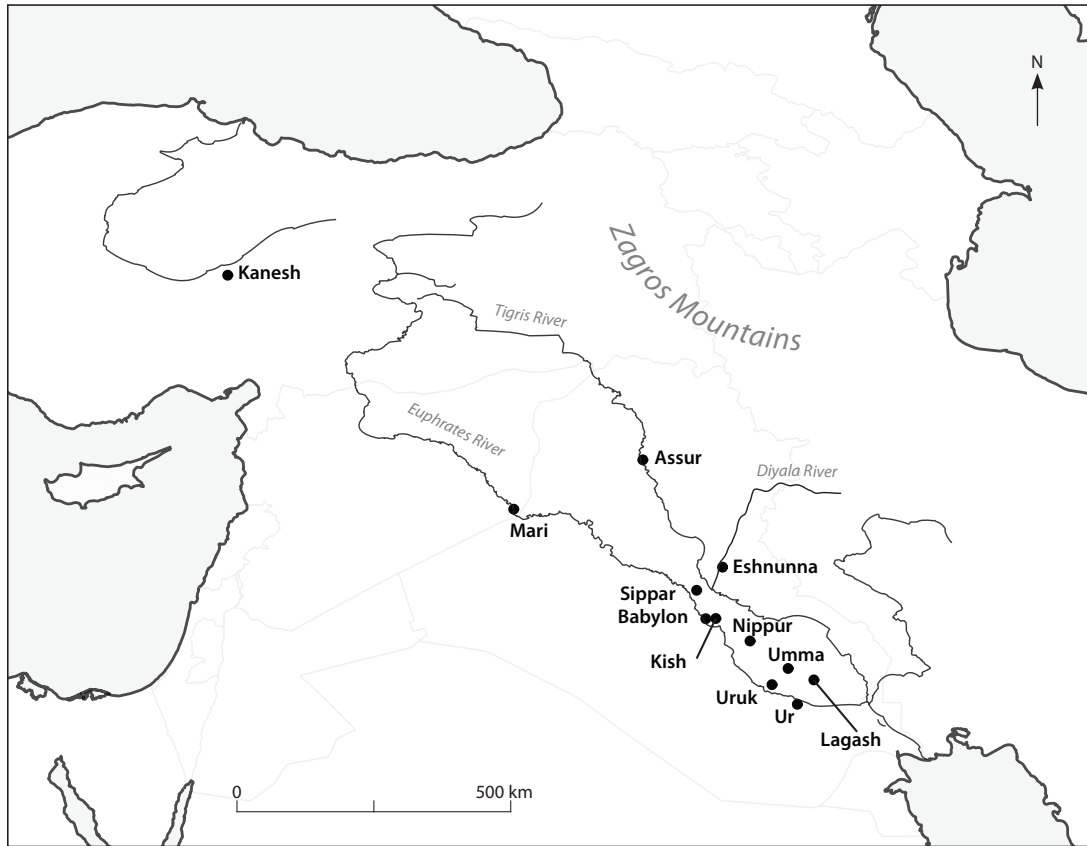


Figure 10.1. Major sites mentioned in the text.

buildings, temples and palaces. Domestic quarters have been excavated in a few but significant examples, and settlement pattern studies have identified smaller sites that were connected to very much larger ones, and so reconstructed the network of regional sites. Less attention has been paid to the destruction levels in these sites.

In this essay we do not simply point to the obvious biases in documentation in the Mesopotamian textual and archaeological record. Also, we do not claim that we have discovered new information from tablets or from material culture that complement or supplement or alter the understanding of Mesopotamian politics and economies and societies. Rather, we attempt to delineate, on the basis of disparate sources, and to synthesize these sources (by way of selected examples), how societies were organized beneath the level of rulers and how social systems interacted with the ruling stratum. Indeed, we question some analyses that are predicated on the distinction between the political system and those groups and individuals who were not bound within that system but were also critical actors in the implementation of the ruler's policies.

Are there patterns of resistance to the goals of rulers in Mesopotamia? How do these instances of contestation and resistance play out? Where do the institutions of resistance come from? We examine whether ancient cities and states in Mesopotamia were 'integrated', as many authors put it, and whether there is there a monopoly of legal authority in cities and states that provides 'benefits' (Frangipane, p. 14).

A history of academic resistance to views of the totalitarian nature of political and economic power in Mesopotamia

The understanding of Mesopotamian states as politically centralized, totalitarian, and administering redistributive/command economies with a monopoly on law has pervaded the archaeological and sociological literature on early states in general. This analysis of Mesopotamian states was formed in the early part of the twentieth century as Assyriologists considered the earliest Mesopotamian states in the late fourth and early third millenniums to be, first, temple-states and then palace-states. The first states were regarded as

temple/theocratic organizations, and the first rulers held priestly ranks. 'Palace-states' was the term used to describe the absolutist royal power of the kings of the Third Dynasty of Ur (Ur III) at the end of the third millennium (which followed the first territorial state of Sargon of Akkade – see below). We present here a digest of the critique of these views by Mesopotamian scholars. We then return to our main subject of how the organization of society cannot be confined to the centralizing and 'integrating' function of rulers (whose great power and wealth we certainly do not contest).

In 1960 A.L. Oppenheim wrote in the first volume of the new journal, *Current Anthropology*, an essay titled 'Assyriology – Why and How'. It was reprinted in his book, *Ancient Mesopotamia: Portrait of a Dead Civilization* (1964). Oppenheim concluded his essay with a famous and provocative call: 'If the new directions here surveyed mean that Assyriology will eventually move away from the humanities and nearer to cultural anthropology, I shall shed no tear.' By 'new directions' Oppenheim meant many things, signalled by his sections on 'why a "Mesopotamian" religion should not be written' and 'historical sources or literature?' For him, the humanistic approach to religion and history, at least by Assyriologists (and Mesopotamian archaeologists – see the fantastic illustration from an eighteenth-century German bible of a Mesopotamian city on the cover of his book – were fantasies of Western scholars who were 'never successful in treating alien civilizations with that tender care and deep respect' that anthropologists were trained to provide. Oppenheim's book still reads as a vademecum to the structure of Mesopotamian society. It interweaves studies on geography, ecology, zoology, ethno-linguistic identity, agriculture, wealth, ownership of structures and land, cities and their parts, markets, and much else. We are content, for the purposes of this essay, only to note that Oppenheim considered that 'Mesopotamian kings were anything but Oriental despots' and that the Great Organizations (as he termed them) of temples and palaces were each internal 'circulation systems'.

A foremost by-product of Oppenheim's perspective (in our view) was his sponsorship of a young scholar at the Oriental Institute of the University of Chicago, Rivkah Harris, who with the critical support of Robert McCormick Adams (who held positions both in the OI and in the Department of Anthropology in the University of Chicago) undertook to study the city of Sippar in the Old Babylonian period (1894–1595 BC). She (and her sponsors) chose this city because it was not the seat of any powerful king and because several thousand private documents (that is, non-administrative texts) had been recovered from the site (mostly from illegal excavations). This project began in the early

1960s, and her book, completed by 1971, was eventually published in 1975. Harris provided information on the city, the city elders, the mayor, the assembly, the merchants, judges, craftsmen, and especially the *naditu* women who lived in a 'cloister' and were active in the real-estate market.

In 1969 and 1971 articles appeared that, in retrospect, marked a change in how Mesopotamianists conceived of the study of Mesopotamian history. These studies, by I.M D'jakonov (Diakonoff) and I.J. Gelb, inspired graduate students to think they could write Mesopotamian history as the history of social groups and social institutions and that political and economic change could be studied, indeed had to be studied, as result of interactions in society. Temples and palaces were part of the story, but they were not the whole story and might even be minor chapters in the story. The two articles are related since D'jakonov visited Chicago in 1962-3 and was interested to learn how American scholars were studying Mesopotamian economy and society. I.J. Gelb, who previously had not concerned himself with such questions, at least as a major part of his research, began studying social organizations, and these studies dominated the rest of his career.

D'jakonov's article, appearing in a book of essays by Soviet scholars, was actually written in 1956 or 1957 and was also drawn from his book of 1959 (according to the confused dates at the start of his essay). In 'The Rise of the Despotic State in Ancient Mesopotamia,' he forcefully refuted the entrenched notion (of Deimel 1931, Schneider 1920, Falkenstein 1954, and others) that held that 'temple estates ... encompass[ed] practically the whole of Sumerian society [which was] a theocratic polity.' By Sumerian society he meant the earliest city-states in Mesopotamia. He mainly referred to the city-state of Lagash in the period before Sargon of Akkade, that is, before about 2334 BC. He calculated that the land held by temples in Lagash was far less than the total amount of land in Lagash, and more importantly cited references to communal land that was sold to kings and notables (which Gelb, Steinkeller, and Whiting later documented fully), to patriarchal extended communities, and to councils of elders. He also discussed popular 'elections' of leaders, coups, and rebellions. The effect of this article was to galvanize scholars to re-think the structure of Mesopotamian society and the course of history.

I.J. Gelb, who wrote in 1967, 'Approaches to the Study of Ancient Society', contributed (in an obscure Festschrift) an article that was widely circulated, 'On the Alleged Temple and State Economies in Ancient Mesopotamia' in 1971 (written in 1965, as Gelb notes). What Gelb argued, in essence and convincingly, was that historians had committed a sampling error.

Temples and palaces, what Oppenheim had called 'Great Households', employed scribes to document in detail activities of these organizations. The data that led to conclusions of an all-inclusive temple-economy came from one temple in one city-state, Lagash. However, there were other documents, land-sale documents from a variety of cities, also discussed by D'jakonov, in which 'private' sellers, heads of kinship groups, alienated land to kings and notables. Witnesses in these documents received token amounts of silver as acknowledgements of their membership in the land-owning group. Presumably, the sellers never moved from their land, which was ultimately owned by the purchaser, but worked the land and paid 'taxes' to the new owner. Although these documents were few, it was an error to assume that the quantity of the documentation – thousands of texts from the temple bureaucracy – should lead to the conclusion that the temples owned all land in early city-states.

Gelb also argued that there was a sampling error in the view that there was 'state socialism' (what Landsberger 1943 called 'Stadtstaatentum') in the Ur III period, c. 2100–2000 BC. Such a conclusion was based on the tens of thousands of texts that came from the clearly massive bureaucracy that administered taxes and tribute in the sites of Drehem and Umma. However, Gelb noted that in Nippur there were significant numbers of texts that attested private landholdings. In recent research on legal cases in the Ur III period, Laura Culbertson (2009 and 2015) shows that decisions of the courts were made by local authorities, not state judicial officers, even though the decisions were collected by the state's bureaucrats. In fact, the army of bureaucrats, officials and scribes, as well as the military machine of the Ur III kings, was resisted by subject cities and territories and lasted less than a century, its effective control less than 50 years.

Aside from the specific analyses of D'jakonov and Gelb, the major contribution of the articles was methodological. In order to study social history, one must collect dozens or hundreds of documents that formed real or artificial archives (that is, archives of tablets that were not found together but reported on similar activities, ideally with the same persons mentioned in the texts). The goal was to delineate the history of officials or of sales or of legal proceedings (or other activities) and so to understand how people interacted with one another in order to collect, circulate, or otherwise manipulate goods and services. Some senior Assyriologists just didn't get it (Kraus 1977) and severely criticized young scholars who were – under the inspiration of Gelb and D'jakonov – attempting to study aspects of social organization and by so doing inferring the nature of social change. The tide of historical research, however, moved

from the study of royal inscriptions and the specious claims of kings, to work on the fundamentals of how land was cultivated, houses were built, rented, sold, and how legal disputes were resolved. These studies resumed some work on these matters that scholars in the early twentieth century had undertaken, mainly as philological enterprises. However, the goal now was to relate the study of economic and legal documents to questions of the legitimacy and governance of cities and states and especially why and how rulers and dynasties came and went and how new rulers and dynasties came to power after the times of collapse. Some historians still wrote in the traditional way: they judged rulers as successful or not, often based on their personal qualities, by amount of territory they conquered, and they attributed collapse to invaders putting an end to weak kings and their dynasties. One Mesopotamian historian denied that any early states (such as that of the Hittites or Persians) were 'ramshackle' (as she put it) (Kuhrt 1995, 281, 701). In the next sections we shall show that the most 'successful' kings sowed the seeds of dynastic failure. We shall also point to the fault lines and cleavage planes that made early Mesopotamian states fragile.

Fragility in literature

A literary text from the seventeenth century BC known as the Atra-hasis ('The exceedingly wise man') Epic explains in detail how a mob of minor deities, protesting their work for the elite gods, took up their spades and torches and marched to the palace of Enlil, the traditional head of the third millennium pantheon (Lambert 1969, Foster 2005, 227–80). Afraid of the possible outcome of the rebellion, Enlil follows the advice of Enki, god of wisdom, and ordered the goddess Belet-ili to create humankind to do labour for the gods, thus relieving the labour of the minor gods. The uprising was successful.

Human insurgents struggled against their overlords with mixed results. Copies of a literary text narrate revolts against king Naram-Sin of Akkade (grandson of Sargon) who ruled in the twenty-fourth century. In this case not only did the ruler smash the rebels but, according to another inscription found at Bassetki in Kurdistan, he was further declared a god against whom rebels were insolent and powerless. In Mesopotamian official histories (as well as histories elsewhere) winners get the privilege of immortalizing their victories in writing. Because the mutiny in the Atra-hasis epic occurred in an imaginary world, rebels could be successful in a way in which, in the literary-historical tradition, kings would steadfastly deny. In the 'lamentations' over the destruction of cities (Agade

estimated at 250 hectares (over 600 acres; the Eanna precinct alone covers 9 hectares, over 22 acres), and the population of the city has been thought to be in the tens of thousands. The city of Uruk developed from a time of humble villages, since only villages (around 10 hectares or less) in Mesopotamia are known before 4000 BC. Thus, the evolution of Uruk was not gradual, but explosive. Demographic change resulted from the depopulation of the countryside, which trend accelerated in the first half of the third millennium BC. Writing, seals, monumental structures, and high art, and statecraft itself were inventions in the new urban setting with its rulers and subjects (Nissen 1988).

It is the rapid and transformative evolution of the city of Uruk that archaeologists and historians have focused on explaining. Uruk was the first city and the first city-state. However, what happened to the Eanna temples and ceremonial structures and the first state in Mesopotamia? (There are also urban developments as early or earlier than Uruk in Northern Mesopotamia, but these are less well known). The Eanna level III (Fig. 10.3) precinct was systematically levelled, and various fire installations were installed (Barrelet 1974), presumably commemorating the *collapse* of the Uruk IV state.

It is possible, as one archaeologist has thought, that refugees from Uruk IV established new 'Urukian' outposts in Syria and Iran (where Urukian traits are found that looks just like those in Uruk) (Johnson 1988-89).

In any case, Uruk, the city did not disappear with the destruction of Eanna. Uruk was a major player in city-state rivalries in the early third millennium, and, indeed, Uruk flourished through the Hellenistic period, roughly 3000 years after its urban foundation. Perhaps we can compare the destruction of the Uruk temple complex in Uruk level IV with the fiery destruction of the ceremonial precinct of the city of Teotihuacan in about AD 550. Teotihuacan was the colossus of Mesoamerica from about 200 BC to the massive conflagration. Rene Millon (1988) noted that there was no rival of Teotihuacan that could have successfully attacked it. Furthermore, *only* the central ceremonial district of Teotihuacan was torched. The neighbourhoods of Teotihuacan were untouched, and in fact there is a population centre at Teotihuacan today.

In any case, although Uruk and some other Mesopotamian cities survived hundreds of years, their forms of government and social relations changed greatly as did their relation to other cities and ephemeral

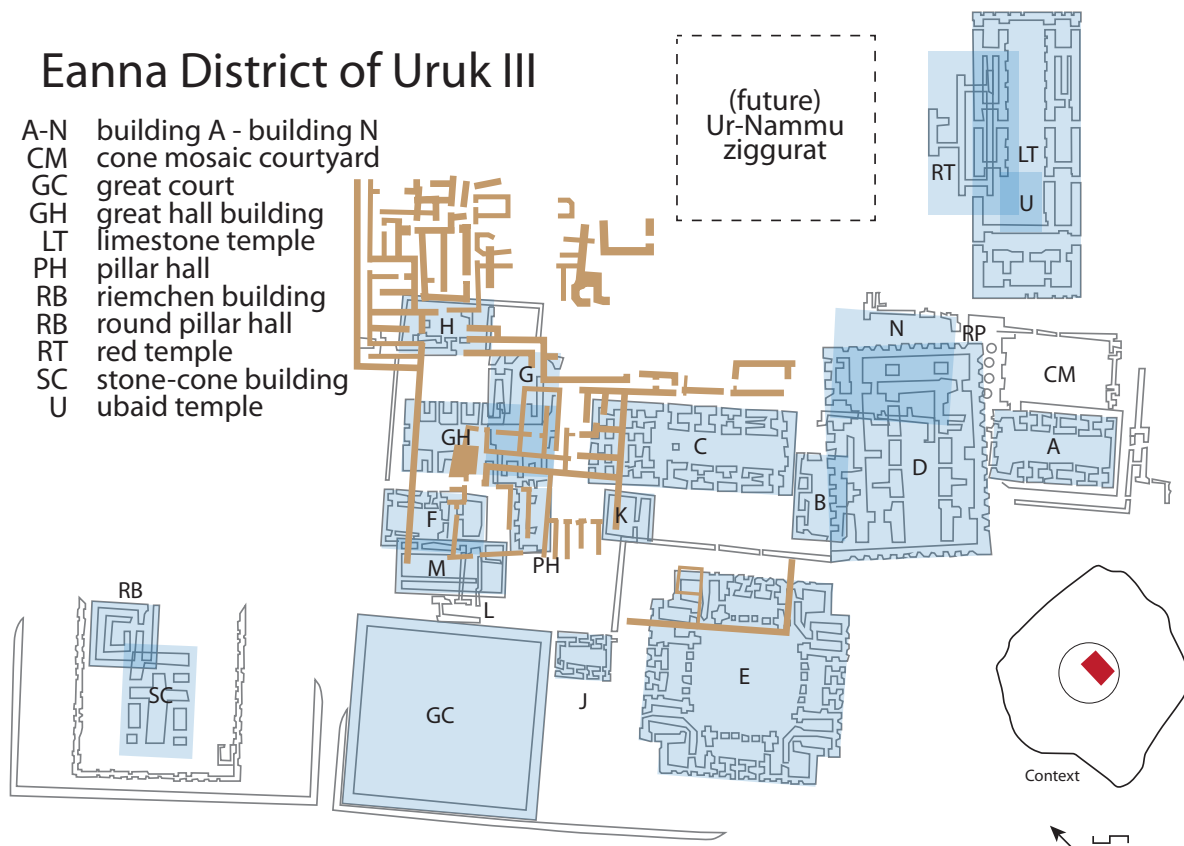


Figure 10.3. Uruk Eanna level III.

territorial states, as did the ethno-linguistic composition of the cities. Nevertheless, cities in Mesopotamia, from the earliest dates onward, usually asserted their own desire for independence against other cities, contained forms of community authority, and were scenes of various forms of struggle for power and wealth within city walls (as we have noted above and see below).

We don't know the circumstances of the destruction of the Eanna precinct, but we can easily think that the massive bureaucratic structure of the first state in Mesopotamia was resisted by the dissident population of Uruk. The presence of thousands of ration-bowls, presumably for the workers who constructed the massive temples in the Eanna precinct, ends after the destruction of Eanna.

In the first half of the third millennium BC Mesopotamian city-states fought each other constantly. In the best known of the petty wars, the neighbouring city-states of Lagash and Umma battled each other over the fertile land between them. The internecine conflicts lasted more than a century as recorded in inscriptions found at Lagash. These texts invariably report on victories by Lagash rulers as well as the kings' boastful claims of divine support (Van De Mieroop 2015). But, as fortune would have it, a Lugalzagesi of Umma conquered Lagash and several other southern city-states as well. His territorial control was short-lived, however, when a new king from Kish, Sargon, defeated him and so took over his conquests.

The Akkadian state (c. 2334–2200 BC)

Sargon of Akkade (or Agade, c. 2334–2279 BC) brought all warring city-states of southern Mesopotamia under his control. He conquered territories from the Diyala River down to the Gulf, the core of his kingdom, and then moved into more distant regions. It is difficult to ascertain how effective his rule was over cities in Iran (e.g., Susa) and farther up the Euphrates (e.g., Mari and Ebla). Sargon and his successors managed to hold power for about 150 years, though unevenly. The succession of five kings from the same dynasty and their dominion over a considerable extension of land was unprecedented and signalled quantitative and qualitative transformations in the socio-economic and political structure of power. The builder of the Akkadian territorial state (or 'empire') was a usurper in the court of the city of Kish. He established his own royal residence in a new city, Akkade and conquered local opposition, ending the struggle among middle and southern city-states in Mesopotamia (in the Early Dynastic period, c. 2900–2350). It is plausible that the *Sumerian King List*, a composition devised to promote the idea that one city at a time ruled all over the land thus creating a cultural unity, was conceived during the

Akkadian dynasty (most recently Marchesi 2010, 233, Foster 2016).

Undertakings of the Akkadian kings confronted the fragility of their realm. All of them, from Sargon to his great-grandson Shar-kali-sharri, carried out numerous military campaigns. They monitored previously conquered territories and attempted to incorporate new ones in the Akkadian state. Important administrative measures were implemented to maintain the cohesion of the reign, from Sargon's establishment of Akkadian governors throughout the kingdom to his grandson, Naram-Sin's regulation of accounting and record-keeping techniques and bureaucratic reforms. Loyal followers and their support were secured through grants of land. A famous monument, known as the obelisk of Manishtushu, records the purchase of 3450 hectares of arable land. The king *bought* the ancestral fields of several hundred men, so enlarging the royal domains and rewarding his own men. To secure divine favour, temples were built and war booty offered to the gods. In an unprecedented act intended to link their dynasty with ancient sanctuaries, Sargon designated his daughter as a priestess of the moon-god at Ur, and Naram-Sin appointed three of his daughters as priestesses at Nippur, Ur, and Sippar.

None of these strategies, however, was enough to secure the kingdom and overcome fragilities. Although no incident is reported from the 56 years of Sargon's reign, problems emerged under his successors. It is possible that both sons and successors of Sargon, Rimush and Manishtushu, met with violent deaths in palace conspiracies (Foster 2016, 8, 10). Rebellions broke out in Sumer and Akkad (southern and middle Mesopotamia) under Rimush's and Naram-Sin's rule. The revolts against Naram-Sin, recorded in literary texts and other inscriptions, have been characterized as the most dramatic events of his reign. Uprisings occurred in the core of the kingdom, with a new leader from nearby Kish allied with other leaders. Another rebel from Uruk allied with other southern cities. All these revolts were crushed and Naram-Sin's son, Shar-kali-sharri, whose name ironically means 'king of all kings', ruled for 25 years before the Akkadian state finally collapsed under his short-lived successors. A military officer seized power in Lagash, another man ruled over Susa, and Gutu people from the Zagros Mountain area (bordering Iraq and Iran) plundered some cities. At this point, the *Sumerian King List*, which monotonously records one king after another, asks 'who was king, who was not king?' (Jacobsen 1943)

Southern and central Mesopotamia (c. 2000–1155 BC)

During most of the second millennium territorial states were few and didn't last long. Until its collapse

in around 2000 BC, the Ur III state had controlled and imposed tribute over a vast territory, from Assyria down to the Gulf, including also regions east of the Tigris River. After the fall of Ur, a constellation of independent kingdoms, whose fortunes were inextricably intertwined, emerged. Political fragmentation and territorial disputes characterized the next two centuries. Ishbi-Erra, a general in the army of Ur, seized power in the city of Isin, expelled the Elamites from Ur, established a dynasty, and dominated much of the region. Further south, the city of Larsa became influential when in 1897 king Abi-sare attacked Isin thus challenging its supremacy. Larsa, however, experienced a period of political instability with rulers from different lineages; then a family, possibly of Elamite ancestry, gained power and ruled for about seven decades. Rim-Sin, the second and most prominent monarch of this newly established dynasty, put an end to the Isin-Larsa rivalry when he captured Isin in 1793. His victory was deemed so important that he dated the remaining thirty years of his reign after this event ('the first year after the king defeated Isin', 'the second year after the king defeated Isin', and so forth).

In central Mesopotamia, in the Diyala valley, Eshnuna had detached itself from Ur and conquered previously independent cities of the area, such as Ner-ebtum, Shaduppum, and Dur-Rimush, becoming one of the powerful states of the early eighteenth century. North-west of Eshnuna, in Assur, after the fall of Ur, local rulers took the title 'governors of the god Assur' (see below on Old Assyrian politics and economics). In the nearby city of Ekallatum, Shamshi-Adad inherited the throne of his father and conquered Assur. He later established his royal seat in Shubat-Enlil, and installed his elder son on the throne of Ekallatum and his younger on the throne of Mari. By the time of his death in 1776, Shamshi-Adad controlled the entire region north of Babylonia, although his Kingdom of Upper Mesopotamia disintegrated soon after his demise. On the banks of the Euphrates in Syria, Mari had not been under the direct control of the Ur III kings, although the two cities were in diplomatic contact. Yahdun-Lim, who by the mid-nineteenth century had begun a new dynasty, was assassinated in a palace conspiracy and his son did not long survive him. Shamshi-Adad then established his control of the area and appointed his offspring as king of Mari. Following the fall of the 'Kingdom of Upper Mesopotamia', Zimri-Lim, a relative of Yahdun-Lim, became the new king of Mari and one of the powerful contenders in the political arena. In Babylon, a local dynasty, ruled from the early nineteenth century, and about a century later, in 1792, Hammurabi succeeded to the throne. Other cities such as Uruk, Kish, and Sippar had their own dynasties

during the time before Hammurabi. The kingdom of Elam in today's Iran and the kingdom of Yamhad in Syria also contended for power in this time.

The political interactions among the various independent cities in the period before Hammurabi were complex. There were diplomatic arrangements and spying, royal marriages, court intrigues, and assassinations. Amorite chieftains, who led separate lineages, allied with and betrayed one another in their successful attempts to seize power within venerable cities in a bewildering kaleidoscope of shifting powers in cities and in the countryside. Traditional and new urban elites alike resisted the domination of neighbouring kingdoms, even though many of them, individually or in concert with ambitious allies, were seeking to impose their own superiority over their neighbours. Thus, for instance, Yamhad and Eshnuna simultaneously attacked Samshi-Adad before he died in 1776. In the next decade, Hammurabi of Babylon rose to prominence. In 1766 Elam, in allegiance with Babylon, Mari and possibly also Larsa, attacked Eshnuna. Then Eshnuna helped Hammurabi of Babylon when in 1764, together with Mari and Aleppo, he defeated Elam. In 1763 Hammurabi overthrew Rim-Sin of Larsa, sacked Eshnuna in 1762, and finally turned against his ally Zimri-Lim of Mari and conquered that city in 1761. Thus, in about five years Hammurabi managed to bring all of central and southern Mesopotamia under his rule in Babylon. His only opponent was the kingdom of Yamhad (modern Aleppo), located too far away in Syria to be a direct threat.

Hammurabi's victories were duly mentioned in the prologue of his famous 'Law Code', written towards the end of his reign (Roth 1995). The prologue of his code exhibits a list of some 25 cities, the crown jewels, that the sovereign ruled, all of them in Babylonia, except for Mari, Tuttul to the northwest and Ashur and Nineveh to the north. Hammurabi's victories, he declares, were endorsed by the respective tutelary deities of the conquered cities. Although one of the epithets of king Hammurabi, 'the queller of rebellions', eloquently summarizes the king's conquests, his authority over his domain did not last long.

Revolts broke out within the first decade of the reign of Samsu-iluna, Hammurabi's son and successor. In the ninth year-name, the king claims to have defeated the army of the Kassites, an ethno-linguistic group first attested in archival records around the eighteenth century. Contradicting this claim of defeating them, Kassites were employed as mercenaries of Old Babylonian kings and also established their own armed encampments in the Babylonian countryside (Richardson 2005). In the tenth year-name of Samsu-iluna, the king mentions his victory over Idamaras

(variant has the army of Eshnuna), Emutbal, Uruk, and Isin. The statement suggests that insurgencies had taken place more or less simultaneously all over the kingdom. In one of his royal inscriptions (Frayne 1990, 384–8, RIM IV E4.3.7.7), the king also claims to have killed and buried Rim-Sin II (a rebel from Larsa), to have executed 26 rebels, and defeated Iluni of Eshnuna and cut his throat. Of the 28 rebels that the king mentions in his royal inscription, administrative records document the following leaders: Rim-Sin II (Larsa), Rim-Anum (Uruk), Daganma-ilum (Kazalu/Muti-abal), Ilima-ilum (Nippur), Iluni and Munaw-wirum (Eshnuna) (Seri 2013). The revolts were put down, but the fragility of the state sprouted. There were signs of economic, institutional, military, and environmental difficulties, and southern and central cities were abandoned (for a time). The last kings of the dynasty of Hammurabi of Babylon, however, ruled until 1595, albeit with reduced hegemony, basically in the countryside around Babylon.

Besides court intrigues and revolts, the forms of resistance traditionally attested, tablets from the first half of the second millennium BC allows us to trace, for the first time in Mesopotamian history, the activities of community institutions whose authority could overlap with and limit royal power. Cities and villages included a network of local authorities, such as the chief of the city, the elders, the city, the port authority, the city ward, and the assembly (Yoffee 2000, Seri 2005). These institutions were involved in the settlements of various disputes and litigations, in the management of labour force, in the distribution and sometimes also in the sale of real estate, and in the collection of taxes, among others things. They acted as hinges that articulated the crown and society. They further show collaboration between the state and local powers as well as tensions over the control of local resources. Unlike the straightforward military opposition of rebellious leaders and their armies, the dealings of local authorities display a complex array of everyday-life resistances.

In traditional histories, kings of the First Dynasty of Babylon ruled for 155 years after Hammurabi. The collapse of the state is much debated and poorly known. The final blow allegedly came from a Hittite incursion. In 1595 Babylon was sacked, and the 'weak' king Samsu-ditana was defeated. Many people abandoned their cities.

The ensuing vacuum of power was filled by Kassite leaders (of several allied lineages) who established a dynasty in Babylon. The beginning of this new period in Babylonian history is uncertain. In 1475 king Ulamburiash overthrew a Sealand dynasty in the very southern-most, marshy part of Babylonia whose leaders

were in power there since the eighteenth century. They later styled themselves 'king of the Sealand' (Dalley 2010; Boivin 2018; Shepperson 2018). These southern territories were defeated by Kassite rulers who, by the fourteenth century, controlled all of Babylonia. They were regarded, in the Amarna correspondence, as one of the members of the 'Great Powers Club' together with Assyria, Mitanni, the Hittites and Egypt (Liverani 2000).

Certain incidents occurred between Babylonia and Assyria after the assassination of the Kassite king Kara-hardash in a rebellion. Assur-uballit of Assyria, the builder of the 'Middle Assyrian' state (see below), the grandfather of the deceased ruler, invaded Babylonia and installed a puppet king on the throne of Babylon (c. 1332). About a century later, another Assyrian monarch, Tukulti-Ninurta I, invaded Babylon and overthrew Kashtiliashu IV (c. 1225). Tukulti-Ninurta I (see below) ruled Babylonia briefly through puppet rulers, until a revolt in Assyria deposed him. The Kassites attempted a return to power, but Elamite raids finally put an end to the Kassite dynasty in 1155.

Assyrian Councils, Nobles, Economy: Decentralized States, The Changing Roles of Kings in Northern Mesopotamia (c. 2000–1200 BC)

Before Shamshi-Adad (Samsi-Addu) founded his 'Kingdom of Upper Mesopotamia', including Assyria, in the early eighteenth century, a native Assyrian dynasty ruled the city of Assur and nearby territory on the eastern bank of the Tigris River for about 200 years. Except for a few building inscriptions recovered from a temple, almost all of the documentation from this period comes from the archives of traders found in the city of Kanesh in central Anatolia (Asiatic Turkey). We summarize the economic affairs of the traders (see Larsen 2015) but in particular emphasize the nature of authority in Kanesh and Assur.

The Old Assyrian commercial system (c. 1920–1750 BC) can be reconstructed from the survival of about 23,000 merchant records written on clay tablets of about 500 Assyrian traders. Most of the Assyrian traders lived in the Lower Town of the city of Kanesh (modern Kültepe) alongside 'native' Anatolians (of various ethnolinguistic groups). The karum of Kanesh was not itself the Lower Town, but the institutional association of the Assyrian traders. The palace of the Anatolian ruler of Kanesh was located in the citadel of Kanesh. The Assyrian merchants were politically subservient to the Anatolian prince to whom they paid taxes.

The Assyrian traders moved tons of tin and high-value fabrics from Assur to Kanesh. They traded these goods in Anatolian markets (through about a dozen smaller Assyrian enclaves) for silver and gold, which

were relatively plentiful in Anatolia. The Assyrian texts allow a picture to be drawn of enterprise based on private initiatives, risk-based and profit-seeking behaviour, free-floating capital, bearer's checks, and similar 'modern' features (Yoffee & Barjamovic 2018). This picture utterly refutes previously held notions (by Polanyi 1957, Finley 1973, and others) of state-organized trade, fixed prices, and merchants who were agents of the state.

There is only a single mention of a 'palace' at Assur, the home-base of the merchants, who travelled over 1000 km to Kanesh, established residences, married Anatolian women (having left their Assyrian wives in Assur), and lived for three generations in Anatolia. The Assyrian trading system was based on communities of private agents who maintained legal and financial institutions independent from the society in which they settled. In Assur itself, which was much smaller in size than Kanesh, the government consisted in an oligarchy that was linked to the city's specialization in trade. Rulers styled themselves as 'stewards' of the state deity. Both at Assur and Kanesh, there are assemblies of 'big and small men' who decided legal issues, especially among merchants quarrelling over deliveries of goods and long-term partnerships combining financial resources (Barjamovic 2011).

The profits made from the long-distance trade were enormous, but the trade depended on the fragmented nature of the political scene during this period. The rise of centralized states in the eighteenth and seventeenth centuries BC effectively put an end to the trade that depended on the movement of goods, the payment of bribes to local chieftains along the routes, and taxes owed to the palace in Kanesh. It is important to note that the privately organized trade required a level of state intervention and support. The state, however, was itself a kind of collective government in which the traders played roles. The state facilitated transport through the building and maintenance of roads, bridges, harbours, and inns and through the negotiation of treaties with local potentates.

The small size of a polity like Assur effectively meant that the same group of individuals shared roles as agents, financiers, and legislators. All actors were closely related in terms of kinship, which meant that the system could be built on mutual trust instead of competition. The entire city-state of Assur can be seen as a corporate entity in external competition with a number of similarly organized political units. The governing institutions, whose members were for a large part involved in the trade, left the actual running of the business to private enterprise, family firms.

It will not escape the reader of Mesopotamian histories that this picture of city-state governance is

not what one reads in economic histories in which merchants were thought to be state agents, and cities were not centres of production, export, and import. Now, it is true that Assur in the Old Assyrian period may not have been typical of other Mesopotamian states, or so some have said. However, the biased sample of documents allows a certain scepticism of those sceptics. In Old Assyria our tablet-sources come almost entirely from the private archives of merchants. We know little about the working of the palace or the temples in the city of Assur. Compare this sample to the tablet-sources from third millennium cities, which are overwhelmingly from temple or palace archives. In those cities we have occasional references to assemblies and councils and traders, and we have clear archaeological finds of distant goods. Who were the traders? How did they trade? How important was trade to third millennium cities? New studies are piecing together the disparate evidence for mixed economies and dispensing with the older ideas that one must choose between either public or private control of trade.

After the Old Assyrian period, from c. 1700–1356 BC, there was a consolidation of territorial states in Mesopotamia and then the collapse of those states, resulting in a proliferation of smaller states with varying amounts of royal authority and military tactics. In 1356, Assur-uballit of Assyria (see above) consolidated a new Assyrian state (in the time called the 'Middle Assyrian' period), successfully warded off local powers and undertook adventures to the south in Kassite Babylonia. Such adventures of succeeding kings culminated in the reign of Tukulti-Ninurta (1233–1197). The king, as depicted in an epic poem, decided to defeat the Babylonian (Kassite) king who, as he claims, violated treaty obligations. The gods, he claims further, supported his campaign, and he sacked Babylon, carried off the statue of Marduk, chief god of Babylon, to Assyria (Machinist 1976, 1978).

Tukulti-Ninurta, however, faced local opposition which consisted of the nobles of Assur and his own sons. His desecration of Babylon was regarded as impious, as was his behaviour to the gods of Babylon. Furthermore, Tukulti-Ninurta decided to move his government to a new city, 3 km north of Assur, to build a new palace complex, establish a new religious precinct, and construct a new irrigation system to support the new capital. The vicious and callous behaviour towards Babylon, a seat of traditional Mesopotamian religion and scholarship, was a grievous sin to the old-line nobility ('great men'), who were also being disenfranchised by a new administration. They assassinated Tukulti-Ninurta. This was not the first royal assassination known in Mesopotamian history, since Rimush, son of Sargon of Akkade (and perhaps his

brother, too), was also killed in a court intrigue. After several centuries of central weakness in Assyria and also a time of collapse and decentralization of other states in Mesopotamia and throughout the Near East, a new Assyrian state arose with militaristic kings who attempted to bring the entire region under their control.

Contestation, resistance and fragilities in early Mesopotamian states

Piotr Michalowski (2011, 84) writes that ‘traditionally the study of [Mesopotamian] history has focused on a succession of “peoples:” Sumerians, Akkadians, Amorites, Kassites, Arameans’ and others. In the earlier part of the twentieth century, such views were racially charged: Semitic Akkadians debased the heroic Sumerian culture. As we noted earlier, another, rather Whiggish view, was that of a progression from temple (theocratic)- states to ‘despotic states’ controlled by a totalitarian royal palace bureaucracy (in the Ur III period, c. 2100–2000 BC). The collapse of the Ur III state (c. 2000 BC), in which the militaristic monarchy lost control of regions near the capital and all its foreign conquests, was followed (in the traditional histories) by an ‘Amorite’ ethnic-group invasion and the installation of various dynasties led by kings with Amorite names. In an Old Babylonian document, the population of the time consisted of ‘Akkadians and Amorites’. Michalowski, however, has refuted the ideas of an Amorite threat to the royal house of Ur and an invasion of nomadic Amorites who bested local dynasties in city-states. Amorites, who in Ur III times were military guardsmen of the royal house and also officials in various cities, seized power in the cities through the interplay of struggles with both local elites and leaders of (named) Amorite lineages, of which there were many. Amorites were certainly not a horde of foreigners who swooped down on Mesopotamia.

The picture of political change in early Mesopotamia is one of resistance to the control of any king or city-state. Although the ‘Sumerian King List’ may portray an ideal of one city ruling over Mesopotamia, the facts on the ground were of armed rebellion against any ruler who attempted to establish hegemony over neighbouring city-states. This much is clear. In the domestic arena in cities, certain forms of contestation are apparent, but an overall picture is elusive. No extant text from an archive records a social revolt similar to the uprising of the primeval ‘proletarian’ gods of the Atra-hasis Epic. But resistance to power in the actions of local authorities and local elites (as we have mentioned, and see below) is occurred.

In the Old Babylonian period, there is a veritable perfect storm of resistance to power. After the collapse

of Hammurabi’s ‘empire’, which lasted for only the last 5 years of his reign and the early years of his successor’s, the following scenario can be reconstructed. First, there was a traditional revolt of the city-states that Hammurabi had conquered. In the eighth year of Samsu-iluna, son of Hammurabi, a king named Rim-Sin (the second Rim-Sin), from Larsa martialled troops against the king from Babylon. An archive from the city of Uruk, dealing with the house of prisoners of war, shows that revolts against Samsu-iluna involved local leaders from all Babylonia trying to achieve independence from the central government.

A subsequent uprising was led by a ‘Sealand’ dynasty, that is, a local dynasty that emerged in the marshy southmost part of the land. Rulers from this dynasty were able to fight a kind of guerilla war against the diminished power of the kings in Babylon. In central Mesopotamia, not far from the former capital, Babylon, armed groups of Kassites established camps in the countryside. In Babylon and the nearby cities still under its control, the Crown’s funds, from tribute and taxes of conquered territories, were failing. Agricultural labourers on royal estates could no longer be permanent employees but were hired for seasonal work (Yoffee 1977). However, the palace required the permission of the local ‘head-man’ (or mayor) to requisition community members for the work (Stol 1976). Urban temples in this period were similarly desperate for funds. They created a series of loans in which the ‘debtor’ borrowed money from the temple and promised to return the loan with interest when they were ‘healed’ through the intercession of the gods. Finally, the nearly powerless royal house in Babylon was attacked by an expeditionary force of Hittites from Anatolia. The Hittite army had launched a campaign in northern Syria, which was a vital corridor for communication with the south, east, and west. Finding no opposition, the army proceeded to Babylon, sacked the city and carried off the sacred statue of the patron god of Babylon, Marduk.

Whereas some Mesopotamian history textbooks report that the Hittites came down ‘like a bolt from the blue’ (Postgate 1977, 100, Oates 1979, 84), in fact this was not a case of a stable and integrated Babylonian state that was defeated by a superior armed force. Babylon fell from a variety of factors – local city-state resistance to territorial state created by Hammurabi, several ethno-linguistic ‘tribes’ (as Kassites are sometimes described) who had been attracted to Babylonia by its riches and possibilities of serving Babylonian rulers as mercenaries, and not least resistance within city-states by the locally constituted/community authorities who acted against the rulers of their cities.

How typical of contestation and resistance to the goals of rulers in other times and places in

Mesopotamia was this Old Babylonian scenario? We hold that whereas there were of course specific differences in means and tactics of resistance, the inherent fragility of governance in early Mesopotamian history make the Old Babylonian patterns of behaviour far from anomalous. Stability is a kind of historical fiction, as is the uncontested power of the strongest of Mesopotamian kings. Although rulers were certainly powerful and were brutal tyrants who built enormous palaces and furnished magnificent temples and led mighty expeditionary forces, the irony of such power is that it led to systematic and successful resistance.

The incidence of warfare in Mesopotamia that we have described (for the Early Dynastic period in the early third millennium and in the Old Babylonian period in the early and mid-second millennium) was itself a critical component in the fragility of political systems on both the territorial and local (urban) level. The need to enlist soldiers, mainly as *corvée* labourers (Steinkeller & Hudson 2015), and for the construction of palaces, temples, and city-walls, on a more or less constant basis, posed a problem for the maintenance of agricultural activities and irrigation. We don't know a lot about how soldiers were requisitioned. There are documents about the hiring of 'substitutes', as wealthy men could pay for others to work and fight for them. We know little about how these soldiers were fed (Landsberger 1955, Wilcke 1983).

In late periods (in the late second and first millennia BC), which we have not incorporated in this essay, the Assyrian army defeated territories that didn't pay tribute and deported tens of thousands of people into the Assyrian heartland (Oded 1979, Wunsch 2013). These deportees worked in the latifundia of Assyrian nobles (often army generals) and in new capitals as builders and craftsmen.

The enormous amount of military actions in Mesopotamia, in which there was seldom an absence of war, destabilized states and empowered those in the countryside to take power in fragile Mesopotamian cities.

Coda

We argue in this essay that early Mesopotamian cities and states were inherently 'fragile'. The fragility of territorial states is clear: they didn't last long. Cities were constituted in various social and economic groups in cities which had their own leadership structures, and the cities were embedded in a countryside in which villages and territory were characterized by farmers, pastoralists. Cities were in a sense resilient, providing the main identity for citizens, above and beyond other social identities. In both cities and the countryside,

there were members of distinct ethno-linguistic groups (such as Amorites and Kassites, that is, people whose ancestral languages were not Akkadian or Sumerian) who interacted with each other in the complexity of kinship relations and with other residents of cities. Cities were originally formed (in the last part of the fourth millennium BC) as people in the countryside migrated into what became cities. The countryside became depopulated in this process, which lasted nearly a millennium, then became repopulated as new villages were established, some in relation to the new cities, others as self-sufficient communities inhabited by urban refugees. Fragility has an evolutionary logic that led to a variety of cracks, fissures, and resistances to the political order.

This picture of stratified and differentiated Mesopotamian societies is at variance with the fetish of Oriental despotism (which one Classical archaeologist calls 'Occidentalism'). We have discussed the history of the demolition of this fetish in the first part of our essay.

We have also discussed certain patterns of resistance in Mesopotamia as a whole and in the city-states in particular. Most visible is the resistance to hegemonic control by the city-states. The formation of the first territorial state in Mesopotamia by Sargon of Akkade was followed quickly by armed rebellions against the rulers. At the end of the Ur III period, cities – one after the other – stopped paying tribute to the last king of the short-lived dynasty creating an economic crisis in the capital and leaving Ur vulnerable to its foreign and domestic enemies.

In the succeeding Old Babylonian period we have noted a variety of resistances to power, including in the cities themselves which was led by community leaders. Indeed, in the preceding, highly centralized territorial state in Ur III times we have noted that legal decisions were made by community leaders, even as the official records were part of the state's archival system. In the Old Babylonian period, the famous 'Code of Hammurabi' was not used in the judicial system which was maintained by local judges, elders, assemblies.

In this essay, we haven't dwelled at length on the various textual curtains that have veiled the fragilities of Mesopotamian societies. We have noted that scholarly reliance – mainly but not only in previous generations – on royal inscriptions which simply glorify the accomplishments of kings. This has led to the 'report-card' version of history: successful kings conquered many places because of their personal abilities; unsuccessful kings were weak-minded and lost territories built up by their abler predecessors.

Finally, we admit that we haven't written about the continuities in Mesopotamian culture that made possible the 'regeneration' of Mesopotamian political

systems of dynastic rule and ambitions to create a territorial state, a Mesopotamia in the political sense of the word. Dynasties of Amorite and Kassite kings, whose languages we know entirely from their personal names, did not have their scribes write in their own languages. Rather, these rulers were intent on becoming Mesopotamians. Under their rule (and then later in Mesopotamian history in the first millennium BC, which we haven't considered in this essay), scribes copied Sumerian and Akkadian texts, which were used in schools all over the land, and worshipped Mesopotamian gods. Among other things, these literary and school texts promoted the normative picture of kings as absolute rulers of stable and integrated cities, favoured by the gods, and instructed to conquer their neighbours.

As we have elaborated in this essay, this was an impossible dream.

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The Evolution of Fragility: Setting the Terms

Explanations for the collapse of early states (and complex societies) often assume that they were integrated and stable until something bad happened, usually environmental change or because enemies overwhelmed them. In fact, many of these early states lasted a relatively short time, at least in archaeological reckoning. Others were longer-lived, but struggled to overcome structural weaknesses that eventually resulted in the fragmentation or a large-scale undoing of political orders. Rulers who attempted to institute mechanisms of control often laid the conditions for resistance and the disintegration of their regimes. The central theme of this volume is to undermine some traditional themes that naturalize the state and legitimize its historical claims to permanence.

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