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Richard Blanton • Lane Fargher

Collective Action in the Formation of Pre-Modern States



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*For Cindy, Richard's Loving Wife,
With Gratitude
and
Para Flor La Esposa
de Lane, Con Amor*

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Chapter 1

Introduction

The publication of *African Political Systems* (Fortes and Evans-Pritchard, eds. 1940) marked the beginning of anthropology's turn to comparative studies of political systems. The discipline's comparative approach has grown to include the more diachronic and socio-cultural evolutionary questions raised by anthropological archaeologists about the formation of states, spurred by a revived interest in theory, new methods of data collection and analysis, and increased research funding. This book makes a contribution to this growing literature through its comparative study of pre-modern states, but we do something unusual in addressing anthropological issues from the perspective of a theory associated primarily with political science, the theory of collective action. The goal of this interdisciplinary strategy has been to enrich the quality of anthropological research, but we hope that political scientists and others will find our anthropological take on collective action intriguing, useful, and, perhaps, challenging.

A Gap Between Anthropology and Political Science

In the study of politics, the interests of anthropologists and political scientists rarely overlap because our Western common sense tells us there is a necessary divide between the subject matters of the two disciplines. With the rise of modern West the rules of the political game shifted, reflecting an evolutionary leap from autocracy to democracy (e.g., Midlarsky 1999; Lenski 1966: 317). As we will demonstrate, however, the theory of collective action implies that an evolutionary leap is not likely. Instead, it implies that, to some degree, state-builders, early or modern democratic, will encounter similar kinds of constraints and opportunities, and will likely respond to them in similar or, at least, analogous ways. We found this possibility intriguing, but unexplored, so we resolved to pursue a program of research on pre-modern states, grounded in collective action ideas, to evaluate these theoretical implications. We should make it clear at the outset, however, that to say "grounded in" need not imply that it is our intention to promote collective action theory or any other perspective. Instead, the research reported on here reflects a thoroughly empirical and falsificationist epistemology in which the

goal of research is to formally evaluate whether or not collective action ideas represent a promising direction for gaining new knowledge about pre-modern states.

Steps Toward a More Integrated Theory

We took several steps to integrate political science and anthropological perspectives. First, in chapter 2 we critically inquire into the history of theory to find the origins of the idea of a great divide between pre-modern and modern politics. This inquiry goes some distance toward answering the question: Why have collective action ideas left so little imprint on anthropological research? For example, in a massive history of anthropology and politics (Vincent 1990), collective action is not mentioned, and none of its key theoreticians are cited. Given that not many anthropologists will be familiar with collective action theory, in chapter 3 we summarize its ideas, and demonstrate how its rational choice approach to social action in state-building can be adapted to the study of pre-modern states. The work of Margaret Levi (1988), in particular, greatly facilitated our efforts to apply collective action theory to pre-modern states; the next required step, however, from theory to research practice, was a much larger and more difficult one. This was true for two reasons. First, because there has been so little interest in this theoretical perspective in our own discipline, there are no methodological exemplars that could serve as guides to best practices. But neither have collective action theorists in political science adopted the empirical and falsificationist perspective we employ. As a result, it was necessary to devise the methods described in chapters 4 and 6 through 9.

The analytical framework for our research design is derived from cross-cultural comparative analysis, and our data are drawn from a world-wide sample of societies. While other analytical approaches and methods would be equally suited to theory testing, we concluded that systematic cross-cultural analysis would be a productive and feasible starting point, for several reasons. First, we wanted to know: Do collective action processes transcend cultural differences found in diverse civilizational traditions and time periods? By drawing our data from a world-wide sample of societies, we think our research design has the potential to test the theory while at the same time potentially enriching and broadening it by revealing new and unexpected political patterns. Cross-cultural method has much to offer in other respects. It stands as one of the most explicitly scientific modes of anthropological inquiry, has a long and distinguished history in our discipline, and it has been subject to considerable methodological refinement (Ember and Ember 2001). Lastly, we can draw from a large body of archaeological, historical, and ethnographic literature of sufficiently high quality that systematic comparison between pre-modern states is feasible. In chapter 4 we identify a sample of 30 societies for which we found information that is suitable in terms of both quality and quantity for comparative coding.

Validity and Replicability

In developing the approach used here, we have been concerned with issues surrounding the validity and replicability of our results. How can the reader evaluate the degree to which our results might be considered valid, and if it is feasible for the reader to check our results and even the data? Where possible, we make use of probability statistics to assess the strength of our conclusions, and these quantitative methods provide one way to gauge validity. Beyond quantification and statistics, we also address validity and replicability through our detailed textual summation and documentation that is provided for all of the information that is analyzed. This documentation is found in lengthy data summaries that are referenced according to author and page citation, both in conjunction with the method chapters but also in Appendix 2.

Comparative research is always made problematic by the fact that no one person can be an expert in all world areas, and, as a result, comparativist research may be criticized by area specialists. We hope to satisfy area specialists by carefully and fully describing our data sources in a manner that will allow them to evaluate the quality of the information we consulted, and the care with which we mastered the local source material, and these source materials could also facilitate replication of our results.

Is Collective Action More or Less Likely to Develop in Some Civilizations Than Others, or in Some Time Periods More Than in Others?

In chapter 4 we group our sample of 30 societies in a way that we use for various descriptive and analytical purposes throughout the book (the groups are: East Asia, Southeast Asia, South Asia, sub-Saharan Africa, North Africa/Mediterranean/Europe, and New World). This is a macroregional clustering at continental or sub-continental scale in a way that captures, to some degree, shared aspects of the cultural and social histories of state formation. In chapter 5 we use the macroregional grouping to organize our presentation of sociocultural evolutionary and historical background information to the coded cases, to provide the reader with a context for each coded society in relation to the long-term evolution of political systems in each location as well as the more specific historical background information for each of the coded societies. These background essays provide the reader with the history of state formation in each macroregion with emphasis on the evidence for long-term evolution in patterns of collective action, an issue we address more comparatively and processually in the final chapter.

Having presented theory, our methods, historical background, data summaries, and the collective action measures, in chapter 10 we get to the heart of the matter and statistically evaluate the propositions of collective action theory. Here, beyond evaluating the predictions drawn from theory, we also address a question that will be of special concern to our anthropological readers: What is the potential role of

culture in the expression of collective action process? Collective action theory is a processual approach that derives its insights from predictions about the social actions of members of a political community under varied conditions. From this perspective, social process is expected to transcend local cultural differences, yet, anthropologists or other area specialists might argue that local culture, rather than social process alone, could also be constitutive of collective action. For example, is collective action more or less likely to develop in some civilizations than others? In chapter 11, we address additional questions of interest to anthropologists, questions that are not usually considered by the collective action theorists. Here, we investigate the impact of social forces operative at world-system, regional, and local scales that may have served to retard or promote collective action processes. In the final chapter, we take a comparative perspective on the long history of collective action in the evolution of pre-modern states. The latter question is related to evolutionary thinking, which we also critically evaluate, namely, has there been progressive development of collective action since the very earliest phases of state formation? Here, we return to the original question that prompted this work, namely, is there a divide between the pre-modern and modern worlds? Finally, we sum up by questioning whether the social sciences should reevaluate some aspects of political modernization theory in light of the findings of our research.

Final Thoughts

This project proved feasible owing to its three foundational elements (not to mention help from people we acknowledged earlier): a theory we think might be of interest to anthropologists but which they have not considered, a cross-cultural approach suited to formal hypothesis testing, and the availability of high-quality data. That the research was feasible does not imply that doing it was easy or that the work always proceeded in a straightforward manner. Neither anthropologists nor collective action theorists have analyzed such a large and varied database using systematic cross-cultural comparative method in this way, and to accomplish it we had to master a vast literature while at the same time developing new methods for coding and analysis. This unusual combination of theory, data, and method has been challenging to develop and carry out, but has proven to be a productive and informative research strategy, and we think our results will require all of us, anthropologist or not, to revisit some of our cherished assumptions about the nature of political evolution.

Chapter 2

Rethinking the Role of Agency in Political Evolution

A basic postulate of collective action theory is that humans find it difficult to build and maintain stable political regimes, given the potential for disorder to be found in their rational but often selfish social actions—their agency. Collective states, that is, those featuring resource sharing among members of the political community, are particularly problematic in this regard. In this case, while shared resources can provide benefits to all, they are allocated according to a social contract representing a consensus arrived at between rulers and taxpayers, differently situated social actors whose interests and goals are often divergent. Given this dilemma, how is it possible to build a state, especially a more collective one? Western social science envisions two solutions to the state-building dilemma. Recent history saw the transition to modernity in the form of Western democratic institutions that brought the potential for consensus and collective action, while, prior to modernization and democracy, state formation depended primarily on the coercive power and absolute divinity of autocratic leaders whose highly centralized rule exploited commoners and largely precluded collective action or social contracts (e.g., Lenski 1966: 317; cf. Haas 1982). This is a scenario that we find implausible and that begs many questions, for example, how is it that pre-modern rulers could avoid consensus politics? Why would people accept exploitation? Are the Western democracies really so different from pre-modern states? To see how anthropologists have answered such questions, we look briefly into the history of ideas about the nature of social action in state building.

Is Agency Universal?

Collective action theory implies a universality of human agency, but the idea of autocracy implies something different, namely, that in the pre-modern condition, agency was more selectively parsed out to powerful rulers while commoners, as a subaltern, were unable to resist the regimes of power imposed on them. This conclusion is consistent with what most anthropologists assume, namely, that the idea of universal human agency is only an ethnocentric expression of Western individualism (e.g., Ortner 2006: 133-4). We are more persuaded by social action theorists such as Sewell (1992) who posit the universality of agency, but

we are curious about how anthropologists arrived at the conclusion that the non-Western ‘Other’ is so different from us.

Since the agency issue goes to the heart of how this book deviates from most anthropological thought, it is necessary to briefly trace anthropological ideas about the universality of agency. Certainly, political philosophers in non-Western civilizations had no trouble identifying the agency of their own people. Ideas similar to those of the rational choice and collective action theorists are found in early treatises on political philosophy developed within diverse civilizational traditions. A recurring theme in these literatures is that the state is the key institution in society able to manage disorder, including that which may result from the selfish or unruly behavior of individuals. In Classical Islamic thought, ruler is expected to overcome “anarchy, confusion, man’s selfish nature and the tyranny of the strong” (Hasan 1936: 57; cf. von Grunebaum 1961: 127). In early Hindu and Buddhist political theory, rulers were admonished to maintain moral and social order (Heesterman 1998: 14; Tambiah 1976: chapter 5). In the doctrines of the Chinese Confucian literati, the ruler’s correct ritual performance and ethical virtue served as persuasive guides to action promoting harmonious relations among the people (Mote 1968: 398). From Zorita (1994: 93) we learn that Aztec rulers were admonished to “... watch over and punish the wicked, lords as well as commoners, and correct and reform the disobedient. ...” During the 17th and 18th centuries, political philosophers of the European Enlightenment assumed the universality of agency. Thomas Hobbes claimed that in a “natural” condition before the state the human pursuit of self-interest brought about a permanent and destructive state of war and strife, and yet, societies did develop, based on a social contract (Hobbes 2003: 100-28). The contradictory forces of selfishness and cooperation are at the heart of what has come to be called Hobbes’s dilemma: What holds society together given the tendency of individuals to pursue their self-interest? We find this an interesting research question, but, unfortunately, anthropological theorists have not pursued it. We agree with Lichbach (1995: xi) that Hobbes’s dilemma should be a central question for the contemporary social sciences, but recent theory in anthropology and most other Western historical social sciences ignored Enlightenment ideas in favor of “history-as-other” (Ricoeur 1984). One of the goals of this book is to bring questions like those asked by Hobbes back into anthropological theory-building, and we see the rational choice theory of collective action as one possible theoretical direction that could help to accomplish that. We describe the theory in the next chapter, but, first, we need to clarify why we think it is important to pursue a theoretical direction able to return to Hobbes’s dilemma.

Two Pathways to State Formation

Ideas like Hobbes’s were modified by 18th and 19th century Europeans who distinguished two distinct paths to social complexity, an Occidental (or “Classical”), and an Oriental (or Asiatic) (i.e., all non-Western instances, whether geographically

Asiatic or not). It was only in the Occidental path that the social actions of commoners forced rulers to accept social contracts, while oriental social complexity was thought to reflect exclusively the outcomes of the strategic behavior of an elite. Western exceptionalism in this recent Eurocentric tradition can be traced to Mills (History of British India), Montesquieu, and Hegel, among others (e.g., Anderson 1974: 472), although found even in ancient Greek philosophy, for example, when Aristotle wrote that Barbarians and Asians “are more servile...hence they endure despotic rule without protest” (in Anderson 1974: 463). But Marx’s and Engels’s proposal for an “Asiatic Mode of Production” (AMP) (or “Asian phase,” and the similar but less socially complex Germanic Mode of Production in early Europe), have been the most influential theory sources that were carried forward into 20th century anthropology and other historical social sciences (Thapar 1992: 5-7).

According to the Asiatic Mode of Production idea, rulers were invested with absolute power and divinity and able to maintain total dominance over a subaltern class (Thapar 1992: 7; as an example, see Finley’s [1981] discussion of early Near Eastern states). But wouldn’t subalterns resist dominance? The answer—no—reflects the assumption that in the oriental civilizations subjugated populations were incapable of acting in their own interest. According to Bourdieu (1977: 164), this is explained by the fact that people were mystified by the experience of *doxa* and so were unable to distinguish between the social and natural worlds, and so failed to comprehend the nature of social production and political transformation or of participating in either as social agents. This is like Fried (1967: 226), who argued that in early stratified societies subalterns internalized norms that justified inequality, making the beginnings of stratification possible “without the conscious awareness of the members of the affected societies.”

Assertions like those of Bourdieu and Fried reflect the false consciousness ideas of Marxist theory. In the Asiatic societies, social change was the result of an elite who constructed new systems of culture to legitimate their appropriation of surplus production and to equate it with the natural world (Wolf 1999). Further, they forged complex society by linking together the self-sustaining and isolated “primitive collectivities” of their rural populations living in a state of nature (e.g., in Anderson 1974; Hobsbaum 1964: 24, 33-5; Marx 1973: 473; cf. Godelier 1978: 212, 220-5; Vitkin 1981: 445). A “herd mentality” pervaded the natural collectivities because, lacking in private property and trade, strategic social or economic decision-making was absent. Lacking any economically-driven social conflict, individuals felt no social impetus to develop a sense of self that could be the basis for heterodox social action such as opposition to the state. This kind of social environment favored the growth of unrestrained despotic regimes able to assert total power over passive subalterns. In Marxist theory, the trap of despotism was only broken, later in world history, in the transition from a state of nature to a state of society, when the social passivity of the subjugated classes was undone through a growing self-consciousness. However, according to Marx, it was only in later European history that the herd mentality of the subaltern was transcended with the emergence of the fully social human and the corresponding “human society” that “would in time subordinate the whole world” (Vitkin 1981: 445; cf. Engels 1972: 216).

Marx and Neoevolutionist Theory

Of course, the Asiatic Mode of Production theory represents pure European ethnocentrism, an essentialist rendering of an imagined other that Marx and other social philosophers constructed through an alterist process of symbolic inversion of European history (e.g. Morrison 1994; Said 1978; Thapar 1992; Tilley 1975: 601). We devoted some effort to describing the AMP because much of the social evolutionary theorizing of mid to late twentieth-century anthropology, although not always citing Marx, or always adopting his terminology, adopted most elements of AMP theory. This was pursued in spite of the fact that Marx's knowledge of what he called "primitive" societies was seriously lacking (Harris 2001: 227-8), and in spite of the steady stream of criticisms of the Asiatic Mode of Production and its proponents such as Karl Wittfogel (e.g., Anderson 1974: 489-95; Isaac 1993). We are unable to offer any simple explanation for the resurgence of Marxist ideas. It would appear that Eurocentrism and alterist modes of thought were such a fundamental part of Western social thought and science that Marx's assumptions were not critically evaluated, even later in the 20th century when social evolutionism was revived in anthropology.

Marx came back into anthropology during the 1940s and 1950s (e.g., Steward 1977; White 1949; cf. Harris 2001: 634-5) as a consequence of the resurgence of social evolutionary theory, termed neoevolutionism, that challenged the particularism, historicism, and extreme relativism that had characterized North American anthropology during most of the first half of the twentieth century. Its practitioners aimed to fashion a more comparative and scientific anthropology through a focus on social process built around a unified materialist explanatory perspective (e.g., Murphy 1977). Neoevolutionism had a particularly receptive audience among archaeological archaeologists (Binford 1962), and truly was a watershed event in the history of anthropological ideas about the evolution of complex societies. By the 1970s and 1980s, it had prompted an impressive outpouring of research and influential publications (e.g., Flannery 1972; Fried 1967; Haas 1982; Harris 1979: 92-111; Miller and Tilley eds. 1984; Renfrew 1972; Renfrew and Shennan eds. 1982; Sanders and Price 1968; Service 1975). Anthropologists were urged to reconsider Marx and Engels as sources for socio-cultural evolutionary theory at this time (e.g., R. N. Adams 1975: 7; Fried 1967; Patterson and Gailey, eds., 1987; Wolf 1982, 1999).

Pre-Modern States in the Neoevolutionist View

We summarize the main elements of the canonical neoevolutionist theory of state formation as follows, while recognizing there were minor differences between its adherents: Early complex societies took form in various world areas, in the form of chiefdoms, then archaic civilizations (Service 1975) or states (Flannery 1972) when an emerging elite class broke free of the constraints of egalitarian society to become the central architects of a hierarchically structured society and culture that was legitimated through their appropriation of powerful symbols (e.g., Gailey and

Patterson 1987; Haas 1982; Service 1975; Skalník 1978: 606). To vest their economic interests, the elite developed the regulatory and military force of a system of government, through which they established themselves as a permanent ruling class able to dominate subalterns (Fried 1967) and to appropriate their surplus production (“tributary mode of production” in Wolf 1982). The resulting social differentiation comprised a dual structure consisting of an aristocratic governing class and a subjugated class that loyally accepted aristocratic overlordship (e.g., Service 1975: 8).

We find much evidence for residues of Marxist theory in this scenario. Most notable here is the assertion that social and cultural production in early complex societies was due only to the actions of an elite (e.g., Baines and Yoffee 1989). Wolf (1999: 290-1, *passim*) asserts that the systems of cosmology and religion the elite developed “... connect questions of power with the existential concerns of everyday life ... and they imparted to holders of structural power a superhuman aura of involvement with them.” Hence, the elite alone developed ideas and practices that could “... hold sway over the whole of ... society and act to reproduce [elite domination]” (Miller 1989: 63). Similarly, according to Roscoe (1993: 114) persons in positions of power engaged in “creative,” “strategic,” and “ends-oriented” practices to build and then augment “... the existing order of domination in ways that will better serve their interests and satisfy their wants.” The subaltern groups are portrayed as having few options other than to emigrate, and even this may not be feasible (Carneiro 1970; Gilman 1981; Roscoe 1993: 115). According to Service (1975: 301), it is “... inconceivable that any peasants would have considered bettering their lot by their own political actions, for this would have to be done for them by their own hereditary rulers.”

From Asiatic theory, neoevolutionists adopted the notion that the emerging government was at the center of societal economy and politics. This is evident in assumptions about the economic behavior—or lack of it—among the moral communities of the self-sufficient subaltern class (e.g., Sahlins 1972; Polanyi 1968; Scott 1976). In early states, although a minor amount of market participation may be recognized in some cases (Claessen 1978: 541-4), the economy is portrayed as consisting of two key components, first, the tribute flows from producers to the emergent ruling class (Skalník 1978: 602-6), and, second, the state-organized redistributive economy that connected rural communities possessing differing environmental endowments (Service 1975). One would think that market systems might also provide for inter-community exchange, but markets are ignored, or downplayed in neoevolutionist theory since market participation would imply independent strategic action on the part of market participants apart from state action. Market systems present a thorny problem for neoevolutionist theorists who are faced with the abundant evidence for fully-functioning market systems with broad participation across social sectors, and that had system-shaping social consequences (e.g., Attwood 1997; Blanton 1996; Blanton et al. 2005; Skinner 1964; Thapar 1975a: 121). Instead, according to Service (1975: 302), the economy was “... an organismic redistributive system that so typically involves complex administration,” and that “... even long-distance trade under archaic conditions could only be undertaken by a governmental organization.”

Besides buttressing the economy, the state was also the key agent sponsoring agronomic development, since it alone was able to build and manage large-scale irrigation systems. And its control of water was another source of what is perceived to be the total power of “Oriental Despotism” (Wittfogel 1957). All in all, in the early states society is considered to be largely a product of elite domination, exercised by instituting modes of centralized political control (Flannery 1972; Fried 1967: 230), water control, and theocracy (Service 1975, 1978: 32; cf. Friedman and Rowlands 1978: 216; Haas 1982). We refer to this as “oppression theory.”

Interestingly, a perspective on early states very different from that of the Marxists and neoevolutionists was preliminarily formulated by Fortes and Evans-Pritchard (1940: 11-12) and Lloyd (1965: 79–80) (cf. Beattie 1967) in their discussions of traditional African states. In these cases, although the political elite carefully guard their privileges, there is a degree to which government was based on the recognition of the mutual obligations and responsibilities of commoners and rulers such that the “... political elite represent, to a greater or lesser degree, the interests of the mass of the people” (Lloyd *ibid.*: 76). These insights, that might have constituted a step in the direction of a collective action theory for anthropology, were ignored by neoevolutionists. For example, in Service’s analysis of pre-colonial African states (1975: chapters 5-7), he emphasized political control and how it resulted from conquest, theocracy, trade monopoly, and clientship.

Bringing Agency Back to Political Theory

That there is a need for new theoretical directions is encapsulated in recent writing such as is found in Ehrenreich et al., (eds. 1995), S. McIntosh (1999a), and Blanton et al. (1996) that reflect a growing critique of neoevolutionism and its overly deterministic oppression theory (Feinman 1995; Paynter 1989). Blanton et al. (1996) identify what they call modes of corporate political economy in which restrictions are imposed on the power of authorities, and in which rulers are obligated to serve the political community (Blanton 1998). Other aspects of neoevolutionist theory have been critiqued, including the redistributive economy (Earle 2002: chapter 4; Feinman and Neitzel 1984), the irrigation hypothesis (e.g. Adams 1965; Millon 1973: 47-9; cf. Offner 1981), and the causal priority of wealth inequality, political centralization, and elite appropriation of surplus production (e.g., Chapman 2005: 92). Recently, anthropologists have proposed that we rethink the nature of social action to better incorporate the agency of knowing subjects (e.g., Brumfiel 1992, and in the chapters in Dobres and Robb, eds. 2000; cf. Vincent 1990: chapters 5 and 6), and that we should “study up” from the base of society to incorporate into our causal models resistance to authority structures, including peasant or alternative ideologies, rites of reversal, peasant rebellions, and folk modes of resistance (e.g., Miller 1989; Paynter 1989; Scott 1985). These ideas help to move us beyond what we see as the Eurocentric ideas of Marx and others that posit the herd mentality of the subaltern. However, while subaltern social action and resistance to authority

ideas hint at a return to the questions posed by Hobbes's dilemma, we find lacking any positive theoretical predictions about the social evolutionary outcomes of agency. Gailey and Patterson (1987: 10) suggest that resistance might "shape possible courses of action in the future," but we find such assertions vague and lacking in any ability to predict when resistance or rebellion is likely to have enduring impacts on states and their governing practices, or what their outcomes will be (e.g., Eisenstadt 1977). In the following chapters we evaluate a far more complex agent-based theory that we think has more potential to retrodict patterns of social-evolutionary change, based on the proposition that under some conditions state formation will reflect rational agreements and mutual consent between the rulers and ruled of a political community. This is the rational choice theory of collective action, which we describe in the next chapter.

Chapter 3

The Social Actor in Collective Action

Neoevolutionists asked how an elite could establish itself as a permanent ruling class in early chiefdoms and states, thus they situated political domination as the central process in state formation. While we recognize the significance of domination, we think that by focusing on it our discipline has not fully explored the role of cooperation in social evolution. The rational choice theory of collective action might be one way to recast our theoretical agenda, and in this chapter we describe those aspects of the collective action approach that pertain to pre-modern states as a first step towards the development of a set of methods that will allow us to operationalize the theory and subject it to rigorous empirical evaluation.

Basic Ideas of Collective Action Theory

Although collective action reasoning ultimately is derived from Hobbes and other Enlightenment social philosophers, the contemporary form of the theory was first laid down by the economist Mancur Olson (1965). His suggestions have stimulated much thought and writing, especially from political scientists (summarized in Lichbach 1996). For our purposes, the most relevant work since Olson is Margaret Levi's exploration of how collective action could contribute to a deeper understanding of the varying forms taken by pre-modern states (Levi 1988; we also benefited from Bates 1983), although other works inspired by collective action theory intersect with anthropological topics (Lichbach 1994, 1995; Popkin 1979, 1988).

The basic proposition of collective action theory, applied to state study, is simply phrased as follows: A collective polity is built on cooperation between individuals and groups making up a political community, but, as Olson (1965) pointed out, collective action is difficult for humans to achieve because the rational, but egoistical, behavior of participants may be contrary to collective group success. This insight gives us some interesting questions to ponder. Can collectivity be a basis for the formation of pre-modern states, or, following neoevolutionist logic, is dominance the only path to state-building? If collective action was possible, how do governing institutions in early polities counter the tendency toward selfish individual behaviors?

Is Collective Action Theory Similar to Functionalism?

By collective polity we mean a complex society in which the government (we'll call this "rulers" for now) provides services ("public goods") in exchange for the revenues (including labor) provided by compliant taxpayers, although, as we point out below, collective polities are predicted to exhibit additional secondary characteristics. At first glance, explaining how a collective polity might develop does not appear to be a particularly new or profound research problem. For one thing, the idea seems only to restate what Elman Service and other "functionalist" proposed in their variant of state formation theory (Service 1975; cf. Halstead and O'Shea 1982; Renfrew 1972: chapter 18). In this functionalist approach, an elite is able to institutionalize its power, at least in part, by providing economic, military, and other services to a subaltern (Service 1975, 1978), or by providing system-regulation functions (Flannery 1972). In the related contract theory, it is predicted that when demand for services increases beyond a critical point, "individuals will voluntarily surrender their freedom to the state to gain protection and justice" (Hechter and Brustein 1980: 1089).

Neither contract nor functionalist scenarios reflects the totality of collective action ideas. The idea, in contract theory, that individuals surrender their freedom is very much different from the rational social actors of collective action theory, described below, who constantly evaluate the actions of rulers and make compliance, defection, and other decisions accordingly. This is not surrender. And we see Service and the other functionalists as squarely within the Marxist/neoevolutionist tradition because they retain the central argument that state formation reflects a top-down process in which a strategically active elite class is able to assert control over a behaviorally inert subjugated class (Service calls the latter a "caste") (Service 1978: 32). The only other social agents Service envisioned is an intransigent secondary elite, so that, "It seems much more realistic to think of the push and pull toward integration and disintegration of the hierarchical society as being confined to the bureaucracy itself, with the "people" passively doing as they were told" (Service 1975: 301). To Service, the basis of commoner conformance and their unquestioning acceptance of power differentials are found in "the norms of the traditional folk society" (ibid.). This is none other than the "primitive collectivity" of Marx that in which people are assumed to be mired in irrationality and communal morality. Service's scheme denies rational choice to one sector of a bifurcated society and leaves only the elite with a collective action problem, but only vis-à-vis its secondary elite.

Additional Problems With Functionalism

From a collective action perspective, functionalist theories of social evolution are problematic in a more fundamental respect. Can a complex society be based on the rational logic of mutual benefits, for example, when the state provides services in exchange for taxpayer compliance? Social scientists often assume that shared

interests or mutual benefits provide a sufficient rationality to prompt group formation, but collective action theorists critique this view as the “fallacy of composition” (e.g., Hardin 1982: 2). They argue that mutual benefits may not foster group formation because cooperation may be threatened by the rational but selfish behavior of individuals (Lichbach 1996: 32; Taylor 1982: 1). Group formation, they argue, is difficult to achieve because it depends, not on a singular rationality of mutually positive benefits, but, rather, on multiple and potentially conflicting rationalities of individuals and groups that intersect in complex ways. Individuals are expected to rationally strategize in their own self-interest, and since these interests may or may not coincide with group interests (Hardin 1982: 2-3), anyone attempting to build a collective polity faces a collective action problem (Lichbach 1996: 32).

What Causes Collective States?

The central problem of collective action theory, as applied to state formation, is how and why cooperation might develop between rulers and taxpayers (Levi 1988). However, the theory does not predict that all polities will develop as a result of cooperation. In collective polities, both the agency of rulers (i.e., their potentially self-interested strategic behavior) and non-compliance among taxpayers must be restricted (as we describe in more detail below). Controls on ruler agency and taxpayer compliance are predicted to result from bargaining between rulers and taxpayers (e.g., Bates and Lien 1985: 53; Levi 1988: 11-12, 52-68), but the outcomes of bargaining are predicted to be variable depending on the kinds of resource endowments the bargainers control. Taxpayers are endowed with resources placing them in a position to make demands on rulers to the degree that rulers depend on them to achieve their revenue goals (we call these “internal resources” below). However, to the degree that rulers are less dependent on taxpayers to fulfill their revenue goals (i.e., if they can make use of what we’ll call “external resources”), they are less likely to engage in bargaining. This could result in a situation analogous, in some ways, to the neoevolutionist scenario of the early polity that develops through processes of elite domination and political centralization, but the similarities between neoevolutionist and collective action theories, even in this kind of situation, are only superficial. Even in the more centralized polities, the collective action theorist does not posit the existence of a passive subaltern class consisting of “primitive collectivities” and lacking in the potential for strategic action. Instead, in this case, taxpayers’ bargaining position is weakened by their lack of resources needed by rulers.

Problems With Essentializing and Categorizing

In other respects, a collective action approach to the more centralized polities is not likely to be confused with neoevolutionist theory. A collective action theorist would

not regard the emergence of an elite “ruling class” as a trivial issue. This is in contrast with a structuralist position that essentializes a “ruling class” (or “elite”) by identifying them as a group sharing an interest in subaltern domination (e.g. Gilman 1991: 156; Wolf 1999: 181-2). To collective action theorists, this idea is naïve because the interests of members of an elite class, or any other kind of group, would not always converge (e.g., Lichbach 1996: 62-4; Hechter 1983: 18; Levi 1988: 186).

An additional problem for the elite domination approach is that the idea of total power is problematic. All polity-builders are predicted to face collective action problems vis-à-vis taxpayers, to some degree. In all complex societies, rulers provide at least some governing services (Levi 1988: 56) and they depend on taxpayers for at least some kinds of services or payments to the state. The revenue streams of states are varied and complex, and while any given state may have a preponderance of either internal or external resources, still, we think there would be only a very low probability of finding clearly distinguishable “types” of states built around exclusively external or internal resources. Rather than discrete collective or non-collective societies, both collectivity and domination will be expressed to varying degrees in all complex societies, and variation is also expected over time in the history of particular polities. A major goal of collective action theory is to explain variation across time and space (e.g., Bates 1983: 141). Below, we propose and apply a method for the comparative measurement of degrees of collectivity in pre-modern states. Thus we transcend the ubiquitous categories found in neoevolutionist and related literatures, such as “classical,” “Asiatic,” “despotic,” “feudal,” and so on, as well as avoiding evolutionary schemes with their pigeon-holes that supposedly characterize states at various levels of evolutionary development, such as Claessen’s (1978: 590) “inchoate,” “typical,” and “transitional” early states. We make no assumption that the degree of collectivity could be construed as an evolutionary sequence or as a typology of states.

Introduction to the Rational Social Actor

According to collective action theory, the rational choices of those individuals and groups making up the body politic impact on a state’s form and function, so it is important at the outset to specify the elements of rational actor reasoning, and to do this we follow Hardin (1982), Levi (1988), Lichbach (1996, 2003), and Ostrom (1998), among others. Below we describe the behavioral assumptions of collective action theorists that are most relevant to the special problem of polity formation. First, we describe the broader assumptions about human social behavior that are foundational for the more specific proposals:

- (1) As we mentioned, mutual benefit is not a sufficient basis for the formation of collective groups because group and individual rationalities may not coincide.
- (2) The assumption that shared norms are the basis for social life is rejected because the over-socialized sociocentric self posited in culturalist theory (Lichbach 2003: 78-87) is behaviorally compelled to conform to role expectations and

communal values, limiting the likelihood of individual strategic action outside normative boundaries (Levi 1988: 160; Lichbach 1996: 15-17, 21, 211-12). For example, as applied to social action in states, rational choice theory proposes that, in spite of norms, taxpayers will not always automatically defer to government authority, and, instead, constantly evaluate the costs and benefits of compliance.

- (3) The “homo economicus” perspective of most economic theory is also rejected because approaches that assume the individualistic, under-socialized, and avaricious utility maximizer have proven unable to address the kind of institution-building that is required in common-property or other collective situations (Bates 1983: 140; Levi 1988: 7, 161; Lichbach 1996: 208-11). Beneficial collective outcomes in commercial systems depend on the highly individualistic rational actions of market participants, but collective resource economies suffer from highly rational individuals because they may free ride, i.e., take advantage of communal assets while not paying the required costs (e.g., Bates 1994: 47; we return to free riding below).
- (4) Although rational choice theory is a variant of the methodological individualism so strongly criticized in the Marxist literature as an expression of “bourgeois” social science, it is possible to assume that individuals “... often have goals that involve the welfare of other persons” (Elster 1982: 453). That is, the rational and self-conscious subject is not always selfish.
- (5) It is not necessary to assume that humans are either inherently selfish, cooperative, or moral. Many factors influence whether or not a person will act cooperatively, but to some degree it is assumed that cooperation is contingent, reflecting rational choices based on information collection and evaluation (e.g., Levi 1988: 21). This implies that society is constituted of persons inside and out of the official structure of the state capable of existential reflection and social action to achieve desired ends. Rather than assuming that humans will or will not have a propensity to cooperate, the analyst’s goal is to identify the various social and cultural factors that impinge on each person’s decision to cooperate or not. In part, then, state formation is a process whereby rational actors with conflicting preferences and different resource endowments engage in bargaining regarding cooperative arrangements, but one possible outcome of bargaining is the absence of cooperation—it is not assumed. Hence, collective action theory is strongly at odds with the Darwinist argument that humans display genetic predispositions with respect to cooperation. Darwinist ideas, sometimes espoused by anthropologists, propose that within a biological population we will find individuals who are “altruists,” “non-altruists,” “reciprocators,” “non-reciprocators,” “cooperators,” “non-cooperators,” “punishers,” “non-punishers,” and so on, the proportions of each behavioral propensity reflecting the outcomes of natural selection (e.g., Boyd and Richerson 2005: Part 3). Any social actor may be cooperative or not at different times, or both at the same time with respect to different situations.
- (6) Collective action theory does not assume that states are formed through the actions of a few highly assertive aggrandizers (Hayden 1995), for example, as is claimed in some anthropological literature under the label of “action

theory” (Flannery 1999). While some rulers, or other players involved in state-building, no doubt might be aggressive or assertive, the key to building and maintaining a collective polity is not how much power an aggressive individual can assert as much as it is how a person or group is able to develop effective and enduring policies that can resolve the collective action problems revolving around taxpayer compliance and the control of ruler agency. Creativity and hard work may count as much as aggressiveness.

From these basic assumptions, we can lay out more specific predictions regarding rational choice and social action in the evolution of complex societies governed by states. We do this in two parts, first addressing the expected actions of taxpayers, then those of rulers. We do this without any implication that either of these would constitute cohesive social entities analogous to essentialized structuralist categories such as “social class,” “elite,” or “subaltern class” (cf. Sarkar 1997: 88). As will become apparent in later chapters, the ruler/taxpayer divide is variably permeable cross-culturally and over time within any particular polity. Individuals may occupy both statuses simultaneously, may shift back and forth between the two categories over their life course, or be recruited to or removed from one or the other.

Taxpayer Rationality

Taxpayers are assumed to assess the costs and benefits of meeting their obligations to the polity, and they may even choose to defect (exit), or threaten to, in cases of extreme dissatisfaction with the actions of rulers (Bates 1983: 41; Levi 1988: 43; Lichbach 1996: 166; Ross 1988). Many factors are thought to be involved in compliance and defection decisions, and in what follows we benefited from the discussion in Levi (1988, especially chapter 3). One factor that might impact on compliance is actual or threatened coercion. Olson (1965) argued that collective action is not likely unless people can be coerced or when they are directly rewarded for cooperation with what he called selective incentives. And Haas (1982) identifies coercion as a key element in pre-modern state formation, but we think his evidence is very weak. While coercion could be a factor encouraging cooperation in large-scale complex societies, its likely effectiveness has to be weighed in relation to costs (e.g., North 1981: 45), including its potential to foster social disorder (Lichbach 1996: 217). Similarly, selective incentives, or direct payments or rewards of some kind given only to taxpaying compliers, would entail an elaborate administrative apparatus and the transaction costs of identifying compliers and distributing rewards to them. We evaluate the role of selective incentives below.

The Moral Basis of Compliance

The promulgation of compliance edicts may influence compliance decisions. However, according to collective action theory, the presence of stated moral, legal, or

contractual (Hardin 1982: 90) obligation is not assumed to be entirely determinative of social action (Levi 1988: 68, 183). As we collected data, we took note of how compliance morality is conceived of and justified, but the simple act of declaring that taxpayers (or rulers, for that matter) should behave morally may not accomplish much. In our coding of data on moral and legal mandates for compliance, we were more interested to learn if edicts and laws were promulgated in association with corresponding social institutions and practices by which the state's governing apparatus could penetrate deeply into the social fabric of society to enforce compliance codes. Of course, developing and enforcing moral action is not predicted to be trivial since it would entail substantial administrative transaction costs to the state.

Compliance and Public Goods

To some degree, compliance is expected as a response to the state's distribution of services (public goods), because taxpayers reciprocate services with tax payments. One factor assumed to impact on taxpayer compliance pertains to whether or not public goods are equitably distributed across social sectors and geographical space (i.e., made available with a high degree of "publicness" or "indivisibility" [Taylor 1982: 40]). But the degree of taxpayer reciprocation is expected to vary depending on current conditions. We assume that taxpayers monitor the availability of public goods, as well as monitoring other factors pertinent to compliance decisions, including the state's ability to regulate the actions of agents of the state's bureaucracy, and the degree to which they trust that ruler action will benefit the public good. Compliance does not imply that taxpayers have totally surrendered "their freedom to the state to gain protection and justice" as is sometimes repeated in Marxists misinterpretations of collective action ideas, which they term "contractarian ideas" (e.g., Hechter and Brustein 1980: 1089).

The Free Riding Problem

Even when public goods are ample and are equitably distributed, the impetus of reciprocity is not assumed to constitute the total basis for compliance decisions by taxpayers. Because they are rational, individuals may defy both moral and legal obligations and the force of reciprocal obligation and choose not to comply while still gaining services ("free riding") (Lichbach 1996: 5, *passim*; North 1981: 45; Olson 1965). Free riding is a complex problem in collective states since rulers are dependent on taxpayer-produced internal revenues. Collective states can address free riding, in part, through compliance monitoring, but monitoring implies that the governing apparatus be able to penetrate into society, with the attendant transaction costs and organizational requirements. This is a severe problem in archaic states, by comparison with modern states, because monitoring technologies were not highly developed and tended to be labor-intensive and costly.

In addition to revenue shortfalls and high administrative costs, free riding may also impact on potential compliers, exacerbating the state's revenue shortfalls, as "... widespread public knowledge of [free riding] leads to more [free riding]" (Levi 1988: 177). One condition favoring taxpayer compliance is knowledge that others are doing their fair share, and that non-compliance will be detected and punished (Levi 1988: 21, 66-7; cf. Güreker et al. 2006). Hence, in collective states the governing apparatus is expected to have the ability to monitor taxpayer compliance and to carry out fair public reprisals for non-compliance. These abilities enhance trust in rulers by communicating the message that the state is serious about the collective system and is able to take positive and unbiased steps to uphold it (Levi 1988: 66-7).

Coercion, promulgating compliance norms, equitably-distributed public goods, and fair monitoring and punishing of free riding, all figure into compliance decisions, and must be weighed in relation to their transaction costs. But encouraging taxpayer compliance is only one part of the collective action problem in state formation. Many other forms of social action may be inimical to the development of a collective polity, including the strategic actions of rulers. We turn to that problem next.

The Rationality of Rulers

Up to this point we have used the term rulers to allude to members of the governing institution viewed broadly, but in what follows, we distinguish "principals," the chief decision-makers and policy-makers of a polity, from "agents," the state's administrative staff. In pre-modern states of the sort we study here, principals often are identified by titles implying ruler, monarch, or emperor, but not all pre-modern states, in or outside our sample, are governed by monarchs per se. Additionally, in some cases we must add to the category of principals other kinds of high-ranking officials who participate in setting official policy, such as members of the highest governing councils. From the point of view of collective action theory, the strategic decision-making of principals that is of most importance concerns the nature of taxation and how revenues will be used (e.g., Cammack 1992: 413; Levi 1988: 71). In making decisions about taxes and revenue allocations, it is assumed that principals aim for acceptable levels of revenue production while choosing between how "they are to use revenues to promote the general welfare or to advance personal ends" (Levi 1988: 71). To achieve their goals they are assumed to: (1) act in accordance with their bargaining power vis-à-vis taxpayers (Levi 1988: 2); (2) minimize administrative transaction costs; (3) take into consideration their "discount rates" (the degree to which rulers are likely to engage in taxation practices that may bring short-term gains but put future compliance at risk [ibid.]); and (4) devise and implement suitable systems of governance combining institutions ("rules, compliance procedures, and moral and ethical norms" [North 1981: 201-2]) with an administrative organization.

Achieving Quasi-Voluntary Compliance

Given the high transaction costs implied in coercion, promulgation of compliance norms, selective incentives, compliance monitoring, and punishment of non-compliers, principals will strive for “quasi-voluntary compliance,” allowing rulers to maximize compliance while minimizing transaction costs (Levi 1988: chapter 3). The following strategies are assumed to enhance quasi-voluntary compliance (drawn in part from Levi 1988: chapter 3):

- (1) Dissemination of Public Goods. Public goods are a key indicator of collective action. They are predicted to be provided only to the degree principals are dependent on taxpayer-produced revenues, and so should reflect the bargaining power of taxpayers. At the same time, public goods can be part of a principal’s strategy to increase quasi-voluntary compliance by altering the terms of the reciprocation between ruler and taxpayers. Lastly, since they represent a tangible cost to the state, they communicate the degree of principal commitment to collective goals.
- (2) Control of Agency. Quasi-voluntary compliance will also require a set of institutional rules and moral codes aimed at regulating the actions of agents in the state’s apparatus who may abuse their power by engaging in self-aggrandizing behaviors (“agency”) (Levi 1988: 26; Lichbach 1996: 162-71). To constrain agency, principals are assumed to promote moral commitment to the collective system and to establish a fiscal constitution specifying bureaucratic procedures for tax collection and public goods distribution (Levi 1988: 48-9). The fiscal constitution provides benchmarks for what is expected of the moral agent, but must be accompanied by an administrative apparatus able to detect and punish those who deviate from them. This would imply increases in the “agency costs” of administration (Levi 1988: 30-2), but an open, competitive recruitment and promotion of agents from across social sectors is one strategy to address the agency problem at lower administrative cost (Lichbach 1996: 167). This assumes that the actions of competitively recruited agents are less likely to reflect narrow sectorial interests (e.g., Weber 1947: 335). Additionally, principals are assumed to have more direct control over salaried agents in a bureaucratized system compared with forms of payment such as *prebends* (assignment to an official of rent payments, in Weber [1978: 963-4]) or similar practices that may easily devolve into hereditary claims and independence from state controls.
- (3) Use and Development of Semi-Autonomous Institutions to Reduce Administrative Costs. While there is no question that a cooperative system will only function if there is a well-developed and complex institutional structure of official governance (e.g., Ostrom 1998: 5), rulers may choose to go beyond the boundaries of the official structure to build a collective system. In this case, some administrative functions are devolved onto paragonmental organizations (Levi 1988: 65-66), either by developing such organizations *de novo* or utilizing or modifying existing ones. Such organizations may be assigned tasks such as

tax collection, compliance monitoring, or even public goods distribution, while reducing transaction costs to the government (e.g., Blanton 1998: 166-70; Levi 1988: 65-6), but they would require some degree of official monitoring, if not direct control, hence the phrase “semi-autonomy.” Collective states facing growing transaction costs may also reduce direct controls over partially self-governing institutions such as market systems (e.g., Skinner 1977a: 23-6), but principals face a potential cost if semi-autonomous groups threaten the state’s ability to govern (e.g., Skinner 1977b: 551-2).

- (4) Promotion of Trust and Credibility. A collective system is based on more than coercion, monitoring, or reciprocity (Levi 1988: 21, 53, 60-4; Ostrom 1998: 6-9, 17). Trust may also figure into compliance decisions. But trust based on ideology that mystifies the nature of power relations, we think, would be counter to collective action. In a collective state, trust of principals has to have a rational component, based on information concerning the actions of principals and other officials, rather than being based on emotional connectedness alone (e.g., Braithwaite and Levi 1998: 376-9). According to the theory of collective action, potential cooperators may withhold support if they have no way of knowing whether principals will honor their agreements or if principals and agents are likely to benefit themselves at the expense of the collectivity. In their dealings with both taxpayers and agents, principals are expected to promote a sense of loyalty through practices that provides reliable information to demonstrate their credibility, their degree of commitment to the collective enterprise, and their accountability to the people (Levi 1988: 60-2). Accountability is enhanced, in part, through well-established procedures whereby taxpayers have voice in the sense that they are meaningfully able to register complaints, make petitions, and appeal legal decisions.

The potential for self-aggrandizement by principals is assumed to be less where there is a well-developed code specifying why principals should behave morally. Typically this will take the form of statements about ruler’s contractual obligations with the people (Levi 1988: 60-4), but moral codes are expected to have little impact unless accompanied by well-developed institutional practices that permit deviations from expected behavior to be detected, and which expose principals to meaningful official reprimand and even impeachment. In addition to accepting the limitations stated by moral codes, principals are assumed to concede to restrictions on their agency and power in order to demonstrate their willingness to be accountable for wrongdoing. Principals are assumed to accept restrictions on their personal control of material and cognitive or ideological resources (Blanton 1998: 156-62).

The Power of Principals in More Collective States

In the more collective states, if principals are expected to concede to restrictions on their agency, are they less powerful than their counterparts in the less collective polities? This issue highlights a dilemma in how we interpret the nature of political

power. Collective governance does not equate with weak governance, in fact, as we have pointed out, a collective government must extend its power deeply into society to carry out its necessary tasks of delivering public goods while monitoring behavior and punishing non-compliance and agency. So principals should possess considerable “infrastructural power” (Mann 1984: 185), while at the same time demonstrating their commitment to the collective enterprise. How can these two seemingly contradictory goals be accomplished? Wolf (1999:290-1) argued that ideology and ritual augmented the “structural power” of the governing elite, but we find this inconsistent with collective action. Rather than augmenting structural power, we assume that, in a collective polity, the power of principals will be conceived of as distinct from the most potent sacred propositions of the culture so they can be more readily held accountable for their actions. This is like what Eisenstadt describes as the “symbolic problematization” of the relationship between rule and religion in which a distinction is made between transcendental and mundane orders, and in which the “political order is judged to be lower than the transcendental one ...” (Eisenstadt 1981: 157, 159). Further, we propose that in a collective polity, ritual will serve less to sanctify principals than to communicate the principals’ dedication to collective principles. In this case, principals’ participation in ritual serves to reaffirm “... through numinous experience [i.e., from the emotional force of ritual action] (Rappaport 1971), the propositions of the egalitarian cognitive code” (Blanton 1998: 164), while, at the same time, serving as a mode of communication (“reflexive communication”) (Blanton 1998: 162-6) that provides taxpayers with opportunities to evaluate the demeanor and actions of principals (e.g., Levi 1988: 52-3). Analogous communicative acts might include required public appearances, open governing council meetings, or other communication channels that make it possible for a broad public to assess the nature of the decision-making process and the degree of commitment of principals to the collective enterprise.

Lastly, it is assumed that an elaborate standard of living of principals and agents may reduce trust if taxpayers perceive that revenues are being squandered on a luxurious official lifestyle, so principals are expected to limit their own and agents’ overt display of wealth (“ruler self-abnegation”) (e.g., Levi 1988: 56; Lichbach 1996: 171; Popkin 1988: 62, *passim*).

Developing a Research Program to Evaluate Collective Action Theory

The proposed features of a collective polity sound “modern,” or at least “Western,” certainly nothing like the autocracies thought to govern the Asiatic or “Oriental” states (Asad 1973), especially given the social contract that is hypothesized to develop between rulers and ruled, but also considering the public goods, taxpayer voice, and something like what we call the “separation of church and state” that is very much unlike Wolf’s (1999) “structural power.” Could polities with features like these be found outside Mediterranean and western European history? Many

would find this dubious. Although the eurocentrism of neoevolutionists and similar ideas is often criticized (e.g., Asad 1973: chapter 1; Morrison 1994), a strong West-Rest assumption can still be found in much recent literature. In his book on the origins of democracy, for example, Midlarsky (1999: 194-6) embraces the idea of Asian autocracy as expressed in Wittfogel's (1957) *Oriental Despotism*, even though Wittfogel's ideas have been widely criticized (e.g., Adams 1981: 243-8; O'Leary 1989: 261).

Collective action theory suggests the West-Rest dichotomy is false, because any polity, East or West, or anywhere else, is predicted to embody elements of collective action to the degree that rulers are dependent on internal, or taxpayer-provided revenues. This is not a prediction that collective governance would necessarily be developed in the same way everywhere. We do not assume that all humans know how to build a collective state that will manifest every feature predicted by collective action theory. A whole host of local cultural, historical, and other factors will shape a particular collective system, but, if the theory is sound, we can expect to see certain broad themes repeated, for example, public goods and restrictions on ruler agency. Further, as we mentioned, collectivity is not a social category or polity type, but is, instead, a variable. Less collective polities may display fewer of the predicted characteristics, but highly collective states, wherever they are found, should more clearly illustrate the playing out of collective action processes as laid out above based on assumptions about the actions of ruler and ruled as they encounter and attempt to solve collective action problems.

To find out if collective action was a general process in political evolution, and not just a singularity of Western history, we needed an objective research design that would allow us to transcend the orientalist claims of Western social science to approach both "Classical" and "non-Classical" civilizations with an objective comparative method. To accomplish our goal, we needed two things: (1) a robust method for systematically measuring the degree of collectivity in such a way as to allow for cross-polity comparison, and (2) a world-wide sample of societies that would permit us to address how collective action processes may have played out in a variety of cultural, historical, and geographical settings.

In chapters 6 through 9 we show how we operationalized the collective action ideas as variables for comparative measurement. In chapter 4 we present our rationale for the selection of a sample of societies for comparative analysis. We should point out that our method takes us away somewhat from a frequently-made assumption that state formation is best studied in the limited cases of "pristine" or spontaneous states where political change occurred in the absence of pre-existing models, and represented by six instances, Early Dynastic China, 3rd-millennium Indus Valley, mid 4th-millennium Mesopotamia, late 4th-millennium Nile Valley, Latter Formative in Mesoamerica, and the First Intermediate Period of Coastal Central Andes. To Service (1975: 3), for example, the earliest archaic civilizations signified the beginning of "the great divide" when "primitive society became civilized society." We agree that in some respects the very earliest such polities have a special value for theory-building since their growth would have required some novel institutional developments. The first author of this book (e.g., Blanton et al.

1999) is one of many researchers who have paid special attention to these early transitional periods. While it would be interesting to evaluate the role of collective action in the pristine states, we chose to base our analysis on more recent states, in part because the kind of detailed information we require for the evaluation of collective action ideas is not consistently available for the periods of pristine state formation. In addition, by studying historically later states, we will be better able to address the nature of political change over long time periods and to incorporate a wider range of possible causal factors.

We see state formation as something that has been ongoing since the “great divide,” not something that happened in a theoretically interesting way only a few times long ago when state formation was spontaneous. All states that have ever existed, even the earliest ones, have been, or are, embedded within complex webs of historical continuity, diffusion, migration, warfare, and trade, so the theoretical advantages of focusing on pristine state formation may not be as great as is sometimes thought. As we will demonstrate later, state-building is assumed to be a continuous and strategic process that, even in later, secondary states, can be quite innovative as states are being constructed, modified, and revamped to reflect the changing conditions that impact on the actions of principals, agents, and taxpayers. Lastly, our goal is to evaluate collective action hypotheses based on probability statistics, which would be difficult if we were to restrict ourselves to only the six pristine states.

Chapter 4

Selecting a Sample of Societies for Comparative Coding

One goal of this work is to enrich what we perceive to be methodologically limited approaches to theory-building in the collective action literature. Collective action theorists often depend heavily on the results of experimental work with the prisoner dilemma game, an approach we find of limited utility for a research program based around theory-testing from empirical data that reflect the complexities of local cultural and historical factors. We also aimed to overcome limitations owing to the facts that that theory testing by collective action theorists typically does not address issues of validity and reliability (for example, we see little use of probability statistics), and tends to emphasize data drawn from European and Mediterranean history (Levi 1988). Here we enrich theory-testing by wedding collective action theory to the methodological rigor of cross-cultural research in anthropology (e.g., Ember and Ember 2001), and by analyzing a world-wide sample of societies.

The Large-N, Small-N Dilemma

An important task in any cross-cultural analysis is to identify a group of societies suitable for comparative coding, but, before beginning the selection process we had to decide what sample size to aim for, and how to select societies for inclusion. When the decision was made to go in the direction of cross-cultural analysis, we faced what is called the “large-N, small-N dilemma” (e.g., Coppedge 1999). In cross-cultural research, hypothesis testing involving the use of probability statistics may make use of a large, even world-wide sample of societies (a “large-N” strategy) (“hologeistic research”), in cases where weak correlations between variables require a large sample size to achieve statistical significance. This kind of research design is ideal for drawing valid and replicable conclusions where statistical associations or correlations may difficult to detect, but typically will be limited to “thin” concepts (Coppedge 1999) that can be easily measured or represented by simple, low-inference indicators (low inference implies the variable is readily evaluated so multiple coders will arrive at the same coding decision). This is necessary because coding data for comparative study from original sources is costly and time-consuming, so the coding of a large sample size must be limited, where possible, to a few easy-to-assess variables.

This is not the case for collective action theory, which addresses complex concepts (“messy” or “thick” concepts in Coppedge 1999) such as public goods and quasi-voluntary compliance, and so on, that cannot be represented by simple measures that are reliably low-inference. Often, when dealing with messy concepts and complicated social processes, researchers adopt a small-N strategy (for example, a two-case comparison), that allows them to richly contextualize their concepts and variables, but which will have limited potential for broad generalization or quantitative analysis to identify statistically weak relationships. We think that methodologically astute theory testing of collective action propositions able to give valid results, and backed up by probability statistics, requires some combination of large-N and small-N strategies. Our goal has been to find a balance between small-N and large-N strategies, and the compromise sample size we arrived at was thirty societies that we identified as having sufficient information to allow for the coding of the many collective action and other variables, and that afforded us the kind of regional and geographical variability we were aiming for. This sample size allows for the use of probability statistics, while at the same time was a manageable number of societies—barely—given the complexity of the coding task.

Sample Selection

Given the large number of ethnographically, historically, and archaeologically-known states, identifying a sample for coding was a difficult problem. One important desideratum we aimed for was to select societies in such a way as to maximize variation in the collective action variables. In order to better understand those factors favoring or inhibiting collective action, we also wanted a sample containing variation in climate, agroecological systems, trade patterns, geographical scale and population density, and cultural traditions, among other potentially interesting variables that we describe and analyze in later chapters. We mostly selected historically recent societies, because the detailed information we required for hypothesis testing comes from the pens of historians and ethnographers, although we benefited from archaeological data in some cases. We include states that represent Western (or “Classical”) polities, but outside Western Eurasia we wanted to maximize the social, cultural, and technological variation in our sample by selecting societies with minimal influence from recent Western colonizing or other Western influences on state-building. Some polities in our sample dating to the 18th and 19th centuries CE participated in early phases of the modern world economy, but none were European colonies or in other ways strongly reflected European modes of governance. Our strategy was to select the earliest sufficiently well-known polity in each respective study area to minimize the degree of diffusion from western Europe. We aimed for a world-wide sample, and generally achieved that, although we were unable to locate any sufficiently well-described pre-modern polities from Central Asia.

To maximize the amount of social, demographic and cultural variation in our sample, we restricted ourselves to three additional selection criteria:

- (1) The society must have had a governing apparatus that served as the major institution of governance within a particular territory (e.g., from Weber 1978: 54).
- (2) The governing apparatus, a state, must be organized in minimally three levels of administrative hierarchy (Wright and Johnson 1975). Most of the states in our sample far exceeded that degree of hierarchical complexity, but we needed a decision criterion that would allow us to include smaller states while excluding complex chiefdoms (defined as having two or fewer hierarchical levels in Wright and Johnson *ibid.*) This is not to argue that collective action processes suddenly come into play when a system of government becomes a state as defined here. On the contrary, we fully expect that collective action processes play out in all human societies. The exclusion of chiefdoms reflects, more than anything, our own research interests and the limits of our expertise. We hope our colleagues who study chiefdom evolution will find utility in what we do here and follow up with similar comparative research.
- (3) To be included, a society's governing apparatus had to have been a functional and enduring organization in which there was a structured pattern of authority allocated between named roles or offices within each hierarchical level of administration and across the various hierarchical levels. Politics that took the form of a militarily forced temporary assemblies of conquered groups, but which lacked a well-developed institutionalized structure of authority, were not regarded as true states and were not included in our sample. On these grounds, we excluded several African polities from consideration, such as Gaza, Makololo, Ndebele, Ngoni, Swazi, and Zulu. These are described by Shifferd (1987: 43) as "inherently unstable" "garrison states" based on "continual warfare and cattle raids." Zulu, for example, was described by Sir Theophilus Shepstone, a British official of the period, as "a rope of sand whose only cohesive property was furnished by the presence of the Zulu ruling family and its command of a standing army" (quoted in Gat 2003: 137). It was a surprise to us to find that this inherently unstable agglomeration of tribes has figured into theoretical proposals about state formation (Flannery 1999; Haas 1982: 117-18). Flannery included it, we think, owing to its founding by the "strong-man" Shaka, who epitomizes the kind of forceful individual central to agent-based "action theory." Haas (*ibid.*) uses Zulu to bolster his argument that in early states "violent coercive sanctions are used to keep the majority of the population in a position of subordination." However, Shaka failed to develop an actual state.

Galton's Problem

According to some researchers, statistical results of cross-cultural data will be invalid if the societies analyzed are historically related ("Galton's problem," e.g., Naroll 1970, but cf. Ember and Ember [2001: 89-91]). In a cross-cultural study of states, this is an issue to ponder. All states are embedded within networks of trade, diplomacy, war, migration, and other ties that might result in inter-polity diffusion of state-building practices, and state-builders almost always draw, in part, from existing cultural

traditions. So, a comparative methodology for the study of states cannot insist on the complete historical independence of its cases, although we did select societies (and time periods for coding) that minimize one kind of historical connectedness, namely, direct intervention by Western Colonial states. Generally, however, we do not see that Galton's problem is a serious problem for this research. The theory proposes that rational social actors, rulers and ruled, respond to varied and changing local resource endowments in their strategic actions. It is predicted that states, even those constructed within the confines of a particular cultural tradition, will exhibit varied degrees of collectivity. This possibility is addressed analytically in Chapter 11, in which we ask the question: Are experiments in collective action more or less likely within some civilization traditions or whole macroregions (e.g., sub-Saharan Africa, East Asia, etc.)?

Coding Sources and Procedures

In identifying societies for inclusion in the sample, we benefited from previous cross-cultural work that addresses problems similar to ours (Bates 1983; Murdock and Provost 1973; Ross 1983, 1988; Tuden and Marshall 1972), and both the HRAF Collection of Ethnography and the Ethnographic Atlas (Murdock 1967) proved very helpful. Several previous comparative studies of states provided theoretical insights and useful bibliographies, including Claessen and Skalník (eds. 1978), Griffeth and Thomas (1981), Hansen (ed. 2000), and Nichols and Charlton (eds. 1997). In these volumes, area specialists were invited to contribute chapters which editors or others used as sources for deriving comparative conclusions, an approach that presents many problems of data consistency and content between the diverse authors. To maximize the validity of our conclusions, we chose to follow, instead, the methodology of cross-cultural research (Ember and Ember 2001). To that end, we decided to do all coding ourselves to assure highly comparable coding decisions. This was not a trivial decision, as it required us to become conversant in a vast and complex literature describing each of the societies in the sample. The senior author developed a coding scheme that requested information on 22 background variables (population, environment, farming systems, etc.), and 38 variables pertaining to collective action.

In addition to doing the coding, we took the additional step of coding each society independently and then comparing the codes for inter-coder reliability. The strategy of independent coding proved to be an excellent way to hone our coding skills and the code itself. By comparing coding decisions, it quickly became apparent when one or both of us did not fully understand the coding procedures or terminology, or where the coding instructions were ambiguous. Even though the senior author had devised the coding scheme, learning it and fine-tuning it was a surprisingly difficult process. The difficulties were compounded owing to the fact that each value assigned to each variable has to be assigned comparatively, i.e., taking into consideration how all other cases were coded so as to properly characterize inter-polity differences and similarities. This required going back

again and again to recode once we became more and more cognizant of the nature of the variation we were encountering in each variable.

Independent coding also proved useful in identifying situations in which the information did not allow for an unambiguous coding decision. In these cases, we discussed the problem and searched for additional information that would allow us to arrive at a coding solution, but we also indicated the nature of the ambiguity in a space provided in the code sheet, in case, for some analyses, we might want to eliminate the more ambiguous values. Inter-coder reliability was generally quite high once we both learned the intricacies of the coding scheme and made sure we were on the same page with the variable description terminologies. After finishing approximately 80% of the cases, we worked independently to finalize the last few cases, although, even then, we carefully checked each others' work.

In addition to a set of formalized coding procedures, we strived to use only sources recognized by the respective area specialists as valid and well informed. A major task of the project initially was to search for societies that are described in a rich and well-documented literature. In cases where we found disagreements between area specialists on some matter of importance for our coding (we mention some of these disagreements later), we attempted to make a dispassionate and informed judgment, and to communicate the basis of our decision. We realize that it is difficult for comparativists to please the regional specialists on each and every fact, and, so to facilitate the efforts of specialists or others who may wish to evaluate our coding or replicate our work, we provide source and page citations, and, where relevant, our justifications for coding decisions.

The Sample and the Focal Periods

Table 4-1 lists the coded societies with the major coding source or sources (and see Figure 4-1), although many additional sources were consulted that will be listed in the variable description sections in later chapters. Table 4-1 also indicates the "focal period" for the coding. The values of the coded data pertain only to the focal period, a period selected for coding that was as early as possible for each case but for which there is sufficient information for coding. These are periods for which an abundance of information is available, and during which no significant policy changes were made pertaining to the collective action variables (the period of policy consistency is in some cases longer than the focal period, for example if we chose a particularly well-described ruler's reign to represent the policies of a longer-enduring state, or an ethnographer's particular study period). As a result, our coded data do not stand for a culture, civilization or any other broadly-constructed entity. In the case of China, for example, our data pertain only to the Early and Middle Ming Periods and cannot stand for either China as a whole or even Late Imperial China as a whole, given that policies related to collective action changed between dynasties, and, sometimes within dynasties, in spite of continuity in some dimensions of cultural and social patterns.

Table 4-1 The coded societies, focal coding period, and major sources used for coding

Sub-Saharan Africa

West Africa to East-Central Sudan

- (1) Nupe (Fulani-Nupe) CE 1837-1897; Nadel (1942)
- (2) Yoruba (Oyo Empire) CE 1750-1800; Law (1977), Lloyd (1971)
- (3) Asante (Akan) CE 1800-1873; McCaskie (1995), Rattray (1923, 1929), Wilks (1975)
- (4) Bagirmi CE 1800-1900; Reyna (1990)

Central Equatorial

- (5) Kuba (Bushoong) CE 1880-1892; Vasina (1978)
- (6) Tio CE 1800-1899; Vansina (1973)

Interlacustrine

- (7) Buganda CE 1800-1880; Roscoe (1965), Southwold (1961), Wrigley (1996)
- (8) Bakitara (Bunyoro-Kitara, Nyoro) CE 1860-1890; Roscoe (1923)

Southern and East Coastal

- (9) Lozi (Barotseland) CE 1864-1900; Gluckman (1941, 1943, 1961), Prins (1980)
- (10) Swahili Lamu CE 1800-ca. 1870; Prins (1967), Ylvisaker (1979)

Southeast Asia

Mainland

- (11) Thailand (Early Bangkok Period, Chakkri Dynasty, esp. Rama III) CE 1782-1873; Rabibhadana (1969), Vella (1957)
- (12) Burma (Early Kon-baung Period) CE 1752-ca. 1800; Koenig (1990)

Insular

- (13) Bali (the Later Mengwi Polity) CE 1823-1871; Geertz (1980a), Schulte Nordholt (1996)
- (14) Aceh (Aceh Sultanate) CE 1850-1900; Hurgronje (1906)
- (15) Perak CE 1800-1870; Gullick (1958)
- (16) Java (Late Mataram Period) CE 1700-1900; Moertono (1981), Schrieke (1957)

South Asia

- (17) Vijayanagara (esp. the reign of Deva Raya II) CE 1350-1564; Saletore (1934), Stein (1989)
- (18) Pudukkottai CE 1700-1800; Dirks (1987)
- (19) Mughal (reigns of Akbar, Jahangir, and Shah Jahan) CE 1556-1658; Ali (1985), Farooque (1977), Habib (1963), Hasan (1936), Sarkar (1963)

East Asia and Tibet

- (20) China, Early and Middle Ming Dynasty, esp. CE 15th century; many sources were consulted, including Huang (1998), Hucker (1998)
- (21) Japan (Tokugawa Period, Edo Shogunate) CE 18th century; many sources were consulted including Hall (1991a, b), Perez (2002)
- (22) Tibet CE 1792-1951; Bell (1992), Carrasco (1959), Landon (1906)

North Africa/Mediterranean/Europe

- (23) Ancient Egypt (New Kingdom, esp. 18th and 19th dynasties) BCE 1479-1213; Kemp (1989), Montet (1964, 1981), Murnane (1998)
- (24) Athens (the “New Democracy” or “Age of Demosthenes”) BCE 403-322; many sources were consulted, but we depended heavily on Hansen (1999)
- (25) Roman Empire (“High Empire”) CE 69-192; many sources were consulted, including Abbott 1963; Eck (2000a, b, d), Galsterer (2000), Griffin (2000a, b)
- (26) Venice CE 1290-1600; Lane (1973); Norwich (1982), Romano (1987)
- (27) England CE 1327-1336; Morris (ed., 1940), Morris and Strayer (eds., 1947), Willard, Morris, and Dunham, Jr, (eds., 1950), Waugh (1991)
- (28) Ottoman Empire (“Classical Period,” but emphasizing the reign of Suleiman I) CE 1300-1600; Inalcik (1994), Lybyer (1966)

New World

- (29) Aztec Empire (Triple Alliance) CE 1428-1521; Davies (1987); Hassig (1985); van Zantwijk (1985); Zorita (1994)
 - (30) Inca Empire CE 1438-1532; D’Altroy (2002), Murra (1980)
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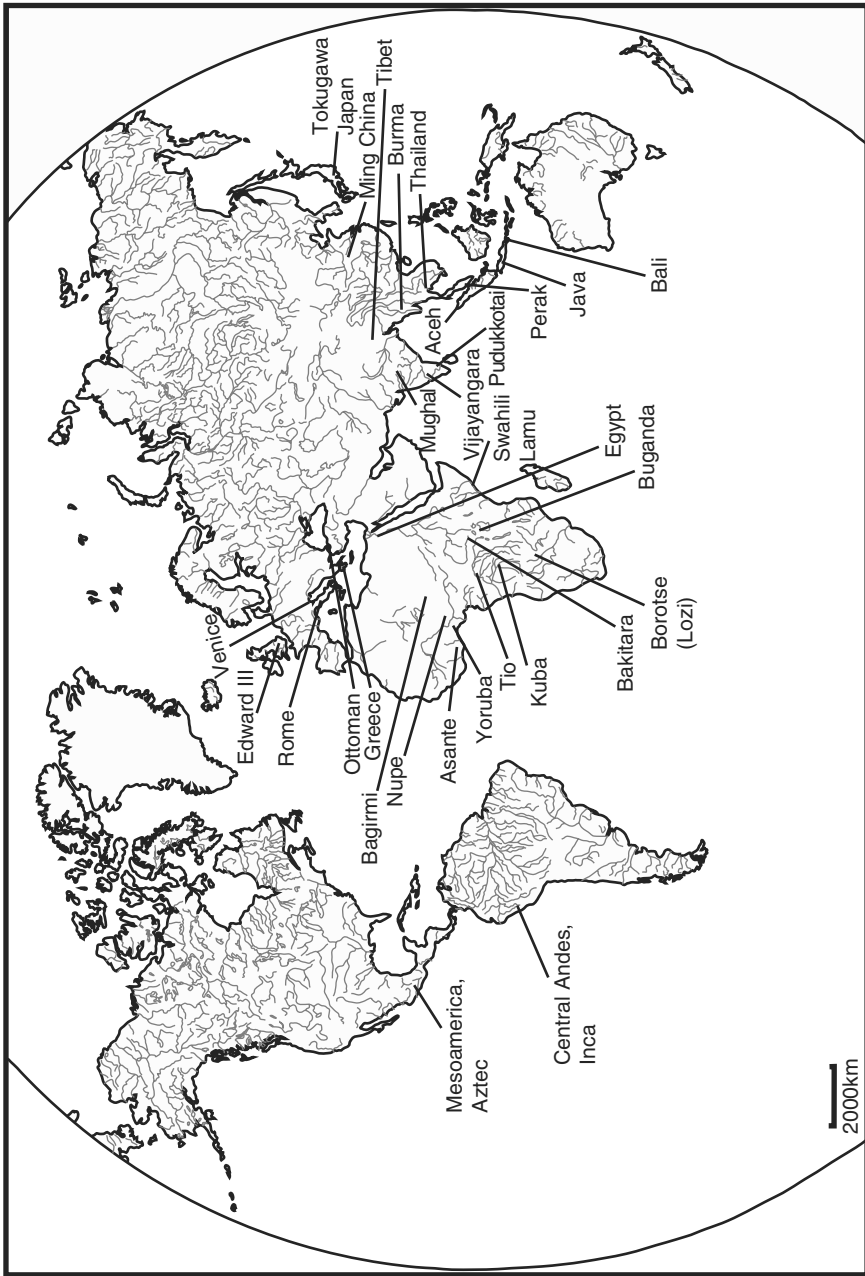


Figure 4-1 Locations of the coded societies.

In Table 4-1 and in later data summary chapters, we organize the coded societies by major world region (sub-Saharan Africa, Southeast Asia, South Asia, East Asia and Tibet, North Africa/Mediterranean/Europe, and New World). This ordering, and the ordering of societies within the geographical regions is the order in which the coding was done, and is completely arbitrary in terms of the project's methods and results.

Chapter 5

Archaeological and Historical Contexts for the Coded Societies

The degree to which a state will have collective properties is hypothesized to reflect, in part, how revenues are constituted, especially the degree to which revenues are taxpayer-produced (Levi 1988). Below we describe a systematic method for cross-cultural comparison to evaluate ideas about social processes in political evolution stemming from rational choice theory. However, this kind of broadly-stated hypothesis cannot be a detailed recipe for how a collective polity might be constructed in a particular situation, or whether, in fact, one would develop at all. We fully expect that even where there are social forces favoring collective action, the form of collectivity will have some unique properties in each case resulting from the opportunities and constraints afforded by local culture and other local factors. While we are interested in the degree to which theoretical predictions provide explanations for social process, we developed a research design that demands that we address theory and generalization alongside a consideration of area particulars. We designed these procedures to enable us to transcend the arguments between processualists, on the one hand, and the local area studies researchers, on the other (Lichbach [2003] summarizes the debate as it has raged in political science). For one thing, we wanted area specialists to have sufficient information available to permit the evaluation of our coding decisions.

Is it possible to please proponents of the general and the particular? Area or regional specialists may criticize processualists for their attempts at intellectual hegemony and for failing to master the nuances of local literatures, but, on their part, area specialists often can be faulted for a lack of interest in theory and for blocking access to their area literatures with local terminologies and concepts that retard comparative understanding and limit the potential community of readers. These problems can be overcome to some degree if the comparativist is willing to delve deeply into the area literatures, and we did this to the best of our abilities. We think area specialists will also look favorably upon the fact that in doing this research we not are not attempting to subordinate all knowledge to a particular mode of theoretical understanding, nor are we joining the "... growing number of academics today who stride confidently across countries, continents, and centuries, armed with simple talismans of theory" (Sarkar 1997: 62). In fact, our intention has been to conduct a methodologically sound and, at the same time, empirically rich

study that will be regarded as a valid and reproducible attempt at theory-testing rather than hegemonic theory-promotion.

In this chapter we summarize some of the results of our area-based research by providing the deep as well as immediate cultural and historical backgrounds for our coded societies. These summaries provide historical context for the coded societies, and place our selection of societies within the context of the range of variation found in each area. These history chapters are not traditional dynastic histories or king lists. Rather, they present problem-focused regional and societal summaries that provide information directly relevant to developing a better understanding of the nature of collective action in state formation in its localized expressions over long time periods. In developing the summaries, we asked four questions:

- (1) What are the characteristic political institutions and modes of state organization in each region?
- (2) What kinds of causal factors in state formation have regional specialists identified, and how have perspectives on causality changed over time?
- (3) What theories have had an impact on ideas about state formation?
- (4) Is there evidence for collectivity in past social formations, and, if so, what has been its history prior to the focal periods?
- (5) What is the local history of state formation in each case?

Introduction to Sub-Saharan Africa

The mid twentieth century comparative literature identified a characteristic “African early state,” for which Murdock’s (1959: 37-9) “African despotism” provides one model (cf. Fortes and Evans-Pritchard 1940: 11-12; Vansina 1962). More recent research critiques this exceptionalist position (Claessen 1981), and points to the necessity to document and explain variation in space and time (e.g., S. McIntosh [ed.] 1999; Robertshaw 2003; Vansina 1999). Our sample of African societies, although limited to 10 societies, reflects the great cultural and environmental diversity, as well as the complex and variable history of alignments with world-systems over more than 1,000 years. Our coded sample is drawn from the region’s major environmental zones, although acceptable sources were not found for the far north-east (ancient Punt and Ethiopia-Somalia) and the far south. But codable reports based on ethnohistoric and ethnographic information were available for societies in the far west (Sahelian and tropical forest/savanna), central equatorial (central and the southern margin), and east Africa (interlacustrine or Great Lakes zone, and the Swahili coast) (Figure 5-1).

In the Sahelian portion of West Africa, along the boundary of the Sahara desert and adjacent areas in the zone of climate transition from savanna (south) to drier savanna and steppe (more north) (Hopkins 1973: map 1), we include Nupe and Bagirmi (although other societies in this zone are suitable for coding as well). Closer to the Atlantic Ocean, in the western tropical (Guinea) forest zone, we selected Asante, as well as Yoruba, the latter straddling the western Guinea forest

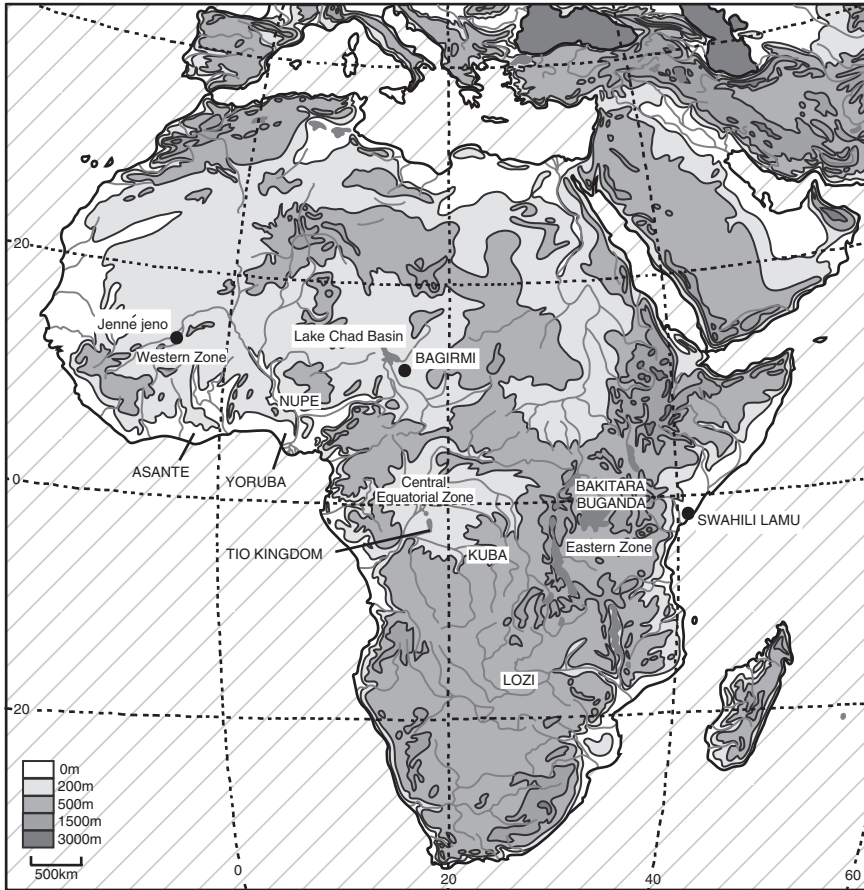


Figure 5-1 Locations of the coded societies of sub-Saharan Africa.

and savanna environments. In the central zone of the equatorial tropical forest, early states are comparatively less well known, but Tio and Kuba have been subject to substantial ethnohistoric study. Along the southern limit of the equatorial zone, the Lozi polity is also exceptionally well described. Of the many pre-modern states in the eastern (interlacustrine) portion of the tropical forest zone, sources describing Bakitara and Buganda provided information suitable for our coding. Of the many city-state polities of the semi-arid Swahili east coast, sources for the small polity of Lamu provided a sufficient if not rich literature for coding. Across all these zones, the abundant ethnographic and ethnohistoric literatures of sub-Saharan Africa provided additional codable societies, but we decided to limit our African sample to 10 cases in order to avoid over-representation of one macroregion.

The Influence of Islam

Cross-cultural variation in pre-Colonial African states was constrained, to some degree, owing to the fact that ideas about how to build states were introduced from external sources (except for the Nile Valley archaic state, which is described as part of the North Africa/Mediterranean/European group). Islam was the major outside influence on state-builders before and during the focal periods, although European influence (for example, from the Portuguese on the east African coast and the British on the western Guinea coast) was beginning to be felt during some of our focal periods. Of the societies in our sample, Nupe, Bagirmi, and Swahili Lamu reflect the most direct Islamic influence, although none of them represent an entirely consistent Islamic blueprint for state-building, and all combined Islam with endogenous cultural elements and technologies to build hybrid social formations. For example, the ethnic term Swahili signifies a hybrid of indigenous African with Islamic and other cultural influences and migrants (Nicholls 1971: chapter 1). Other societies we coded reflect a greater degree to which indigenous social practices provided the basic building blocks for state formation, albeit within the contexts of various kinds and degrees of world-system articulation, including Asante, Yoruba, Tio, Kuba, Lozi, Bakitara, and Buganda.

Secondary State Formation

Whether hybridized Islamic/African, or comparatively indigenous, all sub-Saharan early states were to some degree secondary, referring to the fact that, in varying ways, and to varying degrees, political change was stimulated and conditioned by intercontinental diffusion and world-system interaction and much as it was by local social or other causal forces (Connah 1987). By world-system we refer to a diverse array of inter-cultural long-distance trade and migration circuits organized in hierarchical structures that linked economic core zones, usually providing manufactured goods, to periphery zones that usually provided raw materials and slaves. Trade was carried out between sub-Saharan Africa and the complex societies of South Asia, the Middle East (including Egypt and North Africa), the Mediterranean, and Europe. In many of these circuits, African societies had the status of peripheries, but some trade circuits were intracontinental, with their own core-periphery structures.

Wallerstein (1976) correctly identifies the significance of world-system trade in African political evolution, but in his version of world-system theory, long-distance trade prior to the European economic expansion of the 1750s would have involved only luxury goods, and hence would have had "limited consequences for the social organization of the trading societies." After 1750, he argues (1976: 32-3), the increased export of slaves from Africa (no longer a luxury item because they were beginning to enter the production of all commodities in the core economies) and the growing import of manufactured goods "peripheralized" Africa in the world division of labor of the capitalist world-economy. But Wallerstein's scheme and his

chronological sequence are inadequate because trans-Saharan and intercontinental trade prior to the 1750s clearly had a profound impact on the evolution of social formations in Africa over more than 1,000 years (summarized in Connah 1987: chapter 5, *passim*). Side by side with the trans-Saharan and intercontinental trade, and sometimes stimulated by it (e.g., Vansina 1990: 216), other goods played important roles in sub-Saharan African political economies that were traded intracontinently, especially slaves, salt, copper and brass, iron, cowrie shells, cotton cloth, oil from oil palm, horses and horse equipment, grain, and kola nuts (Connah 1987: 119 and figure 5.8; Holl 2002: 23; McIntosh and McIntosh 1993), and these also brought social change. These more localized inter-group and intra-group exchange systems, such as those involving animal products or fish for plant food, took place in the institutional contexts of border markets, inter-ethnic reciprocity, redistribution through political institutions, and local market systems. Trade at various spatial scales added up to an extensive overall degree of African commercialization, mediated by various complex institutional arrangements such as professional long-distance traders, trader's guilds, international and local markets, and periodic market systems. World-systems and intercultural trade at various spatial scales has had social consequences for African political evolution, not just in relation to the capitalist world-economy. However, it is also the case that the degree of and nature of involvement in intercultural and local trade circuits were highly variable in space and time, as were the sociopolitical outcomes of involvement in trading (S. McIntosh 1999a: 9-14; Terray 1979: 294-6). For example, Vansina (1999: 166) argues that early states in the central equatorial zone developed "largely in isolation from the outside world" (cf. Wrigley [1996: 232] on Buganda, and Gluckman [1941: 23, 75] on Lozi). Recent research points to the importance of understanding indigenous social evolution as well as world-system involvement and diffusion to arrive at a more complete picture of aboriginal African political change (e.g., Abungu and Mutoro 1993; Connah 1987: 225-6; McIntosh and McIntosh 1993; Mitchell 2003; Robertshaw 1999a; Schoenbrun 1999).

Growth Phases in World-System Interaction and State Formation

The two major growth phases in world-system interaction and corresponding phases of state formation can be identified. An earlier phase encompassed two geographically distinct zones, east and west, involving two partially distinct world-system circuits. A western circuit was based on a growing Arabo-Berber trade across the Sahara desert and brought political change along the Sahelian southern boundary of the desert (Connah 1987: 102, 115-19). Although the domestication of the camel increased the frequency of trans-Saharan trade nearly 2,000 years ago (Connah 1987: 99), a growth in the volume of the Arabo-Berber trade corresponded with evidence of early state formation (the Ghana polity) and urbanism (e.g., at Jenné-jeno) perhaps as early as about CE 800, followed by the later western Sahelian states of Mali, Songhay, and Kanem (Connah 1987: 116-19; McIntosh and McIntosh 1993).

Swahili coast polities served as intermediaries (as well as providing some exportable goods) between the Indian Ocean trade and adjacent inland populations of east African (including Great Zimbabwe). State formation on the Swahili east coast stemming from this trade was somewhat later than the western Sahelian regions. Archaeological evidence for settlements prior to CE 800 is scanty, but small village sites dating to the period from CE 800 to 1000 have been located in several places, sometimes showing minor Islamic influence or presence, but already showing some evidence of long-distance trade (Wright 1993: 663-4). Trade, Islamic influence, and social complexity all increased after CE 1000 (Wright 1993: 665-9; Abungu and Mutoro 1993: 699-701).

A second major phase of state formation that began some 500 years later than in the western Sahelian and Swahili coastal zones is found deeper in the tropical forests from western Guinea through central equatorial Africa to the interlacustrine zone of East Africa. In the latter, there is little evidence for agricultural settlement prior to CE 1000 (Robertshaw 1999b: 124), but, once agriculture was established it was developed into a system of cattle pastoralism after about CE 1000 to 1200 and a corresponding emergence of intensive banana cultivation (*ibid.*:136-7), culminating in the Cwezi, a predecessor of Bakitara, perhaps by the 13th or 14th centuries (Robertshaw 2003: 160). The central equatorial zone is poorly known archaeologically, but early states may have developed along the lower Zaire (Congo) River by CE 1200 or somewhat later, including the Tio polity in our sample (Vansina 1990: chapter 5). State formation was even later in the tropical forest and wetter savanna of coastal West Africa, and reflected primarily an increasing interaction with European traders who depended on new sailing technology to gain access to this coast (Connah 1987: 98-9).

Sub-Saharan Africa and Neoevolutionist Theory

The ethnohistoric and ethnographic literatures describing the pre-Colonial states of sub-Saharan Africa are the world's richest such resource on early states. For example, of Murdock's (1967) sample, limited to only the ethnographically best-known societies, 26 from Africa are classifiable as early states, and this is only a fraction of the many hundreds of states that developed here over the last millennium. While this abundance of information has prompted several useful summaries and comparative studies (Cohen 1978; Eisenstadt et al. [eds.] 1988; Lonsdale 1981; Mair 1977), neoevolutionists tended to neglect the African experience (excepting the Nile Valley), and instead privileged Pacific Islands societies as models for theory-building (see, especially Service 1975, following Sahlins 1958; cf. S. McIntosh 1999a: 2). This neglect means that we are not able to adequately assess the degree to which there might have been experiments in collective action in the archaeologically-known periods.

Several factors have limited the influence of Africa on theory-building (summarized in S. McIntosh 1999a). Part of this is the fact that sub-Saharan African

archaeology, although growing (cf. Shaw et al. eds. 1993), has not garnered as much attention as other areas. As R. McIntosh (1999) points, out, many early African states typically lack the remains of substantial public architecture, and thus fail to meet the expectations of Westerners for what an early state should look like. It is also true that European racism and Colonial myths of African primitivism have nurtured simplistic diffusionist or migration and conquest theories that posit external origins for African states, most notably the now-discredited “Hamitic hypothesis” that traces social complexity to a Nilotic source (discussed in Mitchell 2005: 20-1). Although now discredited (Goody 1971: 19; Lonsdale 1981: 171) diffusionist theory appears to have had a longer life as applied to Africa than elsewhere, delaying the adoption of processually-oriented approaches by comparison with other world areas (cf. S. McIntosh 1999a: 2; Kopytoff 1987: 33-4).

The tendency to ignore sub-Saharan Africa in neoevolutionist theory-building is also attributable to the fact that the development of social complexity and the state failed to conform to the “standard sequence” of neoevolutionist theory, in which state formation is viewed as a product of agricultural intensification of cereals under conditions of population pressure and competition for resources, especially irrigable or other high-productivity land (e.g., Sanders and Price 1968: chapter 4). That sub-Saharan African political change could be linked primarily to intercontinental trade as opposed to these endogenous causal factors (outside the Nile Valley, at least), relegated this region’s political history to the status of secondary state formation, a topic of little interest to most social change theorists. Across sub-Saharan Africa, agricultural production tended to be based on a variety of systems of garden production and shifting cultivation involving a mix of root crops and grains with sometimes quite long fallow cycles of five years or more (Allan 1965). Aboriginally, there was virtually no flow-management canal irrigation in sub-Saharan Africa (Allan 1965: 412), so it is true that those aspects of social change linked to water management that might have been significant social forces elsewhere were not integral to this region’s political processes. However, strategies of agricultural intensification did develop that could substantially increase production. In the coded sample (discussed in more detail below), this included, among other strategies, short fallow or continuous intercropping of vegeculture with grains in a core region near the Asante capital, flood recession rice cultivation around the edges of lakes and ponds (for example, at Swahili Lamu, but a similar rice-based system probably was in use by at least CE 800 near Jenné-jeno in the inland Niger delta [S. McIntosh 1999b: 70]), extensive state-organized swamp drainage coupled with flood recession cultivation (Lozi), and the partial substitution of maize for millet and cassava for plantain to increase production (Kuba) (e.g., Vansina 1966: 5). Both Lozi and Kuba agricultural regimes were quite demanding in terms of their year-around labor demands.

Even though there was some potential to increase agricultural production, still, by comparison with some other world areas, in sub-Saharan Africa land tended to be abundant and agriculture of low intensity (Goody 1971: 25-6). As a consequence, the major thrust of theory-building for African political change has emphasized the importance of the control of people and things, including prestige goods, rather than the control of land and the surplus production from it (e.g., Douglas 1967; Ekholm

1978; Guyer 1995; Kopytoff and Miers 1977: 14, *passim*; Kopytoff 1987: 42-8; Robertshaw 1999a). For example, Goody (1971) explained state formation in West Africa as a result of the control of the “means of destruction” (horses and cavalry in the Sahel, guns in the tropical forest) rather than the “means of production.” The model proposed by Kopytoff (1987) is the most elaborate of what might be called the African “wealth in people” theories. According to him, political complexity had a patchy distribution, with more centralized core polities surrounded by an abundance of sparsely populated frontiers. People migrated readily between cores and peripheries in a “ceaseless flux among populations” (p. 7). As dissident elements or others from established polities migrated into margins, immigrants established themselves as a political elite, and succeeded politically and economically to the degree that they were able to attract and retain or control followers in competition with other similarly-situated political actors in contested and chaotic frontier landscapes. Similarly, Robertshaw (1999a) argues that the control of labor, especially women’s labor, in a situation of low population density, was a key factor in state formation in Buganda and Bakitara in the Great Lakes region.

The importance of wealth in people in Africa has led to an elaboration of institutions specifying the nature of rights in persons, and a diverse array of transactions that transfer rights in persons, including bridewealth (which allows for control of wife’s children as well as her labor), unilineal descent, polygyny, patron-client relationships, and the pawning of persons (Goody 1976; Kopytoff and Miers 1977). Institutions and transactions specifying rights in persons includes the “acquisition of outsiders,” a pattern of African slavery wherein typically there is considerable potential for personal and intergenerational social mobility and incorporation into the group (Goody 1976; Kopytoff and Miers 1977; Strickland 1976). This degree of institutional complexity surrounding rights in persons probably is not found in other world areas, but there are some interesting parallels in traditional Southeast Asia (Bentley 1986: 284; Reid [ed.] 1983; Reid 1992: 270; Tambiah 1977: 83, 89).

These aspects of African early states that we summarized, including low population densities, “wealth in people” economies, minimal public construction, comparatively less-intensive agricultural production, and world-system interactions, all reduced the significance of sub-Saharan Africa in the eyes of neoevolutionists. Yet, for a research project such as this one, that aims to evaluate the robustness of a collective action theory across cultures and time periods, these unique properties are elements of variability that provide an ideal setting for rigorous theory-testing.

Local Histories of the Sub-Saharan African Societies

Nupe

The focal period for Nupe (also known as the Bida Emirate, Fulani-Nupe, Kin Nupe [Land of Nupe]) is CE 1837-1897. Nadel (1942: 69-146) divides the history of the Nupe kingdom into two parts, an earlier mythical period with a heroic

founding king, and a recent period known from the writings of Muslim court recorders. According to the mythic history, the Nupe state was founded by Tsoede (or Edegi), a culture hero, sometime during the early fifteenth century CE., and he expanded the Nupe kingdom from his capital in Gbara. He is said to have died, at the age of 120, on a military campaign to expand the Nupe territory northward, after having reigned for 60 years. The genealogies from this period connect Tsoede with a series of descendent kings coming down to the mid-nineteenth century.

Sometime after 1810, a Muslim Fulani, Mallam Dendo, entered Nupe and changed the history of this kingdom. The Fulani dominance combined the efforts of Muslim preachers and emissaries who assembled groups of followers as a basis for future conquest, eventually allowing Mallam Dendo and his followers to rule Nupe. Following Mallam Dendo's death, one of his sons took the title of *Etsu* Nupe and demanded the "magic regalia" of Tsoede from the indigenous puppet king (Nadel 1942: 80). From that time forward, the history of Nupe consisted of intrigues, battles, and revolts until the British took over around 1900. Overall, the history of this state is highly focused on individuals and their quests for power, although we judged the polity to have had a sufficient degree of institutional and organizational development to qualify for inclusion in our coding.

Yoruba, Oyo Empire

The focal period for the Yoruba is mid to late 18th century CE. This was a period of political expansion by one polity (Oyo Ile) over other local systems in what had been a region of autonomous but interacting city-states (e.g., Peel 2002). The Yoruba-speakers recognized some commonalities, besides shared language, especially in that the royal dynasties of various Yoruba city states all traced their origins to Oduduwa of Ife Ile. One of the city-states, at Oyo Ile (or Old Oyo), may date to as early as the 13th century CE (the date is not known with certainty), but it became the center of Yoruba power by the 17th century. Oyo expansion took place during the 16th century, but wars with Nupe brought defeat and the temporary abandonment of Oyo Ile. Although horses were costly to maintain in this tsetse-fly zone (Law 1977: 186), the adoption of cavalry allowed the reimposition of rulership at Oyo Ile and the defeat of Nupe later in the 16th century, and cavalry and archer elements of the Oyo army remained an important source of its ability to establish and maintain empire (Law 1977: 183). European firearms began to be acquired after about 1730, but were not central to Yoruba military strategy during the focal period (Law 1977: 188).

Oyo dominance of other city-states went beyond military conquest. The Oyo ruling dynasty claimed to have inherited Oduduwa's primacy, which validated the king's right to wear a crown with a beaded fringe and its claim of paramountcy over many other Yoruba towns, including Ife Ile (Law 1977: chapter 7). The *Alafin* at Oyo was recognized as the preeminent ruler of the Yoruba confederacy, but Ife Ile retained a measure of symbolic significance for rulership if not actual power (Law 1977: chapter 7). An incomplete king list of 35 names from Oduduwa down to the 1830s is known (Law 1977: 47-50).

The export of slaves from the Atlantic coast began early in the 17th century, and eventually Oyo participated, benefiting from a location allowing it to serve as a trade connection between northern polities such as Hausa and the Atlantic coastal trade where slaves could be sold and European goods obtained for resold to populations to the north. Dahomey, a slave trading center, was conquered in 1726-30 and tribute was collected from it until the early 19th century. Oyo expanded to the Egbado area to have better coastal access in the latter 18th century. The peak of Oyo expansion was the middle of the 18th century but by the late 18th century a series of military defeats reduced opportunities for involvement in the slave trade and for getting horses from areas to the north; to maintain revenues, the palace became more demanding of the free people of metropolitan Oyo, breeding discontent (Lloyd 1971: 15). Oyo Ile was abandoned and sacked by Fulani in the 1830s and considerable population displacement occurred, especially migration from north to south under pressure from Fulani and the Muslim Caliphate of Sokoto. Wars between various Yoruba groups ensued until British military interference in the 1880s and 1890s.

Asante

The focal period for Asante (also known by the anglicized Ashanti, or by the cultural name Akan) is the 19th century CE, up to about 1873. The focal period follows a phase of intensive trade with Europeans, especially the gold trade, during the 15th and 16th centuries. That early trade was the initial basis for world-system linkages that stimulated social change in the Akan area, and was followed by a growth in the slave trade during the 17th and 18th centuries (e.g., Wilks 1993:1, *passim*). Trade was key to social and demographic change. Wealth accruing from gold exports funded the importation of labor (mostly slaves), making possible a transformation of the Akan area from a foraging economy to horticultural production (e.g., McCaskie 1995: 25; Wilks 1993: 77). Labor imports were an important feature of the agroecological transformation of the Asante core region (Wilks 1978: 526).

Just prior to and after around CE 1700, a chiefdom centered at Kumase was able to defeat its overlord Denkyira and incorporate adjacent chiefdoms into a nascent state extending over 600 km from the Atlantic coast to the savannah, under the *Asantehene* Osei Tutu (Wilks 1993: 41). European influence at this time appears to have been minimal, although Kumase polity was buying guns from the Dutch in preparation for war against Denkyira (Rattray 1929: 219). Osei Tutu introduced new military formations that gave his armies a degree of military superiority (Rattray 1929: 219) and he established Kumase and several other secondary centers (Wilks 1975: 111).

As in the earlier transformation, the growth of the polity during the 18th century was tied to world-system connections rather than local production intensification, although emphasizing the export of slaves in exchange for European guns and other goods. The end of the slave trade by the early 19th century forced the Asante polity and its people to find new sources of revenue. One consequence was a transformation

of the agricultural system in the direction of greater production intensity in some areas (McCaskie 1995: 26, 33), and a reduced emphasis on control of the southern (coastal) tributary provinces that came under increasing British influence (Wilks 1975: chapter 5). During the early 19th century, Kumase gradually gained more centralized control over its remaining territory, in part by weakening the semi-autonomous polities of Dwaben and Mampon (Wilks 1975 116-9) and by extending its control of northern (savannah) areas to expand trade connections, based in part on the growing African demand for kola nuts (Wilks 1975: 261).

British pressure increased after 1873, including the burning of Kumase. Asante was annexed by the British crown in 1901, and in 1957 it was incorporated into the Republic of Ghana. Prior to British intervention, neither Christianity nor Islam had profoundly shaped the strongly inward-looking Asante polity of the focal period.

Bagirmi

The focal period for Bagirmi is the 19th century, especially the later decades. We summarize its history up to that point mostly from Reyna (1990: chapters 2 and 3). States first developed in the east-central Sudan perhaps as early as CE 800, and state formation continued as a largely aboriginal process through the 19th century, although influenced by some Islamic ideas. An early polity, called Zagawa, is described as agrarian, while others in this area tended to be pastoral, but is poorly known. However, even the earliest state formation probably reflected the flourishing trans-Saharan slave trade (Reyna 1990: 28) that continued through the 19th century. Later states in this “early Medieval” period included Kanem (11th century), which was Islamized beginning ca. CE 1100. The Bulala followed Kanem rule along the eastern margin of Lake Chad, ruling until 1460, at which time the Bornu (a branch of the Kanem) reasserted control by defeating the Bulala. Gaoga, supposedly founded by a slave, is another possible polity in this general area east of Lake Chad among others. The first Bagirmi polity probably had developed by the mid 16th century, perhaps earlier, and appears to reflect largely in-situ processes and people rather than migration from an eastern source as is sometimes suggested (Reyna 1990: 43, 44-6).

Specifically, Reyna (1990: 51) proposes that a phase of declining rainfall and size reduction of Lake Chad, after CE 1200, affected agricultural productivity in the Kanem territory. They responded by increasing pressure on groups further south, possibly including the Bagirmi, who might have developed political centralization as a defensive strategy. Once, founded, however, the polity had a lengthy history, as indicated by the list of an estimated 22 Bagirmi rulers for the period from 1522 to the focal period. Bagirmi was an important, expansionist state from about 1600 to 1800, and the Bagirmi area was recognized for its commercial importance (Reyna 1990: 54). After CE 1800 it was placed in a more defensive position by the expansionist Wadai (*ibid.*) who exercised indirect control over Bagirmi through much of the remainder of the century, although there were few internal changes in the mode of governance (Reyna 1990: 55). Bagirmi was incorporated into the French colonial empire in 1897.

Kuba

The focal period for Kuba (also known by the tribal name Bushoong, or as Bambal or Lukengu) is the short period from 1880-1892, for which suitable documentary information is available, but the polity has a lengthier history. The rise of the Kuba kingdom followed an earlier, poorly-documented, “archaic” or chiefdom phase, and can be traced with some certainty to Shyaam (son of a slave woman and hence a foreigner, and possibly a trader), who probably ruled during the middle of the 17th century (Vansina 1978a: 49, 187). Shyaam was recognized as a great innovator, and evidently forged a state out of several chiefdoms, establishing regional rule by the Bushoong tribe. His successors were also notable state-builders who gradually developed the institutions of the state as they are known for the focal period, especially the development of a political capital and the various institutional means by which a growing bureaucratic system weakened the powers of the traditional chiefs (Vansina 1978a: chapter 8). European or other superior military technology played no role in the growing dominance of the Bushoong (Vansina 1978a: 162), although Shyaam and his followers probably borrowed some features of their governing system from more complex polities in the region, including the Mbuun, Yajima, Lunda, or Kongo (Vansina 1978a: chapter 6, 137). Over the long history of the state, it appears to have been politically quite stable (except for some succession problems), at least until a civil war ensued following the decline of the ivory trade very late in the 19th century (Vansina 1978: 238-9). Kuba began to lose its middleman position in the ivory trade after 1886, and this had been an important source of royal income. Sovereignty was ceded to the Congo Independent State in 1885, but had no impact on the kingdom until 1897; the capital was defeated in 1900 (Vansina 1978a: chapter 8: fn 1).

Tio

The focal period for Tio (also known as Tyo, Eastern Teke) is the 19th century, to 1899. We summarize its history from Vansina (1973:439-471). The Tio polity first appears in written documents around CE 1507 and at this time a king is mentioned. Vansina takes this as evidence that the kingdom of Tio had been organized before this date, but historical details are sketchy. The first king is described as an immigrant who gained control over a local elite by bestowing them with titles. Ideologically, the early kings were connected with iron smithing, a common pattern among the Tio, Kongo, and Loango kingdoms.

During the early history of Tio, the slave trade was an important revenue source. By 1529, a major slave market operated south of what is called the Pool, an area within the Tio kingdom where the Zaire River (previously Congo) widens and becomes shallow; and by 1560 Tio slaves had arrived in Colombia. The Tio seem to have exported their own people during these early years of the slave trade. By the 1630s the slave trade had expanded significantly in response to increasing Dutch demand. During the Napoleonic wars the slave trade declined, and then

rebounded, peaking during the 1830s, but then collapsing again after 1840. The period from 1820 to 1840 is marked by increasing strife as other polities attempted to break the Tio monopoly of the slave trade. Between 1860 and 1880, the ivory trade replaced the slave trade and became the key commodity at the Pool market. As the ivory trade expanded, the value of slaves as porters increased dramatically and the export of slaves fell correspondingly.

Politically, the kingdom was relatively decentralized. The king usually had little power and in some cases the lords of Tio warred against each other. Although Tio is probably the least complex and weakest state in the sample, still, it featured a governing apparatus (other than king or *Okoo*) consisting of three “superior lords,” four ritual officials, two officials of the royal household, territorial “lords” of two ranks, “chiefs” or local officials, and village headmen (Vansina 1973: 313, 324, 372-3). A 19th century ruler, Opontaba, and his successor Pieele appear to have excised more control over the lords of Tio than their predecessors and successors. Yet, this control began to decline during Pieele’s reign and by 1892 a powerful lord, Ngandzio, was challenging the power of Opontaba’s children in Mbe Nkulu. This conflict signaled trouble for the Tio state and by 1899 indigenous rule had ended.

Buganda

The focal period for Buganda (sometimes called Baganda, referring to the ethnic group name) is the 19th century CE to ca. 1880 (especially the reigns of Ssuuna II and Muteesa I). A period of rapid social change was initiated here, as elsewhere in this part of Africa, from about CE 800 to 1400, broadly reflecting the combination of a western (Bantu) cultural stream with a Nile Valley cultural stream (e.g. Wrigley 1996: 77-8). It also reflected the spread of iron technology and the beginning of a tendency toward regional production specializations in plantain horticulture and cattle pastoralism (Schoenbrun 1999). While it is likely that political consolidation was initiated as early as the fourteenth century, and the state took the form coded here by about CE 1800, the details of Bugandan social evolution have yet to be clarified (Wrigley 1996: 235). The polity was relatively isolated from other African regions until about 1850, suggesting that long-distance trade did not figure importantly into state formation until well into the 19th century (Wrigley 1996: 232). However, Kottak (1972:375) argues that ivory export as well as the growth of a more localized interregional trade in hoes, salt, iron, fish and cattle, during the 18th century, may have been related to state formation, for example, through the regional markets of Ssinga (which later became an outer province of Buganda). Robertshaw (1999a) points out that another causal factor in social change was the necessity to import labor for agricultural intensification in an area characterized by high mortality rates.

By the middle of the 19th century, Muslim merchants from the east coast had arrived in Buganda, promoting the ivory and slave trades, although ivory had been exported (and cloth imported) indirectly with the east coast through Karagwe (the

major Lake Nalubaale port-of-trade) before that time (Wrigley 1996: 3, 57). This was followed by a phase of Islamic cultural influence, and, after 1875, increasing British influence (Speke and Grant visited during 1861-2) (*ibid.*), and the introduction of firearms (Wrigley 1996: 4). While state formation had occurred at least a century before, growing British pressure and the proliferation of firearms resulted in a brief phase of political centralization under king Muteesa I, involving the development of something approximating a standing army under direct ruler control (Southwold 1961: 14). By 1894 the British had taken direct control of the Uganda Protectorate.

The relative isolation of Buganda from European or other observers prior to the middle to late 19th century, and the lack of an indigenous script, means that much of the published information on this polity derives from early contact and colonial period accounts, oral traditions that became the basis for indigenous histories written early in the 20th century, and interviews of older informants (especially Roscoe 1965; *cf.*, Wrigley 1996: 7-9; Southwold 1961: 1-2). Variant forms of a king list have been reconstructed from oral traditions, the most accepted version extending back 21 kings before Muteesa I (1856-84) (*e.g.*, Wrigley 1996: 21). Evidently, the state grew and was institutionally elaborated during the 18th century, including the annexation of adjacent territories, then by 1800, or so, reached its approximate 19th century contours that remained relatively constant until the colonialist disruptions of the 1880s and 90s.

Bakitara

The focal period for Bakitara (also known as Bunyoro-Kitara, Banyoro, kingdom of Kitara, and Nyoro), is a brief period, CE 1860-90, for which data are available, but social complexity and state formation have a longer history here. There is little evidence for agricultural settlement of this area prior to CE 1000 (Robertshaw 1999b: 124), which has led several authors to propose that Kopytoff's (1987) model for African secondary state formation might apply to Bakitara. According to this model, a marginal frontier area is populated by dissident elements or other migrants from established polities, creating a rather chaotic and competitive social environment in which an emergent migrant elite compete among themselves for followers and control of territory (*e.g.*, Robertshaw 1999b). It is hypothesized that this process eventuated in the development of a series of what were probably chiefdoms, referred to as the Cwezi, that were destroyed or incorporated by the in-migrating Babito clan, the dynasty holding rulership into the modern period (Beattie 1960: 17, 1971, chapter 3). The Babito had Nilotic origins (Robertshaw 1999b: 127). The relationship of the hypothesized Cwezi polities and a series of earthwork archaeological sites found in this area is not as yet clear (Robertshaw 1999b: 132), but, according to Schoenbrun (1999) the Bakitara state first developed sometime between CE 1600 and 1800.

In addition to a phase of immigration, political change also followed on the emergence of specialized pastoralism after about CE 1000 to 1200, and the corresponding emergence of intensive banana cultivation (Schoenbrun 1999: 136-7), although banana cultivation has a much longer history of use in this area (Robertshaw 2006). In Schoenbrun's formulation, state formation occurred "with

little or no connection to intercontinental or maritime trading systems” (p. 136). Instead, he links political change primarily to agricultural diversification and intensification. However, scattered finds of imported goods and possible indications of ivory production for export indicate some trade ties to the East African coast, perhaps by the 13th century (Robertshaw 1999b: 130), so the question of causality in state formation processes in this area is far from settled. Robertshaw (1999a) suggests that in this area, like Buganda, state-building was impacted by the necessity to import labor in an area where there was high mortality due to disease.

During the focal period, the Baganda had begun to encroach on Bakitara territory and previous dependencies had broken away, such as Toro and Ankole (Beattie 1960: 17; Roscoe 1923: 1), so for the focal period the territory was roughly equivalent to what became eventually the administrative district of Bunyoro. Direct British influence became stronger around 1890, including the capture of king Kabarega (Beattie 1960: 16-24; Roscoe 1923: 2).

Lozi

The focal period for Lozi (also known as Bulozhi, Barotseland, referring to the whole polity, including tributary groups, Luyi, Aluyi, and Aluyana) is a short period for which ample data are available, CE 1864-1900 (particularly that part of the reign of Lewanika I before the period of British protection, ca. 1885-1900), but state formation occurred much earlier. The earliest probable date for a ruler is CE 1780 to 1830 (?), but the ruler in question, Mulambwa, was already the 9th ruler (Gluckman 1961: 2-3). Little is known about early phases of Lozi state formation from either ethnohistory or archaeology (Prins 1980: 25-7). Gluckman (1941: 4) suggests a CE 1600-1888 chronology for Lozi expansion out of the core zone and a 1750 date for the establishment of the southern (subsidiary) capital. An immigrant group, the Kololo, defeated the Lozi (after a civil war) in 1838, but Sipopa reestablished Lozi control in 1864. This was followed by a period of factional conflict until power was established by Luboshi (or Lewanika, from his praise-name) in 1885 (Prins 1980: 30-1). Lewanika then used the resources of rulership to build an effective state over more than a decade. Portuguese, Arabs, and other slavers were in the area as early as the early 19th century, but more detailed accounts of the Lozi are available from after 1853. By the end of the 19th century, Lewanika agreed to bring the polity under British protection.

Swahili Lamu

The focal time period for Swahili Lamu is CE 1800 to ca. 1870, a period for which ample data are available, but state formation has an earlier history here as in other parts of the Swahili region of the East African coastal belt. Along the Swahili coast, archaeological evidence for settlements prior to CE 800 is scanty. Small village sites dating to the period from CE 800 to 1000 have been located in several places,

sometimes showing only a minimal Islamic influence or presence, but already showing some evidence of long-distance trade (Wright 1993: 663-4). Islamic influence and social complexity both increased after CE 1000, including the growth of port towns (break-in-bulk points) at Manda in the Lamu archipelago, where a sea-wall was built, and another at Ungwana, both near Lamu, but many other communities were established at various sites along the coast, some of 10ha or more in area (Wright 1993: 665-9; Abungu and Mutoro 1993: 699-701). Given the evidence for Middle Eastern and Far Eastern trade items, and the influence of Islam in periods prior to its influence in adjacent interior areas of Africa, researchers have questioned whether social change in this area, after the 10th century, involved primarily exogenous or local social forces (e.g., Abungu and Mutoro 1993).

The Portuguese conquered this area after 1508 and remained the dominant influence for two centuries, until they were pushed out of all but the southernmost (Mozambique) part of the coast by Omani Arabs after 1698. It is the Omanis whose influence is most evident at Lamu during the focal period, but it is also the decline of Portuguese power that set the stage for the development of political independence of the polities of the Lamu archipelago (Ylvisaker 1979: 66). A conflict between Lamu and its neighbor Pate was resolved in part by the interference of the Sultan of Zanzibar and the establishment of an Omani garrison and governor at Lamu in 1813, although Omani control over the area remained tenuous (Ylvisaker 1979: 71, 81-2, chapter 6). First, under Pate domination, then under some degree of Omani control, Lamu was never completely politically independent, but it was largely politically autonomous and retained its republican system of governance through the focal period (Prins 1967: 100, 1971: 48).

Struggles between island factions, between island polities (especially Lamu and Pate), between the Omanis and mainland groups (when inland groups disrupted trade), and struggles between Oromo and Somali pastoralists of the adjacent mainland, were continual during the 19th century, culminating in a decline in the ivory trade beginning in 1866 (Ylvisaker 1979: 115). In spite of this, during the period 1800 to 1876, Lamu emerged as a major port of trade in the African-Indian Ocean trade (Ylvisaker 1979: chapter 7). British and French trade also increased in the 19th century (Nicholls 1971:95-6). British opposition to the slave trade caused an economic decline in this area beginning in the 1870s (Ylvisaker 1979: 93).

Introduction to Southeast Asia

Southeast Asia is productively viewed as a distinct socio-cultural and geographical macroregion even though it was never integrated by a single religion, language, or “classical” culture, nor was it ever controlled by a single polity (e.g., Reid 1993). Elements of cross-cultural similarity can be attributed to the region’s relative topographic isolation from both South Asia and China and to the intensity of maritime interaction between Southeast Asian groups, abetted by a shared aim of keeping the ocean a “vast zone of neutral waters” (Wolters 1999: 45). At the same time there

were shared elements of culture and society reflecting the sea's integrative influence, there was also a complex patchwork of local histories and cultural elements that Wolters calls a "polycentric landscape" (Wolters 1999: 44). Evidence of historical localization is abundant (Wolters 1999: Ch. 3), including a diversity of political-economic strategies in state formation, a diversity of ethnic origins and migrations (in the coded sample, Thai, Burmese, Malay, Javanese, and Balinese, among others, are represented), and the fact that cultural elements and technologies were adopted, selectively, from other civilizations, for example, in the degree of Chinese influence. While the China trade, as well as resident Chinese immigrants, acted as significant social forces in many parts of the region as a whole, in the comparatively more sinicized northeast, connections with China had profound political influences not seen elsewhere, in fact, the Tong-King delta was incorporated into Han China in 111 BCE (Wheatley 1983: 67). Unfortunately, none of the more sinicized polities are sufficiently well-described to warrant inclusion in our sample.

Further south and west, South Asian Brahmano-Buddhist religions exerted more influence, followed by Islam and Christianity in later periods. While in the south and west there was no direct political incorporation from India comparable to Han expansionism and later Chinese interventions and influence, Indian cultural elements were adopted in many areas beginning during the first centuries CE (although not all polities were equally Indianized [Caldwell 1991]).

Another source of variation in Southeast Asian state formation is a north to south topographic divide. Along the southern rim, a series of volcanic arcs, surrounded by waterways hospitable to seaborne trade (Reid 1988: 1-3), were the setting for polities that developed initially as *entrepot* at strategic exchange points in a growing maritime trade that connected Southeast Asian populations to Oriental and Occidental regions (e.g., Christie 1995; Hall 1985, 1992; Kathirithamby-Wells 1990: 1; Wolters 1999: 44, *passim*), especially in the Malay Peninsula, Sumatra, and Java (Figure 5-2); Bali, also in the sample, was only weakly connected to this trade. By contrast, mainland polities such as Burma and Thailand, included in our coded sample, although involved to some degree in international commerce, displayed a more agrarian pattern in which economies were built around large zones of irrigated rice (this was also true of Bali). The north-south split, with its attendant agrarian versus trade-based political processes (to somewhat oversimplify a complex situation), provides a natural laboratory for comparative analysis with this project's research goals in mind, given that all these polities shared some cultural elements from South Asia or other extramural sources, but developed distinct types of state revenues.

Southeast Asia and the Literature of Political Evolution

Southeast Asian political evolution has not figured importantly in neoevolutionist theories that prioritized primary state formation. Early states here are secondary because they were strongly influenced by diffusion from adjacent, more established

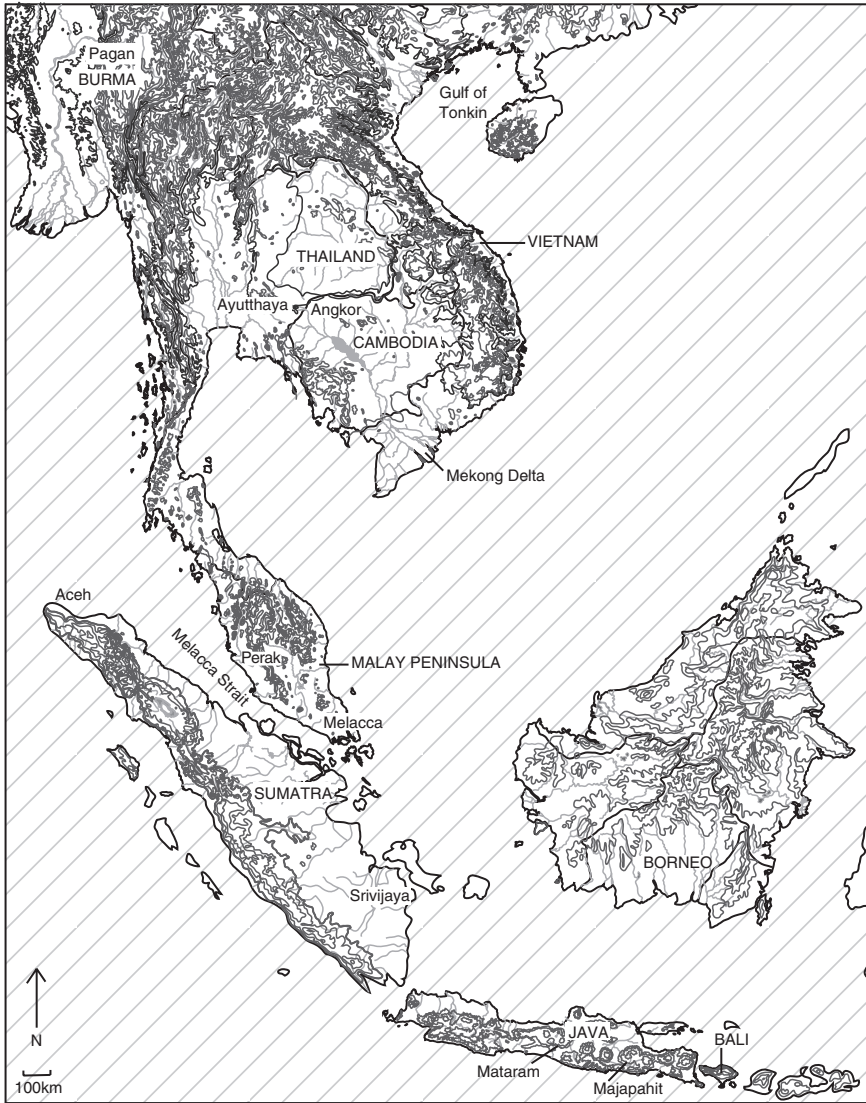


Figure 5-2 Locations of the coded societies and other places mentioned in the text, Southeast Asia.

civilizations and long-distance trade (Hagesteijn 1989: 2; Vickery 1998: 5; Winzeler 1976: 623). It also has been established that, by comparison with better-studied early civilizations, aboriginal Southeast Asian states tended to have low population densities and low rates of population growth (e.g., Reid 1988: Table 2, 1992). That a key political strategy was often elite gifting of prestige-goods,

rather than direct control of basic production (e.g., Junker 1999; Reid 1992: 270; Tambiah 1977: 83), also could be used to argue that Southeast Asian polities were less complex than the earlier primary civilizations of most relevance to theory-building. More recently, however, theorists interested in diverse forms of the early state, including those built around prestige-good distributions, intercultural networks, and the adoption of “international styles” in their political strategizing, have paid more attention to the Southeast Asian experience (e.g., Blanton et al. 1996; cf. Junker 2001), and, for the present project, the distinct aspects of, and variable nature of, state-building in this macroregion provide interesting possibilities for evaluating collective action ideas.

From Diffusionist Theory to Endogenous Evolutionary Process

In recent decades, some Southeast Asian researchers have turned away from a predominantly cultural historical approach that emphasized diffusion (“Indianization”) to one that pays equal attention to endogenous evolutionary processes. This perspective identifies Indianization as an outcome of internal political processes rather than attributing change exclusively to outside agents (e.g., Ray 1989); for example, the *deva-raja* (god-king) concept found in some otherwise Indianized variants of Southeast Asian kingship probably was a local innovation and not derived from India (Stein 1980: 335). The processual approach to diffusion argues for a dual evolutionary pathway for Southeast Asian state formation. In one pattern, emergent rulers opportunistically adopted elements of a foreign cognitive code, especially Hinduism, to certify their cosmopolitanism and to legitimate their claims to divinity (Higham 1996: 37; Hagesteijn 1989: Ch. 3, 1996: 189; Hall 1985: 53-4; Wheatley 1983: 325-6). In the other, more egalitarian, pattern, Theravada Buddhism and Islam were adopted as “popular religions that displaced or subordinated earlier cults that gave royalty proprietary privileges” (O’Connor 2000: 439).

The Contribution of Archaeology

Archaeological research also challenges the diffusionist “Indianization” approach by demonstrating a more gradual evolution of early Iron Age sociocultural and technological complexity pre-dating the Sanskritized protohistoric period (Higham 2001: 143-6; Vickery 1998: 21). The early moated centers of the Khorat region of northeastern Thailand, dating to the middle of the first millennium BCE (Higham 1996: 33-4), may represent an instance of indigenous state formation (Bentley 1986: 277). An even earlier Bronze Age (2000 to 700 BCE) in Thailand similarly displays autochthonous features (Higham 1996: 25, 39; White 1995). A megalithic tradition in early maritime Southeast Asia signifies chiefdom and perhaps early

state formation as early as 500 BCE (e.g., Christie 1995: 246-51). And maritime trade, including external trade with China goes back before the third century BCE (Christie 1990).

Social Causation and Diversity in Southeast Asian States

Early political evolution in southeast Asia, especially in the maritime south, has been explained most often by reference to phases of intensification of long-distance trade that moved valuable goods between the South China Sea and South Asia and the Mediterranean, coupled with a growing demand for Southeast Asian export goods. A first phase, some 2000 years ago, reflected the peak of Asian trade with Rome and perhaps a growing demand for the tin that was plentiful in some Southeast Asian locations (Ray 1989). Other growth phases occurred in the 5th to 7th centuries, and the 10th to 13th centuries; a final phase of intensification, CE 1400 to 1800, reflected an increased demand for pepper and clove (Manguin 2000: 410; Reid 1992: Figure 8.1). Several of the most important early polities, such as Srivijaya (starting in the 7th century) and Melacca (beginning in the 15th century), were trade *entrepot* that could take advantage of the need for trade services and could link their resource-rich up-river hinterlands to the growing external demand for local products including gold, tin, camphor, spices, and aromatic woods (Hall 1985; Manguin 2000: 409; Wolters 1967). A vast literature details the role of long-distance and local trade in political change in pre-modern Southeast Asia (recent sources include Hall, ed. 1985, 1992; Kathirithamby-Wells and Villiers (eds.) 1990; Reid 1992; Wheatley 1983). However, polities such as those that developed, initially, in the Mekong Delta region, and that were predecessors of Angkor, may not reflect maritime exchange (Stark and Sovath 2001), and this would include other mainland polities, e.g., Pagan (Aung-Thwin 1985). Some of these less trade-oriented regions had core regions characterized by elaborate water-control systems (e.g., Stargardt 1992).

This implies two partially contrasting causal sequences leading to state formation over the pre-modern sequence, one maritime and one based on wet rice (although both political-economic engines always were to varying degrees integrated) (Hall 1985: 256-7, *passim*; Kathirithamby-Wells 1990: 3). Richard O'Connor (1995), however, alerts us to the necessity of making a further division of Southeast Asian wet rice types, reflecting a distinction between two main "agro-cultural complexes," as he calls them, an upland valley type, and a lowland type. The latter, based on rain-fed irrigation ("flood management" or flood-retreat agriculture in Rigg [ed., 1992]) (combined with house garden production), was historically associated with earlier complex societies developed by Pyu, Mon, Cham, and Khmer speakers (the latter including Angkor) (Richard O'Connor 1995: 973; Stott 1992). The upland type, based on "flow management" draws water upstream from a weir, and directs it to fields through systems of canals. This was the agriculture of Burmese, Thai, and Vietnamese "wet rice specialists" that was "the nucleus of their states and the mold for their cultures" (Richard O'Connor 1995: 974). Several aspects of the two types

proposed by O'Connor are relevant to some of the coding concerns of this project, and we were especially concerned to discover the degree to which the state provided water management as a public good versus local, community-based organization of irrigation production. According to O'Connor, flood management (with its associated house garden production) is associated with comparatively solitary, autonomous households. The simultaneity of flood irrigation, it seems, does not have the same implications for irrigator cooperation and community and state institutional development that is found associated with flow management. In the latter, a sequential watering of fields from a continuous flow requires "locally accountable leaders," "irrigation associations, labor exchange groups, and village solidarity..." (p. 976). Communal land rights in these cases imply that villagers have "a moral claim on the community," (ibid.), while house gardening and flood management are associated with privately owned land and systems of lineal descent reckoning. In the conclusions, we evaluate the potential role of these communal irrigation systems on the evolution of collective action in state formation.

Long-Term Change and the Evolution of Second Millennium Polities

Southeast Asian states everywhere shared certain general characteristics, but long-term change from the "Classic Period" (early centuries CE to about CE 1500) to the "Postclassic" states (CE 1500 to the beginning of modern states) can be identified. Broadly, Southeast Asian states had the following features across both Classic and Postclassic Periods:

- 1) In the early Indianized states, the Indian Mandala served as a cosmological model for polity formation. Here, the interaction of a symbolically potent center with its outlying circles of satellite secondary polities ("circles of kings") is less a matter of military force than a kind of symbolic attraction (Geertz 1980a: 132) or voluntary association (Christie 1995: 271). The analogy is a cone of light (Anderson 1972: 22), brightest at the center, with diminishing luminosity with distance that reflects the gradually diminishing degree of ruler authority toward a vaguely-defined and fluctuating boundary. Rather than the administrative levels of a bureaucratized state, the polity consisted of a series of lesser semi-autonomous polities embedded within greater ones. This form of the Southeast Asian state, sometimes referred to as "*negara*," to distinguish it from more territorially-discrete forms, is the famous "galactic polity" in the terminology of Tambiah, a "center-oriented but centrifugally-fragmenting polity" (Tambiah 1977: 74) (cf. Adas 1981: 218; Geertz 1980a: 4; Hagesteijn 1989; Southall 1988; Wolters 1999: 26-9). These are similar to segmentary states in Africa and South Asia (Southall 1988; Stein 1977).
- 2) Although Southeast Asian states exhibited varying degrees of bureaucratic organization, the legitimacy of Southeast Asian rulership, rather than reflecting a hierarchy of governing statuses, was validated in part through a ruler's superior

religious potency, religious merit, and “devotional capacity” (e.g., Koenig 1990: 42; Wolters 1999: 93). Ruler charisma was coupled with elaborate temple and palace ceremonies and the regalia consumed in them (e.g., Geertz 1980a). Court ritual served to materialize the potency of power in the *axis mundi* through a “spectacular display of the cosmic order and the king’s place within it” (Bentley 1986: 295; cf. Tambiah 1977: 83). Links between ruler and a lesser elite were diverse and emphasized dyadic alliances, including marriages (Andaya 1992: 408; Junker 1999: 68-78), the distribution of official symbols of office, and the gifting of prestige-goods (e.g., Junker 1999).

These persistent structural properties lent themselves to a comparative ephemerality of Southeast Asian states (“centrifugal tendencies” in Bentley 1986: 292-3), especially in the less bureaucratized systems, as lesser nobles could challenge the ritual hegemony of the center or change political affiliations quite easily (Adas 1981: 218). Also, the prevailing theory that rulers should be charismatic religious leaders militated against lineal descent and predictable dynastic succession. As a result, succession difficulties often brought factional competition and political decline (Bentley 1986: 292-3; Tambiah 1977: 89).

- 3) Persistent low population densities (e.g., Reid 1992), and, in some cases, commoners’ propensity to migrate (O’Connor 2000: 434), placed a premium on the importance of labor control (as opposed to control of land) (Bentley 1986: 284), and various institutional arrangements appear to have developed in this context, including slavery (Reid, ed., 1983), patron-client relationships of personal patronage and bondage (Reid *ibid.*; Tambiah 1977: 89), warfare that aimed primarily at labor-capture (Reid 1988: 122), and state policies encouraging immigration (Bentley 1986: 283; O’Connor 2000: 434). States could be seriously weakened as a result of population loss from raiding or emigration (Tambiah 1977: 81).

Growth of Bureaucracy in the Postclassic

These similarities notwithstanding, later Southeast Asian states (“Postclassic” period, post CE 1500), in some cases, developed more bureaucratic modes of governance. Earlier states are known almost exclusively from widely-scattered epigraphic sources lacking in detailed information and plagued with validity problems since they were produced more as instruments of propaganda than as factual accounts (Wheatley 1975: 229-30). Hence, all the states in our sample date to the early modern period (after CE 1500), for which more detailed records can be found, and so some display more bureaucratic development than the earlier segmentary states, although some aspects of segmentary organization were carried forward into the Postclassic Period. The transition to the Postclassic Period eventuated from increased Chinese and European demand for products, especially spices, and corresponding European commercial and military influence, as well as the introduction of Islamic theories of governance that in some cases superseded or supplanted an earlier phase of Indianization (Reid 1993).

While the Southeast Asian literature generally identifies two types of states, a more agrarian versus a smaller city-state form, the latter usually a port city, toward the end of the “Classic” Period the former type underwent considerable development while the smaller independents increasingly lost viability (Reid 2000: 419). For example, after CE 1500, eastern Javanese rulers had been able to achieve a greater degree of integration of inland rice and spice production with control of coastal ports and maritime trade (Hall 1985: 250-6, Hall 1992: 218), an evolutionary process of political centralization that set the stage for the comparatively larger Postclassic kingdoms (summarized in Andaya 1992; cf. Lieberman 1991: 22-3). After 1500, new strategies of social control made possible a more complete integration of secondary elites as well as the control of material resources and labor, especially in their agriculturally rich core zones. According to Richard O’Connor (1995) this transition from the first millennium to the second entailed an agricultural succession, as the “wet rice specialists”—Thai, Vietnamese, and Burmese—tended to grow in territory at the expense of the flood irrigators. The ensuing polities were considerably larger and more bureaucratically complex and could be viewed as more “region-centered” (i.e., with a clear core-periphery structure) than “center-oriented.” These polities were based in the institutional and agroecological transformation of core zones that were densely-populated and intensively irrigated, and which became the economic, military, and demographic foundations of polities that were larger and more complex than those of prior periods (Andaya 1992: 425-7, 434-6).

The more complex polities illustrate the “strong form” of the Southeast Asian polity, expressed clearly in early modern Thailand and Burma (Tambiah 1977: 83-5), both of which are included in the coded sample. Growth was achieved through an increased use of force, in part fueled by the availability of European weapons, for example in Ayutthaya, the predecessor of the modern Thai state and in Aceh (Andaya 1992: 415-16). While Bayinnaung, the ruler of 16th century Burma remained “a model Buddhist king,” in the old charismatic fashion, he also promulgated standard weights and measures, standardized judicial proceedings, and gained more control of commerce than had been possible in earlier states (Andaya: 1992: 416).

The coded sample, selected, as usual, based on the availability of broadly-based descriptive summaries, happily did include divergent forms of Southeast Asian states, and thus provides a window onto the diversity of political economy in this region. Aceh and Perak, both Islamic, illustrate many features of the city state or port-polity type, while Burma and Thailand, cognitively based in large part on Buddhist principles of rulership, developed complex systems of labor control in emerging core zones. The focal period in Java, which converted to Islam just before the focal period, also was an inland agrarian state (that had recently lost many of its trade-oriented port outliers), but one that illustrates a far more decentralized mode of core-zone administration than Burma or Thailand. Bali is of interest for maintaining its modified Hinduism that figured into the sanctification of a form of rulership heavily dependent on symbolic expression rather than an elaborate bureaucratic structure, and it looks very much like a segmentary state.

Local Histories of the Southeast Asian Societies

Thai, or Kingdom of Siam

The focal time period for the Thai state is the Early Bangkok Period (Chakkri Dynasty, CE 1782-1873), especially the reign of Rama III (1824-51) (this brief history depends mostly on Rabibhadana 1969). The origins of the Thai polity can be traced to the early 13th century CE, when Thai chiefs defeated a part of the Khmer Angkor polity at Sukhothai. From 1350-1569, the polity was further consolidated during the Early Ayutthaya Period, but was defeated by the Burmese in 1569. Independence was regained during the Late Ayutthaya Period (1569-1767), but the polity was defeated again by the Burmese in 1767. The Early Bangkok period began with ascension of Rama I (1782) and ended in 1873.

The earliest historical records of this state organization, from the 13th century, indicate that the Thai polity was already influenced by Theravada Buddhism, in which the ruler was considered largely a secular figure, although Hindu concepts, that favored ruler divinity, also played a role in early concepts of rulership. Doctrinal reform during the early Bangkok Period deemphasized Hindu concepts of divine rulership and emphasized Buddhist thought that foregrounded *thammasat* (Buddhist ideas of merit), in which the king is expected to be righteous to benefit the populace (Rabibhadana 1969: 41-3, 44-46). The focal period was the final phase of primarily indigenous social development before a period of strong western influence, which resulted in the opening of channels of social mobility not previously available (Rabibhadana 1969: 1).

Burma

The Burmese focal period is the Early Kon-baung period (CE 1752 to 1800), sometimes referred to as Early modern or late pre-Colonial Burma, or the Kon-baung kingdom. The focal period just precedes a period of economic and political decline of the kingdom that began around 1800, and which was followed by British conquest and colonization during 1826-1885. Early phases of state formation in this region are poorly known, but states had probably developed by the 2nd to 6th centuries CE (Bentley 1986: 28). The Pagan Dynasty (CE 1044-1287) was the first major Burman polity illustrating features that were still in evidence during later periods studied here (Aung-Thwin 1985, 1990: 13), in which the ideational basis for state formation was Theravada Buddhism. This cognitive code places the ruler as central to society's fund of meritorious behavior, for example, the ruler was charged with the "religious well being of the population" (Koenig 1990: 126). This period of political consolidation of the Burma region was followed by a phase of fragmentation into sub-regional entities, then reunification, again, brought about by the first Taung-ngu dynasty (1486-1599), bringing the "Restored Taung-ngu

Regime” (1597-1752). Fragmentation again after 1752 was followed by the restoration of central power by the Kon-baung kingdom (1752-1885).

Bali

The focal time period is the middle to late 19th century, especially the later (revived) Mengwi polity (1823-71), the best-described of the several semi-autonomous court centers that comprised the political system of Bali as a whole. Indianized states first developed in Bali in the 9th century CE (Schoenfelder 2000: 43), and Bali was the last polity in the Indonesian archipelago where a modified Hinduism remained the basis of the cultural system. In this cultural code, status hierarchy is a central property of social life, and the divinity of royalty was certified by situating rulers within a hierarchical universe (Geertz 1980a: 102). The king was thought of as a corporeal god whose actions expressed the themes of the four-cornered universe (*padmasana*, or throne or lotus seat of Siva), the potency of *lingga* (phallus of Siva), and a divinely inspired charisma, *sekti* (religious power) (Geertz 1980a: 104-6), the latter reflected in part by the possession of royal regalia (“sacred heirlooms”) (e.g., Schulte Nordholt 1996: 152), and ritual sites, including rulers’ palaces (Geertz 1980a: 109-20).

The peak of Balinese political consolidation had developed by the 11th century CE (Schoenfelder 2000: 43), followed by Javanese invasion and control in 1284 and 1343, but independence was achieved shortly thereafter (*ibid.*: 44). A unified Balinese polity (*negara*) centered at Klungkung proved not to be sustainable, and partial fragmentation into local polities was complete by the middle 17th century. By this time Klungkung was a largely symbolic political center of Bali as a whole owing to the superiority of its ruling line (Geertz 1980a: 42). This segmentary system lasted until the Dutch conquest in 1906. The semi-autonomous polities under the weak umbrella of Klungkung included Badung, Karengasem, Tabanan, Mengwi, Bangli, Lombok, Gianyar, Jembrana, and Bulèlèng.

Since this was such a weakly integrated political structure we decided not to code Bali as a whole, and, instead focused on one local system, Mengwi. Mengwi’s ruling clan (Arya Kepakistan) traces its origins to nobles who served Javanese conquerors of Bali during the Majapahit Period (Schulte Nordholt 1996: 19). In Mengwi, strong rulership had weakened during the period 1770 to 1823, but centralized power was restored, in spite of multiple contenders for the thrown, under the influence of the powerful Agung Mayun, and his wife Biang Agung, who retained her title as queen for the next 20 years after his death (Schulte Nordholt 1996 118, *passim*).

Aceh

The focal period for Aceh (also referred to as Acheh, Aceh Darus-Salam, Aceh Sultanate, Atjeh Besar) is the late 19th century. Early state formation is not well documented in the north Sumatran coast region, however, prior to CE 1520, several

independent kingdoms (port-states) had been founded. Evidently, these appear not to have been as strongly influenced by Indianized concepts of state formation as was true for south Sumatra and Java, so the Islamic tradition was comparatively more influential in state-building here and may be older here than in other regions of Indonesia (Reid 1975: 46) (but see Brakel [1975] who points to some Hindu elements in the symbolic expression of Acehese kingship). Sultan Ali Mughayat Syah conquered the north coast (1520-24), to create what became Aceh. Acehese trade increased during the 16th century, especially as a result of the Muslim spice trade.

Reid (1975: 47) proposes that in Aceh, state formation was an outcome of "... a trade largely financed and organized by a varied group of Muslim merchants whose origins were in Pasai, Pidië, Melacca, Gujerat, and South India, but who increasingly became involved in Aceh's state system, its court ceremonies, and its wars." The language of the capital was Malay, not Acehese. However, there evidently was some tension between the merchants and state-builders. An Acehese Dynasty in the 16th and 17th centuries reduced the influence of the merchants and consolidated power (Reid 1975: 48-9). Further, Reid (1975) suggests that with the late 17th century decline in foreign trade the Acehese state began a program of local agricultural intensification to supplement its largely imported food supply. Interestingly, this development corresponded with a period of female rule (four successive queens) that, according to Reid (1975: 55), was an attempt to find "... stability without tyranny in a system of female rule." By the focal period, rural development may have led to a shift in the balance of power from strong Sultanate (port-capital) control to more independence and influence of the rural sub-polities, the *sagis*, (the three "corners" of Aceh Besar), whose rulers were called *panglimas*, and the other *ulèëbalang* (district rulers). There was British interference, beginning in the 18th century, and, later, Dutch involvement in Acehese affairs. Owing to these internal and external developments, by the focal period, the power of the Sultan had declined considerably, evidently, by comparison with prior periods (e.g., Hurgronje 1906: 272, 287).

Perak

The focal time period for Perak (also known as Negri Perak, or the Perak state) is the middle of the nineteenth century CE, before the civil war in the 1870's, which was followed by British control in 1874 (this summary is based largely on Andaya [1979: chapter 1] and Gullick [1958: chapter 1 and *passim*]). The Perak area, is one, among others, where evidence of early Indianized polities in the Malay Peninsula and Sumatra are found dating to the early centuries CE (Coedes 1968: 51), along a key trade route linking China, India, and the Mediterranean through the Straits of Melacca.

Owing to its strategic location for long-distance trade, by the 7th century CE the Malay Peninsula was brought within the orbit of Srivijaya, and by the later 14th century, the Javanese Majapahit polity. The Melacca Sultanate was established about CE 1400; this was a significant development, as later states in this area, including Perak, borrowed ideas about state formation from the Melaccan "heroic period" (Gullick

1958: 7), and Perak received a ruler who was son of the Sultan of Melacca during the early 1500s. After that, combined with the growing demand for tin by European commercial interests, Perak grew rapidly. Melacca was conquered by Portuguese, Dutch, and British, in succession (the last by 1795), but until 1873, Dutch and British policy had been to promote trade with other straits polities (including Perak) and to abstain from any direct political control. Hence, Perak "... persisted as a weak but independent dynasty" (Gullick 1958: 9), with minimal cultural or political influence from Europeans (or the Thai polity, which also threatened the independence of other Malayan polities [Gullick 1958: 10]), although Perak's ability to remain independent from expansionist polities such as Aceh probably resulted from its treaties with the Dutch and later British (Andaya 1979: 1). Civil unrest, beginning in the 1850s and continuing into the 1870s resulted in British intervention in 1874.

Java

The focal period is the Late Mataram Period (sometimes called the Muslim Mataram Period), CE 16th to 19th centuries (especially the 18th century and later). Initial state formation in Java is poorly documented (the following summary draws from Hall [1985]), and can only be indirectly inferred by an increased scale of archaeological sites dating to the 8th century CE. Early states here evidently typified the "Classic" Southeast Asian segmentary pattern (the "galactic" polity), that is, polities constructed around a symbolic system derived from Hinduism, and that involved the manipulation of networks of personal relationships and the ceremonial distributions of prestige goods (e.g., Hall 1985: 257-8). Eastern and central Java were unified in CE 1025 by Erlangga, primarily as a commercial power, but the polity later fragmented. Reunification was accomplished by the Singasari Dynasty, and Java subsequently developed into a maritime empire under Kertarajasa (1294-1309), controlled from the center at Majapahit. The growth of international trade, especially the demand for spices during the 14th century, changed the political situation in Java, in part because the growing populations of commercially-active port cities required additional rice surpluses from river-plain and inland states, providing an impetus to intensify agricultural production in Java. In this context, the 14th century Javanese polity (the Majapahit state) was transformed, and featured new modes of political legitimation, claiming links to earlier polities with a Siva-Buddhist-Javanese symbolic foundation, increased political consolidation, and new modes of revenue collection (Hall 1985). By the 15th century, some coastal ports became independent from Majapahit (and adopted Islam), so Majapahit increasingly emphasized internal sources of revenue as a substitute for control of trade. A new Islamic polity, at Mataram, emerged in the late 16th century, but lost control of coastal ports to the Dutch by the early 17th century, marking the end of Javanese control of the Java Sea trade, and allowing Aceh, Johor, and others to develop in its place. The Late Mataram period began with Panembahan Senapati (1585) and continued until the beginning of what is thought of as the Colonial Period in Java in

1830 (Carey 1986: 59), with few major organizational or cultural changes except that Dutch inroads eventually reduced state power (Moertono 1981: 6-8). Two key influences conditioned the Late Mataram polity: Islam and the Dutch East India Company (the V. O. C.), although many elements of traditional Javanese culture remained, and the polity was never as thoroughly Islamized as Aceh (Moertono 1981: 7). By the 18th century, rulers had diminished the power of the religious authorities and claimed new forms of symbolic legitimation.

Introduction to South Asia

Given the lengthy and complex history of state formation in South Asia, we summarize selected aspects of political evolution as a sequence of five phases (some of the phase terminology is from Kenoyer 1997: Table 4.1). This sequence in five phases does not represent a rigid sequence of evolutionary stages, nor is it an attempt to capture the totality of South Asian political history. We use the sequence as an organizing device to facilitate the presentation of information in a compact format suited to this project's analytical goals. The phase scheme extracts relevant information from a small sample of the more than 60 major polities that developed in this region during the pre-modern period (Schwartzberg 1977: 197).

The first four phases of the sequence elucidate key aspects of sociocultural change that established most of the organizational and cultural foundations of those early modern polities included in the coded sample from South and Southeast Asia that were based on Hindu and Buddhist political theory and culture. This need not imply that all Southeast and South Asian polities illustrating Hindu and Buddhist political theory and practice were identical. State builders combined elements from these cognitive codes with local cultural elements and faced a diversity of local circumstances in terms of environment, world-systems involvement, agriculture, degree of military threat, and so on. Phase 5 documents the basis for a final pre-British pan-Indian integration phase, the Mughal empire, one of our coded polities, that incorporated Hindu, Central Asian, and Persian elements into its political architecture and culture.

There was a geographical migration of major political transformations over the five phases and 4300 years considered here. State formation is first evident in the Indus Valley, but during the early Iron Age the main theater of political evolution expanded eastward to include the whole Indo-Gangetic Plain (for two phases), then shifted to south India, and, finally, it moved back to the Indo-Gangetic Plain during the final phase. At an even broader geographical scale, diverse regions and cultural groups contributed to South Asian political-economic change, including contributions from Central Asian and other extra-mural sources. In addition to geographical change, the five phases are embedded within a sequence of two long waves of scalar change in South Asia political systems. Three "localization" phases were characterized by polities of less than South-Asia wide extent during our Phases 1 and 2 (Indus civilization and the second urbanism), and Phase 4 (the "Medieval" Period). A first India-wide (or nearly so) "integration" phase developed in what is locally called the "Classic" Era (Mauryan and Gupta empires) (our Phase 3). Following the Medieval

interregnum, a second integration of the subcontinent (Phase 5) began with the Delhi Sultanates and was completed by the Mughal empire.

***Phase 1. Indus Valley Tradition (First Urbanism Phase)
(2600 BCE to 1900 BCE) (Figure 5-3)***

The literature on South Asian political evolution is highly segmented chronologically because researchers tend to specialize by period, and this is especially notable in the case of the Indus civilization's highly specialized literature. This makes it difficult to comment on the degree of continuity from Indus civilization to later periods. The third millennium writing has not been translated, and a nearly 1000 year period (from 1900 BCE to 1000 BCE), lacking states, urbanism, and writing, followed the

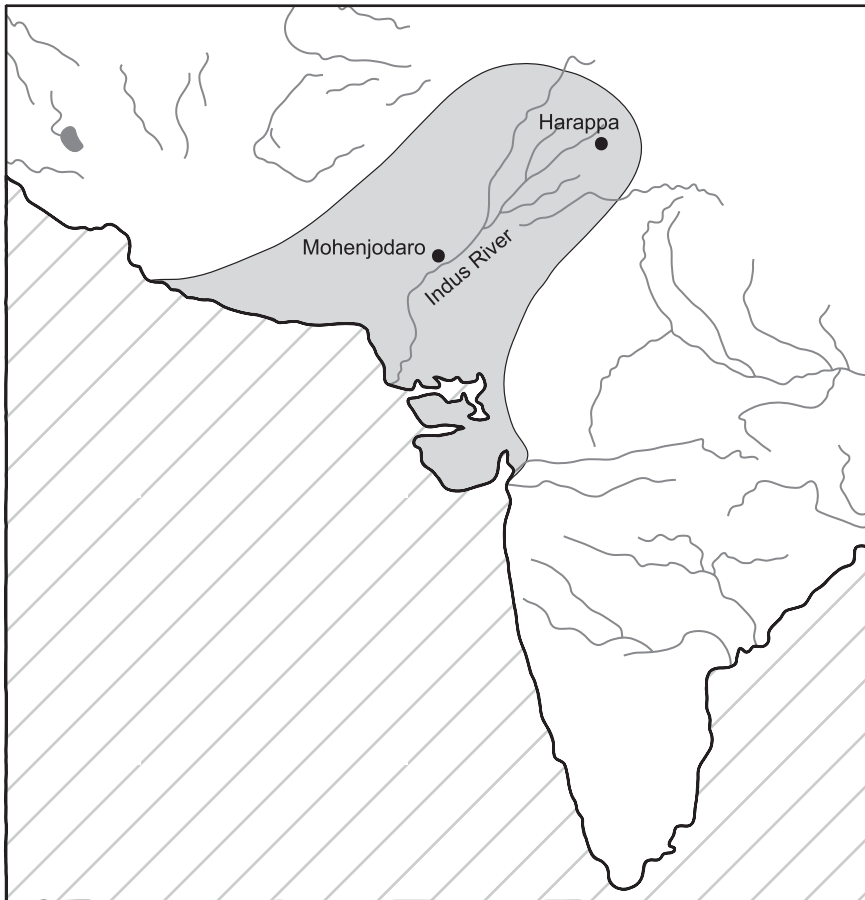


Figure 5-3 Approximate territorial extent of Indus Civilization (shaded area).

collapse of Indus civilization before the reestablishment of social complexity during the South Asian Early Iron Age (writing re-emerged even later). Hence, it is not clear to what degree the third millennium should be considered as an originating source for the later political evolution of later South Asian periods.

However, if we were to view South Asia as having to some degree a continuous thread of state formation from the middle of the third millennium, then we could argue that the initiating phase might have displayed a collective orientation. The scarcity of evidence of the sort required for this project precluded including Indus civilization in the coded sample, but from what evidence is available it appears to manifest outcomes of collective action processes, and probably constituted one of the most corporately organized polities of the world's primary civilizations. We base this on the lack of ruler images or evidence for a ruler cult (e.g., Kenoyer 1998; Possehl 1998: 277-9), an egalitarian ethic in consumer behavior (e.g., Miller 1985: 62; Rissman 1988; Sarcina 1979), comparatively limited wealth differentiation, and evidence for public goods in the form of street construction, granaries or warehouses, and public sewer drains (e.g., Kenoyer *ibid.*; Wheeler 1968: 7, 43-4). Some aspects of political evolution in the subsequent Vedic Period, discussed below, illustrate collective features, but it is not clear whether this pattern of political economy was carried forward over 1000 years after the collapse of Indus civilization, or was developed independently during the second urban phase. Several minor elements of continuity from Indus to the Early Iron Age have been identified, for example, similarities in weights and measures, agate bead production, faience, and copper metallurgy (Kenoyer 1995: 233), but South Asian specialists rarely write about the possibility that more fundamental aspects of later social formations might have had their origins in the third millennium BCE (but see Kenoyer 1997).

Based on Tambiah's (1976: 22) comparison of Buddhism and Vedic Hinduism, Miller (1985: 62-3) suggests a long cycling between more egalitarian and more centralized forms of the state in early South Asia in which Vedic Hinduism developed in opposition to the earlier and more egalitarian Indus civilization, while, in turn, Buddhism emerged in reaction to Vedic Hinduism. Whether or not early South Asian political evolution is correctly seen in terms of long waves initiated by the impact of the Indus tradition, Hinduism and Buddhism do propose distinct theories of rulership that are relevant to understanding the political economy of some South Asian and Southeast Asian polities included in the coded sample. From archaeological, historical, and epigraphic evidence, these cognitive codes were initiated during our Phase 2.

***Phase 2. Indo-Gangetic Vedic Period and Early Historic
(Later Vedic) Period (Second Urbanism Phase)
(somewhat before 1000 BCE to 300 BCE)***

The core of the Indus civilization was in the semi-arid, wheat-cultivation zone of the north-western part of South Asia along the lower drainages of the Indus and Ghaggar-Hakra (Saraswati) rivers. By Phase 2, some of the sixteen or so identified

polities of the second urbanism phase were located in this same area, but others extended further east across the Indo-Gangetic or north Indian Plain from the Bengal region in the east and to as far west as Afghanistan (Figure 5-4). Within this broad area, a concentration of the phase's most influential polities extended from approximately modern Lahore to Bengal straddling the wheat-rice agroecotone that divides northern South Asia along an east-west axis. The Ganga heartland and the site of Maghada in the eastern zone were especially important sites of state formation. A pattern whereby polities of the Indo-Gangetic Plain were dominant in South Asia was one of the most common macro-regional structures of this and some later periods. Twenty-eight of 62 major South Asian states were centered in this general area, including all of the major pan-Indian polities prior to the British Empire (Schwartzberg 1977: 208, 225). South Asian polities tended to have connections to other macroregions through coastal-based trade as well as continental connections that included trade, migrations and invasions (e.g., Johnson 1996: 75). But, it was during periods when the Indo-Gangetic region was the central theater for state formation that South Asia's political evolution was repeatedly influenced in diverse ways from adjacent regions, cultures, and polities, including Greek, Central Asian, Persian, and Southeast Asian.

The development of an Indo-Gangetic geographical focus, beginning during Phase 2, also signifies an agroecological transformation of signature importance for the later development of South Asian political economy, insofar as it involved an adaptation to the wet tropical forest of the Ganges region and the adoption of rice cultivation, including irrigated wet rice. This was a revolutionary change in production orientation by Aryan populations, described in the Rg Veda, whose original habitat was semi-arid, and whose traditional way of life was pastoral (Thapar 1984: 23, 75). The sociocultural evolutionary significance of the eastward migration of the Vedic peoples is evident in several respects. After this time, Indian political and economic evolution was often tied to areas emphasizing rice-growing, such as in the evident commercial and diffusory contact between Khmer Angkor and Indonesia with Southern Indian empires (of Phase 4) such as Pallava and Chola (Stein 1980: 37-8, 335-7). Even more importantly, from the point of view of political evolution in South Asia, the agroecological transformation tied aspects of subsequent sociocultural evolution to the comparatively high productivity and managerial requirements of wet rice cultivation, that included flow and flood management and well irrigation. In Asian agriculture today, wet rice is nearly twice as productive on average as wheat (as measured both in kg per ha of yield and calories per ha [Grigg 1974: Table 21]). The significance of wet rice agriculture need not imply a simple energy theory of evolutionary change for South Asia in the manner of Leslie White (1949), nor a Wittfogelian (Wittfogel 1957) process of political evolution as a consequence of water management (e.g., Thapar 1984: 157, 163). As will become evident from the coded cases, in most Indian or Indian-influenced polities, states often had little direct involvement in irrigation management. Nonetheless, there were diverse and complex causal interconnections between rice cultivation and the evolution of Indian states that were initiated around 1000 BCE.

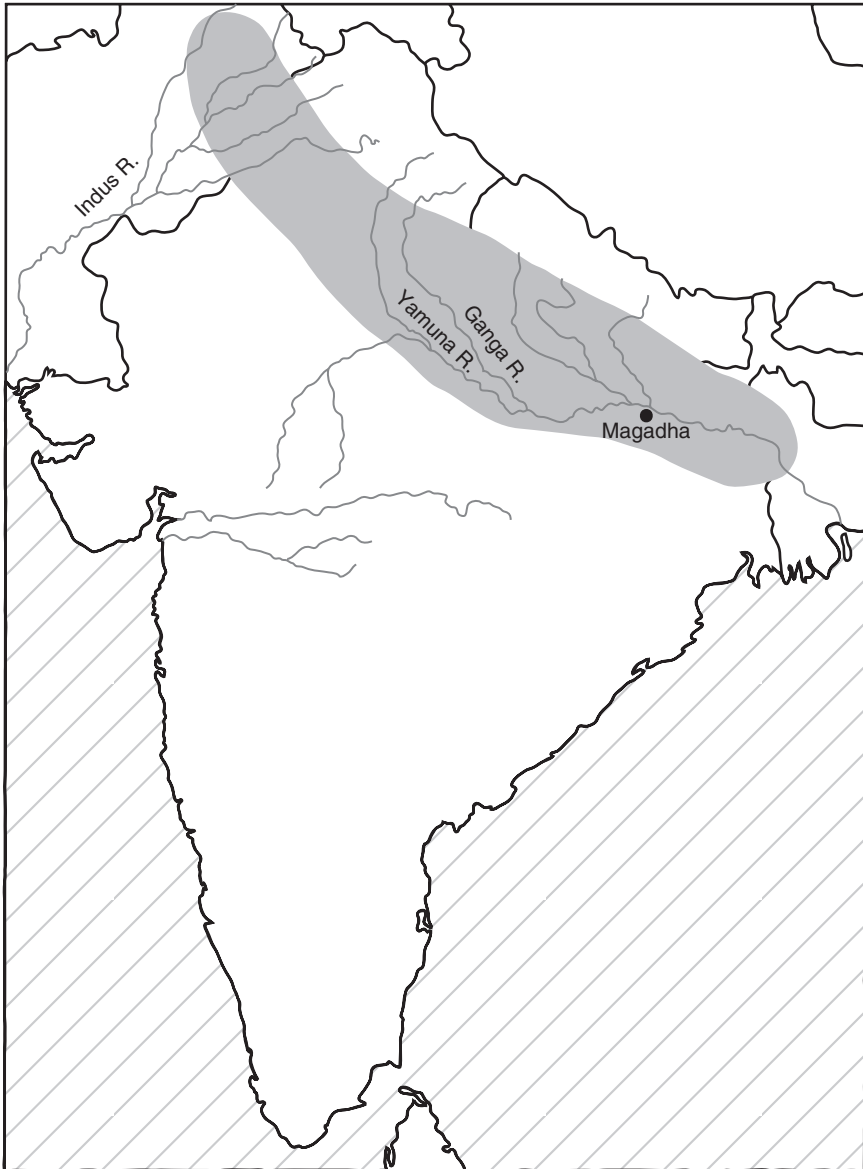


Figure 5-4 Approximate limits of the zone where Vedic Hindu and Buddhist cultural systems developed during the Indo-Gangetic Vedic Period and Early Historic Period (shaded area).

Based on descriptions of the Vedic Period (around 1000 BCE) committed to writing in later periods, Thapar (1984: 29-33) documents a growing social differentiation in society. And state formation in this phase probably first occurred in the middle Ganga Valley by about 500 BCE, roughly coeval with the beginnings of

the iron age and wet rice cultivation (ibid.: 68-75, 95, 103). Some polities in this area were monarchical, while others developed political systems usually described as republican (the *gana* and *sangha* collectives with council governance [Sharma 1968; Thapar 1984: 78-81]). In the monarchical variant, a pattern of social differentiation was codified, by the Early Historic Period (Later Vedic Period, also mid-first millennium BCE), as the Aryan *varna* system that distinguished ritually pure *brahmins* and *ksatriya* from impure *vaisya* and *sudra* castes (and *dasa*, peoples of non-Aryan ethnicities) (Thapar 1984: 42-9). This classification system was a key attribute of later Hindu political theory. *Varna* problematized the relationship between rulership and the supernatural by separating the highest ideals of ritual purity from the power of rulership (e.g., Heesterman 1998). According to this code, rulers (*rajanya*) became *ksatriya*, but the moral authority of ruler was maintained through *brahmanic* ritual. *Brahmins*, however important to rulership, are themselves rendered impure through the mundane actions implied by the exercise of power, and ideally must remain largely apolitical (e.g., Heesterman 1998: 14-17; Thapar 1984: 36).

The requirement of *brahmanic* consecration of rulers was coupled with a social contract formulated at this time that identified the “mutual rights and obligations between peasant and king” (Thapar 1984: 105-6). The social contract legitimated ruler taxation of a share of production in exchange for maintaining moral and social order (*rajadharma*) (Heesterman 1998: 14). But in Hindu political thought a social contract theory was not a sufficient justification for rulership, and was supplemented by royal sanctification through *brahmanic* consecration. An identification of rulers with gods is even more evident in later periods. For example, in the Medieval Chola polity, rulers augmented their ritual hegemony through the promulgation of a Siva cult (Stein 1980: 341). Sanctification is relevant to some of the coding concerns of this project since in Hinduized polities, sacralized rulership may be considered largely above question, even by the ritually purer *brahmana* (Thapar 1984: 130). Rulers violating the moral code or failing to maintain public safety and social order could be punished, but only with difficulty. Thapar (ibid.: 130, 163) mentions the possibility of ruler assassination by *brahmins*, and they may choose to defect from a kingdom in protest, but, generally, Hindu political theory vests ruler with considerable inherent spiritual power.

Buddhist political theory, strongly influenced by the republican form of governance, also took form in the Ganga heartland and Early Historic Period. It too vested power in a ruler according to the dictates of a social contract that obligated ruler to maintain order and religious purity. At the same time, elements of the Vedic view were rejected (Tambiah 1976: 22, 33). The ruler was expected to maintain social order and promote religious values (in exchange for a share of production), but Buddhist theory problematized ruler’s relationship with the supernatural even more clearly than does Hindu theory by not sanctifying ruler or rulership (Heesterman 1985: 95-6; Thapar 1984: 130). This placed the Buddhist temple and monastic institutions (*sangha*) at a greater social remove from the state (a “parallel system” according to Thapar [1984: 111, 148-9]) and, hence, with less relevance to the conduct of rulership since they play no role in ruler consecration. However, rulers were not entirely secular. Ruler patronage of *sangha* and the upholding of religious

values were thought to be a source of *dharma* or spiritual merit to both ruler and the larger society (Tambiah 1976: Chapter 4). Owing to the fact that Buddhism's theory of rulership was contractual rather than based in divinity meant that Buddhists potentially might have been more willing to protest or even revolt against immoral rulers (Thapar 1984: 130).

Phase 3. First Integration Phase (ca. 322 BCE to ca. CE 500) The Mauryan and Gupta Empires

Some polities of Phase 2 were more corporately organized and governed by councils, while others typified the more centralized ruler-centered vedic polities linking *brahmanic* ritual to an emerging concept of sanctified rulership (Sharma 1968; Thapar 1984: 78-81). In the republican forms, *brahmanism* and *varna* apparently were less important (Thapar 1984: 86). Thapar (1984: 103) suggests causal links between the growing egalitarianism that embodied the critique of *varna*, and a growing commercialization, with the growth of Buddhism, whose concepts were more compatible with a commercial economy (Thapar 1984: 103, 109, 116). The more corporate form of political organization had disappeared by the Vedic Period, but its legacy is found in the comparative egalitarianism of Buddhist political philosophy that was carried forward to the Mauryan empire centered at Maghada in the middle Ganga Valley (Thapar 1984: 115), especially under the ruler Asoka (ca. 269-232 BCE) (Figure 5-5), one of the most innovative of South Asia's early rulers (Thapar 1997).

Asoka's use of writing, in the form of epigraphical monuments erected across the breadth of state territory, was an important contribution to South Asian political culture and was adopted by later Hinduized South and Southeast Asian states. Typically, such inscriptions are important sources of information on early South Asian and Southeast Asian states, and this practice had a long tenure; some of the information Dirks (1987) used in his study of 18th century Pudukkottai, included in the coded sample, is from inscribed copper plates that exemplify this ancient mode of political communication. Asoka's edicts provide few details about the administrative functioning of the Mauryan empire, and, instead, appear to combine a kind of proselytism promoting the acceptance of Buddhist *dharmic* ideals (*dhamma* in Asoka's edicts) with propagandistic statements concerning the ruler's role in the regulation of *dhamma* (Tambiah 1976: chapter 5).

The inscriptions, as well as a text on statecraft, the Arthashastra (written in part at this time by Kautilya, a minister of Candragupta Maurya, grandfather of Asoka), among other sources, hint at the possibility that a decidedly egalitarian and perhaps collective form of state was developed in this earliest pan-Indian polity. The epigraphical texts and the Arthashastra point to role of ruler and state as powerful agents of merit for the polity, with a responsibility to promote economic growth, worldly pleasures, and spiritual success (Tambiah 1976: 58, 62). Asoka's professed "paternalistic attitude toward his subjects" (Thapar 1975b: 39) suggests a recognition of the significance of collective action processes, and, while there is no way to confirm

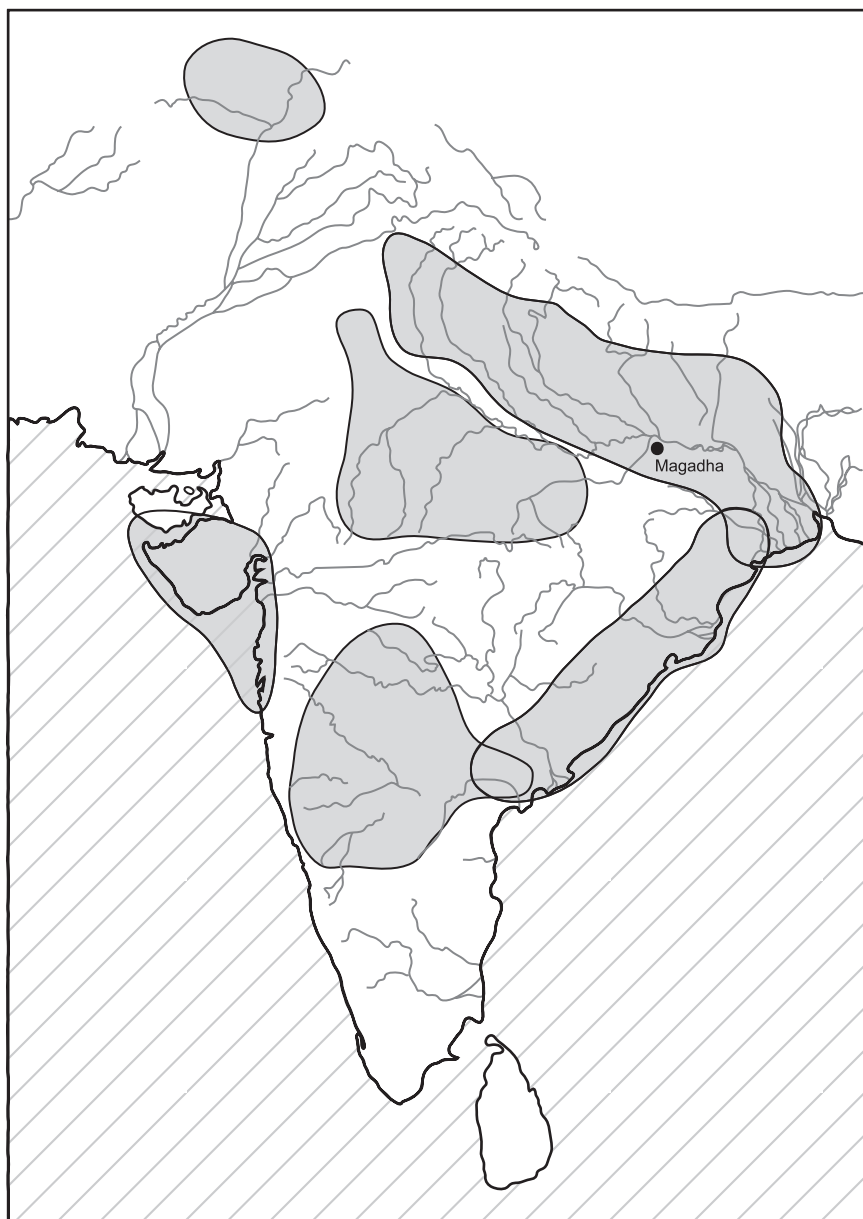


Figure 5-5 Estimated limits of the First Integration Phase polity (shaded area) (modified from Sinopoli 2001: Figure 6.2).

claims he and others made, the sources indicate that Mauryan rulers were aware of the importance of “correct assessment and proper collection” of taxes by paid administrators, recognized the importance of expression of commoner voice, and built roads (ibid.: 39-40, 1997: 81, 96, 99).

The subsequent Gupta Empire (320 CE to ca. 500 CE), also centered in the Ganga heartland, brought with it two major changes central to later political evolution. First, a resurgence of Hinduism and Sanskrit literature, and, second, the establishment of a decentralized form of the state (Thapar 1975b: 46-8) that was carried forward into later Hindu polities of the so-called Medieval kingdoms and that typified some aspects of the later Sanskritized segmentary polities of Southeast Asia. Both South and Southeast Asian literatures are replete with terminology that characterize the properties of decentralized states, including feudalism (Harbans 1995; Kulke 1995; Kulke and Rothermund 1998: 84; Sharma 1995), *mandala* or “circles of kings” (e.g., Hagesteijn 1989; Wolters 1999: 26-9), galactic polity (Tambiah 1977: 74), and segmentary state (Stein 1977, 1980: 265-74, 1995), among others. These terms describe comparatively unstable polities in which a core zone, directly administered and taxed by the state, is distinguished from a state’s outer territories where more distant conquered elites maintain considerable local autonomy (“little kings” or reinstated territorial princes in Kulke and Rothermund [1998: 122]), or are simply allied with the ruler rather than directly controlled administratively. Rather than direct taxation and civil administration outside the core, land grants or other revenue grants to administrators, warriors, and Buddhist, *brahmanic* or other religious institutions, typically substituted for administrative salaries (Thapar 1975b: 46-8). The outer territories produced few or no revenues for the central state.

Phase 4. Kingdoms of Medieval South India (ca. CE 500 to 1565)

This period saw an expansion southward of wet rice production as it was extended outward from the Ganges drainage (Figure 5-6). This phase of South Asian agrarian evolution extended wet rice into the rich Coromandel plain and other areas of southern South Asia and is associated with the rise of the ruling houses such as the Chola who were able to extend the power and ritual influence of their segmentary state from a core in the Kaveri basin over the whole Tamil area (Stein 1980: 37-40, *passim*) (Figure 5-6). Especially in the alluvial zones of Coromandel and similarly rich agricultural areas, *brahmins* and *brahmanic* temple communities of various sorts, established and supported in part through royal endowments and grants, were key institutional and cultural mechanisms for the expansion of wet rice cultivation side by side with Sanskritization and Chola political and symbolic dominance (Hall 1980: 6; Stein 1977: 25, 1980: chapter 7).

Polities such as Chola illustrate the full development of the Medieval Indian state, and while most states of this type could not be included in the coded sample (most of the information is from sometimes propagandistic inscriptions on stone

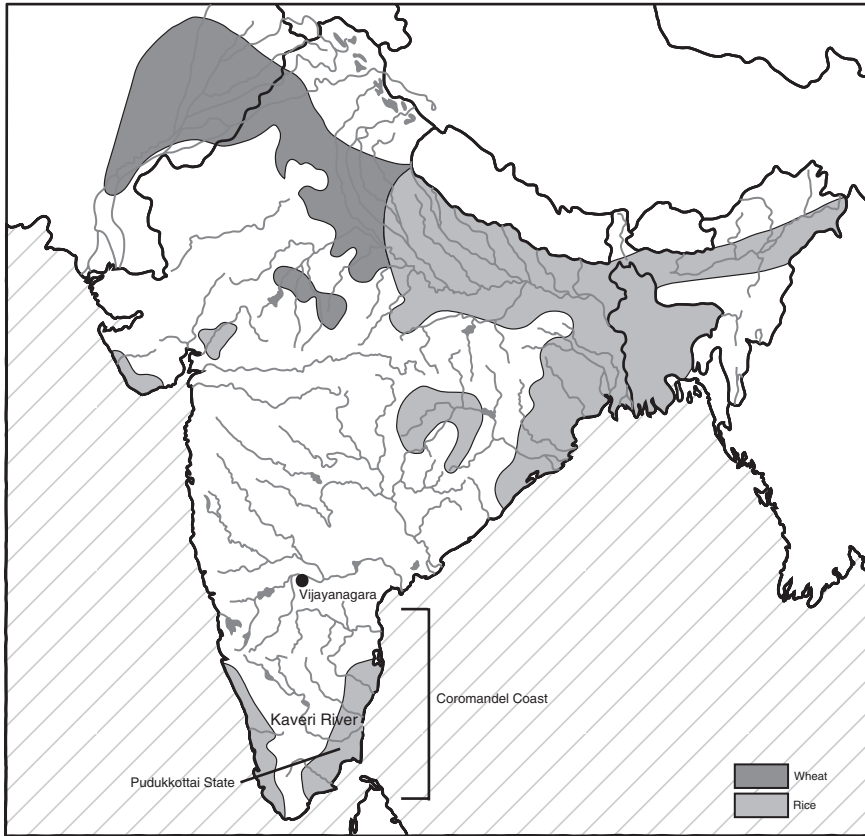


Figure 5-6 Major zones of wheat and rice production in South Asia.

and metal), still they are important for what they tell us about the fully-developed form of the Hinduized state. Fortunately, we were able to include two later polities that displayed some elements of the Medieval form, Vijayanagara and Pudukkottai, because in both cases aboriginal information is supplemented by archaeology and by European accounts.

Stein’s (1980: 274, *passim*, 1989) concept of the segmentary state, modified from Southall (1956), is perhaps the most useful metaphor for describing the central political features of the Hindu kingdoms as they were fully developed during the Medieval Period of southern India. Stein’s elaboration of the segmentary state concept contains the following key elements (modified from Stein 1980: 265-74, 339):

1. Political sovereignty was dual, consisting of a political element (*ksatra*) and a ritual and symbolic element (*rajadharmā*). The ritual and symbolic dimensions were crucial in the process of incorporation of a local hereditary elite and their polities (small states or chiefdoms) into the larger polity, as they were more “ritually incorporated” by the center than they were politically absorbed. This

was probably advantageous to the center in allowing for the incorporation of an unruly periphery at low administrative cost, while, in turn, local rulers found it possible to gain additional authority in their own domains by establishing ties to the anointed kings of the center (e.g., Stein 1989: 62).

2. Each ritually incorporated polity maintained control of a local territory with its own administrative apparatus, but all centers were at the same time under an umbrella of the ritual supremacy of the capital. The forms of executive control and ruler symbolism were similar from highest to lowest levels (“little kings”), differing primarily in the number of people controlled by rulers at each level. In the Chola state, the ritual supremacy of the ruler was augmented by the promulgation of a royal Siva cult at the center and beyond, coupled with the center’s elaboration of a ruler cult, including royal funerary shrines and civic buildings, some possibly serving as palaces. By the end of the Medieval period, descriptions are available that detail other aspects of the materialization of rulership in these Hinduized polities, most notably a suite of prestige goods used by rulers to signify and confer authority, including *palanquin* (covered litter), *chauris* (fly-wisk emblem of royalty), parasols, elephants, and horses (e.g., Stein 1989: 48).

The tendency toward decentralization in Chola and other Hinduized states of this period was due in part to the fact that states constituted, in essence, a layer of complexity built over a pre-existing substrate of highly autonomous community and commercial institutions that remained relatively stable in spite of the rise and fall of polities (Hall 1980: 2). Local social structure (in addition to local political elites) included local and regional assemblies integrating villagers, *brahman* communities, and regional market communities (standard markets) (Hall 1980). Local groups maintained considerable control over tax collection, and could bargain with the central state regarding tax remittance, or even benefit from royal grants which permitted them to maintain control of revenues for local purposes such as temple maintenance (ibid.: 24, 57, *passim*). As a result, central states such as Chola depended primarily on revenues collected from their own immediate domains as well as through additional conquests and plunder, rather than from the outer, symbolically integrated territories (ibid.: 5-7).

The sample includes two polities, Vijayanagara and Pudukkottai, that can be loosely fitted into the political forms of Phase 4. We summarize their histories as follows:

Vijayanagara

The focal period for Vijayanagara (also known as Vidya and Anegondi) is CE 1350-1564 (“Late Medieval”), especially after 1424, during the reign of Deva Raya II. The characteristic properties of the Vijayanagara polity can be understood, in part, as an outcome of the evolution of aboriginal modes of South Asian statecraft, but combined with, in Stein’s (1989: 11) words, a combination of “two massive forces operating in Eurasia—the expanding ‘gunpowder empires’ of the Middle East and the Mughals of India as well as the sixteenth-century expansion of

Europe.” These external social forces influenced the growth of polities such as Vijayanagara and rendered the “old regime of medieval South India impossible to sustain” (ibid.) While in many respects the state followed traditional governing practices that can be traced back to as early as Kautilya (e.g., Saletore 1934, Volume I: 174), change is also evident, reflected in (1) a decline in the *dharmic* religious justification of kingship, (2) the development of new institutions that allowed for greater political centralization than had been seen in earlier south Indian Hindu polities, (3) a growing interest in promoting and taxing commerce, including long-distance exchange, and (4) a change in the political geography of south Indian kingship. We summarize these as follows:

- 1 While rulers continued to endow and sponsor Hindu religious organizations, this was motivated less by a traditional *dharmic* religious impetus and more by a strategy to gain additional control over religious constituencies (Stein 1989: 65-6), and to collect taxes from them (Saletore 1934, Volume I: 230). Also, beginning with the ruler Deva Raya II (1424-46), Muslim fighters were recruited for service in the imperial armies, and he allowed mosques and Muslim cemeteries to be built in the capital, signifying a decline in the degree to which *dharmic* opposition to Muslim influence was a singular justification for political consolidation (Stein 1989: 70).
- 2 Earlier south Indian kingdoms, in Stein’s phraseology (Stein 1989: 61) “were aggregates of numerous chieftaincies over localised, communal organization,” for example the *nadu*, or local community, or the territorialized caste organizations. The ruler of a segmentary polity, that incorporated a group of chieftaincies and communal organizations, was different in that he maintained a greater degree of direct control over his immediate territory (a core zone), in being a conqueror, and in being “annointed” (ibid.: 62). Hence, rulers had the powers of *rajadharma*, but their authority was limited beyond their immediate core because local kings or chiefs retained the trappings of rulership and based their authority on local lordship. This is the concept of *dayada* or “shared sovereignty” (ibid.: 63). Local lords recognized kings and *rajadharma* only as a means of gaining prestige for themselves and some additional power over their own local populations (ibid.: 62). While this general form of political organization continued to some degree, early in the Vijayanagara polity, a new form of local lordship was developed at this time, the *nayaka*, who was granted local authority and rights of taxation stemming from military service, based on a new concept of war authority (ibid.: 64). The prebendal rights granted to *nayaka* were granted by the Vijayanagara ruler, and did not reflect traditional ascribed local authority. Hence *nayaka* authority was in opposition to traditional forms of community-based governance which persisted in some parts of the Vijayanagara polity.
- 3 Long-distance trade in South Asia saw a growth after CE 1000, connecting the Mediterranean, the Middle East, and West Africa with China by way of a series of trade emporia, including some on India’s west coast and in Southeast Asia, for example, Melacca (Stein 1989: 25). Trade contributed to a process of urbanization of South India that became a signature feature of the Late Medieval pattern. Deva

Raya II's conquests of commercial ports on the west coast, from which war horses and trade treasure could be obtained, are considered innovative (ibid.: 70).

- 4 Vijayanagara's rise signifies the transition from an earlier Medieval pattern wherein key south Indian polities developed in riverine core zones, to a Late Medieval pattern that saw polity development in the upland dry zone, perhaps owing to the superior military skills of the upland, "frontier," peoples, whose skills were increasingly needed in light of the encroaching Sultanates and their well-developed cavalry warfare (Stein 1989: 21-2), and guns, both of which were becoming increasingly important in South Asian warfare (ibid.: 58). Change in military tactics and weaponry implied the need for "more and better horsemen and stronger fortresses," horses (which had to be imported), as well as war elephants and bullocks to pull the heavy weapons, all of which imposed a new and "heavy financial charge upon Hindu rulers" (ibid.: 22). The growing need for tax payments in currency, rather than the traditional in-kind and labor payments, was one result (e.g. ibid.: 64). Beyond the military skills of upland peoples, an upland location central to southern India would benefit a new capital by linking the growing trade emporia developing on both coasts. But a marginal location would also allow a new state to be developed away from the influence of the old kingdoms and their complex forms of rural organization in the intensively-irrigated core zones such as the Tamil Plain. This may exemplify a "disembedded capital" strategy (e.g. Blanton 1976: 257-8) that would allow principals to socially restructure a little-populated zone to meet their new revenue needs.

Approximately 20 rulers, representing three dynasties, ruled over the 220 year time span of the Vijayanagara kingdom. But the emerging centralized political system lacked any sure mechanism for maintaining control over powerful territorial warrior chiefs the system had created, leading to crises of succession, rebellions, and civil wars, as well as successional struggles (Stein 1989: 67-71, 303). Decline and eventual collapse combined internal political conflict with defeat by external enemies (e.g., Stein 1982a: 204). The capital was attacked a number of times and finally sacked in 1565 and abandoned (Stein 1989: 40).

Pudukkottai

The focal period for Pudukkottai is the 18th century CE, just prior to British control beginning around 1800. Pudukkottai was ruled by the Tondaiman kings, whose ancestors, of the Kallar subcaste, had moved to the area and had done service for the Cola (CE 900-1100) and Vijayanagara polities (CE 1300 to 1565) (Dirks 1987: 156-9, 220). Later, the Tondaiman were among a group of chiefs who had defended the Nayaka (Telegu) kings of Madurai Fort (mid 17th century), and subsequently they emerged as among the most significant "little kings" of the Tamil area during the late 17th through 18th centuries (ibid.: 111, chapter 6, *passim*), in spite of the fact they were not of the usual Kasatrya ruling caste, and were, in fact, of the Kallar subcaste that was associated in this area with marginal people and even thieves (ibid.: 168, 204). Owing to military help they had provided to the British, they remained a tribute-free native or

principally state under British rule in the 19th century with its revenue system left intact. As a result, 19th century revenue records (and even mid 20th century ethnographic interviewing by Dirks) provide useful information pertinent to the pre-British period (ibid.: 116-7, *passim*), along with the more usual information source for Hindu polities, namely epigraphical records of ruler grants to temples and other institutions.

Phase 5. Second Integration Phase: Mughal Empire (CE 1556 to ca. 1700)

After about 500 CE, the earlier pan-Indian polities of Asoka and the Guptas had collapsed, and were replaced by numerous smaller independent states of the Medieval Period, but by the 13th century, foreign rulers referred to as the Delhi Sultanates began to reincorporate sections of north India into large states. Akbar (1556-1606) finalized the consolidation, in part by building on an administrative system (*zabt*) permitting the collection of land revenue from individual farms or communities over a vast area, a systematization of tax collection that had been initiated by the Delhi Sultanates (Ali 1995: 265). Akbar also introduced new measures of military and administrative control and cultural unification (e.g., Ali 1985: x; Richards 2002: 4). Akbar and the subsequent Mughal (Mongol) rulers are described as Turkish conquerors of India who imported administrative methods from outside, a “Perso-Arabic system in Indian setting” (Sarkar 1963: 5), with foreign elements mostly evident in the upper administration, while lower levels remained relatively unchanged and largely administered by Hindus (Sarkar 1963: 6). An element of Chinese statecraft appears to have been part of Mughal practice, as well, namely, the selection of administrative officials from across social sectors (although without anything like the Chinese civil examination system that we describe later). Another influence on the Mughal state includes features of patrimonial rule, traced by Blake (1995: 284) to the Mongol polity of Chingiz Khan. The Mughal system of graded administrative posts (*mansab*) developed by Akbar (e.g., Ali 1985), however, cannot be traced to China, Central Asia or the Middle East (Ali 1995: 266).

The Mughal emperors were successful in attracting high officials of the Shah of Persia and the Sultan of Turkey to hold key administrative positions (Sarkar 1963: 160), and while an influx of Central Asian migrants is also evident, Persian was adopted as the official government language and was a *lingua franca* in the region (ibid.: 228-9). Mughal unificationist policies included standardized coinage, a standard provincial administrative structure modeled after that of the central court, a postal system, the moving of office holders between posts (e.g., Farooque 1977: chapter 4; Sarkar 1963: 229), required periodic attendance at court for all higher officials (e.g., Blake 1995: 297), and frequent travel by the ruler (ibid.: Table 1). Further, the king’s protection of life, property, and religion was extended to non-Muslims (Hasan 1936: 306-8).

A key element of Mughal rule, in contrast with traditional Indian rule, was the sharp distinction made between governorship (*amir*, military and police) and

treasury (*amil*). These were separate and equal in authority, and were charged with keeping watch over the other (e.g., Sarkar 1963: 6, 7). In addition to this, other practices permitted a higher degree of ruler control over lower officials than would have been possible in traditional Hindu segmentary statecraft, including careful attention to bureaucratic details and a routinized work schedule by the ruler (e.g., Hasan 1936: chapter 2), close ruler control over the inheritances of officials (Sarker 1963: 150-5), an elaborate system of spies (Farooque 1977: 146-9), the frequent re-posting of officials (Sarkar 1963: 229, Habib 1963: 260), and the power to remove or retain revenue officials of all levels (Ali 1985: xxii; Habib 1963: 294). The frequent selection of even high officials from across ranks, classes, or religious backgrounds departed from both Muslim and Hindu practices, and weakened the traditional aristocracy and the caste system (Ali 1995: 271-2; Hasan 1936: 350, 356; Habib 1963: 182), while at the same time introducing an element of egalitarian access to positions of governmental authority not found in traditional Hindu state practice. Daily audiences by officials (*darbar*), open to all subjects, close attention to administrative details by ruler, tours to various parts of the empire, official news reporters and a system of spies who could monitor the behavior of middle-level and lower officials, were all mechanisms that provided an institutional basis for commoner voice and to identify official agency (e.g., Hasan 1936: 356-7). Of course, it is not clear how successful these institutions could be given the vast scale and complexity of a polity with an estimated 309,000 government agents already by 1595 (Ali 1985: xiii), and a total population of over 100 million.

Another distinct feature of Mughal rule was the largely military basis of government. Although Mughal rulers did support exalted religious practitioners and in other ways made grants that reflected the requirement that a beneficent ruler should promote religion and moral values, in a manner analogous to Hindu rulers (e.g., Habib 1963: 282-7; Sarkar 1963: 16, 157-9), a major administrative break with prior South Asian practice is evident in the fact that state officials held a *mansab* (a military grade) (Sarkar 1963: 7). A *mansabdar* was a commander of a certain number of horsemen, and was paid a salary or awarded a source of land or tax revenue as compensation (a *jagir*) (e.g., Habib 1963: chapter 7).

The focal period for the Mughal polity includes the reign of Akbar (1556-1606), who established the bulk of the governing apparatus and institutions, Jahangir (1606-27) and Shah Jahan (1627-58), who both adhered to most of Akbar's policies.

Introduction to East Asia

Our sample of East Asian societies includes Ming Dynasty China, Tokugawa Japan, and the Tibetan Recent Period. Japan and Tibet were influenced by some aspects of Chinese culture and society, but their developmental histories and modes of governance were different from each other and from China. We discuss Japanese

and Tibetan histories briefly below, but state formation in China is the major focus of this introductory essay.

Diverse Pathways to Social Complexity and the State in China

In China, as in South Asia, we are able to discern a long history of collective action beginning in the prehistoric and early historic phases of state formation. The state is well attested by Phase II of the Erlitou Culture (1800 BCE) (Table 5-1), centered on what is now the archaeological site of Erlitou in the central Yellow River Valley of China (e.g., Liu 2004: 226-238), although other Chinese areas have evidence for early social complexity at about the same time (e.g., Shelach 1999: 200-12), and states may have developed somewhat earlier than Phase II. During the Late Neolithic archaeological phases preceding Erlitou Culture, several constituent elements of emergent East Asian social and technological complexity are evident, including bronze metallurgy, writing, public buildings that can be interpreted as palaces, rammed-earth walled settlements, elite prestige goods, and complex settlement hierarchies (Liu 2004: chapters 4-7). During this time, a broadly similar horizon style developed, that Chang refers to as the “Lungshanoid Horizon” (Chang 1986: 238), extending from what is now north China to the Yangtze delta, and west into the Wei River valley, that is thought to represent the origins of Han Chinese culture (Chang 1986: 242, Figure 201). The Late Neolithic data point to the possibility of highly complex chiefdoms, or perhaps nascent states, between about 2200 and 1800 BCE. Clearly the scale of settlements is consistent with a degree of social complexity that we often associate with early states. For example, the Longshan site of Liangchengzhen, in Shandong, covers an area of 246 ha (Underhill et al. 2002).

In spite of the broadly similar material culture of the Lungshanoid Horizon, over this broad region archaeologists are beginning to identify diverse pathways to social complexity, some of which appear more corporate, and perhaps, more collective (e.g., in Liu 2004: 249-51). In the emergent Late Neolithic polities in Shandong and southern Shanxi, for example, valuable objects and rich burials are found with specialized funerary offerings, especially “eggshell thin” vessels thought to signify ancestor veneration (Underhill 2002: 157-8). Liu interprets this as evidence of “individualizing chiefdoms” and exclusionary political economy in which an aristocratic elite controlled important material and ideological resources (Liu 2004: 247-8). In central and north Henan, however (the central Yellow River Valley), valuable objects and evidence of ancestor veneration are not found, and, instead, social complexity is evident in the rammed-earth enclosures that may denote communal labor. Li Liu interprets this as a more corporately-based path to Late Neolithic social complexity, that she labels as “group-oriented chiefdoms” (Liu 2004: 247). Rather than ancestor veneration, in these polities, based on an excavated ritual structure from Henan at Lutaigang, religious practice aimed at “the worship of heaven and earth” in “communal

Table 5-1 China chronology

	Peoples' Republic of China
1949	
	Republican Period
1912	
	Ch'ing Dynasty
1644	
	Ming Dynasty
1368	
	Yüan Dynasty
1279	
	Southern Sung Dynasty
1126	
	Northern Sung Dynasty
960	
	Five Dynasties Period
907	
	T'ang Dynasty
618	
	Sui Dynasty
581	
	Wei, Chin, and Northern and Southern Dynasties
220 CE	
	Han Dynasty
202 BCE	
	Qin Dynasty
221	
	Warring States Period
	Eastern Zhou Dynasty
	Spring and Autumn Period
771	
	Western Zhou Dynasty
1050	
	Shang Dynasty
1570	
	Erlitou Culture (possibly Hsia or Xia Dynasty)
2100	
	Longshan Late Neolithic Period
2600	

ritual activities toward natural deities” (ibid.: 249-50). Interestingly, it was the more corporate form of early social complexity that “gave rise to the early states in north China” (ibid.: 248). However, once formed, the Erlitou state (possibly the Hsia [Xia] Dynasty [Chang 1986: 307-16]) appears to have been based in large part on elite control of bronze metallurgy (Liu 2004: 226-38). This elite-dominated pattern of state formation persisted during the subsequent Shang and “feudal” Western Zhou states of the Three Dynasties Period (Chang 1986: Chapter 6) (Table 5-1). During that time, aristocratic rulers based their authority on a principal of agnatic descent traced from powerful clan ancestors, ancestor veneration ritual, monopoly control of bronze casting, powerful symbols, writing, and high shamanic ritual (e.g., Chang 1983).

Imperial-Scale Political Integration

China was first integrated into an imperial-scale polity by the Qin Dynasty, which expanded from 500 to 211 BCE (Elvin 1973: Map 1; Yates 2001). Political consolidation took place within a geographical context that can be summarized as four broad east-west zones making up an East Asian theater for imperial action (e.g., Elvin 1973; Farmer 1976) (Figure 5-7):

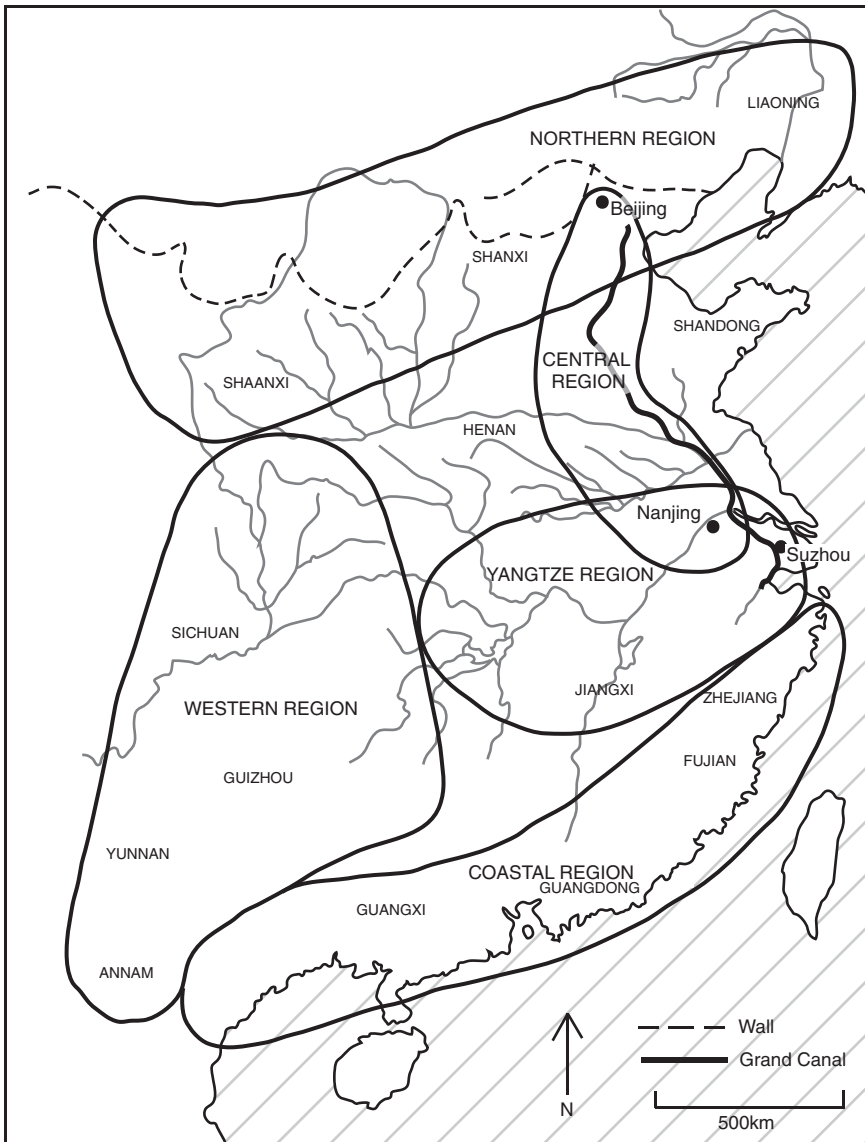


Figure 5-7 Chinese administrative regions (modified from Farmer 1976: 8).

- 1 A wet tropical and culturally diverse far south and southwest, including modern Yunnan, Guangxi and Guangdong Provinces. This region was largely peripheral to the main trends in socio-cultural process owing to its lack of favorable riverine or other transport suitable for local or long-distance commercial transactions, or that could serve to connect the region efficiently to more northern areas. But this region was, at times, a highly commercialized semi-periphery that intermediated in cross-boundary exchanges linking the more densely populated zones to the north with Southeast Asia and the South China Sea, and it also bordered on polities including Vietnam that at times presented pressing military challenges (e.g., Gungwu 1998; Skinner 1985).
- 2 The lower Yangtze drainage (in the vicinity of Nanjing and Suzhou). This is a zone of Han culture that is highly suitable to wet rice agriculture and commercial development, the latter predicated on the efficiency of riverine transport. The development of this area began during the T'ang Dynasty (see below), and intensification of wet rice production began in earnest during the Sung Dynasty, including double-cropping production schedules (Bray 1983-4: 16).
- 3 The lower Yellow River drainage (in the vicinity of Henan Province). This is also a Han Chinese culture area that constituted the core zone of primary state formation, but was comparatively marginalized in later periods owing to its less-productive wheat and millet agriculture and its greater degree of exposure to military threats from beyond the northern boundary.
- 4 Northern Region. This is a comparatively arid and agriculturally problematic area, and highly subject to military attack from Mongol and other central Asian nomadic pastoralists. Here, Chinese political control and cultural dominance were tenuous and fluctuative. Mongol and other groups beyond the northern boundary had superior access to horse grazing territories allowing for cavalry to a greater degree than was possible for the more horse-deprived Chinese. This, combined with their ready adoption of Chinese military technologies, made them at times formidable enemies.

Social, Cultural, and Economic Change After the Shang Dynasty

Significant social changes shaped Chinese state formation after the Shang Dynasty, including the development of more egalitarian concepts of rulership such as is evident in the Zhou conquest of Shang (ca. 1100 BCE) and their claim of a Mandate of Heaven (*tianming*) in which the piousness of rulers certified the legitimacy of government (Hsu 1986: 307-8). The emerging Confucian theory that critiqued the exclusionary Early Dynastic states, although rejected by the Qin dynasty, was adopted as state orthodoxy on an imperial scale by the Han Dynasty (Yates 2001: 353). These new concepts of rulership (discussed below) were implemented alongside agricultural intensification, changes in land tenure and the emergence of a free

peasantry, new modes of land taxation based on crop yield, and a growing commercialization that emerged after the demise of the Western Zhou Dynasty, during the Eastern Zhou Spring and Autumn Period (722-481 BCE) (Hsu 1999). Commercialization was further augmented during the T'ang Dynasty (Twitchett 1968), and with what Skinner (1965: 196) calls the "intensification of the rural landscape" that developed during Sung and Ming times that continued through the Ming Period (Bray 1984; Elvin 1973: chapter 16).

The Confucian Critique of Aristocratic Privilege

Political reforms began during the latter Three Dynasties Period (Hsu 1986), and eventually crystallized around the Confucian critique of the system of aristocratic governance and privilege (Creel 1964: 166-70; Hsu 1999: 545). The Confucian program brought about social and cultural change in a threefold manner. First, it revised the concept of rulership, basing it on a moral code and a system of accountability. Second, it culturally deconstructed the sources of power traditionally mobilized by social actors in the middle level of government, a level traditionally dominated by the heads of aristocratic lineages of clans. Third, it augmented the social and cultural complexity, and significance, of what were conceived to be the basal units of society, ordinary households. For example, the Confucian texts emphasized the idealized behavior of rulers, on the one hand, and of family members, on the other, but there is almost no mention of a governing role for feudal lords (Creel 1964: 170; 1970: 99-100).

Beginning in the anti-Confucian Qin polity (e.g., Yates 2001: 356-63), the state administrative apparatus diminished the power of aristocratic lineages, eventually developing in its place the system of territorial administrative units governed from the center (the *hsien* system [Creel 1964]). But this impetus to a highly centralized political structure was countered in the political philosophy of the Confucians that pointed to the potential for abuse found in a highly bureaucratized system if the goal was to maximize the power and wealth of the state (Turner 1999). Accordingly, they argued, effective governance transcends strict bureaucratic routines because its officials understand the importance of fairness and virtue (*ren*) in the practices of government so that the state is better able to provide benefits to all (ibid.: 35).

The Confucian program extended beyond the domain of official governance per se in its development of a model for citizen behavior that also aimed to reduce the potential for growth in state power. While the new code denied the importance of clan and lineage, it aimed at bolstering the sociocultural complexity, functional autonomy, and cultural importance of family life (including multigenerational extended households) (Creel 1964: 166-71). These social and cultural ideas were then encoded in domestic habitus, including formalized architecture, everyday practices, and ritual (e.g., Bray 1997: chapter 3). Comparatively autonomous households had a long history in China. Prior to the Qin unification there is evidence of the use of a land tax, as early as 594 BCE (Lu state), that evidently developed in conjunction with a shift to more permanent fields, private ownership of fields by households, a land market, and a growth in

administrative ability to record land holdings of households (Elvin 1973: 23-4). Definitely by the first empire (221 BC) there was a free peasantry (Elvin 1973: 24).

Long-Term Change Agricultural Change and State Evolution

The gradual agronomic and commercial development of the lower Yangtze region, especially during and after the T'ang Dynasty, transformed this region into the major economic engine of East Asia and the most important source of tax revenues. At the same time, the necessity to maintain an extensive administrative and military presence in the Yellow River and Northern Regions for military defense meant a separation of main economic from main administrative activities of the state, challenging any state's ability to transfer southern tax revenues (especially grain) to northern administrative and military consumers, while maintaining an adequate administrative presence simultaneously in the two regions. This was accomplished in part by the construction of an early version of the Grand Canal, beginning early in the seventh century (T'ang Dynasty), to link the increasingly agriculturally productive Yangtze region with the more militarily and administratively costly north (Elvin 1973: 55).

The military challenges of the northern region are also reflected in decisions about the locations of political capitals. In earlier periods, invading forces in some cases gained control of the area as far south as the Yellow River (Liao and Chin Dynasties) or complete foreign control of the polity (Yüan and Ch'ing Dynasties) (Farmer 1976: 17-21). While foreign dynasties ruled from capitals north of the Yellow River (including what became Beijing, for example, under the Yüan, as Ta-tu), Chinese dynasties faced a logistical and military problem as the political and demographic core and main zone of agricultural production shifted from the lower Yellow and Wei Rivers (where it had been situated during Zhou, Han, and T'ang Periods) south and east to the rice-based economy of the Lower Yangtze (Farmer 1976: 21-24). Given the shift of agricultural focus, to maintain control of the contested Northern Region while maintaining adequate logistical support for political capitals in some cases meant moving capitals east from the more typical earlier locations such as the comparatively militarily-sheltered Xian, for example, to Kaifeng, during the Northern Sung Dynasty. But an eastward location exposed capitals to attack by placing them closer to the middle of the alluvial plain. A Ming Dynasty innovation, the "domestication" of Beijing, previously a capital of non-Chinese dynasties, represented the optimal military solution, allowing for control of the Northern Region and its military garrisons by a Chinese dynasty, while, at the same time, maintaining the military viability of the capital. Beijing was elevated to the status of capital during the reign of the expansionist Ming Dynasty Yung-lo emperor (1403-1424) who also manifested his desire to control the north through aggressive military campaigns into Mongol territory (Farmer 1976: 108-14). However, a northern location for the main political capital exacerbated the difficulties inherent in the logistics of capital support, necessitating the expansion of the Grand Canal and other supply and communication routes connecting Beijing with the Yangtze Region (Chi 1936: 113; Farmer 1976: 21-24, 116) (Figure 5-7). The decision to locate the main capital far north

eventuated in problems for tax collection, as it required taxpayers in the south to assume a greater burden of transport costs as a proportion of their total tax obligation (Wiens 1988: 24-9).

Military Costs and Manorialism

Characteristic Chinese patterns of state formation found in later periods were becoming evident in the emerging relationships among advances in military technology and strategy, on the one hand, and state dynamics of growth and collapse, on the other, all in the context of the necessity to protect China from the persistent threat of invasion from the north. One element of the dynamic of state formation related to this is the tension between imperial control, on the one hand, and the threat of decentralization based on the growth of a manorial economy, on the other. Interconnections between military costs, taxation, and manorialism can be seen beginning as early as the fourth century BCE, when the cross-bow and mounted archery were adopted, requiring an increase in expenditures for fortifications and for the acquisition and care of horses. For example, the adoption of new technologies and strategies led to over-taxation, tax evasion by seeking the protection of patrons, and, finally, rebellion against the Qin Dynasty (Elvin 1973: 26-7). To preserve the free peasantry under conditions of high military costs, early in the succeeding Han Dynasty new practices were undertaken that were like those utilized in later periods, including the confiscation of large estates to counter the manors, the heavy taxation of merchants, monopoly control of key commodities (salt, iron, and wine), violent purges of nobility, and the recruitment of bureaucrats from low-ranking households (Elvin 1973: 28-30) (the latter strategy was formalized as a competitive civil service examination system by the T'ang Dynasty [Ho 1962: 12]). However, the costs of maintaining the northern boundary resulted in the failure of most of these policies later in the Han period, leading to decentralization, the failure of the military system, and crisis and collapse by CE 220 (ibid.: 32-5).

New institutions, first proposed by non-Chinese rulers of northern states around the middle of the first millennium CE, and improved on in following dynasties, were designed to reorganize the system of military recruitment and training of soldiers, as well as to gain control over powerful landlords and regularize state revenues. These included the development of a dispersed part-time army of trained soldier-farmers who combined farm work and military obligation (the "divisional militia"), household registration (in local five-family groupings of households), state allocation of land to commoners ("equitable field system"), the conversion of large estates to government control, and salaried officials. These diverse policies provided a framework for the reunification during the "Middle Kingdom" by the partially Chinese ("Sino-Barbarian") Sui Dynasty (CE 589-618) and succeeding T'ang Dynasty (CE 618-906) (Elvin 1973: 47-53). However, these policies were difficult to maintain. T'ang military incursions into Central Asia required a permanent frontier army, resulting in collapse of the largely self-supporting divisional

militia. As a consequence, the increasingly autonomous frontier generals were difficult to control and even rebelled against the state, at the same time that a weakened government was not able to maintain the equitable field system, resulting in the growth of powerful landed families and the decline of the free peasantry; dynastic collapse followed in CE 906 (Elvin 1973: 65-7).

During the subsequent Sung Dynasty, little attempt was made to regain control over the landed families, and this period is notable for its highly developed system of tenant-serfdom built around large privately-owned manors (Elvin 1973: chapter 6). Unlike Medieval Europe, however, in this and other Chinese periods the manorial economy was not a variant of European-style feudalism, owing to the far more pervasive pattern of private ownership of land, and the fact that important manor lords owed no military obligations to the state. In a broader sense, however, there are some European-Chinese similarities in that both were decentralized forms of politics centered around a rural economy of manors. In China, this was evident in the fact that communal works such as water-control projects were often undertaken by wealthy landowners, and even the administration of justice appears at times to have represented the expression of manorial rather than state power (*ibid.*: 77, 82, *passim*).

Local Histories of The East Asian Societies

Ming Dynasty

The focal period is primarily the 15th century (“Early and Middle Ming”), prior to a series of Late Ming changes signifying a decline of some elements of the revenue system and aspects of collective action. Changes included the institution of hired tax collection agents, the decline in fiscal and military administrations and local water-control management, the commutation of most in-kind and labor taxes to silver, the growing coastal trade with Portuguese and Spaniards, and the influx of New World silver, all of which pertain to the 16th and 17th centuries (e.g., Huang 1998: 148-71).

The founder of the Ming Dynasty, the Hung-wu emperor, rose from the status of impoverished orphan (Hucker 1998: 70). As a young man, he was involved in one of the millenarian movements that flourished during the decline of Yüan rule (the Buddhist White Lotus Society). After having gained political power, however, he embraced Confucian orthodoxy in order to appeal to a broader constituency that desired primarily the reestablishment of social order and traditional Chinese rule (Farmer 1976: 30-37). His state carried forward many features from previous dynasties, including the preceding Yüan Mongol Dynasty (Hucker 1998: 72-3). But the founder’s vision was more egalitarian, for example, he pursued a policy of land confiscations from wealthy landowners and its redistribution to poorer households, especially in the Yangtze Region (Huang 1998: 110), although his concern with the plight of common people was not always carried forward intact into subsequent reigns (Farmer 1976: 98). The legal system was largely carried forward from the T’ang Dynasty, although the wide dissemination of a vernacular version of the legal code was a Ming Period innovation (Langlois 1998: 180).

In the decades following the Hung-wu emperor's attempts to secure centralized control of the bureaucracy by eliminating the prime ministry, a stable system was developed that was less centralized than he had envisioned but more functional in that he appointed a group of six grand secretaries rather than one, allowing for coordination between major governmental agencies (Hucker 1998: 76). Following the founder's death, a period of instability was followed by the second strong ruler, Yung-lo (1403-1425), who reasserted Chinese influence in Central Asia, and who finalized the placement of the major capital at Beijing, from which it was more feasible to manage the military threats presented by Mongols and other Central Asians (e.g., Farmer 1976: chapter 4).

Beginning in the 16th century, growing problems included overpopulation in the rice-growing regions while huge areas of the north were abandoned owing to military threat (Bray 1984: 66-7). The decline of the hereditary military system and an inability to recruit soldiers effectively came at a time of Mongol invasions, and later, domestic rebellions, including that by the Manchus. Dynastic collapse came in 1644 (Huang 1998: 148-71; Hucker 1998: 69-70).

Japan

The focal time period is the Early Modern or Kinsei Period (although sometimes called "Late Feudal"), which is also known as Tokugawa, Edo Period or Edo Shogunate, and Edo Bakufu. The focal period is the 18th century. The following brief history is summarized from Barnes (1993), Hall (1991a), and Tatsuya (1991).

The earliest Neolithic Period is the Jomon, or "cord-marked" pottery period (10,000-300 BCE), followed by the Yayoi (300 BCE-CE 300), in which metal tools, weaving tools, and rice agriculture first appeared that had evidently diffused from the Chinese mainland and from Korea (Barnes 1993: 168-71). The subsequent Kofun Period (CE 300-710) is regarded as the beginning of state-level political complexity (ibid.: 222). During this time, the first monumental architecture was built, in the form of "key-hole" tombs. This archaeological culture shows a growing influence from the mainland, including horse-based warfare. By the 5th century CE, a form of clan organization developed (*uji*) followed by inter-clan warfare, culminating in a confederation of clans led by the Yamato clan. The political system that developed during the period of confederation resembled a segmentary state. Subsidiary clan rulers were appointed as governors of their home territories or *han*, but they recognized the dominate religious sanctity and political centrality of the imperial line of succession (thought to be descended from the Sun Goddess), while maintaining control of their own local clan ancestral and other spirits. However, beginning as early as the 7th and 8th centuries, cultural elements from T'ang Period China were adopted, including Confucian and Buddhist ideas, in order to construct a more bureaucratic government. This entailed the use of the Chinese script and the use of land censuses to apportion tax payment. A constitution-like document was developed and promulgated by the Imperial Prince and Regent Shotoku Taishi that

promoted the values of filial piety and citizen devotion to the ruler, while proclaiming the necessity for moral rule.

In spite of the adoption of Buddhist and Confucian ideas, a system somewhat like European feudalism was adopted in which military leaders were awarded estates. By the mid-12th century, some of the estate holders were able to consolidate power. After the 1180s, Minamoto Yoritomo accepted the chief military title of *shogun*, and ruled indirectly through military vassals, *daimyo*. The *shogunate* and *daimyo* rule was called *bakufu*, or “tent government,” while the imperial system was kept intact only symbolically.

From 1200 to the mid 16th century, this decentralized form of governance was weakening owing to the increased autonomy and power of the local *daimyo*, leading to civil war of the Sengoku or warring states period (1467-1570). By the late 16th century, guns had been introduced from Europe, and this, in part, eventuated in the weakening of the *daimyo* and their warrior class or *samurai*. Eventually, one contestant, Toyotomi Hideyoshi, consolidated power over much of Japan and was succeeded by Tokugawa Ieyasu who, by 1615, formed a new *shogunate* centered at Edo, in the Kanto region. Ieyasu adapted a Confucian political theory that was put into place by the end of the 17th century. This new *bakufu* required that many hereditary *daimyo* become part of the civil administration in the manner of the Chinese literati while also administering their own semi-autonomous *han* domains (*bakuhan* system; cf. Hall 1991b).

As it developed as a *bakufu* system, there was no meaningful concept of a unitary state centered around kingly authority. The Tokugawa *shoguns* at Edo were high military officials, not emperors, and yet they represented the center of political decision-making for the polity. As observed by Eisenstadt (1996: 195), this represents an interesting situation of “bifurcation between authority and power.” Lacking the authority of rulership, per se, the basis of Edo *shogunate* power was its ability to maintain control over the *daimyo* through the exercise of military power, confiscations of *daimyo* holdings, and some elements of administrative centrality, including control over a supreme court of adjudication (Hall 1991b: 150, 160-1), although “the law of Edo did not reach deep into society” (Eisenstadt 1996: 180). But the *shogunate* depended also on its substantial prestige gained through its efforts to consolidate power and to reduce inter-*han* warfare. In addition to its enduring prestige, symbolic elements contributed to *shogunate* legitimation even though the Tokugawa house could not claim royal descent. Ieyasu claimed direct descent from the historically significant Minamoto clan, and was officially appointed its chief. In addition, the Edo *shogunate* aided in the maintenance of the emperor and court at Kyoto, and used its ties to royalty, for example marriages into the royal family, as an additional source of symbolic legitimation (Hall 1991b: 149). In addition, the Tokugawa *shoguns* made use of religious sanctification to some degree, manifested by the deification of founder Ieyasu as “Great Shining Deity of the East” (ibid.: 149). The *shogunate* exercised powerful control over religious establishments, reducing the wealth and influence of Buddhist monastic orders (ibid.: 160).

European religious and commercial influence was severely restricted after 1640, as the Tokugawa government worked to create a more completely

Japanese cultural and political system while controlling foreign trade. This was accomplished by 1700. By the middle of the 19th century, Western ideas and technologies were in widespread use, so the focal period was strongly indigenously Japanese, but enriched by cultural and social elements that had been imported from China and elsewhere. The end of the focal period saw an increase in the already high levels of rural unrest, probably beginning as early as the 1790s, and the situation deteriorated during the early 19th century (Bolitho 1988: 117-24), resulting in the forced resignation of the Tokugawa *shogun* in 1845 (ibid.: 159).

Tibet

The focal period for Tibet is CE 1792-1951, the “Recent Period” in Carrasco (1959: 25). This is a period for which the evidence is fairly complete (we depended heavily on Bell 1992, Carrasco 1959 and Landon et al. 1906), but before substantial Chinese intervention. Much of this summary is from Bell (1992: 9-18).

The early political history of Tibet is highly mythical and recorded in oral epics. According to these legends the first king came to Tibet from India in the first century BCE. In the seventh century CE, the famous king, Song-tsen Gam-po, came to power, and conquered areas in western China and Upper Burma. He established Buddhism as a major religion in Tibet, and instituted a criminal law code. We see some minor collective action consequences of Buddhism in Tibet, for example, when the ruler Mu-ni Tsem-po reduced economic inequality by redistributing wealth on three different occasions, although his mother assassinated him because she disagreed with this policy. Another ruler, Ral-pa-chan extended Tibetan territory and supported the expansion of Buddhism by increasing the number of priests and subsidizing them with land grants. However, his religious zeal was not appreciated by all and he was assassinated at the suggestion of his brother, who was head of an anti-Buddhist group.

Shortly after, the line of Tibetan kings ended, civil war erupted, and the region was divided into petty states controlled by chiefs who battled among themselves. Buddhism was officially repressed during this period. However, the religion survived and eventually the priesthood began to grow again. In CE 1270, a priest from the monastery of Sa-kya traveled to China and converted its Mongol Emperor to Buddhism. In return, he was granted rule of Tibet, inaugurating the period of priest-kings, which lasted until CE 1345. But Buddhism forbids the ruler from taking human life, so Tibet became weak militarily and was overrun by Mongols and northern Tibetans. In 1641, the first Dali Lama, Lob-san Gya-tso, became sovereign of Tibet. He rebuilt the great Potala palace and established the general pattern of political administration that continued through the focal period. In many respects, however, the Buddhist system of rulership in Tibet was unlike other Buddhist-inspired polities in the sample, for example Burma and Thailand. In Tibet there was

no concern with ruler's *dharmic* obligations to society, and, it would appear that the controls over ruler's behavior often associated with Buddhist theories of government did not apply (e.g. as described in O'Connor 1906: 443).

During the period from 1720 to 1792, the Chinese came to dominate Tibet (Carrasco 1959: 25). During this period the Chinese introduced a number of reforms in the Tibetan administration, but local government remained under Tibetan direction (ibid: 25-26). The Chinese continued to dominate Tibet until the Chinese revolution in 1911, when Tibet was able to oust the Chinese from many parts of the country and the Dali Lama regained sovereignty. During the period from 1904 to 1911, British-Tibetan relations had improved and the period of British influence began after 1911.

Introduction to Western Eurasia, the Mediterranean, and North Africa

Although this broad area is geographically and culturally diverse, past and present, and although it was never integrated as a unified culture area or empire, there was a shared agricultural basis for the evolution of complex society over this vast territory. The major shared cultigens included a suite of grains and legumes, typically emphasizing wheat and/or barley, and complemented by sheep, goat, and cattle. This complex originated in the Near East, beginning roughly 10,000 years ago (Miller 1992), and later diffused westward into North Africa, the Mediterranean and Europe (Dennell 1992). These biotechnologies were augmented during the Late Neolithic Period and Bronze Age with vine and olive production in the greater Mediterranean region ("Mediterranean polyculture") (e.g., Renfrew 1972) and by a "secondary products revolution," including horse-riding, ox traction for carts and plowing, the pack donkey, along with wool-sheep and dairy products that also saw widespread diffusion across Western Eurasia and North Africa (Sherratt 1997: chapters 6 and 7).

In spite of these shared biotechnologies, the systems of government that have developed over the last five to six millennia have been highly diverse. The small number of societies we coded from this area could not possibly stand as a representative sample of the total range of variation in state formation that developed during the pre-modern period. However, the sample was selected in order to provide representation to forms of governance frequently referred to in historical and comparative works as characteristic expressions of Western Eurasian/North African/Mediterranean political evolution from the later Bronze Age to the Early Modern Period (e.g., in sources such as Bloch 1961, Doyle 1986, Eisenstadt 1969, Hansen, ed. 2000). Significant forms of governance that are represented in our sample include an early democratic city-state (represented by 4th-century BCE Athens), a feudal society (as represented by late Medieval England), a northern Italian republic (Venice), and three large, multi-regional empires, including Egyptian New Kingdom, Roman High Empire Period, and the Ottoman Classic Period.

Theory Development

A great deal of variation in the degree of expression of collective action is found in our coded societies from this region, and these political forms figure into the comparative analyses we carry out in later chapters. Although archaeologists and historians who have studied political evolution in this region have not been influenced by rational choice or collective action theories, since the 1970s this macroregion has been an important venue where mainstream theories of anthropological archaeology, relating to the question of the evolution of social complexity and political change, have been addressed and evaluated (Cherry 2004: 1-3). Since one goal of this book is to contrast a collective action approach with prior social change theories, we begin this section by providing a brief summary and evaluation of the history of social evolutionary ideas that have had an impact here.

During the decades after the middle of the twentieth century, archaeologists influenced by neoevolutionist theory turned away from historical particularism to a processual approach grounded in cultural materialism in which social stratification and a ruling elite were argued to have developed in large part as a consequence of intensification in agricultural and other forms of production (e.g., Renfrew 1972, for the Mediterranean). The key transformational technologies initiating phases of political evolution were thought to be Mediterranean polyculture and the secondary products revolution, but other technologies, especially irrigation agriculture (e.g., Gilman 1991:156), and control of metal-working (e.g., Lull et al. 1992) have also figured into explanations proposed for social change. It should be noted, however, that production intensification is a complex variable, and that the relationship between it and political change is more often assumed than demonstrated (e.g., in Adams [1981: 243-48], Chapman [2003: 156-8]; Halstead [2004], and Hamilakis [1996]).

The neoevolutionist explanatory emphasis on largely endogenous agroecological and other technological causes of social evolution was embraced, in part, as a reaction to earlier diffusionist thinking from the first half of the twentieth century that had attributed most social change in Europe to Near Eastern influences (e.g., Childe 1958). The diffusionist approach was rejected for being ideologically motivated (Trigger 1989: 255), and poorly theorized, although, on the other hand, the growing opposition to east-west diffusionism itself was ideological, stemming from a growing concern to establish a European identity distinct from other civilizations (Kristiansen 1998: 14-17).

The neoevolutionist theory that replaced east-to-west diffusion eventually also proved vulnerable to criticism (e.g., Chapman 2003), in part because it tended to devolve into a contentious and unproductive paradigm clash between functionalists and conflict theorists (e.g., Gilman 1981), although, as we have alluded to previously, both approaches ultimately depend on a theory of subaltern behavior that was derived from Marx. The singular focus on the causal role of an ascripted elite ruling class which dominated the early polities (e.g., Champion et al. 1984: 266) meant that collective action never was regarded as an important social evolutionary force. Rather than varying degrees of collectivity, variable pathways to state formation

were thought to reflect differences in kind and degree of elite domination, ranging from the more decentralized “rainfall states” of Europe versus the Asiatic form of the state with its “hypertrophy of the agro-managerial functions” in the “ancient riverine empires,” such as ancient Egypt (Harris 1979: 104). These ideas can be traced back to the “Germanic Mode of Production,” from Engels (1972: 206-16), as a model for Western European state formation versus the Asiatic Mode of Production proposed by Marx (for an updated summary, see Kristiansen 1998: 46-50).

Although the key problem for neoevolutionists is the emergence of a centralized political system dominated by a governing elite, initially in the context of chiefdoms (or rank society), then early states (Renfrew and Shennan, eds. 1982), the explanations offered for political change tended to split researchers into two camps, functionalists and conflict theorists. Functionalists argue that commoners accepted the political dominance of an elite because they are able to provide benefits to followers. The most significant benefit is posited to have been local redistribution of goods, an idea in line with the assertions of substantivist economic anthropologists and of “primitivist” economic historians, who, like Marx, thought that local communities would have been primarily locally self-supporting and agrarian (summarized and critiqued in Sherratt and Sherratt [1991: 352-3]; as applied in the Bronze Age Aegean, Renfrew [1972: chapter 18]; a similar argument is presented in Halstead and O’Shea [1982]). Other societal services thought to be offered by the emergent governing elite include the management of irrigation systems (e.g., Redmon 1978: Figure 7-7) and the sponsorship of feasts and ritual cycles (Hamilakis 1996).

By contrast, the conflict approach centered attention on what they see as the emergence of a nonmanagerial elite that governed society in its own interest (Gilman 1981: 1; 1991: 147; 167). As in functionalist theory, production intensification was the key factor causing social transformation, but, as proposed by conflict theorists, intensification is hypothesized to bring changes in property relations that gave the emergent ruling classes differential access to restricted resources, allowing them to extract rent from producers, and enabling their control of the production and distribution of prestige goods such as bronze (e.g., Chapman 1982; Gilman 1991: 156, 160-1; 1995: 245). Why would people acquiesce to economic inequality and elite political domination, given the absence of state-provided services? According to Gilman (1981: 7-8), intensification involving irrigation, vines, and olive trees required costly capital investments necessitating military protection at the same time that the opportunity cost of exit from a polity would have increased for most farmers. As a result, those persons charged with protecting society could become self-aggrandizing without fear that producers would be driven away, and, “Over the long term, there would have arisen a permanent ruling class” (Gilman 1981: 7).

The Collapse of Neoevolutionist Theory

“Where’s the Chief?” (from a section heading in Stein 1994a: 39)

Criticisms of neoevolutionist theory were voiced beginning in the 1980s and 1990s as researchers became more aware of gaps between expected and actual results

in their archaeological discoveries. This is evident, for example, in the case of 'Ubaid Period Mesopotamia, where Gil Stein (quoted above), was unable to find evidence for ascribed leadership in an early complex society, and in Renfrew (1971: 556), who failed to find evidence of "personal ranking" in a Neolithic Wessex chiefdom. The main failure of neoevolutionist theorists was their inability to conceive of the possibility for alternative modes of early governance, including more egalitarian forms where there is no evidence of a ruling elite class (e.g., Gilman 1997).

A related problem was that the expected linear progression from chiefdom to state predicted by neoevolutionists (cf. Flannery 1972; Spencer 1990: 10) was not always clearly detectable. Instead, archaeologists encountered complex histories of cycling between more egalitarian and more centralized political systems rather than linear sequences from egalitarian society to chiefdom and eventually to state formation (e.g., Feinman 1995). This was not the alternating periods of consolidation and collapse of chiefdoms, as suggested by Wright (1984: 50-1), or cycling between "Germanic" and "Asiatic" forms (e.g., Kristiansen 1998: 48). It was, rather, cycling between alternate modes of governance of chiefdoms or states, for example, the cycling between more centralized "agro-literate" and more egalitarian and corporate "citizen-states" in Greece (Morris 1997: 98), and analogous transformations between more corporate and more centralized Minoan Bronze age states (Cunningham and Driessen 2004).

A Need for New Theory

As neoevolutionism's shortcomings were becoming increasingly apparent, new approaches and theoretical propositions were formulated or borrowed from researchers in other world areas who also were finding problems with the dominant theory. Adams (1981: 76-81), for example, was among the earliest critics of the neoevolutionist assertions concerning the hierarchical structure of early Mesopotamian states and the role of irrigation management in political centralization (ibid.: 243-8), and he concluded that an approach based in urbanism could better characterize the institutional diversity and historical complexity of early Mesopotamian society than could a theory of political centralization or the state alone. Similarly, Stein (1994b: 13) concluded that in early Mesopotamian political evolution "it is probably more accurate to characterize [states] as organizations operating within a social environment ... they only partially control."

Historians and archaeologists encountered Bronze Age and later social systems that were less economically stratified and politically centralized than neoevolutionist theory had led them to expect (e.g., Chapman 2005: 92), requiring a new vocabulary and concepts to describe what they were finding. Renfrew (1974), for example, used "group-oriented" and "individualizing" to better characterize diversity in European chiefdoms. Stein (1994a: 39-43) found his "revised chiefdom model" a better fit than neoevolutionist terminology for the 'Ubaid Period in Mesopotamia, which lacked elite burials or exotic goods, but which, instead, featured "an egalitarian ethic of shared group membership and ideology" (p. 43). Several authors, following Carole Crumley and others (e.g., Ehrenreich, Crumley

and Levy, eds. 1995), turned to the concept of heterarchy (a system composed of differentiated but unranked segments) to characterize systems of social complexity in which no clear hierarchical ordering of social segments can be detected, for example Keswani (1996), for Bronze Age Cyprus, and Schoep (2002), for proto-palatial Crete. The terminology and concepts associated with corporate and exclusionary political economy from Blanton et al. (1996), Blanton (1998) and Feinman (1995), have also come into use to better characterize more egalitarian pathways to social complexity, as well as the nature of cycling between more centralized and more egalitarian modes of political organization (e.g., Cunningham and Driessen 2004: 109, on Minoan Crete). Although Bronze Age Crete was described as an “oriental” polity with strongly-developed social strata, as recently as 1992 (Lull et al. 1992: 162), Parkinson and Galaty (2007), based on a much more careful review of the data, argue that prepalatial states of Crete tended to be strongly corporate, while the Neopalatial Period and Mycenaean Bronze Age exhibited features of exclusionary political economy (cf. Vansteenhuyse 2002, on Minoan Crete and Rothman and Peasall [2000] on Tepe Gawra, Mesopotamia, for similar findings)

The idea that primarily endogenous causal factors could account for social change is another dimension of neoevolutionist theory that has proved to be limiting, and in recent theory-building there has been a renewed interest in the evolutionary consequences of social interactions at a distance, including long-distance trade and migration (Parkinson and Galaty 2007; Sherratt and Sherratt 1991). World-system ideas (or “center-periphery” ideas) (modified from Wallerstein 1974) are a new wrinkle in the post-neoevolutionist approach to trade and diffusion westward from Near Eastern centers (the “orientalization” process) (e.g., Kristiansen 1998; Sherratt and Sherratt 1993). Unlike diffusionism, the modified world-system approach is itself a processual theory of socio-cultural change that addresses the consequences of increased periphery involvement in world-system trade (e.g., Hall 1986), asking the question: What are the social, cultural and technological consequences of incorporation into a growing macro-regional exchange system for a periphery or semi-periphery zone? Specifically, what are the social consequences of a reallocation of production labor from local goods to export products? What are the consequences of the substitution of imported for local goods? How is labor reallocated to satisfy the export economy? What are the consequences of peripheralization for social differentiation and political change? Although diffusion may accompany world-system involvement, the modified world-system theory being applied is one in which peripheries are not passive receivers of goods and ideas, but are active agents in the construction of modes of peripherality (e.g., “negotiated peripherality” in Morris 1999: 77).

Beyond Neoevolutionism: Bringing More People Into Governance

Broadly speaking, there were similar political patterns in early political evolution that tended to reoccur across much of Western Eurasia, the Mediterranean, and North Africa. In a number of situations, assemblies and councils played a role in governance that often involved more than just an elite, although there are notable

exceptions such as ancient Egyptian civilization. In fact, where there were assemblies and councils, there was also ambivalence concerning the legitimacy of monarchical rule, including in European history (Collis 2000: 231). A key issue in this regard surrounds the similarity of the famous Greek *polis*, with its citizen assembly and collective political action (e.g., Morris and Raaflaub eds. 1998), on the one hand, and the town-based governance found in ancient Syria-Mesopotamia, on the other. Did Mesopotamian “primitive democracy” (Jacobsen 1943), dating to the fourth millennium BCE or earlier, diffuse westward to Europe, or “Is it possible that the polis “town” was one component of the raw materials from which Greek democracy came that was simply common to a broadly Mediterranean and Near Eastern heritage?” (Fleming 2004: 240). At the moment this remains a contentious and exceedingly complex issue. For example Raaflaub (1998: 31) even rejects the notion of Mesopotamian primitive democracy, but does allow that perhaps some select elements of Near Eastern governance did diffuse to Greece, including justice, enactment of written law, and the abolition of debt bondage (ibid.: 52).

We have already mentioned revisionist literature concerning evidence for heterarchical or corporate political economy in early Aegean states, but many other examples of “non-standard” (from a neoevolutionist perspective) political systems can be cited. The idea that there was a system of “primitive democracy” based on a city assemblies in pre-literate Mesopotamian polities (i.e. late fourth and early third millennia BCE) that pre-dated the first kings was first proposed by Jacobsen (1943), and later researchers often subscribe to this view (e.g., Postgate 1992: 80-1) (and, as we mentioned, the prior ‘Ubaidian “chiefdom” was also relatively egalitarian [Stein 1994a]). While Mesopotamian rulership and the palace developed as formal institutions during the middle of the third millennium BCE Early Dynastic period in Mesopotamia (Postgate 1992: 137), non-palace governing organizations persisted to some degree so that in later periods “individual rule appears to have been constrained by strong counterbalancing forces in temple and city institutions. There was no “primitive democracy,” but there was a lively interplay of individual and group leadership” (Fleming 2004: 237-8; cf. Humphreys 1978: 181-6; van de Mierop 1997).

Elements of corporate political economy are found outside the Near East and Greece. Oosten (1996) notes that early Germanic and Celtic polities eventually developed kingship, probably, in part owing to Roman imperial strategies that strengthened local leaders (“to lessen the political and economic strain on the empire” in Oosten [1996: 222]). But even then, according to Collis (2000: 231) both oligarchy (council government) and kingship could be found as alternate modes of governance, and the “ethos” of the period (as he calls it) “favored oligarchy over kingship.” Further, as Oosten points out, it is possible there was a complex concept of rulership in the Germanic and Celtic polities, with one dimension expressing ascribed status (“rex”) while another was rooted in achieved status (“dux”), and, sitting alongside these was a third element, “the sacred assembly of the people” (Oosten 1996: 222) that may have played a role in the selection of kings (ibid.: 232; cf. Commelin 2000: 18-19). Evidently, there was a far greater degree of institutional complexity and egalitarianism in early European societies than we find in Gilman’s (1991, 1995) sparse

rendition of “Germanic” chiefdoms that focuses on how a coercive and ascripted ruling class was able to extract tribute from their followers (e.g., Gilman 1995).

In later post-Roman periods, European Christian medieval kingship came to be strongly based on ascription and religious sanctification (Oosten 1996), at the same time the community assemblies in some areas were weakened (although assemblies reemerged beginning in the late 13th century [Oosten 1996: 232]). But, even as medieval kingship was becoming institutionally strengthened throughout the period, “the question of supreme authority was a recurring feature of political debate” (ibid.: 232). In French feudalism the system of territorial lordship (*seigneurie*) destroyed the ancient self-governing assemblies (Comninel 2000: 18), but in England, a form of local self-governance with prehistoric roots, the “shire moot” or folk assembly (Baker 1990: 4-5, 7-8), persisted even after the Norman conquest. The result was the persistence of the local-level shire and hundreds courts (Comninel 2000: 23; Lupoi 2000: 206-7) that became foundational elements for rural organization and for English common law (Baker 1990: 17).

Archaeologists who adopted neoevolutionist theory thirty-five years ago perhaps should not be criticized for failing to anticipate the comparatively egalitarian nature of some early complex societies; those discoveries were the result of many years of careful epigraphic and historical research alongside archaeological excavation and survey. But we find ourselves at a complete loss when it comes to understanding how so many people could have promoted a neoevolutionist theory of political evolution that was so incapable of accounting for what was known, even at that time, about Mesopotamian primitive democracy, Greek democratic *polei*, and citizen assemblies among the ancient social formations of the Germanic and Celtic peoples, all of which are social arrangements that limited or precluded strongly ascripted, class-based chiefships and kingships.

Local Histories of the Coded Societies

Egypt

The focal period for Egypt is the New Kingdom, especially the 18th and 19th Dynasties (1479 to 1213 BCE), but with more focus on the better-described decades between 1390 to 1357 and 1295 to 1213. The New Kingdom began with the Ahmose’s reconsolidation of a unified Nile Valley polity following the Second Intermediate Period, in BCE 1530 (Bryan 2000: 218), and lasted until the collapse of consolidated control following the period of invasions by the “Sea Peoples” that began late in the 19th Dynasty during the reign of Rameses II’s successor Merenptah (van Dijk 2000: 303). However, the mode of New Kingdom government was temporarily disrupted by the imposition of monotheism and the construction of a new capital at Amarna by Akhenaton, and so our coding pertains only to the non-Amarna parts of the sequence up through the reign of Rameses II.

Earlier, we critiqued the neolutionist's assertions such as Trigger's (2003: 197) that in all early civilizations, "Political power ... remained the prerogative of a small minority of upper-class people ..." We disagree with this kind of broad characterization; however, ancient Egypt does conform to the main expectations of neolutionist theory, given the persistent tendency for a highly centralized government to remain in the hands of a small wealthy elite. The conflation of control of wealth and political power in ancient Egypt can be illustrated by the study of burial practices and ideas about death and dying. In ancient Egyptian culture, the afterlife was conceived of as being very much like the world of the living (e.g., Richards 2005: 61), that is, strongly socially stratified. Kings and other elites "deployed vast resources in preparation for death" (ibid.: 59) to reproduce their social standing in the afterlife, so a culture-historical study of Egyptian burial practices throws light on social evolution. The pre-Dynastic Naqada Period (ca. 4000 to 3000 BCE) is notable for an expansion of agricultural villages across Upper Egypt and increasing social inequality (we summarize Naqada from Midant-Reynes [2000:44-60]). During the first phase of the Naqada, most interments are in simple pit burials, but a number of individuals were buried in coffins with more elaborate grave offerings. This corresponds to a growing depiction of maceheads, a symbol of royal power in later periods, and technological improvements in the production of prestige goods such as glazed steatite jewelry, early faience, and native copper ornaments. The following Naqada II saw a growing inequality in burials with high status tombs becoming richer and more elaborate. Large burial pits were subdivided by mud-brick partitions. Early mummification also emerged during this period as wealthy individuals were wrapped in strips of linen. Exotic luxury items acquired through riverine trade frequently were found in elite burials at the same time that elaborate stone working technologies were developed to work hard stones into items for elite consumption.

Some time during Naqada II, artifact styles of the Lower Egyptian Maadian cultural complex were gradually replaced by Naqada II artifact styles, and by Naqada III (3200 - 3000 BCE) artifact styles were uniform across Egypt, probably signifying that Upper and Lower Egypt formed a single state (Bard 2000: 61-88). The important Naqada II centers (Naqada, Abydos, and Hierakonpolis) were unified through either conquest or alliances during Naqada III and this unified southern polity incorporated Lower Egypt shortly thereafter. The main political center following unification was at Abydos, where the first tombs with named rulers and distinct royal architecture have been found (Kemp 1989: 53-5).

The association of wealth concentration and political power continued as a signature feature of ancient Egyptian political economy. During the Old Kingdom (2686 to 2125 BCE) the Egyptian state began to mature, taking on features that would persist through the sequence up to and including the focal period (Malek 2000: 89-117). The pharaoh first claimed descent from Ra and divinity during this period. Bureaucracy was developed to manage the massive labor and other needs for the construction of burial monuments for rulers, and the Pharaohs began a pattern of direct control, or even ownership, of large tracks of land and other resources. From the Old Kingdom onward, ancient Egyptian history is marked strong centralized governments that consolidated power over Upper and Lower Egypt (Old, Middle, and New Kingdoms),

punctuated by periods of instability and regionalization of power (1st, 2nd, and 3rd Intermediate Periods). While some changes instituted during the Middle Kingdom further consolidated Pharaonic power, for example, the use of appointed governors of *nomarchs* (secondary regional centers) rather than indigenous town mayors (Callendar 2000: 175-6), in general, the organization and institutional structure of ancient Egyptian government was conservative during the Pharaonic Period, adhering to the idea of a divine pharaoh whose word was law (Edgerton 1947: 152-60).

By the New Kingdom, an elaborate bureaucratic system had been developed (O'Connor 1983: Figure 3.4) capable of governing an empire stretching from Nubia to the Sinai and parts of Near East. The end of the focal period, during the late 19th dynasty, was marked by the beginning of migrations of the "Sea Peoples" who joined with Libyan tribes to invade Egypt at this time and into the 20th dynasty. These troubles, coupled with succession crises and growing lawlessness, brought the end of the unified Egyptian state (van Dijk 2000: 304-5).

Athens

The focal period for Athens begins with the establishment of the "new democracy" after 403 BCE and lasted until the Macedonian conquest in 322 BCE, but we focus on the better-known period 355-22, the "Age of Demosthenes." The focal period comes after a poorly-documented initial phase of democratic governance that followed the reforms of Kleisthenes in 507, some elements of which had been abandoned by the focal period, including the institution of ostracism (used from 487 to 416), which proved to be vulnerable to cheating (Camp 1986: 58). A few minor changes were instituted during the focal period, modifying the core elements of the late-6th and 5th-centuries democracy, including the selection of jurors by lot at the beginning of each court day, and the restoration of some powers of the *areopagos* (see below) (Hansen 1999: 301). By and large, however, the focal period was a period of "radical" democracy (in Aristotle's terms), featuring a strong contribution to governance by ordinary people (*hoi aporoi*) through the powers of the Assembly (*ekklesia*) and the People's Courts. This arrangement was largely stable until the Macedonian conquest in 322, after which citizen rights were restricted to property owners and the wealthy (Hansen 1999: 304).

The earliest state formation in this region is the Aegean Bronze Age, including Minoan Crete and Mycenae among other localities (e.g., Parkinson and Galaty 2007). After a hiatus following the collapse of the Bronze Age system around 1200 BCE, evidence of state formation is again found beginning in the 8th century, taking the form of the Greek *polis* states during the Archaic Period (700 to 500 BCE) (the Greek city-state system) (Thomas 1981: 33). The latter phase of state formation was coincident with a growth in long-distance trade, population growth, and intensified warfare, including a new, more egalitarian form of warfare based on *hoplite* armies (see below) that became the "symbol of polis status" (summarized in Morris 1997: 101; quote from Snodgrass 1986: 52). Other features of this second phase of state

formation includes the reemergence of writing (750 BCE), the construction of monumental stone temples (700 BCE), and written law codes laid down as early as the early 7th century (summarized in Snodgrass [1981] and Morris [1997: 95]). This time period also saw the development of two additional features central to the Greek city-state system, the reemergence of urbanism and the rise of key sanctuaries and other “interstitial” institutions such as sports contests that contributed to Greek regional social and cultural cohesion (Snodgrass 1981). Associated with Archaic Period political change, a “great rebuilding” is evident in changes in design and construction of houses beginning during the 8th century (Morris 1997: 102).

While some aspects of governance appear to have been passed down from Mycenaean culture to the Greek polis through the hiatus (e.g., in Greek terms such as *deme* and *polis*), the Bronze Age polities were evidently structured quite differently than later states, at least by comparison with polities such as democratic Athens, where governance involved a kind of citizen assembly not documented for the Bronze Age (Morris 1997: 34-5). The 8th century phase of state-building had variant political outcomes in Greece, with those in the central Aegean showing more evidence of corporate political economy in the form of citizen states (Morris 1997: 101). Thomas (1981: 37-9) traces an evolution from early kings who governed in conjunction with aristocratic councils and assemblies during the later Greek Dark Age (late 10th century to the late 8th century), but aristocratic councils had largely replaced monarchy by 700 BCE.

During the subsequent Archaic Period, the development of *hoplite* warfare (mass formations rather than mounted cavalry) was roughly coeval with the beginning of episodes of control by anti-aristocratic “tyrant” rulers, whose efforts could counter the aristocracy and “effect economic improvements for the lower orders of society” (Thomas 1981: 39). In part they did this by “supporting public cults at the expense of regional cults where aristocratic priesthoods predominated,” by developing systems of adjudication based on law, and by vesting governance in boards of magistrates (Thomas 1981: 37-9; cf. Snodgrass 1981: 115). Snodgrass (1981: 102) hypothesizes that more broadly-based citizen participation in politics came about when commoners agreed to participate in the new broadly-based *hoplite* mode of warfare. Another related hypothesis relating warfare to the rise of the *polis* can be proposed. The correspondence of a growing importation of bronze, beginning after the 8th century, and the rise to dominance of the *hoplite* mode of fighting suggests a link between changing world-system ties and local political change. As bronze became more available in society (i.e., less expensive), its greater potential use for armor and weapons would have changed the conditions favoring a commoner role in warfare, which previously had been the domain primarily of a horse-mounted elite. Tyrants able to mobilize commoner soldiers against the aristocracy could bring about egalitarian change. Later, *hoplites* (and even *thetes*, who manned the fleet) played a significant role in the emergence of Athens as a key player among the Greek city-states. According to Sinclair (1988: 450-1) “These remarkable military successes [at Marathon and in later engagements that drove the Persians out of the Aegean] engendered in the Athenians in general a high confidence in their *polis* and in themselves, and also a recognition of the contribution of all Athenians to the

security and safety of their *polis*. It was probably in the mid-460s that the Athenian *polis* assumed the responsibility for bringing the war dead back to Athens for burial. A practice, which applied only to the leaders (for example the Spartan kings), was being extended by the Athenian *polis* to all Athenians.”

Morris (1987), found that burial data suggests a more exclusionary form of social hierarchy in Greece, based on ranking and patron-client relationships, that excluded commoners from descent group burial sites, from Protogeometric through Middle Geometric Periods (1000 BCE to 760 BCE), then again through the Protoattic to Black Figure Periods (700-600 BCE). With the evolution of the *polis* and the corresponding decline of serfdom, commoners were included in corporate graves during the Late Geometric 760-700 BCE, and again after the Solonic and Kleisthenic reforms of the late 6th century. Further, the evolution of corporate political economy is also evident in how luxury goods were deposited during the Archaic Period. Morris sees a difference between an emphasis on grave goods in some periods versus votive offerings to deities that benefited the commune while creating a “hierarchy of honor” (Morris 1997: 102) because, increasingly, “Generosity to the gods was a true test of the correct use of luxury...” (ibid.). After 500 BCE, “there are virtually no rich graves or funerary monuments anywhere in Greece, and fifth-century houses hardly vary in size, decoration, plan, or finds” (ibid.).

The democratic reforms of Kleisthenes, in Athens, in 507, developed out of a governmental system, at least a century old, in which rule was vested in magistrates (*archai*) representing the aristocracy of important clans. Significant governing institutions included the Council of the Areopagos (a council of all those who had served as *archons*, i.e., chief magistrates), a Board of Chairmen of the *naukrariai* (of unknown nature or function), and kings of each of the four tribes of the Athenians. It is not known whether there was an assembly of the people at this time. However, it is known that during the century or so prior to 600 there was a growing social differentiation and marginalization of poorer households, including the frequent debt enslavement of smallholders by a wealthy land-holding elite. From 630 to 530, social tensions were further elevated, resulting in political change, including legal reforms codified by Drakon and Solon that reduced the degree of monopoly control of the legal system traditionally held by the aristocracy. Solon was empowered to reform Athenian governance and society in 594, and he did so by abolishing debt slavery, making the commoners free holders of their land (although he did not redistribute land), and by expanding legal rights to all citizens. State officials were elected, probably by a People’s Assembly, except that *thetes* (the lowest class of laborers) were excluded from the political process, and the highest offices were restricted to the wealthiest families. Hence, ascription as the basis for holding positions of authority was replaced by a wealth criterion, codified as a system of four wealth classes. In addition to the people’s assembly, Solon devised a Council of Four Hundred, providing wide representation of each of the four tribes, whose task was to prepare “all matters to be decided by the Assembly” (Hansen 1999: 30).

Hansen (1999: 32) elaborates on the nature of these broad changes as they can be seen in the specific history of Athens. Changes that occurred in military technology and tactics contributed to the emergence of a more egalitarian form of

government, in which a first phase saw the emergence of commoner foot soldiers, carrying shields and lances (*hoplitai*), who became the central fighting force, largely replacing mounted aristocratic warriors. *Hoplitai* were recruited largely from farm families, at least from those with sufficient wealth to afford the necessary armor and weapons. Reflecting the changing role of the commoner military forces, a *hoplite*, Pisistratos, through a coup, established himself as *tyrant* of Athens, placing himself in opposition to the aristocrats and their oligarchic rule. Following intervention by pro-oligarchic Sparta, Peisistratos and his son were ousted, but oligarchy was undone owing to Athenian opposition to Spartan interference and rule by *tyrants*. As a result, in 507, Kleisthenes was enlisted to develop a system of democratic governance like that found in several other Greek city-states of the period (Hansen 1999: 34). In his reforms, he based a Council of Five Hundred on a new regional organization consisting of ten “tribes” (eliminating the political significance of the four original tribes), 30 districts (*trittyes*), and 139 *demes*, as well as a new calendar, ritual cycles, and symbolic representation of the 10 tribes. *Demes* were constituted as local village-scale governing bodies which sent representatives to the Council of Five Hundred according to population size. “Tribes,” each named after an important Athenian hero, were to provide a *hoplite* regiment, with the military headed by an elected Board of Generals. This institution reflects a strategy whereby governance by magistrates was always by committee rather than by single individuals. Lastly, a direct voting method was instituted that allowed for the 10-year ostracism of unpopular political actors. This was introduced to reduce conflict resulting from rivalries between political leaders.

Owing to the defeat of the Persians by the Athenians in 490 and the creation of the Delian League in 478, Athens emerged as a key player in the Aegean region. Further democratizing changes were instituted that reduced the powers of the *areopagos*, an ancient council of elite families. Additionally, under the influence of Perikles, a broader spectrum of the population was able participate in governance (e.g., as jurors) because persons doing service for the state were reimbursed for lost work-time. The emergence of Athens as a naval power was another example of how the changing military situation impacted on social change. During this time, *hoplite* influence declined somewhat while the *thete*, who manned the ships and served as light armored foot soldiers, gained influence and were thought to “agitate for democracy” (Hansen 1999: 126). Also, at this time, the conditions for citizenship and government participation were tightened.

Following a series of failed naval engagements and intervention by the Spartans, several attempts to restore oligarchic rule were made from 415 to 403, after which democratic rule was reinstated, bringing with it a “new democracy” that is the focal period for this coding. New democracy refers to a substantial project undertaken at this time to revise and codify the legal system in such a way as to reduce the power of the Assembly by placing legal legislation in the hands of two boards (*nomothetai*), one elected by the Council of Five Hundred, and the other emanating from *deme* assemblies, who would ratify and publish the legal code. This left a place for the Assembly to issue decrees, but was somewhat of a retreat from an earlier ideal of direct democracy.

Roman Empire

The focal period is the Roman “high empire,” or CE 69 to 192, the product of roughly a millennium of state-building in this part of Italy. Of this historical sequence, the Republican Period (509 to 31 BCE) and the subsequent reigns of Caesar and Octavius saw most of the institutional change relevant to understanding the political regime of the focal period, and receive the most detailed historical coverage in this summary. State formation in this area is first traced to Early Iron Age Etruscan polities during the 8th and 9th centuries BCE (e.g., Barker 1988, on South Etruria). The presence of only a few scattered Bronze Age settlements in Rome and its nearby regions suggests this area was marginal by comparison with the major Mediterranean and even Italian zones of early state formation. Settlement density in the vicinity of Rome increased beginning in the early Iron Age, around the middle of the 8th century BCE, and Rome had grown to perhaps 300 ha by the early 6th century, and already featured a public square in what later became the Forum area (Potter 1987: 28-9). Ethnically, early Rome was basically Latin, but probably had been founded as an Etruscan colony under the Tarquin rulers (Grimal 1983: 29-30). Rome was located on the boundary between the Latium and Etruscan regions (e.g., Potter 1987: 15), and may have first gained importance as a boundary market (e.g., Grimal 1983: 29-30).

To some degree, the surge in early Iron Age social complexity in Central Italy, as elsewhere in Italy, is attributable to the cultural and social influence of newly-founded Greek colonies and the accompanying growth in long-distance trade that brought Greek and other foreign goods, as well as the vine cultivation that figured so prominently in the export economy of the Republican Period (e.g., Tchernia 1983). An emergent Italian elite appear to have benefited from this orientaling process (Potter 1987: 30). Egalitarian reaction to the emergent aristocratic system, however, brought substantial social change beginning in the 6th century with the emergence of a new political form that rejected rule by kings. The new city-state system, “based mainly on Greek models,” was the foundation for the Roman Republic, created in 509 BCE (Potter 1987: chapter 3). The rise of the Roman city-state constituted a transition from the more exclusionary Etruscan kingship pattern to a more corporate form of governance that combined Greek institutions with local institutions, some of which had a strongly corporate nature. A key example of the latter is found in practices associated with city foundation and the spatial organization of a Latin city. A city foundation required the laying out of a religious boundary, the *pomerium*, marked by stones (Grimal 1983: 345-7). The *pomerium* functioned to minimize the personalization of power and to disconnect political power from military success. In Rome, the military and the militarily-based assembly (the *comitia centuriata*, see below) were associated spatially with the north portion of the Campus Martius, separated from what might be called the religious city defined by the *pomerium*, which, by the focal period, included a large part of central Rome (Aventine Hill, Pincian Hill, and part of the Campus Martius in Grimal [1983: 347]). Within the boundaries of the *pomerium*, military action could not be taken (“orders

could not be given to an army within the sacred city limits” [Taylor 1966: 5]). Additionally, military honors could only be conferred by civil authorities acting within the sacred city limits. “Returning from his wars, a victorious general was forbidden to cross the *pomerium* ... and he waited ... for the Senate to vote him the honors of a triumph” (Grimal 1983: 5). Additionally, laws forbade the burial of rulers (or other mortals) within Rome’s *pomerium* (Carcopino 1968: 6).

Evidence for Greek influence in the origin of corporate political economy includes rule by elected magistrates (*consuls*) who held one-year terms, and who ruled as a “college” (i.e., multiple authorities were given the same title and executive role). Magistrates were carefully monitored to “prevent them from abusing their power” (Potter 1987: 43). While the patrician Senate originally served as the main decision-making body, commoners (*plebs*) demanded voice, and, withdrawing in protest from the city in 494 BCE, they established their own assembly and officers (*tribunes*), which were incorporated into the governmental system alongside the Senate and the *consuls* (see below), and with some power over the senate. Unexpectedly, it was this *plebian tribunician* power, which was established to limit the power of the Senate, that proved most useful to Caesar and Augustus in their efforts to develop a more ruler-centered *principate* after the Republican Period (Abbott 1963: 271; more below). By the Late Republican Period, after nearly two centuries of class struggle, there was widespread political participation that took the form of voting, in broadly-based assemblies, to select magistrates and commissioners, establish laws, and on the guilt or innocence of men accused of crimes against the state (Taylor 1966: chapter 1).

The situation in Rome during the Republic was highly conflictive and the corporate political system was under constant pressure from patrician and other wealthy interests. Frequent warfare, including a major military crisis following the invasion of Italy by Hannibal in BCE 218, tended to strengthen the political position of the elite families and, by extension the power of the Senate (e.g., Briscoe 1989: 78-9). But the basic system of governance was maintained after the defeat of Hannibal, described as a “mixed constitution” by the Greek Polybius (in Astin 1989: 163). The mixed constitution was a system of government through three major institutions, the elected magistrates, the Senate, and the citizen voting assemblies (ibid.) The Senate was an ancient body first established by the mythical founder Romulus that, by the late Republic, had developed into a deliberative body made up of 300 aristocratic and wealthy men who had performed magistracies. The Senate’s main source of power was its control of expenditures from the state treasury, otherwise, it was considered only an advisory body. Day-to-day government was carried out by magistrates, and by the major voting assemblies that included commoner participation. Of the magistrates, *consuls* were afforded the most authority. They could command armies, could issue edicts, could preside over assembly and Senate meetings, and “could employ coercion and punishment to enforce their will” (Astin 1989: 163), especially under conditions of crisis, when special powers could be given to a *dictator*. But their actions were subject to *tribunician* (i.e., commoner) veto.

The voting assemblies were not deliberative bodies, but, at least theoretically, afforded voice to commoners. The *comitia centuriata* had the most connection to

military matters, and was organized, as was the military, into units of 100 members, sorted by wealth-grade and age, in such a way that wealthier members had better representation than poorer (Astin 1989: 164). The *comitia tributa* (and similar *concilium plebis*) were assemblies that, in theory, were more egalitarian and could provide more voice for commoners (Astin 1989: 164-5). These latter *populus* assemblies could elect magistrates, including the important *plebian tribunes* and they enacted *plebiscites* (resolutions of the commoners that were binding even on the Senate), as well as conducting some judicial hearings (Astin 1989: 164). The *plebian tribunes*, of which there were 10, had wide-ranging powers to “intervene to protect a citizen against a magistrate, indeed they could veto almost any act of public business in Rome; they could impose penalties ... and they could introduce legislation ...” (Astin 1989: 166). In addition, they attended Senate meetings and hence served as a medium of communication between aristocrats and commoners.

In spite of these egalitarian political changes, Rome faced a growing class conflict, exacerbated by competition between members of the upper class for political prominence (e.g., Wiseman 1994a: 341-3). Roman political history of this time appears as a bewilderingly complex sequence of persons, families, and factions who come and go from a contentious political scene that at times turned violent. Elites, whether patricians, or not patrician but of “known” status (a “plebian oligarchy” of *nobilitas*) (Badian 1996: 1046-7), often connected through marriages and in other ways, in some cases combined resources to influence political outcomes, although inter-elite competition was also evident in political struggles (e.g., Briscoe 1989: 67-74). Patron-client ties and other elite-commoner social networks might also be used to mobilize factions (Astin 1989: 167-71). These highly contingent, person-centered social actions placed a premium on noble birth and prominence, but combined them with the necessity for talent, ambition, and social ties to succeed.

The social forces that sometimes pitted powerful individuals against corporate political economy were played out against the backdrop of a militaristic cultural orientation and nearly continuous expansionist warfare, the booty from which often passed into private hands and hence exacerbated social disparities and political competition (Astin 1989: 181, 188, 196), as well as depriving the Roman people of the benefits of conquest (Wiseman 1994b: 390). This dynamic mixture at times posed a problem for the polity and its democratic form of governance, namely, the emergence of highly capable and popular leaders whose actions could threaten the delicate balance of powers between governing bodies and between the elite and commoners (e.g., the case of P. Cornelius Scipio, conqueror of Carthaginian Spain during the crises of the Second Punic War [in Astin 1989: 174-5]). Such individuals could “distort the conventional pattern of competition for office and power” (ibid.: 175), and could challenge the sense of *mores* (expected standards of conduct of the elite) that included social discipline, recognizing the authority of public institutions, the importance of corporate responsibility, and maintaining a modest lifestyle (Astin 1989: 181-5). Empire-building entailed other social costs, especially among rural families in Italy, including extensive military demands on farm families, and an influx of wealth and slave-based *villa* agricultural production in rural Italy that often brought loss of land to small-holders. These stresses prompted a phase of

egalitarian reform under Tiberius Gracchus and his brother Gaius which resulted in land redistribution and which provided new measures to regulate the agency of state authorities, provided a state-subsidized grain supply, new public works, and better terms of military employment (Potter 1987: 53).

During this militaristic and contentious Late Republic Period, Sulla, Crassus, Cato, Clodius, Cicero, Pompey, and Caesar, emerged as key political actors. The latter, especially, built his reputation in large part on his egalitarian legislation (for example, the *acta senatus* that made the Senate's deliberations available to the people), land redistribution to the poor, administrative reform, and success in protecting the provinces in Narbonensian and Cisalpine Gaul and the Adriatic coast of Illyricum. By 48 BCE, in dispute with the senate, Caesar invaded Italy and was declared *dictator* (a special magistrate position) (Rawson 1994: 431). Over time, he accepted more and more power and symbols, approaching the status of deified king in the Hellenistic manner, while never allowing it entirely (e.g. Rawson 1994: 464-5). Between his crossing of the Rubicon to invade Italy and his assassination, Caesar undertook to consolidate power and to develop a program of governmental reform. He stacked the senate with followers, manipulated the commoner assemblies, reducing their functions to "a matter of form" (Abbott 1963: 138) and secured important magistracies for himself and others, including a *tribunate* which allowed him to veto the senate and convene the *plebian* assembly (ibid.: 134-5). He introduced reforms to make provincial governors more accountable to the state (ibid.: 138). He based the tax system and grain distributions more firmly on census data, and aimed to regularize community governance (as *colonia*, *municipium*, or *civitates*) by developing a charter for municipalities that required councils to elect magistrates (*lex Iulia municipalis*) (Galsterer 2000: 349). He brought in many new senators from various parts of Italy to rebuild that body along lines beneficial to him (and increased their numbers to 900). He also built new buildings so Rome could compete with Alexandria and the other great cities of the Mediterranean, while making and enforcing sumptuary laws to restrict luxury consumption. As permanent *imperator* he alone commanded armies and public finance, and he "put his own slaves in charge of the mint and taxes" (Rawson 1994: 461), a precedent that influenced imperial policies during the focal period.

Following the assassination of Caesar, Octavius alone emerged as the empire's leader. His strategy was to centralize power and minimize the potential that a rival could challenge his authority, but he did in such a way as to "cloak his extraordinary powers in traditional terms, and to reserve for the old institutions the nominal exercise of their old functions" (Abbott 1963: 275). For example, he allowed for the transference of state power to the senate and people, while retaining a *consulship* as well as *tribunician* power. The senate then conferred on him an *imperium proconsulare* affording him control of much of the military and the titles of Augustus and *princeps* (first citizen) (Abbott 1963: 268). *Tribunician* power, in particular, an older position left over from the Republican period that had given commoners considerable control of the senate, voting assemblies, and the magistrates, proved valuable to him, since the nature of power vested in it was varied and largely unspecified (Abbott 1963: 271).

Generally speaking, the new powers afforded the *princeps* decreased the degree of open political discourse and commoner voice, while at the same time his reforms benefited many people by allowing for a greater degree of control over the agency of lower officials, especially the provincial governors, and by augmenting the effective governance of Rome and offering more public goods such as aqueducts and fire and police departments (Abbott 1963: 280). A census he called for in some provinces allowed for the assessment of a rational land tax and personal tax to replace the arbitrary and abusive taxation practices of the Republican period governors. The reformed governmental systems of Caesar and Augustus were largely carried forward to the focal period that began in CE 69 with the reign of Vespasian and ended with the assassination of Commodus (summarized in Griffin 2000a and b).

Venice

The focal period for Venice (also known as The Republic of Venice, The Commune of Venice) is CE 1290 to 1600 (the following historical overview of events leading up to the focal period is summarized, in part, from Norwich [1982: 4-283, 630]). Early state formation in this area, as in other areas of Italy, probably dates to the early iron Age, 9th to 7th centuries BCE, and may be represented by the Atestina (or proto-Venetian) archaeological culture (Torelli 2000: Figure 3; cf. Barker 1988). Venice itself was founded near the end of the Roman Empire, sometime after CE 421, when the failure of Rome to provide for security forced some populations to retreat to the islands of the Venetian Lagoon. By 523 the Venetians had established self-government under the auspices of Constantinople.

The early history of Venice is marked by commerce, shipping, and the establishment of a communal form of government that, in part, reflects the continuation of Roman governing institutions (Epstein 2000: 278), for example, in 726, the Venetians rebelled against Constantinople and elected their first *dux* or *doge* (leader), illustrating the role of a popular voting assembly in the political life of the community. According to Epstein (*ibid.*: 278-82), several additional factors combined to produce the communal form of the Italian city states such as Venice that had emerged by the 13th and 14th centuries: (1) The fragmentation of territorial rule of the 9th and 10th centuries, requiring modes of self-governance; (2) The rebirth of trade beginning in the 11th century and the accompanying social differentiation; and (3) A 12th-century revolt against Frederick I's control. The desire for self-governance coupled with growing inequality brought social tensions and factionalism that were resolved by building a more egalitarian power-sharing system with offices such as the *capitano del popolo*, charged with defending the interests of the common people (Epstein 2000: 284).

At the same time, there were social forces at work bringing an end to popular participation in government. The main problem was that control of the agency of holders of the *doge* position proved increasingly difficult, and the response was a transition from a more democratic system to a more oligarchic system in which a

small nobility placed more and more limits on the *doge's* agency, including the selection of two ducal counselors responsible for monitoring the *doge's* activities to prevent the abuse of power. Between 1172-1173, additional changes were instituted that lasted through the focal period. The Great Council, composed of 480 prominent Venetians, was created, a new legislative body responsible for selecting all chief officials of the state. These responsibilities included appointing the electors who selected new *doges*. In the final decade of the 13th century, the Great Council was closed to all except those whose ancestors had sat on the council. This move effectively created a hereditary nobility in Venice and an oligarchical government dominated by the rich and powerful of the city. Over the following centuries the size of the Great Council grew, hovering between 1500 and 2000 members from the mid-fourteenth century onward. Finally, all other high level officials were elected from the members of this council. So membership was the key to power within the Venetian oligarchy. During the reforms of 1172-1173, the number of ducal counselors was raised from two to six forming the inner council or *signoria*; and the Senate, which had been created earlier, was given increased powers, especially in the area of foreign affairs. During the late 12th century, the Council of Forty (*quarantia*) was created and ultimately became the central judicial council of the state. In 1310, following a failed coup, the Council of Ten was created. The council was given wide-ranging police powers to maintain order and root out rebels before coups or assassinations of important officials could be carried out.

England

The focal period for England is the reigns of Edward I-III, especially Edward the III, especially the period from CE 1330 to 1350. By the end of this period, ruler control was weakened as the Parliament and Commons assumed stronger roles in governance (Holmes 1962: 236). We selected our focal period because it illustrates many features of what might be called English feudalism (Comninel 2000), but, our decision was also influenced by a very useful source, a series of volumes titled "The English Government at Work 1327-1336" (Volume I: Central and Prerogative Administration, edited by William A. Morris [1940], Volume II: Fiscal Administration, edited by William A. Morris and Joseph R. Strayer [1947], and Volume III: Local Administration and Justice, edited by James F. Willard, William A. Morris, and William H. Dunham, Jr. [1950]).

While early state formation in England might have occurred prior to Roman conquest, "under the influence of Roman diplomacy and Roman trade" (Bradley 1991: 61), it is more likely to have been a direct result of the Roman invasion and establishment of administrative capitals and territories after CE 61. At this time, the governing apparatus was typically Roman, with a civil-military administration under the direction of the governor and a separate financial administration under a *procurator* (Hunter Blair 1963: 91), and settlements were organized as *colonia*, *municipium*, or *civitates* (ibid: 95-96). The first two settlement types consisted of Roman citizens and

the third of local tribal aristocracy. Each had a local senate composed of 100 men, which annually elected pairs of magistrates. Finally, the Romans used a combination of tax revenues and labor tax to provide Britons with a range of public goods (ibid.: 92-94, 97, 120). These goods included the state funded construction of an extensive road system for military and political functions, and even private commercial activities (ibid.: 92). The Romans used *corvée* to dig drainage canals bringing new and highly productive land under cultivation, which they subsequently supplied to the laborers in return for their service (ibid.: 120). Lastly, the Romans provided internal security from potential warring factions within the Lowlands region and protection from raids emanating from the Highlands of Scotland (ibid.: 47, 97). We mention these complex modes of governance and the provision of public goods to make the point that, by the focal period, the mode of government was both less corporate and less collective than it had been under Roman control.

Despite these highly effective measures, beginning in the CE 380s the Roman administration started to fragment with the establishment of client kingdoms, the reorganization of civil administration into five provinces, and the weakening of ties with the empire (Hunter Blair 1963: 154). In CE 410, the emperor essentially withdrew any remaining military support and made communities responsible for their own defense (ibid.: 155). For a brief period, Britons were able to establish independent governments and protect themselves, but by the 450s Saxon rebellions and attacks were beginning to change the power structure of England (ibid.: 163-164, 166-167). From CE 552 to 590, the Saxons expanded their power in England at the expense of the British, and the political landscape of the island became increasingly fragmented.

The change from Roman rule to British-Saxon rule marked the decline of a highly collective and bureaucratic government and the rise of a system based on personalized patron-client relationships (Hunter-Blair 1963:249) within the context of a segmentary state that fragmented power and severely curtailed collective action (Holmes 1962: 17, 26, 30, 67). It appears that the senates, which had been established by the Romans, came to be dominated by ealdorman and evolved into the shire courts maybe as early as the 7th century (Hunter Blair 1963: 246), although Baker (1990: 4-5, 7-8) argues that they may have prehistoric antecedents. The shire courts seem to have preserved some limited aspects of voice at the local level in Anglo-Saxon society. Thus, they may have formed the basis for a national council or parliament by selecting shire representatives to attend the royal court (Holmes 1962: 27; Hunter Blair 1963: 245). Yet the powers of “parliament” during the focal period remained fairly limited and acted primarily as a national court for the nobility with some power over taxation and only later became a “taxing and debating assembly” after the focal period (Holmes 1962: 83) as well as becoming the “acknowledged forum for consultation between the king and his realm” (ibid.: 236).

English lore indicates that there were seven kingdoms following the rise of Anglo-Saxon power, yet the reality of the political landscape during the post-Roman Dark Ages was much more complex (Brooke 1961: 31-75). During the 7th century, a confederation of many kingdoms emerged, with Northumbria as

the hegemonic power in England. Subsequently during the 8th century, the Northumbrians were replaced by the Mercians at the apex of this confederacy. Then Wessex came to dominate the system for a brief period. But by 871, this confederacy of Anglo-Saxon kingdoms was gone and Vikings had begun to establish polities on the island. In the context of Anglo-Saxon struggles against the Vikings, Alfred, king of Wessex, laid the foundation for a united England, which took another 300 years to be completely established. Importantly, the King of Wessex and his successors brought the shire and hundred courts under the control of the crown and prevented their domination by the territorially based nobility. This was an important accomplishment because, for a time, the hundred courts provided a venue for the local population to negotiate taxes with the crown. The kings were also able to establish royal control of sheriffs and, thus, limited the power of local nobility over them as well. The Norman conquest of England in CE 1066 (Brooke 1961: 96-110) brought additional changes relevant to understanding the political system of the focal period. King William sought to reorganize the land tenure system by redistributing land and establishing a strongly militaristic feudal system. Under this new system, the importance of the hundred court was diminished, which further reduced commoner voice in medieval England. At the same time, the agency of individual sheriffs was limited and royal control over them expanded.

However, the power of the nobility grew following the conquest and by 1215, the barons had managed to limit the autonomy and power of the king, as expressed in the *Magna Carta* (Brooke 1961: 220-231). And for a brief period in the mid-thirteenth century, they were able to further limit his power and control the affairs of state and pushed for more limits on the crown's independence. The result of these actions was essentially a continual battle over power between the aristocracy and king that lasted well beyond the focal period. One important outcome was the development of parliament as a national body that increased the power of a large part of the aristocracy, and, for the first time during the reign of Edward II, they were able to remove the king from the throne (Waugh 1991: 201, 211).

Ottoman Empire

The focal period for the Ottoman Empire is the "Classical Period" (CE 1300 to 1600), especially the latter 15th century through the reign of Suleiman I (1520-1566), who preserved many of the governing systems of Mehmed II (1451-1481).

It is not known with certainty when the earliest state developed in the core zone of the Ottoman Empire, which was in northwest Anatolia and adjacent regions of northern Greece. Perhaps the earliest state formation could be attributed to Hittite incursions into this general area around 1600 BCE (e.g., Macqueen 1986: chapter 3), but there was little continuity from earlier phases of state formation in this region into the Ottoman Period. The state's Turkic founders, and much of the core zone population, were immigrants from Central Asia, and their institutional and

organizational arrangements reflect primarily a combination of Central Asian and Islamic ideas of governance, although one stated goal of some state-builders here was to reinstate a polity on the scale of the Roman Empire, if not with its characteristic institutions.

Ottoman state formation is traced to CE 1300, when it first developed as a frontier principality located at the fringes of both the Seljukid Sultanate in Asia Minor and the Byzantine Empire (Inalcik 1994: 11). Under pressure stemming from the conquests of Genghis Khan, a first phase of Ottoman expansion and conquest was carried out by Süleyman Pasha, who established bases at Gallipoli and Thrace. His success is attributed to his ability to attract landless people, including “Turkish immigrants from Anatolia, landless peasants, nomads, and all kinds of uprooted people seeking a new life on the other side of the Straits” (Inalcik 1994: 11). With these new recruits, subsequent leaders made more conquests in eastern Bulgaria and Macedonia, regions that were important in terms of European and Byzantine access to Constantinople, and which brought the Ottomans to the attention of Europeans. The Ottomans made gains in Anatolia by about CE 1400 (*ibid.*). Faced with threats from a Crusader-Hungarian-Venetian alliance on one side, and the followers of Timur’s Mongol Empire in Iran, on the other, military setbacks slowed expansion temporarily, but under Mehmed II and his immediate predecessors, control of Anatolia was regained and Constantinople was conquered in 1453 (Inalcik 1994: 13).

Part of the success of the Ottomans in the Balkans was the protection they offered to the Orthodox Church (which the Venetians and Hungarians, both Catholic, would not do), and, in part, owing to the prior oppression of peasantries in the local feudal-like small polities that had developed in the aftermath of Byzantine authority. The Ottomans replaced these feudal systems with a somewhat more centralized authority (Inalcik 1994: 15). However, the Ottoman mode of political incorporation of conquered areas, the *timar* system, reproduced some elements of the prior feudalism. A *timar* was a prebend awarded to a soldier in exchange for military service, and gave *sipahis* (prebend holders) considerable local autonomy in terms of tax collection and maintaining the peace. A third element in Ottoman success was their emergence as a significant sea-power in the Mediterranean, even defeating the Venetians (1499 to 1503) (Inalcik 1994: 19-20).

After Mehmed II’s conquest of Constantinople (Later renamed Istanbul), he endeavored to “restore the furthest boundaries of the Eastern Roman Empire” and expanded his polity into Serbia, the Morea, Bosnia and Herzegovina, Euboea, and northern Albania, as well as into Anatolia and the Crimea, in essence controlling a large area between the Danube and the Euphrates (Inalcik 1994: 18). These were steps toward what he hoped would eventuate in the conquest of Christendom (Necipoglu 1991: 11). During the 16th century, Ottoman power was extended by Suleiman I (1520-66) to include Hungary, Vienna, Azerbaijan, Mesopotamia, Egypt, the Arabian Peninsula, parts of North Africa and the Black Sea. As the “protector of the holy shrines in Mecca, Medina, and Jerusalem,” Suleiman claimed possession of the Islamic Caliphate (Necipoglu 1991: 22). At the same time, the

Ottomans extended commercial privileges to France (1569), England (1580), and the Netherlands (1612), giving considerable impetus to economic development in the three polities (Inalcik 1994: 21).

By the last decade of the 16th century and the early 17th century, fiscal problems and military reversals brought decline and loss of territory on both eastern and western fronts, and the beginning of Ottoman decline at the same time that the European economies were beginning to grow. "The Ottoman failure meant that a traditional Asiatic culture, even when it had borrowed war technology from the West, was doomed before the rise of modern Europe ... The Ottoman economy and monetary system collapsed in the 1600s mainly because of the aggressive mercantilistic economies of the Western nations that replaced the Venetians in the Levant" (Inalcik 1994: 22). However, internal problems also figured into causes of decline (e.g., Wright 1935: 55-60). Population pressure in Anatolia produced numerous underemployed peasants and nomadic pastoralists who exacerbated internal instability and lawlessness just as the Iranians were beginning to pressure the empire. A persistent problem of grain shortages is apparent after the middle 16th century, exacerbated by contraband trade in grain that sometimes involved the actions of Ottoman officials and even *ulema* who "were actively involved in this profitable trade" (Inalcik 1994: 183). After 1590 the financial situation of the empire was precarious, leading to an increase in emergency levies and a rapid growth in the amounts due for the non-Muslim poll taxes; these and "abuses committed during their collection aggravated the discontent of the *reaya*" (peasants) (Inalcik 1994: 24). Additionally, the flood of silver coming from Europe after the 1580s disrupted the financial stability of the Ottoman silver currency (ibid.: 25). Following the focal period there ensued a phase of Europeanization and increasing dependence on western powers to achieve political ends (Inalcik 1994: 1).

New World Societies

We made the decision to include New World polities, Aztec and Inca, in the sample with some trepidation. On the one hand, including them is an ideal way to maximize sample variation, as both Mesoamerican and Central Andean states developed completely separately from Old World states. On the other, both are somewhat deficient in some categories of information we require for our coding. Mesoamerican peoples used writing, but the Aztec pictorial manuscripts (*codexes*) of most relevance to our coding are all very early Colonial Period copies of aboriginal texts or are new works commissioned by Spanish authorities, although all are done in the native tradition, and they only minimally reflect Spanish influence (Boone 1996: 182). Other sources of information for both Aztec and Inca are Spanish in origin, including Conquest-Period accounts and early Colonial Period censuses and other administrative documents, and it is not always clear to what extent the composition of these texts may represent a jumble of post-Conquest political and economic

interests that may reduce their value for understanding prehistoric political economy. Over the centuries since the Conquest Period regional specialists have combed through sources such as these and the resulting body of work, combined with recent archaeological research, we think provides a sufficiently-detailed and valid body of information from which we could code, although sometimes with difficulty. For Mesoamerica we depended heavily on Berdan (et al. 1996), Davies (1987), and van Zantwijk (1985), and for the Inca, D'Altroy (2002) and Murra (1980) were especially useful.

Background to Aztec State Formation

The long-term historical development of complex societies in Mesoamerica is well known from archaeology and epigraphy. Across Mesoamerica, sedentary agricultural life emerged by about 1400 BCE, and between that time and 950 BCE there ensued increased social complexity, inter-regional exchange of goods, and a broadly shared "Olmec" symbolic-expressive system during what is termed the Early Horizon (Grove and Joyce, eds. 1999; Sharer and Grove, eds. 1989). Following the decline of this early phase of cultural integration and interregional exchange, there was a period of comparative stylistic localism and reduced interregional exchange (Blanton et al. 1993). This more fragmented social landscape was the context for a second phase of rapid social change, from about 500 BCE to 200 CE. Regional populations grew, people congregated in urban centers, and the first states in Mesoamerica emerged in highlands regions, especially the Valley of Oaxaca (Blanton et al. 1999) and the Basin of Mexico (Millon 1973; Sanders et al. 1979: 97-102). Shortly after 500, Monte Albán was founded and rapidly expanded to a population greater than 5,000 people, becoming the center of the first state in Mesoamerica (Blanton 1978; Blanton et al. 1999). By 100 BCE, Teotihuacan had also emerged as an important urban center in the Basin of Mexico (Sanders et al. 1979: 101).

During subsequent centuries of the Classic Period (CE 200-700), Teotihuacan became the most important Mesoamerican polity influencing political, economic, and stylistic change as far away as Monte Albán, Tikal (a lowland Maya polity), and Kaminaljuyu (Blanton et al. 1993: 88; Martin 2001). By the end of the Classic Period, the regional states of the highlands fragmented and were replaced by small weak cities that controlled relatively limited territories (Diehl and Berlo, eds. 1989; Kowalewski et al. 1989: 251-305). In the central Maya Lowlands (the core area of Classic Maya sociopolitical developments), population fell dramatically and this area never again became an important center for social development (Sharer 1994: 338, 341).

Teotihuacan is one of the most intriguing and enigmatic of the Native American states. It was a large polity, with a capital population of over 100,000 (Cowgill 1997; Millon 1973), living in a highly planned city with massive public buildings arrayed along the main north-south avenue that included the Pyramid of the Sun, one of the largest constructions of the ancient world. At the same time, the

Teotihuacanos developed a strongly corporate political system during the post-200 CE period, in which the public display of individual identity and conspicuous consumption were rejected in favor of a collective identity and group ideology that point to a strongly corporate political economy (e.g., Pasztory 1992, 1997; see also Blanton et al. 1996: 9-10). The nature of government is not clear. Rulers, palaces, and royal burials have not been found (Cowgill 1997; Millon 1992: 400). Architecturally, this corporate pattern manifested itself in large open spaces and massive public architecture which could accommodate large sections of the population in group rituals or festivals (Cowgill 1997; Millon 1973, 1988). Moreover, the city population, from high-level political officials to commoners, resided in large apartment compounds that were uniformly plain on their exteriors (Cowgill 1997:137) and would not have communicated status information.

History of the Aztec Polity

The focal time period is CE 1428-1521, from the formation of the Triple Alliance (see below) to the Spanish conquest, but state formation during the Mesoamerican Postclassic Period had a long and complicated history. Periodically, over the 500 years of the Postclassic Period, following Teotihuacan's collapse around 700 CE, regional states were developed, such as Tula, Chichén Itzá, and Mayapán, but these periods of state formation were relatively brief compared with the longer-lived Classic Period polities (see Diehl 1983; Kepecs et al. 1994, Sharer 1994). However, within this fluctuative political environment, Mesoamerican populations became increasingly involved in inter-regional exchange systems, culminating in the development of a materially rich Late Postclassic world-system, especially after about 1200 CE (Blanton et al. 2005; Smith and Berdan 2003). After this time, the population within the Basin of Mexico grew rapidly and it emerged as a key core region in the world-system at the same time that several of its polities, especially the Acolhua (from their capital at Texcoco) and Tenochca (from their capital at Tenochtitlan), increased in inter-regional importance (Berdan and Smith 2003; Sanders et al. 1979: 149-181). These two polities emerged during a period of political competition and warfare between city-states (Brumfiel 1983; Smith 2003: 38; Smith and Berdan 1996: 1). Two of them, Azcapotzalco and its Tepanec allies became the dominant power on the west side of the Basin, while Huexotla-Coatlichan headed the Acolhua coalition to the east (Smith and Berdan 1996: 2; van Zantwijk 1985: 106). By CE 1427, Azcapotzalco was dominant in the Basin of Mexico, but the rulers of Tenochtitlan, of Texcoco (the Acolhua polity), and of Tacuba forged a Triple Alliance to confront it (van Zantwijk 1985: 109-111). Together they consolidated power in the Basin and beyond to build the largest empire in Prehispanic Mexico, conquering Mesoamerican territories in the Central Highlands, Southern Highlands, Gulf Coast, and Pacific Coast (Berdan et al. 1996; Carrasco 1999), an area of about 278,852 sq. km and populated by some 5 to 6 million people (Sanders 1970; Sanders and Price 1968: 208; Smith 2003: 58).

The political structure of the Aztec empire was based on a military alliance between three *tlatocayotin* (sl. *tlatocayotl*, independent state), Tenochtitlan, Texcoco, and Tacuba. The political system became more centralized, but each *tlatocayotl* retained a significant amount of autonomy within its individual domain (Lockhart 1992; van Zantwijk 1985: 275, 277). At the same time, Tenochtitlan's influence increased, mostly at the expense of Tacuba (Smith and Berdan 1996: 2). Consequently, the triple alliance really became a binary confederacy of Texcoco (Acolhuacan) and Tenochtitlan (Tenochca/Tepanec), with the latter forming the more powerful half.

History of Central Andean State Formation

The focal period Inca empire (CE 1438-1532) was a final pre-Hispanic episode of state-building in the Central Andes macroregion that had a history of at least 1600 years of state formation. The enigmatic and poorly-understood period from 3000 to 1800 BCE saw the initial development of social complexity on the north coast of Peru and in the highlands, including large sites at El Paraiso, which covered 50 hectares and contained rock mounds up to 6 m high (D'Altroy 1994: 81). The Norte Chico region of the north coast is another area where early social complexity can be detected. The early chronological placement for Norte Chico sites has only recently become evident, so the nature of social change is not yet fully documented. Shady and her colleagues (e.g., Shady and Levya, eds. 2003) tend to see early state formation during the Norte Chico Late Archaic Period, while other researchers are less certain whether or not that would have constituted an episode of state formation (Haas and Creamer 2006). State formation is more likely to have happened following the subsequent Early Horizon, (800 to 300 BCE), a Central Andean-wide integration phase featuring the sharing of the Chavín symbolic-expressive system (summarized in D'Altroy 1994: 84-7, 91-3). As happened in Mesoamerica following the collapse of the Olmec integrationist horizon, state formation occurred during a phase of stylistic localization and reduced interregional interaction locally termed the First or Early Intermediate Period (200 BCE to CE 600), continuing into the subsequent Middle Horizon (CE 600 to 750).

During the Early Intermediate Period, the Moche polity, located on the north coast, is Peru's first well-documented phase of state formation (CE 200 and 600) (Billman 2002; D'Altroy 2002). During this period, the Moche polity extended its power across multiple valleys on the Pacific coast and very large adobe pyramids were constructed at the Moche site itself. In the Central Andean highlands, states emerged slightly later, at Wari and Tiwanaku, beginning about CE 400 during the Middle Horizon (Janusek 2004: 149). Tiwanaku extended its control into the Bolivian jungle, the southern Peruvian and northern Chilean coasts, and into northwest Argentina. According to Janusek (2004: 155) "... by CE 800 Tiwanaku was a bustling urban center of at least 6sq. km and some 10,000-

20,000 people.” We detect possible corporate and collective elements in this city’s remains. Large public buildings with expansive open spaces suitable for communal ritual were constructed, the scale of centralized storage increased, and feasting became an increasingly important aspect of community life (Janusek 2004: 153, 154, 156, 162). Following the collapse of these Middle Horizon states, political units in the highlands fragmented, and the Peruvian coast reemerged as the dominant region in the Andes during the Late Intermediate Period (CE 750 to 1440). The most important Late Intermediate polity was Chimor, whose main period of preeminence was between roughly CE 1100 and 1400. The capital of Chimor, Chan Chan, grew from a large town to an urban center and became the capital of a coastal empire (Topic 1994: 98).

Inca

The focal period for the Inca Empire (also known as Inka, Tawantinsuyu, and Tahuantinsuyu) is CE 1438 until the Spanish conquest in 1532 (D’Altroy 2002: 45). Few details are known about the culture history of Inca governing institutions, although it has recently been established that Inca imperial expansion out of the Cuzco Valley into adjacent regions began in the aftermath of the collapse of the Wari polity, during the period from 1000 to 1400 (Bauer and Covey 2002). This is at odds with oral histories, that justify imperial expansion as a response to an attack, in 1438, on the capital at Cuzco by an adjacent polity, the Chankas (D’Altroy 2002: 207). In these accounts, the Inca king fled but another leader, Pachakuti, mounted a successful resistance and became the Inca ruler. Following this victory, the armies of Cuzco spread out, conquering Peru’s southern highlands and the Lake Titicaca region, and they also made forays into the central Peruvian coast. After CE 1463, Pachakuti’s son, Thupa Inka Yupanki, took command of the armies and spread Inca domination into central Ecuador, the Peruvian coast, and began to move into the eastern tropical forests, the *montaña*. By CE 1493, Thupa Inka Yupanki had extended Inca control over the Bolivian *altiplano*, northwest Argentina, and northern Chile. As a result of the efforts of Pachakuti and his son, the Inca Empire incorporated most of the Central Andes region. In order to administer this vast empire, the Inca left local rulers to govern their people and used a decimal-based administrative system to organize labor for *corvée* demands emanating from the central authority in Cuzco (ibid: 233).

Chapter 6

Revenue Sources

Collective action theorists propose that bargain-making between state authorities and non-ruling groups (especially taxpayers) is a key social process in state formation (e.g., Bates and Lien 1985: 53; Levi 1988: 11-12, 52-68), and that bargaining outcomes will reflect the comparative resource endowments of the bargainers (Levi 1988: 112-12). Since the major resource endowment possessed by taxpayers is their labor and their ability to produce surpluses that can be taxed, they will be in a weakened bargaining position vis-à-vis rulers when a substantial portion of a state's revenues are derived primarily from sources other than a broad population of taxpayers, or when substantial revenues can be gained from a narrow, wealthy, constituency ("external revenues" in our terminology). In these circumstances, revenues originate from specific, highly productive point sources, allowing tax administration to be carried out by a comparatively small, and, presumably, highly motivated work force and administrative staff rewarded with high social standing and a share of the state's wealth. This would apply when foreign trade can be taxed or controlled at one or a few easily-controlled trade ports, or when the state maintains a monopoly control of valuable assets such as mines. Similarly, taxpayer bargaining power is weaker to the degree that rulers directly control significant amounts of land and labor, another category of external revenues in the coding scheme we describe below. Producers in these situations, usually consisting of slaves, war captives, or landless tenants working state land, are less likely than ordinary taxpayers to make demands on rulers.

In contrast, rulers are more likely to strike bargains when they are strongly dependent on the surplus production, labor power, and taxable commercial transactions of a large population of ordinary taxpayers (Levi 1988), what we call "internal revenues." Internal revenues imply collective action problems for rulers and taxpayers of the sort we discussed in chapter 3. These problems are resolved by building a much larger, more complex collection bureaucracy than would be required in the case of external revenues, and also require policies that promote quasi-voluntary taxpayer compliance.

Operationalizing Internal and External Revenues

The evaluation of collective action ideas requires an abundance of information on state revenues, and one of the most important criteria we used in selecting societies for inclusion in the sample was that detailed information be available on the relative importance of different types of revenues. From our review of these data, it became apparent that most states depend on a diversity of revenue sources, both internal and external, so we set out to develop a scaling method that would allow us to measure and compare the degree of dependence on internal versus external revenues. Internal and external revenues, however, are “messy” theoretical constructs that cannot be directly measured, so our next step was to identify coding categories that represent the component elements of each construct, components that are easy to code and that will have high inter-coder reliability (i.e., have “high face validity” in Ember and Ember 2001: 46-47). The component variables we selected are listed in Tables 6-1 and 6-2. We then coded each component on a scale of 1 to 3 (the resulting codes are provided in Table 6-3), so that higher scores indicate a relatively greater dependence on that category. We then summed across the component scores to arrive at an aggregate or scale measure of internal and external revenues for each society (cf. Ember, Ember, and Russett 1992: 587; Ember et al. 1991: 202-5; Labovitz 1967, 1970). Below, we summarize the main revenue sources for each society.

This method worked well, in part. The coding categories were generally clear and easy to code. While we feel the coding was successful, the scaling part of our method was not because our assumptions about scalability turned out to be mistaken in this case. To build a valid scale, each constituent component of that scale is assumed to represent a domain of the overall theoretical construct. An implication of this is that the components should be statistically correlated, demonstrating that each is contributing to the pooled variance of the scale variable (“convergent validity”) (Ember and Ember 2001: 49), something we did not find. We illustrate this with the measures of Cronbach’s alpha for the two component sets, internal and external revenues. This is a measure of how a scale’s components reliably contribute to the aggregate measure, and is based on an average of the bivariate correlations of component items. A Cronbach’s alpha value of .7 is usually considered a minimal level of agreement for a valid scale variable, while our scores are .3 for internal revenues and .12 for external revenues.

Our scaling method thus failed to provide a useful estimate of revenue sources. This is so because, in many cases, one particular type of tax dominates all others in terms of its overall importance to a state’s revenues. This precludes scaling because, for example, while a state might depend heavily on one type of external revenue, it might ignore other possible sources. This kind of selectivity results in low correlation values between the components, but also, potentially, can result in a low aggregate score for that theoretical construct because most of the other components have low scores. For example, both labor and production taxes correlate negatively with our category of miscellaneous other taxes (including, as we detail below, inheritance taxes), indicating that state-builders tend to choose between these alternative modes

Table 6-1 The revenue variables coded for the category Internal Revenues. The letter designators refer to the column heading in Table 6-3

Taxation of Ordinary Market Transactions (a)	
1	= local commodity transactions are not taxed
2	= small or irregular taxation of local commodity transactions
3	= local commodity transactions are regularly taxed
Taxation of Basic Agricultural and Craft Production (b)	
1	= ordinary production is not taxed or very lightly, and these taxes appear not to be important for state revenue production
2	= a moderate proportion of state revenues derive from taxes on ordinary production
3	= taxes are regularly collected based on ordinary production, and constitute an important element of state revenues
State Revenues in the Form of Labor (c)	
1	= labor obligations are not important for the state economy
2	= a moderate proportion of state economy derives from labor obligations
3	= labor requirements are regularly assessed, and constitute an important element of state resources
Taxation of Other Production (e.g., mines) (d)	
1	= not taxed or very lightly, and do not appear important in state revenue production
2	= a moderate proportion of state revenues are derived from these taxes
3	= taxes are regularly collected and constitute an important element of state revenues
Miscellaneous Other Levies (e)	
1	= do not appear important in state revenue production
2	= a moderate proportion of state revenues are derived from these taxes
3	= taxes are regularly collected and constitute an important element of state revenues

of tax collection. Similarly, control of foreign trade correlates negatively with taxation of international trade, perhaps as one might expect: If you control trade, why tax it? Given these difficulties with scaling, we used a more subjective method in which we compared a polity's diverse revenue sources once we completed the coding. When one or more sources of either internal or external revenues were clearly dominant in the state's economy (a fact the sources often point to), we classified the polity as either Internal or External (the column titled Revenue Emphasis in Table 6-3). If there was no clear pattern of internal or external revenue dominance, we classified the polity as "Mixed."

Summary of Revenue Sources

The following summaries are not intended to provide a complete accounting of all revenues collected. Instead, we briefly describe the major revenue sources to make clear what data influenced our decision to characterize a state as having an Internal, External, or Mixed revenue emphasis. Before we begin, we should point out two of our coding conventions for the sometimes confusing revenue data. First, while one

Table 6-2 The revenue variables coded for the category External Revenues. The letter designators refer to the column heading in Table 6-3

Revenue from State-Controlled Land (f)	
1	= the ruler and/or the state directly control little or no agricultural land or similar properties such as mines
2	= the ruler and/or the state own some agricultural land or similar properties such as mines that make a significant contribution to state revenues
3	= the ruler and/or the state control significant agricultural land or other properties such as mines that are key elements of state revenues
Revenues from External Warfare and/or Empire (g)	
1	= ruler has little or no surplus income from external warfare, conquest, or empire
2	= ruler has some revenue from external warfare, conquest, or empire
3	= ruler has extensive revenues from external warfare, conquest, or empire that constitute an important contribution to state revenues
State Control of Trade (h)	
1	= ruler has little involvement in long-distance trade and no monopoly control over such goods
2	= ruler has some involvement in long-distance trade, for example, may claim monopoly control over selected goods of this type
3	= ruler is extensively involved in long-distance trade, has considerable monopoly control over many or all long-distance trade goods
State Taxation of International Trade (i)	
1	= state has little involvement in taxation of long-distance trade
2	= some taxation of long-distance trade
3	= taxation of long-distance trade is an important source of state revenues
Ruler's Direct Control of Labor (j)	
1	= Ruler has little or no direct control of labor apart from the usual broadly-based labor levies
2	= Ruler has some direct control of labor apart from the usual broadly-based labor levies
3	= Ruler has extensive direct control of labor, apart from the usual broadly-based labor levies, and this labor provides an important component of state revenues

of our external tax categories is the degree of ruler-controlled land, we did not code this as a positive in the many cases where ruler is said to “own” all the land, because, typically, this was meant only in a metaphorical sense such that household or corporate group ownership of land was not precluded. For example, in Burma, the ruler was said to hold “absolute proprietary rights over the land” (Koenig 1990: 126, 141-2), but, rather than constituting actual property control, this assertion was only a justification for the payment of production taxes (*ibid.*). In fact, in Burma, ordinary villages of taxpayers were called *athi*, or “land-owner villages.” To code for ruler-controlled land (or other resources) we required specific evidence for direct control, for example, when revenues from ruler-controlled properties were managed by a distinct bureaucratic office set off from the ordinary revenue bureaucracy, and/or it is clear that laborers on that land were tenants, slaves, etc., not taxpayers.

Another coding convention we followed was to regard revenues from conquered provinces as internal to the degree that such provinces had been thoroughly

Table 6-3 Revenue codes. The column headings are: (a) Ordinary Market Transactions; (b) Basic Agricultural and Craft Production; (c) Labor Tax; (d) Other Production; (e) Miscellaneous Levies; (f) State-Controlled Land; (g) External Warfare and/or Empire; (h) Control of Trade; (i) International Trade; (j) Direct Control of Labor

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	Revenue emphasis
Nupe	2	1	1	1	2	2	2	2	2	2	External
Yoruba	2	1	2	1	1	2	3	2	3	3	External
Asante	1	1.5	2.5	2	3	2	2.5	3	2	1.5	Mixed
Bagirmi	2	2	1	1	1	1	3	3	1	3	External
Kuba	2.5	2	3	1	2	2	1.5	2	3	3	External
Tio	2	2	1	1	1.5	1	1	3	3	2	External
Buganda	2	1	3	1	2	3	2	2	1	2	Mixed
Bakitara	1	1.5	2.5	1	1	3	2	1	1	2	External
Lozi	1	2	3	1	1	2.5	2	2	1	2	Mixed
Swahili Lamu	1.5	1	2	1	1	1	1	1	3	1	External
Thailand	3	3	3	2	1	2	1	2	2	1	Internal
Burma	3	3	3	2	1	3	1	2	2	3	Internal
Bali	2	1	3	1	1	3	1	2	1	1	External
Aceh	2	1	2	1	1	2	3	2	3	2	External
Perak	2	1	2	1	1	1	1	1	3	1.5	External
Java	3	3	3	1	1	2	1	1	2	2	Internal
Vijayanagara	3	3	2	1	1	2	1	2	2	1	Mixed
Pudukkottai	1	2	1.5	1	1	2.5	1.5	1	1	2	Mixed
Mughal	2.5	3	1	1	2	1	2	1	1.5	1	Internal
China	2	3	3	2	1	2	1	1	1	1	Internal
Japan	2	3	2	1	1.5	3	1	3	1	1	External
Tibet	2	3	3	1	3	2.5	1	2	2	1	Internal
Egypt	1	2	2	1	2	3	2.5	3	1	2	External
Athens	3	2	3	1	3	3	1	1	3	1.5	Mixed
Rome	2	3	1	1	2	2.5	1	1	2	2	Internal
Venice	3	1	1	1	3	2	2	2	3	1	Internal
England	1	1	1	2	2.5	3	1	1	3	3	External
Ottoman	2	1	2	1	3	3	2	1	2.5	3	External
Aztec	3	3	3	1	1	2	2	1.5	2.5	1	Internal
Inca	1	1	3	1	1	3	2	2	1	3	Mixed

incorporated into a state's regular tax-collection administration. In these cases, we felt that rulers or similar high-ranking authorities would have little potential for exercising personal control over incomes that are managed by a tax-collection bureaucracy. Tributes from conquered provinces, and other kinds of imperialistic incomes, such as war booty, that are directly controlled by ruler, however, were counted as external revenues, especially when they are paid into a separate bureaucracy that manages the ruler's personal financial affairs.

Coding Summary

Nupe (External)

While there were market and production taxes, and what appears to be a tax on villages (Nadel 1942: 185), still, the incomes from a royal monopoly on the kola nut trade (*ibid.*: 90), wars and raids, and “the king’s private estates” (Nadel 1942: 90) appear to constitute the major revenue sources.

Yoruba (External)

Commoners paid little tax (Law 1977: 229), although free-born Oyo had military and some other labor obligations to the state (*ibid.*: 100, 191). The major revenues collected by the *Alaḥin* (ruler) were from war booty, including the sale of slaves captured in war (Law 1977: 12, 226), but also included taxation of long-distance trade caravans (Lloyd 1971: 12), and the ruler had direct control over a large number of slaves (Law 1977: 67-71, 118, 190, 231-2).

Asante (Mixed)

Most households were obligated to provide military labor (Rattray 1929: 124-5; Wilks 1975: 73). Other important internal revenues were derived from an inheritance tax on personal property (“death duties”) (Rattray 1929: 107-9; Wilks 1975: 147), levies imposed on office-holders (McCaskie 1995: 59), and court fees and fines (Rattray 1929: 111), all coded under miscellaneous internal revenues. At the same time, external revenues were also important. Some gold mines were owned by the state (Wilks 1975: 436), some administrative districts and their tax revenues were under direct control of the state (Wilks 1975: 52), there was income from tributary provinces (Wilks 1975: 66-7), long-distance trade was taxed (Wilks 1975: 48, 55, 424), and the state was extensively involved in commercial transactions in long-distance trade (e.g., Wilks 1975: 444, 689).

Bagirmi (External)

War booty was by far the most important source of revenue (Reyna 1990: 124), along with state control of the slave trade (*ibid.*: 53-4, 128-32), but direct control of slave and other labor by officials of the state were also significant sources of revenues (Reyna 1990: 63-4, 93, 123).

Kuba (External)

Extensive “king’s fields” in each village were worked by commoners (Vansina 1978a: 177). But long-distance trade was key to state income, through control of ivory production (*ibid.*: chapter 8, fn 42), direct involvement in trade (*ibid.*: 194), and taxes on the main international market (*ibid.*: 195). Ruler control of slaves and other categories of unfree persons was a major component of the state economy (*ibid.*: 139-40, 142).

Tio (External)

During the focal period, the political elite were directly involved in the ivory and slave trade (e.g., Vansina 1973: 300, 310, 336).

Buganda (Mixed)

There was a household poll tax (Roscoe 1965: 244), court fees, and an estate tax (Roscoe 1965: 26-1, 27), but the major tax was in the form of labor for a “frequently mobilized militia” (Wrigley 1996: 65). The ruler also directly controlled some land and fisheries, as well as large cattle herds, and even some whole villages (Kottack 1972: 362; Roscoe 1965: 201, 392, 415). Although long-distance trade was not as important as in some other African polities, the king did control much of the ivory trade (Roscoe 1965: 269).

Bakitara (External)

There was no regular system of taxation of ordinary persons, but, in Roscoe’s terminology (1923: 52, 55, 56, 59, 60), there was an occasional “cow tax” and “serfs” would make a “voluntary” payment of beer, grain, and labor, to their chiefly overlord when required. Rulers exercised considerable control over land and cattle herds, and rulers had vast cattle herds that could be grazed anywhere within the polity (Roscoe 1923: 8, 61, 116). One category of persons (*batongole*) were directly responsible to the king (*ibid.*: 56, 83-6, 116).

Lozi (Mixed)

The major tax on commoners was a *corvée* (Gluckman 1961: 38, 51, 63). Rulers and other high officials directly controlled some land, fishing sites, and cattle herds,

and tending to these was part of the commoner labor obligation (Gluckman 1961: 22, 62; Prins 1980: 56-7, 84, 92). Tribute came in from provinces, but some of this was distributed “before all the people” (Gluckman 1961: 40), and there was episodic income from raiding (e.g., Prins 1980: 108). Rulers controlled a small armed force, some slaves, and “followers” who became “loyal dependents” (Gluckman 1941: 32, 1943: 21, 1961: 53; Prins 1980: 72).

Swahili Lamu (External)

Freeborn and slaves were obligated to provide military labor (Prins 1967: 103), but the major tax appears to be on long-distance trade (Ylvisaker 1979: 105, 110).

Thailand (Internal)

Earlier, the people’s direct labor had been of primary importance to the ruler’s taxation system, “but with the emphasis on trade in the earlier Bangkok years as a means to rebuild the economy ... the people now became valued as producers” (Lysa 1983: 385), hence the growth of the tax farming system (*ibid.*: *passim*), that included taxes on agriculture, craft production, and vendors (*ibid.*: 387), however, some labor obligations were maintained. In theory, all of the people (*phrai luang*—“king’s men” and *phrai suai*—craft specialists) of the kingdom not directly obligated to members of the nobility (*phrai som*) (and excepting slaves) owed allegiance to the king, and were assigned to a *krom* (an administrative bureau) for which they provided labor (Rabibhadana 1969: 77; Rabibhadana 1975: 96). Early kings were engaged in foreign trade (Rabibhadana 1969: 141), and had “royal cargo ships” (*ibid.*: 67) and royal monopolies in some reigns, and monopolies on goods exchange were also sold (*ibid.*: 141). Wales (1965: Appendix 1) indicates monopolies on some goods, including tin and ivory, during the reign of Rama II. But, increasingly, long-distance trade was less of a royal source of income, from the reign of Rama III (Lysa 1983), because the state was switching its emphasis to sources of internal taxation (cf. Cushman 1981).

Burma (Internal)

The agricultural economy was basic to the state’s revenue system (Aung-Thwin 1990: 3; Koenig 1990: 120; Lieberman 1991: 17), and taxes on market transactions and basic agricultural production were significant sources of state income (Koenig 1990: 56, 57), as were episodic labor drafts (*ibid.*: 33, 57, *passim*). Some of these agricultural taxes were collected from the “crown service population,” (*ahmudan*)

who provided many kinds of services to the state, from cavalry to palace guards, servants, to lower-ranking crown cultivators. They were categorically distinct from *athi* (land owner villages) and were more directly administered by departments of the central administration than the *athi*, who were largely under hereditary territorial and local officials. The state viewed the crown service population as its chief resource (Koenig 1990: 107-8), and it made up about 40% of the population (ibid.: Table 2). This category presented a coding problem. Should *ahmudan* be considered a ruler-controlled revenue source, and hence as external revenue? In this case and others like it, we coded it as an internal revenue source, for two reasons: First, to build its revenue base and to exert more direct control over tax collection, a state may develop new revenue systems more directly tied into the state administration, and hence less under the control of traditional ascribed or other similarly entrenched elites, without it being “ruler controlled” or “ruler owned” in any meaningful sense. As Koenig (1990: 115) points out, Crown Service households paid taxes and cannot be seen as a non-taxpaying group in opposition to *athi*. Secondly, as we pointed out, a characteristic of external revenues sources is that they can be managed by a small cadre of officials, thus avoiding the kinds of collective action problems inherent with internal taxes. Since the *ahmudan* constituted 40% of the total population, Burmese rulers would have faced collective action issues in this domain.

Bali (External)

Agricultural production was not directly taxed by the state (Geertz 1980a: 66). There was a tax in grain (based on amount of irrigation water used) (ibid.: 68, 178-80, fn 68-19) amounting to about 10% of the total harvest (ibid.: 179, fn 68-19), but rulers did not use this income. Instead, it went to the support of the agricultural temples (Schulte Nordholt 1996: 130). As we have documented, Bali featured a segmentary organization in which governance was carried out by a series of royal households with varying levels of prestige and degrees of territorial control over secondary royalty (“satellite” lords) (Schulte Nordholt 1996: 146-9). We coded the revenue system as external because these various noble houses obtained revenues from those specific fields they owned (not just in a metaphorical sense), that were worked by tenants. Tenant rents were then collected by administrative assistants (*sedahan*) who worked directly for noble households. The leading Mengwi royal family also controlled a harbor at Blambangan that would have provided access to the Java Sea trade, and some revenues also accrued from this source (Schulte Nordholt 1996: 41-4).

Aceh (External)

This was also a strongly segmentary polity, so there was no unified revenue policy, but the main revenues benefiting the *sultan* of Aceh were derived from his control

and taxation of the main and other port-towns and the international commerce that flowed through them (Hurgronje 1906: 128, *passim*).

Perak (External)

Toll-stations taxed the movement of goods along the rivers (Gullick 1958: 27, 126), and, by far the most important source of tax was on the export of tin into international markets (*ibid.*: 126).

Java (Internal)

By the focal period, long-distance trade was no longer an important tax resource. The major income sources were labor and agricultural taxes from the peasantry (Moertono 1981: 135-6), and taxes on the "... numerous small and large market places ... and the all too numerous stops on roads and rivers formed a considerable source of income" (Moertono 1981: 120-1). There was also a substantial agricultural production tax, said to be 40% or 50% (*ibid.*: 116), and a labor levy. Soldiers to supplement the king's guard were drawn from a general levy (Moertono 1981: 69, 124), and the general levy was drawn on for extraordinary labor requirements such as public construction (*ibid.*: 124). There was also evidently some direct ruler control of labor. Mataram rulers "moved large numbers of the population from the conquered regions to Mataram proper..." (Moertono 1981: 68, 134-5; Schrieke 1957: 146-9). It is not known where they were moved to or the institutional framework for this displaced labor. It is possible they were placed on *narawita* lands (crown domains) or settled in colonies (Moertono 1981: 113). It is not clear how many people resided on crown lands or in colonies, but the numbers seem to be small. Some were possibly conquered tribal peoples who lived in special villages or were brought to central Java to serve the king (*ibid.*: 135). Revenues from tributary states, Palembang, Jambi, and Suykudana appear minimal, especially later in the focal period (Schrieke 1957: 227).

Vijayanagara (Mixed)

Internal revenues included taxation of market exchanges, with cloth one of the most important traded commodities (Sinopoli 1994: 232; cf. Stein 1989: 41; Saletore 1934, Volume I: 218-28). There was an important tax on basic agricultural production, and the comparatively less-densely populated upland core zone (where the new capital was built) emerged as a major internal tax resource in this regard. The tax system of the core zone (78,000 sq. km) and other regions had been reorganized

to allow for more direct administrative control of taxation by replacing traditional rulership with *nayaka* (e.g., Karashima 1992: 197) or other ruler-appointed administrators, and by promoting agricultural and commercial development through endowments to temples (Morrison 1995: 167; Palat 1987: 178; Sinopoli 1994: 226). While areas where rulers were actively working to generate new revenues is sometimes referred to as land “owned by the king” (Sinopoli 1994: 226), other sources indicate that, rather than “ownership,” in these areas ruler strategies were intended to enhance state control over revenues and enhance revenue production, especially given the difficulty of exacting taxes from the traditional segmentary domains in other parts of the empire (e.g., Karashima 1992: 203-8; Stein 1989: 47, 61-7; Sinopoli 1994: 226; Smith 2006: 487). Lands developed by *brahmins* based on endowments from the state were subject to tax “like those owed by the average citizen” (e.g., Saletore 1934, Volume I: 231; cf. Stein 1982b: 111). Vijayanagara also depended on some external revenue sources. The state appears to have controlled some aspects of foreign trade in order to maintain control over the importation of horses (e.g., Palat 1987: 182) but other commodities were taxed (Sinopoli 1994: 232). Military and administrative control over Arabian Sea ports allowed for increased state revenues, possibly through tax farming (Stein 1989: 41).

Pudukkottai (Mixed)

The state appears to have controlled a substantial amount of land, allowing it to grant some 70% of the total cultivable land as tax-exempt endowments (*inam*), in part to governing officials, but also to temples, charities, monasteries, and *brahmins* (Dirks 1987: 117 and Appendix). The other 30% was taxed land. The vast scale of these *inam* grants point to perhaps a greater degree of ruler control of land in this case than is true in the other coded societies. As Dirks (1987: 124, cf. 126-7) put it: land “... while not the ‘property’ of the king in a western sense, was implicated in a structure of political authority.” There was a tariff on trade, as well as taxes on all kinds of production such as trees, fish, etc. (ibid.: 117, 312). Rulers appear to have had some ability to mobilize labor, working through local community and caste groups (ibid.: 280).

Mughal (Internal)

There were local market levies on non-agricultural commodity exchange (Sarkar 1963: 214), customs duties on imports, and taxes on arts and crafts (Grover 1994: 245), but these were not major sources of state revenue and often were prohibited or reduced by rulers (ibid.; cf. Farooque 1977: chapter 5; Habib 1963: 65-6). The most important tax was exacted on production from the polity’s vast core area where a land and population census was carried out (*zabt*). This was a sophisticated

system in which tax was based on estimated crop production, not land area per se (e.g., Habib 1982a: 235), so it could be viewed as a progressive tax system. Compulsory labor for agricultural producers or others was not a part of the fiscal system in the core zone (Habib 1963: 248), but outside the core zone the endogenous elite (*zamindars*) were required by the state to recruit labor for purposes such as road construction (Farooque 1977: 23).

China (Internal)

Late in the 14th century, a massive land and population registration program was completed (the “Yellow Registers”) that was more ambitious than those of earlier dynasties (Wiens 1988: 20). In this system, taxpayer households were organized according to the *li-chia* system (a new mode of community organization responsible for tax collection, described below), and categorized according to the amount of male labor in the household and the amount of land owned, and these, in turn, determined the land tax they owed as well as their labor tax (ibid.: 21). Customs houses collected transit fees on all private shipping using the grand canal (Hucker 1998: 84). This and other customs duties were not important sources of revenue (Huang 1998: 144), although Heijdra (1998: 499) declares that “trade along the major rivers was the economic mainstay of the economic structure of the empire.” Market-place revenues were marginal to the overall state revenue stream (Heijdra 1998: 509). Households were expected to pay taxes on farm products, especially grain (from men’s labor), and cloth (from women’s labor) (Bray 1997: 186). Labor service could be required of households, and military households owed the military service of one able male (Hucker 1998: 63). Service levies “covered a wide range of material and labor requisitions” that were fixed, as well as ad hoc projects such as road maintenance and canal construction (Huang 1998: 134). The state attempted to impose monopoly control of salt distribution in which salt merchants were required to deliver grain to the Great Wall region (where it was needed by soldiers) in exchange for the required salt vouchers (Hucker 1998: 71; Huang 1998: 139-44; Heijdra 1998: 514). A few other state monopolies were held (e.g., tea), and silver and copper mining were taxed (Atwell 1998: 386).

Evidence for external revenues is slight. Beijing and other capital cities, including Nanjing, the southern capital, were surrounded with provinces whose local administrations were “directly attached” (“metropolitan areas”) (Hucker 1998: 10), although this did not imply any direct form of state ownership, just a greater degree of direct administrative control than was exercised beyond metropolitan limits. For most of the dynasty, international trade “was not regarded as a source of public revenue” (Huang 1998: 124). There were Ming laws against overseas private trade (Heijdra 1998: 500). There was some conscription to military duty and military families could be posted in garrisons where required in militarily sensitive zones, but obligated military duty appears as the equivalent of the ordinary labor service, not directly controlled by the ruler (Hucker 1998: 63). The “colony field system”

was an ancient Chinese practice (dating to the Han dynasty) in which households were forcibly moved to areas deemed in need of increased agricultural production, and the Ming expanded this practice to a large scale (the largest number involved that we could identify was 197,000 people [Farmer 1976: 65]). Although households were forcibly moved, they were provided with compensation including tax exemptions (Farmer 1976: 149). Most of these colonies were aimed at building self-supporting military garrisons along the northern border (ibid.: 65). Again, though, rather than direct control by the state, these colonies appear to have fallen within the normal labor obligations of the taxation system. The state often made use of convicts and officials under punishment as sources of manpower (Farmer 1976: 15), but this appears to have constituted a minor source of labor power.

Japan (External)

In spite of the notable commercial development in both rural and urban areas, the basic tax remained the rice tax collected from rural villages (Toshio 1991: 492). But in the *han* (semi-autonomous “feudal” domains of the *daimyo*) these revenues were used for local government costs and so were not a *shogunate* tax (Hall 1991b: 159). The main income for the *bakufu* (the central authority or *shogunate*) was its own “granary land” from which it collected roughly 10.5 million bushels or more each year (Toshio 1991: 495-6). But for the *han*, the grain tax was very important (Toshio 1991: 493). *Daimyo* were required to contribute labor, materials, and funds to the *shogunate* construction programs (Hall 1991b: 159). All households owed at least some *corvée* labor (Toshio 1991: 494).

Japan was coded as having a predominantly external revenue system because the *shogunate* (the Tokugawa family) directly controlled up to one-quarter of all arable land in the country, referred to as the “*shogun*’s granary lands” (Hall 1991a: 8; Hall 1991b: 152-3). In addition, Chinese, Korean, and Dutch traders could only trade at Nagasaki, and this allowed the *bakufu* to profit from trade and control the importation of guns (Perez 2002: 24), and the *bakufu* monopolized commerce in some import goods such as silk thread (Hall 1991b: 175).

Tibet (Internal)

External revenues were collected, including state monopolies of trade goods as well as customs and transit taxes (Carrasco 1959: 87, 213). Some land was also directly controlled by the Dalai Lama and other members of the governing elite, for example (from Carrasco 1959: 85), “Some other land ... is kept under the direct control of the Dalai Lama or his representatives and worked by conscripted peasants or by agricultural laborers, its full production being received by the state. We shall call this type of land demesne land, or home land.” However, it would appear that the

revenue mainstay of the state was the multiplicity of land taxes, taxes on production, and required labor services (Bell 1992: 111; Carrasco 1959: 51, 85-8, 91).

Egypt (External)

Taxes were collected on agricultural and craft production (e.g., Brier and Hobbs 1999: 66; Kemp 1989: 236; Montet 1964: 79), there was a *corvée* tax (David 1998: 85-6, 277; James 1984: 116), and a poll tax was collected from the head of each family (David 1998: 96). These internal revenue sources seem minor, however (e.g., Kemp 1989: 236), by comparison with the vast revenues from external sources. Pharaohs, as individuals, owned large estates (e.g., Brier and Hobbs 1999: 63), and vast areas of agricultural land (as well as cattle herds) were controlled by offices of the state, especially the temples, which controlled one-third of the cultivable land (O'Connor 1983: 202), often worked by tenants or forced labor (e.g., Haring 1998: 77, 83; Kemp 1989: 191; Kitchen 1982: 131; Montet 1964: 65). Additionally, the state controlled most mines and mining (Grimal 1992: 247-8; Kemp 1989: 246; Montet 1964: 95, 100).

While the populations of the conquered Levantine polities were treated as subjects and taxed through normal bureaucratic channels (Smith 1995: 4), in Nubia, and other conquered areas, tributes collected consisted of prestige goods and appear to have gone directly to the pharaoh (e.g., David 1998: 267), who used them to consolidate and certify power, for example, by making temple offerings (Bryan 2000: 239) and to reward high officials (*ibid.*: 242; O'Connor 1983: 207). The state and the temples retained extensive control of long-distance trade (e.g., David 1998: 268; Kemp 1989: 195, O'Connor 1983: 206), and there was some directly-controlled labor (e.g., prisoners of war) (Kemp 1989: 191; van Dijk 2000: 295).

Athens (Mixed)

There was no overall property census (Hansen 1999: 88), but there was a tax on property assessed above a certain level of value (*ibid.*: 100). Sinclair (1988: 63) estimated that the number of taxed persons was around 2,000, but perhaps as many as 6,000. Labor taxes were more broadly assessed. Eighteen and nineteen year old citizens were obligated to do two years of military service, and were liable for conscription to age fifty-nine (Hansen 1999: 89). Citizens above thirty years old were eligible to participate in the assembly, and to serve as jurors in the People's Court or as legislators or magistrates (*ibid.*: 89), and even older citizens (*ex-archons*) served on the *areopagos* (a high law court). However, these duties were not always a labor tax since citizens were compensated for some civic work (except for the magistrate positions), even for attending theater days and military parades (*ibid.*: 98), a kind of selective incentive. However, participation in government was

expected, and the participation rate was “astonishingly high” (ibid.: 309). Beyond citizens, there was a “*metic*” (foreigner) tax of 12 *drachmas* per year, plus expected military service and property tax.

Wealthier citizens, and some *metics*, paid tax and also performed liturgies which required the performance of public duty, and that entailed expenses (Hansen 1999: 110). Those who paid liturgies were a kind of Athenian “upper class” (ibid.) One of these was the *choregia*, in which a wealthy man sponsored the choruses that were performed during the festivals of Dionysus, Apollo, and Athena. A liturgy might involve taking command of a ship and paying some of the cost of its maintenance (ibid.) Liturgy holders were subject to a public accounting at the end of their term because they had managed some public resources in addition to their own resources (ibid.) “Liturgies were a considerable economic burden on the well-to-do” (Hansen 1999: 111). Plaintiffs and accusers had to pay a court fee to begin the proceedings, although the loser ended up paying the full amount, and fines and confiscated property could sometimes be a significant source of state income (ibid.: 196, 261).

External revenues were also important. The state controlled silver mines (Hansen 1999: 260), and silver was “perhaps the backbone of the Athenian economy” (ibid.: 285). Land owned directly by the state was leased through auction; the revenue was a source of tax revenue (ibid.: 260). The capture and sale or ransom of slaves was an important result of warfare (ibid.: 122), overall, however, wars were a major drain on the public budget (ibid.: 316). The import tax on slaves was an important source of revenue (ibid.: 122). There was a 2% customs duty on all imports and exports (ibid.: 260), and the exports of silver (especially) and olive oil were important in the Athenian economy (ibid.: 285). In addition, the state owned some slaves who served as magistrate’s assistants or as laborers, for example, road workers and mint workers (ibid.: 123).

Roman Empire (Internal)

Under Augustus (Octavius) the efficiency of tax collection was improved by extending censuses into annexed provinces (Garnsey 1988: 245). This was important for state finance since the population of Italy and some other Roman colonies were exempt from the basic production tax, although Roman citizens, even in Italy, did pay an inheritance tax. Provinces long integrated into the Roman system were key to the state’s revenues, in spite of administrative costs such as maintaining some military presence. The key tax, the *tributum soli*, was exacted in all provinces. The rate exacted was variable by province, ranging from 1% of capital levy (equivalent of 20% on production) in Syria (in cash) while in Egypt the tax was less, and in-kind, at a rate adjusted every five years, while in other areas it was calculated as a proportion of production (Garnsey 1988: 245; Hunter Blair 1963: 119). Land types were taxed at set amounts (for example, arable versus pasture, etc.) (Duncan-Jones 1990: 187).

Provincial tax rates in some cases reflected past practices in each province (excepting areas where census and taxation had not existed). The Roman tax rate

did not represent an increase, for the most part, except possibly for supplementary taxes such as billeting of the military, which could become quite onerous (ibid.: 247). Ordinary citizens might be conscripted for public labor for short periods, usually 5 days per year (Duncan-Jones 1990: 174-5), but most construction in towns was done by paid labor (ibid.: 175-6). Finally, provincial populations paid a poll tax (*tributum capitis*) that was the same rate for rich and poor, although we were not able to find out much about the amounts involved or how important the tax was to state revenues. All Roman citizens, including provincial elite, paid a 5% inheritance tax, which was monitored by special administrative officials charged with collecting it (Eck 2000a: 247). At the local town level, town magistrates paid for their offices (Duncan-Jones 1990: 176).

Some external revenues are also evident. Private ownership of property was a widely-held value (e.g., Garnsey 2000: 695, 703), although land confiscated as a result of military conquest or by appropriation (for example, of municipal land or temple land) became state or emperor's property, at least until it was redistributed to soldiers, colonies, etc., and there were other categories of public lands (Duncan-Jones 1990: chapter 8). State land included *ager publicus* (Roman state land, cultivated by private state tenants); this might amount to over 10% of land in some regions, although much of it was eventually distributed to soldiers and others as land grants (ibid.: 121-4). Imperial land was directly owned by the emperor, and could amount to 1% to nearly 20% of total land in a province (ibid.). Cities owned land worked by tenants (ibid.: 122-3), as did temples, especially in Greece. Imperial lands included agricultural land, villas and palaces in Italy as well as estates, mines and quarries in provinces administered by *procurators* and private contractors, and other lands were given to the military (Galsterer 2000: 348). Important mines were in some cases owned by the emperor and leased to contractors operating under government supervision (Eck 2000b: 284-5). Most of the metal consumed in the empire came from mines owned by the state (or, more precisely, were the property of the emperor), and these mines constituted an important component of the emperor's wealth (Harris 2000: 722). Emperors had more direct control over some provinces than others (e.g., in Griffin 2000b: 118). Until Antoninus established a separate department (*res privata*) to administer his private wealth (Birley 2000: 150), previous emperors combined some personal and state resources.

Revenues or booty from, military campaigns during the focal period are mentioned as a source of income, for example, for some public construction in Rome attributed to Trajan's conquests, and the conquest of Dacia was hailed as a significant new source of metallurgical wealth (Griffin 2000b: 113). But provinces conquered and fully incorporated into the empire and its administrative and tax structure prior to the focal period are not considered here as revenue from "external" warfare. Considering only new conquests or areas regarded as military frontiers, imperial revenues were probably negative. According to Hopkins (1980: 101), the outer ring of recently-conquered frontier provinces with defensive armies consumed tax revenues rather than serving as a substantial new source of revenues. The potential for losses owing to expansionist warfare is evident in imperial policy, since Augustus, that emphasized prudent expansion to avoid domination over

“poverty-stricken and profitless tribes of barbarians” (from Appian, quoted in Whittaker 2000: 299). And, the second-century solidification of imperial limits seen in the construction of walls and lines of fortifications (especially by Trajan and Hadrian) would have increased the costs of empire. Some of Trajan’s public constructions in Rome and Italy were given by him to Rome and paid for from his war spoils (at least as is proclaimed on inscriptions) (Griffin 2000b: 113).

Emperors had some direct control of labor, but this was more significant in a bureaucratic sense than as a source of revenues. We refer to the extensive use of imperial freedmen (emancipated slaves from the emperor’s household) in diverse and sometimes quite important administrative positions (Eck 2000a: 253). The forced movement of conquered tribal groups to provide a source of labor for mining is mentioned (Liversidge 1976: 122). One form of legal punishment was to be condemned to public labor, and this was an important source of forced labor for large construction projects (Duncan-Jones 1990: 174-5).

Venice (Internal)

Venice relied on a mix of internal and external revenue sources to fund the state, making it difficult to classify as to internal or external, but we found a quantitative summary of tax revenues for 1469 by Chambers and Pullan (2001: 140-3) that points to a predominance of internal revenue sources. Internal revenues included taxes on market or business transactions, property taxes, income taxes on citizens and state employees, tax on interest from loans, merchandise taxes, taxes on wine, meat, oil, and delicacies, minor required labor services, and tax on the clergy; to these can be added the episodic forced loans the state exacted from wealthy families (Chambers and Pullan 2001: 134, 138, 157; Lane 1973: 150, 151, 324; McClellan 1904: 179; Norwich 1982: 201, 252, 291, 348, 353). External revenue sources included the sale of salt, rent on property owned by the state, duty on imports and exports, long-distance trading, revenue on the salt-pans of Chioggia, and the revenue from the empire on *terra firma* (Chambers and Pullan 2001: 140-143; McClellan 1904: 179; Lane 1973: 58; Norwich 1982: 240, 272, 298). However, the sea empire was operated at a loss (Lane 1973: 237-238).

England (External)

Our decision to classify England as having external revenue was based especially on the economic importance of the crown’s privately-held demesne lands, which included shire (county) farms, boroughs (towns), royal manors, escheats (lands that reverted to crown because their lords died without heirs), and feudal holdings such as wardships (lands held in trust by the king for lords still in their minority) (Strayer 1947: 4). The king also owned the gold and silver mines (Salzman 1950: 67, 68, 88).

Customs fees on imports and exports also generated income (Strayer 1947: 5; Waugh 1991:179). During the focal period, the crown was able to extract a tenth from the church (Lunt 1947; Strayer 1947: 5; Waugh 1991: 184), funds the ruler evidently was able to divert for personal use (Morris 1940; Lunt 1947). Loans to the crown from banks and merchants were a source of revenue (Strayer 1947: 3; Waugh 1991: 183). One of the few internal revenue sources was the lay subsidy, a tax on the moveable goods held by individual households (Waugh 1991:181). This revenue source was only collected four times between 1327 and 1336 (Waugh 1991:184), and the sovereign had to negotiate heavily with parliament in order to collect it (Morris 1940: 7, 29; Plucknett 1940: 126; Strayer 1947: 12; Waugh 1991: 195-196, 203).

Ottoman Empire (External)

There were diverse and important internal revenue sources. Labor taxes (some payable in cash) included working on state enterprises such as salt works and transportation (Inalcik 1994: 62). A tax required of Muslims included membership in a militia (*azeb*) (ibid.: 93) and to provide oarsmen for the navy (ibid.: 94). The poll-tax (*cizye*), paid by non-Muslims (of which there were nearly 700,000 households in the Balkans) was one of the key sources of revenue (ibid.: 55).

We regard the Ottoman system as having depended primarily on external revenues owing to the state's claims of direct control over land in areas it had conquered (Inalcik 1994: 127). Revenues accruing from these lands were then awarded to members of its military and they constituted a key economic foundation of the military apparatus. The claim of direct control was strongly asserted by the state even though it was problematic according to Islamic theory. In the Islamic concept of *fay' al-muslimin*, lands conquered by Muslims belongs to the Islamic community (*umma*), but are held by the conquering state as "God's trustees." Ottoman policymakers argued that all the state's territories that had been gained by conquest were subject to a more direct form state control, designated as *miri* lands (Inalcik 1994: 103-4, 113). As a result, in Ottoman usage, ownership in conquered areas could be validated only through the state (ibid.: 105). This limited any possibility for a landholding nobility or merchant class because only peasants (*reaya*) were eligible to hold land, but they became, in essence, tenants who paid the equivalent of rent in exchange for use, whether to the state directly or to the land's *timar*-holder (*prebend* holder). This system provided some legal protection to peasant households, while assuring a continuous stream of revenues for the state and its military apparatus, both of which would collapse if land were to become private. In general, ownership was a form of usufruct that allowed for the possibility of inheritance and land sales, but with the limitation that what the purchaser bought was right of use only (Inalcik 1994: 106). State lands (*miri*) constituted 90% of all arable lands (ibid.: 105). This included imperial demesne (private) land (ibid.: 66, 73), lands set aside for important officials, *timar* grants, and assorted *appanage* grants (grants that are held temporarily and cannot be inherited) (ibid.: 141). State-owned mines, mints, and salt

works accounted for 28% of total revenue (ibid.: 55, 59-60). Some agricultural lands were reserved for the sultan (ibid.: 66).

Warfare might have been a source of revenues. Ottoman policy was based on the idea that “military power was ... the principal means of securing wealth” (Inalcik 1994: 44), but it is not clear that warfare and empire was a great producer of surplus revenues owing to military costs (Lybyer 1966: 178-9). By the end of the focal period, the Iranian campaign “instead of bringing in new resources, entailed enormous new expenditure for the treasury and threw the empire into a long financial and political crisis” (Inalcik 1994: 100). Finally, income from foreign trade was a source of external revenue. The growing popularity of silk cloth in Europe from the 13th to the 18th centuries had an impact on world-system development, including growing Chinese imports after 1257, but disruptions in Chinese supplies increased the demand for Iranian silk, and this trade became an important source of Ottoman revenues (ibid.: 189-90). Dues at ports could produce substantial revenues in some localities (e.g., Yemen, from the Indian transit trade) (ibid.: 85). In Inalcik’s words (ibid.: 223), “along with Constantinople and Pera, the rise of Bursa as a world market in the second half of the fourteenth century became the economic foundation of Ottoman power.”

The Ottoman ruler also could be said to have had considerable direct control of labor, in the sense that the personnel of the ruling institution were considered the sultan’s slaves. These administrative agents had to come from Christian areas of the empire since it was against Islamic law to enslave Muslims (Lybyer 1966: 48). In addition, the state made some use of forced migration and settlement of population to control rebellious ethnic groups, to colonize new territories, and to populate Istanbul (Inalcik 1994: 32); this included “transferring disorderly nomadic groups into the Balkans in order to Turkify and secure new conquests” (Inalcik 1994: 35). Areas of abandoned villages might be turned into estates controlled directly for the ruler’s treasury, for example when Mehmed II populated 164 abandoned Greek villages near Istanbul with war prisoners and settled them as “his sharecropper slaves” (Inalcik 1994: 167-8).

Aztec (Internal)

We first assumed that external revenues would be central to the economy of an expansionist empire such as the Aztec. Tributes paid by conquered provinces are well documented in the Codex Mendoza (Berdan and Anawalt 1992), one of the most important of the documents done in the pre-Hispanic pictorial style. Land appropriated by ruling families as a result of military conquest (the aftermath of Azcapotzalco’s conquest is often mentioned in this regard [e.g., Durán 1994: 82]), or lands newly developed through state efforts (e.g., Hicks 1984: Table 7.1; Parsons 1991), provided revenues that could perhaps be classified as external in nature. There was a social category of tenant, “serf,” or “estate-based laborers” (*mayeque*), as well as “... pawns, purchased slaves, or “orphans” (i.e., people without kin)”

attached to the palaces (Hicks 1984: 163), who were under varying degrees of state control and represent categories distinct from free tax payers residing in urban *parcialidades* and rural *calpultin* (*calpuleque* or *macehualtin*) (e.g., Carrasco 1971: 355-356; Hicks 1984: 150).

However, imperial revenues from “tributary provinces” (Berdan 1996) were collected through the state’s regular office of tax administration (*calpique*) (Berdan 1996; Davies 1987: 117) and thus would produce revenues that fit our internal concept. We were able to detect only minimal personal control by ruler over revenues, imperial or otherwise. According to Zorita (1994: 182) “The ruler could not dispose of the tribute as he pleased, for the people and the principals would be displeased if he took what was not his share, since all the rest was destined for other purposes.”

We also concluded that state-controlled land and labor may not have been a major source of revenues (e.g., Lockhart 1992: 97). For example, Calnek (1975) was able to identify 100 state-controlled estates, and while this is not a complete list of all such lands, the area we estimate they represent would have been only a small fraction of the potentially cultivable land in the Late Postclassic Basin of Mexico (as measured from the archaeological surveys reported on by Sanders, Parsons, and Santley 1979: Table 9.3). Hicks (1976) concluded that the status of *macehual* and *mayeque* households may not have been that different, and Brumfiel (1991) concluded the *macehual/mayeque* distinction is not archaeologically detectable. Even if we were to consider *mayeque* as a form of state-controlled labor, still, very likely most commoners were free taxpayers who met their tax obligations through their contribution to tributes assigned to urban tax-collection organizations, the *parcialidades*, or to the rural *calpultin* (e.g., Hicks 1984: 150). Carrasco (1976: 104) found that the majority of persons contributing to tribute collected from Morelos (south of the Basin) were free taxpayers. Zorita (1994: 181) comments that “The *calpullec* were numerous, and included almost all who paid tribute to the supreme ruler ...,” and Davies (1987: 124) reminds us that “... the power of the *tlatoani* [ruler] to take away *calpulli* holdings remains in doubt ...” This would imply little real possibility for appropriating substantial amounts of land even in conquered areas.

Other significant revenue sources in the internal category include a tax on ordinary market transactions (Anderson, Berdan, and Lockhart 1976: 138-49; Cortés 1986: 103; Durán 1967: I: 79, 180, II: 161-162, 264; Hicks 1987: 904), and *corvée* labor was required of commoners (Davies 1987: 117, 137, 153; Durán 1994: 130, 155; Hassig 1985: 31, 56, 60; van Zantwijk 1985: 276; Zorita 1994: 203), including, in some cases, the working of state agricultural lands or providing services to the palace (Hicks 1984; Offner 1983: 136; Zorita 1994: 187).

Inca (Mixed)

The Inca tax system made extensive use of *corvée* labor to work lands (*mita*) appropriated and developed by the imperial administration. As Murra (1980: 31) puts it

“... one can speak in Inca economics of state agriculture. After the conquest, in each region and probably in each ethnic area, lands were set aside for the Tahuantinsuyu [the empire] and the state cults. In some cases these lands were simply carved out of existing holdings; in others, unworked lands were brought into production through irrigation, terracing, colonization and just plain expansion of the cultivated surfaces.” In addition, peasants had an “Obligation to work the crown and church lands” and an “Obligation to weave cloth for state and church need” and carry out other labor services, including military service (Murra 1980: 70, 71, 95, 101).

While ruler claims of overall land ownership were usually only metaphorical (e.g., D’Altroy 2002: 265), at the same time Inca rulers did appropriate vast areas that became state-owned lands or even personal estates of the rulers worked by royal retainers, not through *corvée* (Murra 1980: 39). Royal retainers could even include whole communities of persons, for example as described in Murra (ibid.: 38) in which “... the Indians of the town of Alca, at 4,000 meters, in Chumbivilcas, were appropriated by Pachacuti and his descendents; its inhabitants, now royal retainers, worked the royal lands” (D’Altroy 2002: 273, 301). *Yana* was a category of full-time retainers in the service of the state or ruler (Murra 1980: 182), while *mitmaq* were colonists put in place through state action (e.g., D’Altroy 2002: 288). In some cases, the state created new categories of state labor as a means of increasing production. Again we quote Murra (1980: 71-73) when he points out that since *corvée* was no longer a sufficient source of cloth, “Craft groups were then set up or ... were incorporated into the state machinery...Cripples, dwarfs and hunchbacks of both sexes - people less likely to set up family-type units and engage in agriculture, frequently became very skilled weavers ... These craftsmen belonged to two quite separate categories ... male weavers ... [and] ... the nunlike girls, kept weaving in ‘convents’ all over the kingdom ...” Besides its control or large numbers of human laborers, the state also owned large herds of camelids (llamas and alpacas) amounting to hundreds of thousands of animals (D’Altroy (2002: 279).

Chapter 7

Public Goods

In the more collective states, reciprocity between rulers and taxpayers is hypothesized to develop in which the state provides public goods and services (or collective goods and services) in exchange for taxpayer compliance, although other factors influence compliance decisions. Given the centrality of the taxpayer-ruler reciprocity in collective action theories of state formation, theory-testing requires a method suited to comparing public goods and services cross-culturally. We were challenged to develop a suitable method owing to the fact that little prior work has been done along this line. Bates (1983: Table 10) and Claessen (1978: 541 and Table 1) provide some limited methodological guidance, and their data demonstrate that we could expect to find considerable cross-cultural variation in public goods in pre-modern states.

All states provide at least some public goods, with military defense, judicial services, and the maintenance of social order probably the most commonly provided (e.g., Levi 1988: 56). However, the list of goods and services we developed for our coding excludes both military defense and judicial services, and focuses instead on other categories, including transportation infrastructure, public water supplies and control, public safety, redistribution, and an additional miscellaneous category that we will describe below (Table 7-1; the coded values are in Table 7-2, and the total for each polity is in parentheses following each polity's name in the descriptive section). We omitted judicial services because generally they are provided and thus might not exhibit much cross-cultural variation, but a more pressing problem for us was in developing a suitable coding scheme for comparative study in a very complex institutional domain. Our solution was to restrict our definition of judicial services to a measure of public safety. Here what we were looking for is the ability of the state to suppress and punish crime as well as its ability to resolve disputes following formal judicial procedures. For example, we gave low scores in cases where feuds and crime were not regularly suppressed by the state, and where punishments may be carried out by the aggrieved parties locally without state involvement. We did code for the degree to which commoners have the right to appeal judicial decisions. Although this could be construed as a public good, we include it as one measure of the degree to which the state's bureaucratic system

Table 7-1 Coding categories for public goods. The letter designators refer to column locations of the coded data in Table 7-2

Roads and other state-supported transportation infrastructure such as bridges within one to two travel days from the capital (a)
1 = none or very little in the way of state-maintained infrastructure
2 = presence of state-maintained infrastructure in a few localities
3 = state maintained transportation infrastructure in this part of the territory
Roads and other state-supported transportation infrastructure such as bridges distant from the capital but not including edge areas (b)
1 = none or very little in the way of state-maintained infrastructure
2 = presence of state-maintained infrastructure in a few localities
3 = state-maintained transportation infrastructure in this part of the territory
Roads and other state-supported transportation infrastructure such as bridges in edge areas near the limits of the state's territories (c)
1 = none or very little in the way of state-maintained infrastructure
2 = presence of state-maintained infrastructure in a few localities
3 = state maintained transportation infrastructure in this part of the territory
Public water supplies and control in the near vicinity of the capital (d)
1 = little state involvement in providing public water supplies or water control
2 = state sponsored water supplies and control for limited sectors of the population or limited uses
3 = most households benefit from state-built water supply and/or control projects
Public water supplies and control away from the capital but excluding edge areas (e)
1 = little state involvement in providing public water supplies or water control
2 = state sponsored water supplies and control for limited sectors of the population or limited uses
3 = most households benefit from state-built water supply and/or control projects
Public water supplies and control in edge areas (f)
1 = little state involvement in providing public water supplies or water control
2 = state sponsored water supplies and control for limited sectors of the population or limited uses
3 = most households benefit from state-built water supply and/or control projects
Public safety in and around the capital and other government sites (g)
1 = the state does little to control crime or feuding and lacks judicial services to punish wrongdoers
2 = the state is able to reduce crime and feuding, but many households must protect themselves and punish wrongdoers locally
3 = the state has extensive institutional ability to combat crime and reduce feuding and provides judicial services to apprehend and punish wrongdoers
Public safety away from the capital and other government sites (h)
1 = the state does little to control crime or feuding and lacks judicial services to punish wrongdoers
2 = the state is able to reduce crime and feuding, and adjudicate, to some degree, but many households must protect themselves and punish wrongdoers locally
3 = the state has extensive institutional ability to combat crime and reduce feuding and provides judicial services to apprehend and punish wrongdoers
Redistributive Economy (i)
1 = redistribution is rare or not significant to the economies of ordinary households
2 = redistribution occurs regularly, but is of marginal economic significance to ordinary households
3 = redistribution occurs regularly and has considerable economic significance to most ordinary households.
Other forms of public expenditures that could be construed as public goods, e.g., temple and monastery endowments, hospitals, etc. (j)
1 = Rare or not significant to most households
2 = Marginally significant to most households
3 = Has considerable significance to most households.

Table 7-2 Public goods codes. The column headings are: (a) Roads, etc., close to the capital; (b) Roads, etc., away from the capital but not including edge areas; (c) Roads, etc., in edge areas; (d) Water services close to the capital; (e) Water services away from the capital but excluding edge areas; (f) Water services in edge areas; (g) Public safety in government capitals; (h) Public safety in other locations; (i) Redistributive economy; (j) Miscellaneous public goods

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	Total
Nupe	1	1	1	1	1	1	1	1	1	1	10
Yoruba	2.5	2	2	1	1	1	3	1.5	1	1	16
Asante	3	2	2	1	1	1	3	2.5	2	1	18.5
Bagirmi	2	1	1	1	1	1	2	2	1	1	13
Kuba	1	1	1	1	1	1	3	2.5	1	1	13.5
Tio	2	1	1	1	1	1	2	1	1.5	1	12.5
Buganda	3	2	2	1.5	1	1	2	1	1	1	15.5
Bakitara	1	1	1	1	1	1	1	1	1	1	10
Lozi	3	3	1.5	2.5	2.5	1	2.5	2.5	2.5	1	22
Swahili Lamu	1	1	1	1	1	1	1	1	1	1	10
Thailand	3	1	1	3	1	1	2.5	1	2	3	18.5
Burma	2.5	2	1	3	2	1	2.5	2	1	3	20
Bali	1	1	1	1	1	2	2	2	1.5	1.5	14
Aceh	1	1	1	1	1	1	1	1	1	1	10
Perak	1	1	1	1	1	1	2	2	1.5	1	12.5
Java	3	2	2	2	2	1	2	1	1.5	2	18.5
Vijayanagara	3	1.5	1	2.5	1	1	3	2	1	2	18
Pudukkottai	2	1	1	1.5	1.5	1.5	2	2	1.5	3	17
Mughal	3	2.5	2.5	3	2	1.5	3	1.5	2.5	2	23.5
China	2.5	2	1.5	2	2	1.5	2.5	2	3	3	22
Japan	2.5	2	1	2	2	1.5	2	1.5	1	1	16.5
Tibet	2	1	1	3	3	1	3	1.5	1	3	19.5
Egypt	3	2	1	3	2	1	3	3	1	1	20
Athens	2.5	2	2	2.5	1	1	2	1	3	3	20
Rome	2.5	3	2.5	3	2	2.5	2.5	2	2	2	24
Venice	3	1	1	3	1	1	3	3	2.5	2.5	21
England	1	1	1	1	1	1	1.5	1.5	1	1	11
Ottoman	1	1	1	3	1	1	3	1	2	2	16
Aztec	3	2	2	3	2	1	3	2	1	2	21
Inca	2	2	2	3	2	1	3	3	2	2	22

conformed to the expectations of collective action theory from the point of view of bureaucratization, which we discuss in the next chapter.

Military offense-defense also presents coding problems for assessing public goods. We recognize that in situations of endemic military threat a well-funded defensive military is a valuable public service. Still, we lacked a suitable procedure to compare the degree of military threat. Even in situations like these we think it would be difficult to evaluate whether military action is defensive, and thus public

good-providing, versus when it will benefit primarily an elite or some other specific sector of the population. A key criterion of a public good is that it is expected to be widely available across social sectors and territories. This is the degree to which a good or service is “divisible,” or its degree of “publicness” (Taylor 1982: 40-1). Military offense-defense is one public good that is often identified as being potentially “lumpy” (i.e., not highly divisible) (Taylor 1982: 40). Booty or other gains from offensive wars, for example, are often very lumpy in how they are distributed. And, because military action is often episodic, its costs and benefits may not be evident to us within the constraints of our focal period.

The variables we did code for allow us to effectively evaluate publicness in some of the variables. Accordingly, we coded our transportation infrastructure, water-control, and public safety variables separately by sector of the state’s territory to assess the degree to which rural as well as urban populations were deriving benefits.

All of the public goods variables display considerable cross-cultural variability, as does the summed value of the aggregate measure (Figure 7-1). The public goods we chose for coding are all more likely than defense or judiciary to allow us to evaluate cross-cultural variation. They include goods and services that are likely to have had a day-to-day impact on households, and as a result were more likely to figure into a household’s compliance decisions. Our list (Table 7-1) includes primarily material benefits such as road and bridge construction (so long as roads were available for public use), water control (including irrigation management, flood control, and public water for domestic consumption), and economic redistribution, but we also included variables that measure the degree to which a state offers social and emotional services such as public safety. Our category of miscellaneous allowed us to expand on the latter category, in particular, to include the provisioning of spiritual and emotional services through endowments to religious groups and the funding of public rituals. We made this decision based on comments such as Aung-Thwin’s (e.g., 1985: 170-82) on the role of Buddhist practice in ancient Burmese state-building. Here the state played a key role as a provider of cosmic merit for the polity’s population through its ability to endow monasteries and temple construction.

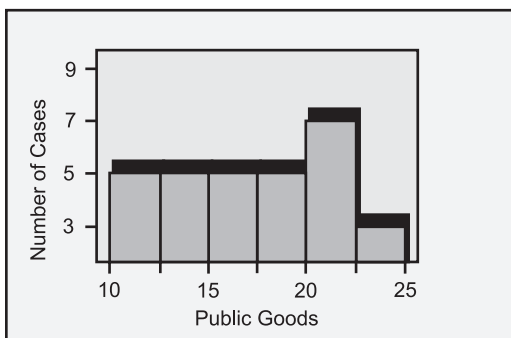


Figure 7-1 Distribution of values of public goods.

The Special Problem of sub-Saharan Africa

We were largely satisfied with the public goods variables we chose to code, although, potentially there are some inherent difficulties in cross-cultural comparison in this domain, two of which we were alerted to by the Africanist Peter Robertshaw. He argued that both transportation infrastructure and water control measures might artificially reduce the public goods scores for sub-Saharan African polities. He argued that, because African population densities tend to be lower, transportation infrastructure would be a less valuable public service. Further, water control would be of little relevance in the wet tropical environmental settings more common in the sub-Saharan African sample than in the remainder of the sample. We can evaluate these suggestions with the coded data. First, yes, the sub-Saharan African polities do tend toward lower population densities, averaging 17.3 per sq. km compared with the sample density of 37.9 per sq. km. However, when we compared the sub-Saharan African values for transportation infrastructure, we did find African values slightly below the sample average, but the means are not statistically significantly different (based on a t-test). Interestingly, some sub-Saharan African societies have among the higher transportation scores in the sample as a whole, including Yoruba, Asante, Buganda, and Lozi.

Water control is a different matter. Sub-Saharan African societies do have mean scores below the sample values, and they are statistically significantly different (although almost all coded values for water control in distant peripheries, in Africa as elsewhere, are '1'). It is interesting to note that in the other two water-control variables, Lozi had among the highest scores in the sample, based on the extensive canalization of its flood-plain core zone. We conclude that, while there may be some degree to which water control variables should not be used for comparative study of public goods, we are not entirely convinced local environment is always the main determining factor. For one thing, although neoevolutionists spilled much ink writing about the significance of water control for state formation, consistently, in our sample, water control variables score generally lower than other public goods (Table 7-2), suggesting that water control was one of the least important functions of pre-modern states, whether African or not. Although our analysis of public goods data will be presented in a later chapter, we would point out that some other polities receiving low scores on water control are, like many of the sub-Saharan African states, comparatively recent polities that developed as periphery social formations in the growing early modern world-system. Many of these polities tended to have limited public goods, not just in water control, but in other domains as well.

Public Goods as an Aggregate Scale Variable

The public goods total for each society (in Table 7-2) is the sum of values assigned to our public goods categories. Unlike our attempt to derive aggregate or scale measures of internal and external revenues, we had considerable success in

developing a valid composite measure of public goods that could be used for comparison and statistical analysis, and from which we think we can gauge the degree to which state-builders were pursuing a policy of collective action. There is a wide range of values for the public goods total (Figure 7-1), and the component variables display a consistent pattern of covariation. This is indicated by the value of .84 for the Cronbach's alpha for the public goods components (well above the .7 cut-off value). Another indicator of the high degree of convergent validity of the public goods measures is found in the results of a principal components analysis of the public goods variables. This method is useful for identifying statistical patterning among a large group of numerical variables, and calculates the correlation of each variable with underlying patterns in the data (principal components). For the public goods variables, one of the principal components accounts for by far the largest share of the variance (42%), and it correlates positively with every one of the public goods variables. This shows a strong degree of consistency in which the component variables are contributing to the pooled variance of the scale measure.

Summary of Public Goods Data

Nupe (10)

Nupe was given the lowest possible score on public goods, which would signify that while public goods were sometimes made available, their benefits were not necessarily felt across all social sectors. It scored among the lowest on maintaining public order. For example, Nadel (1942: 126) writes that "Rivalry and feuds between the leaders of the local factions may throw the whole town, indeed the whole country, into a civil war," or, "The peasants in Nupe kingdom proper, though safe from slave-raids, were still exposed to similar attacks: punitive expeditions which, directed against a rebellious feudal lord, were fought on their land, or the visitation of armies which marched through and foraged from their farms" (p. 366; cf. p. 122). Nupe was also comparatively weak on redistribution. As Nadel (*ibid.*: 91) points out, "Out of this large and varied income the king gave directly very little to the common weal: he 'financed' certain public works, the repair or the building of the city mosque, his own palace, and the town walls and gates."

Yoruba (16)

The Yoruba state provided some public goods, including road-building to facilitate coast-inland trade (e.g., Law 1977: 236). In Yoruba city plans, spacious roads are depicted radiating out from a central area containing the palace and main market



Figure 7-2 Chinese village granary from the Gengzhitu (Ploughing and Weaving Illustrated). We thank Francesca Bray for her help in identifying this image.

(e.g., in Krapf-Askari 1969: 50, *passim*), and public roads are mentioned in the far south (Law 1977: 117). Public safety was a high priority, at least around the main city, but the state's efforts in this regard did not extend dependably to areas away from the capital, as is indicated by the fact that provincial rulers were charged with maintaining law and order (Law 1977: 103). By comparison with other polities, this indicates that the central state did not penetrate deeply into society to carry out a public goods policy. Hodder (1969: 24-5) points out that conditions of insecurity in rural areas impacted negatively on market participation.

Asante (18.5)

A series of "great roads" connected the capital Kumase to the provinces and included "halting places" where travelers could rest and which served as sites of local authority (Wilks 1975: chapter 1). The *akwanmofo* was an administrative agency charged with road maintenance (*ibid.*: 35). Paths "were kept open, and rude bridges were made across streams by felling trees" (Rattray 1929: 114). Security in and around Kumase was very tight (Wilks 1975: 379). There is some evidence of a policing activity away from the capital at the "halting places" along major roads which served to control banditry (*ibid.*: 2), and the state was able to maintain the peace in the southern tributary areas during the early 19th century (Wilks 1975: 140-1). There was considerable institutional complexity aimed at identifying, trying and punishing offenders, although much legal action took place within the descent-groups (Rattray 1929: 290-1), for example, while blood-feud or vendetta was absent in Asante, it was because descent-group leaders would expel a member for committing such a crime (Rattray 1929: 289). The state was involved in punishment of criminals, however, with the central authority maintaining the prerogative of capital punishment (*ibid.*), and adjudicating disputes and holding criminal trials were major sources of state revenues (Rattray 1929: 292). Food was always available in a chief's palace for anyone who wished it, and a drum announced the daily offering of food (Rattray 1929: 114), but it is not clear how many people benefited from this redistributive service.

Bagirmi (13)

This polity was weak on public goods. There is mention of a road out of the capital going south at least 10 miles to a group of villages (Reyna 1990: 62). There were no police, but the military retainers of a court official comprised an ad hoc police force brought to bear when needed (*ibid.*: 138). Tax collection was somewhat relaxed in areas suffering drought (Reyna 1990: 155), which could be interpreted as a form of redistribution.

Kuba (13.5)

Authorities could draft labor to maintain paths and build bridges, but this was rarely done, “there being evidence of only one bridge in the whole realm” (Vansina 1978a: 141). “Feuds were forbidden and no longer seemed to arise” (ibid.: 151), although some disputes were “fought out with witchcraft” (ibid.: 152) and poison ordeals were carried out at the local level in some cases to identify wrongdoers (ibid.: 202). “A representative of the king or chief saw to law and order” in and around markets (Vansina 1978b: 364).

Tio (12.5)

There were some roads, but a coding decision was difficult because Vansina (1973) does not explicitly say that the state maintained them. However, “Geographically villages were regrouped along the roads in the 1930s so the available labour could keep them up and roads had therefore to follow available water supplies” (Vansina 1973: 483). This implies that before 1930, during the focal period, little state effort or revenue was invested in road construction or maintenance. Even in this wet tropical area, it appears that water control might have been a useful public good. As Vansina (ibid.: 5-7) points out, away from the rivers water could be scarce, and “...their settlements were tied to the few rivers and streams that existed. For even through they cultivated the plateaux, water for the households had to be carried from the rivers.”

Public security was a weak point of government services. Robberies were common away from the capital and a few halting places along roads (Vansina 1973: 259, 391). Other public services were also limited: “The political organization impinged only slightly on the life of these social groups. Quarrels, feuds, conflicts of all sorts at the social level, were settled mostly without immediate recourse to the political administration” (ibid.: 83). Vansina (ibid.: 355) concludes that “The very existence of feuds and their frequency were a sign of the weakness of the political structures. ...”

Buganda (15.5)

Well-built roads radiated out from the capital (Wrigley 1996: 59). These were intended to serve primarily military functions (Roscoe 1965: 200), but other road construction in and around the capital was frequent (ibid.: 243). Chiefs were required to build and maintain roads from their center to the capital (Roscoe 1965: 239), as were sub-chiefs to their district center (ibid.: 240). There was little concern with water quality or sanitation facilities (Roscoe 1965: 243) except for efforts to keep important wells clean (ibid.: 458). “People lived in fear of thieves”

(Roscoe 1965: 15), and had to catch thieves themselves so that “medicine-men” could divine their guilt (*ibid.*: 11-12, 267). Feud avoidance took place in part as a result of clan, not state, action (*ibid.*: 267). Feasting by chiefs and the king is mentioned (e.g., Roscoe 1965: 438), but no provisions were made for the state to respond to situations of drought or other disruptions of food supply (*ibid.*: 432).

Bakitara (10)

This polity also scores very low on public goods. There were no roads (Roscoe 1923: 73). “Private vengeance” was possible, although the king or lower officials could be involved in punishment for a murder (Beattie 1971: 133). The main charge of the district chiefs was to keep the peace, mostly settling disputes between herdsmen of different masters, and protecting the interests of the king and his cattle (Roscoe 1923: 54-5). Elites, including district chiefs, appear to have had considerable authority to try cases (*ibid.*: 142). Restitution for murder, including the killing of the murderer or a member of his clan, appears to have been carried out by relatives of the murdered individual, although the king’s assistance could be requested (Roscoe 1923: 64). Trial by ordeal could be administered by chiefs or the king, and this seemed to substitute for actual investigation of a crime (*ibid.*: 70-2). The king gave gifts of cattle to chiefs and palace personnel, and warriors, in some cases, for services rendered, so that the relationship of king to high chiefs and others serving him contains a strong element of reciprocal gift exchange and selective incentive, but these gifts are for political purposes and did not benefit the population as a whole.

Lozi (22)

“Canals which score the plain” have been dug by order of the kings to facilitate transportation (Gluckman 1961: 63; cf. Prins 1980: 58-70), although, outside the core zone, there wasn’t this much state involvement in transportation except that a portage was maintained by the state at the Ngonye Falls (Gluckman 1941: 91). Drainage canal construction, especially under king Lewanika, was substantial and brought additional core zone land under cultivation and provided for transportation (Gluckman 1941: 92; Prins 1980: 58-70). Disputes were expected to be settled locally if possible (Gluckman 1961: 35), but “...a well-established and defined system of law, administered by an organized judiciary and executive... are alert to protect ... security...” (Gluckman 1961: 63). However, healers could use ordeals to identify witches (Prins 1980: 147-50).

State gardens were worked with *corvée* labor from nearby villages, but they served, to some extent, as a public good, as did royal cattle herds (Prins 1980: 56-7, 84). For example, hungry persons could help themselves to the ruler’s gardens and fishing sites (Gluckman 1961: 63, 92). Lewanika’s state gardens and royal

herds were used to relieve stressful agricultural periods (Prins 1980: 60). Visitors or whole villages under stress were fed from the royal storehouses (Prins 1980: 93). Some tribute from conquered groups was distributed in public because “tribute was of the nation” (Gluckman 1943: 79). Some of the goods acquired by rulers in international trade were distributed to “his people” in the core and tributary dependencies (Gluckman 1941: 23, 92, 1943: 80). But the scale of state storehouses was not great, suggesting there was not as much of a redistributive economy as Gluckman sometimes implied. Some of what was described as redistribution was something more like political gifting (Prins 1980: 107-9). Still, it is striking to us that so much of what was regarded as the ruler’s was distributed or available to those in need.

Swahili Lamu (10)

According to Prins (1971: 49) there is little evidence for road construction. There might have been state upkeep of wells, but Prins (1971: 49) indicates there is little evidence. Crime was a problem until late in the focal period (Ylvisaker 1979: 114), and disturbances in the mainland were not well controlled until late in the focal period owing to the efforts of Sayyid Sud (Ylvisaker 1979: 114).

Thailand (18.5)

In Wales (1965: 229-30) we find that a system of canals and bridges for inland navigation and irrigation was evident “throughout the lowlands of Central Siam.” It was built originally to hasten the flow of state revenues, but was also a transportation asset, especially for peasants (cf. Vella 1957: 24). Beyond the core zone, however, Sternstein (1966: 71) mentions poor communications between distant provincial capitals. The kingdom had no organized police force (Rabibhadana 1969: 86), but securing public order (both militarily and internal) was recognized as an important element of ruler services (ibid.: 49-50). A governor who “allowed robberies to become prevalent was to be punished” (ibid.: 50); one ministerial position in the central administration was charged with public safety in the capital and adjacent areas (ibid.: 68), but rural communities had to maintain the peace pretty much on their own (Vella 1957: 17).

According to the Thammasat doctrine that influenced the cultural code of Thai state-building, the king provided benefits to the people by maintaining a positive accumulation of merit (Rabibhadana 1969: 46-9), including a royal alms house which distributed goods to the poor, the construction of temple-monasteries (*wats*), and the sponsorship of elaborate rituals (ibid.; also Vella 1957: 34-5). Alms-giving as a redistributive practice appears more developed in Thailand than in other Buddhist polities in the sample.

Burma (20)

Although the Irrawaddy River was the main route of commerce, the "... road system appears to have been functional between the capital and the major subcenters, between the major subcenters themselves, and in the areas of overland trade..." (Koenig 1990: 56). Roads were built in the north and northeast over the An pass at the limits of the state's territory (Koenig 1990: 56), but generally the "marches" (near the state's limits) (Lehman 1991: 104) were not under direct state control. Lieberman (1991: 18, *passim*) concurs that public works expenditures included irrigation projects (Koenig 1990: 122), as indicated by the fact that the high administrative council (*hlut-taw*) was concerned with irrigation matters. Some territorial administrative divisions were involved in irrigation management, done in conjunction with the "Crown Weir Department." Some of the literature on Burma highlights theoretical issues surrounding the importance of water control in early states. Aung-Thwin (1990: 15) mentions the importance of central authority in maintaining the main systems of weirs and canals, while Stargardt (1992) questions the Wittfogelian and Asiatic Mode of Production assumptions often displayed in works on irrigation in Burma, and points to the long history of autonomous management of complex and long-enduring water-control systems at local levels, some of which persisted to the 19th and 20th centuries, or even to today. These arguments made coding more difficult, but we chose coding sources that provide useful empirical examples, and from these we concluded that there was some state involvement in irrigation in at least parts of the core zone.

Kin (crown police and customs posts) collected tolls and were charged with apprehending "bandits, smugglers, and fleeing rebels" (Koenig 1990: 56). Invasions and/or civil disturbances were reduced with the growth of the Restored Toungoo (1600-1752) and Early Kon-baung dynasties, compared with earlier periods (Lieberman 1991: 4), however, banditry was an "almost respectable occupation and often enjoyed the overt support of villages" (Koenig 1990: 52). State merit-making involved the support of Buddhist monasteries (Koenig 1990: 81), the construction of religious buildings, endowments to fund palace festivals, religious offerings, and land endowments to religious institutions (*glebe* lands) (Koenig 1990: 122, 126-30).

Bali (14)

Few roads were built, so that travel between palace centers was difficult unless they were on the same ridge line (e.g., Geertz 1980a: 20). Geertz (*ibid.*: 69-86) argues for a minimal role of the lords in irrigation management, and shows how irrigation societies (*subaks*) were linked into hierarchies of water temples, a hierarchical system of water management that was "highly self-contained" (p. 69) (cf. Lansing 1987). Water-opening rituals in important temples that coordinated annual water use were attended by the high-ranking officials (Geertz 1980a: 81), but water scheduling was otherwise run by "its own momentum" (p. 81). *Subaks* governed local irrigation

systems collectively and were linked into higher levels of irrigation management (Geertz 1980a: 50-1, 185-6, fn 75-4); according to Geertz, the state “had no legal rights at all within the *subak*...” (ibid.: 196, fn 84-28, and 197-8, fn 85-38).

Sources such as Hauser-Schäublin (2003), Schulte Nordholt (1996: 55-61, *passim*), and Schoenfelder (2000), and others discussed in Christie (1992), have argued for an active role for the state in large-scale irrigation construction and management in Bali (and Java). Schulte Nordholt (1996: 57-8) supports this contention by arguing that village organization of the sort described by Geertz and others was late developing in Mengwi (since the 18th century), so that the organization of large irrigation projects at the village level would not have been possible earlier. He concludes that the nobility must have been more involved in water control than in more recent times. But we think his evidence is not very good. Sources such as Geertz (1980a), Lansing (1987), and Lansing and Kremer (1993) argue that the construction and maintenance of the irrigation systems was organized primarily from the bottom up, focusing especially on the role of the *subaks*. And Christie (1992: 16) suggests that institutions ancestral to the *subak* go back at least 900 years as a “non-political” means of building and maintaining irrigation systems. Schulte Nordholt (1996: 128-9, 131) discusses the development of irrigation and agricultural temples in the marginal northeast region of Mangwi *nagara*, sponsored by Agung Mayun, where, he says, *subaks* (irrigation societies) had not been present. He implies a greater role for the ruler in irrigation in a marginal setting such as this, but the data could be better for this variable.

Public order is difficult to code. *Brahmana* priests served in the administration of justice, including apprehending offenders, but sometimes community groups had to apprehend offenders themselves (Geertz 1980a: 242-3, fn 126-39). The Mengwi dynasty instituted severe penalties for theft (including death for paddy theft) (Schulte Nordholt 1996: 129), but it is not clear how this could have been enforced. There might have been a slight bit of redistribution in this system. Palace rituals are described by Geertz as redistributive (Geertz 1980a: 249, fn 129-29); goods distributed in this events were consumed during the ritual or taken home. Princes carried out rituals “intended to benefit their...kingdoms” (Lansing 1995: 55), palaces were known as centers of learning and artistic production, and rulers endowed tax-free lands to support artistic endeavors and performances, even in rural areas (ibid.: 65).

Aceh (10)

We depend on Hurgronje’s (1906) massive ethnographic study of Aceh. The fact that he fails to describe public goods such as water control and transportation infrastructure would seem to imply they were not present. However, he does mention the presence of feuding and revenge killings that point to a weak state presence in the matter of public security (ibid.: 47, 56, 78-9, 94). In keeping with the state’s Islamic cultural code, an informal system of redistribution was maintained, based on a voluntary 10% of harvested grain that was then given as a religious donation,

principally to poor persons and for the advancement of Islam, and to be administered by each community's religious leader. The distribution of these funds was irregular, however, and not administered by the state (*ibid.*: 268-70). Earlier sultans built mosques, but little is mentioned regarding this kind of activity for the late 19th century focal period.

Perak (12.5)

Travel by boat along the rivers was required, as there were no roads (Gullick 1958: 5). A road built by a chief is described as "almost unique" (*ibid.*: 131), and, according to Gullick (1958: 46), poor communication limited the frequency of official convocations. And, when the British later did build roads, there was a rapid response in the founding of new communities along them (*ibid.*: 27), suggesting there had been a need for roads earlier. Water control features were present but were maintained locally by villages (Gullick 1958: 30-1, 131).

Crime, on the other hand, seems to have been infrequent (Gullick 1958: 116), and village chiefs, district chiefs, and the sultan all had responsibilities for maintaining law and order. Yet, their ability to do so seems limited, given that inter-chieftom feuding within the polity required the construction of defensive structures at chieftom centers (*ibid.*: chapter 6). Gullick (1958: 116) indicates that crimes could be "settled within the village." Village heads and their assistants were charged with apprehending criminals in the near vicinity of their villages (*ibid.*: 36). People in need of assistance looked to the sultan and local chiefs (Gullick 1958: 128), but this does not seem to be an institutionally well-developed redistributive system.

Java (18.5)

There was no centrally-financed department of roads before the Dutch administration (Moertono 1981: 91), but regional chiefs were charged with building roads and canals (*ibid.*: 103). A "great overland route" was built from Mataram north to Semarang (Schrieke 1957: 105). Water management was largely a village-based process, as it had been, apparently from as early as the first millennium CE (Christie 1992). There may have been tax concessions to encourage the conversion of forest to *sawah* (irrigated rice) (Christie 1991: 30), but these grants were recorded mainly during earlier periods, so it is not clear how much this applied in the focal period.

Numerous "bands of robbers, vagrants, and highwaymen" terrorized the Javanese countryside (Carey 1986: 83; cf. Moertono 1981: 85). The state was required to maintain public order, and had an official administrative title (*redi*) for those charged with police supervision, but it is also the case that it was acceptable to "take the law into one's own hands against a criminal" (Moertono 1981: 85), which suggests a rather weak control of the countryside (cf. *ibid.*: 90). Villages had considerable self-sufficiency, especially in maintaining security (Moertono 1981: 90). The ruler was expected to

give alms and other material support when needed (Moertono 1981: 38; Schrieke 1957: 143), but it is not clear that there was redistribution under normal circumstances. He was also expected to build or maintain religious monuments and support religious groups and communities (Moertono 1981: 83), but this practice appears to have declined to some degree by the Late Mataram Period (ibid.: 62). Central distribution of goods from the state was only for certain members of the king's household (ibid.: 119). Some resources were provided by the king to religious communities (ibid.: 83), but this is not described as being very extensive.

Vijayanagara (18)

Roads were built in the core zone to better connect the capital to producer areas, and to connect the capital to ports where military goods such as horses came in. These may have served as public goods but seemed to have benefited primarily the state (Sinopoli 1994: 226, 232). "There is considerable comment from foreign travelers on the excellence of roads and roadside facilities for travelers between large towns or fairs" (Stein 1982b: 120), however, armed convoys were required for long-distance commerce in some areas (ibid.)

Rulers invested in water control facilities for irrigation in the core zone to increase revenues and to assure a dependable supply of military assistance from this region (Smith 2006: 487; Stein 1989: 61-7). This appears to have included both flow and flood management irrigation, with "massive" rain-fed tanks and tank systems built throughout the core area, some with royal sponsorship, others with local sponsorship (Sinopoli 1994: 234; Stein 1989: 59). One tank had an embankment 5 km long (Sinopoli 1994: 234), but it is not clear to what degree the state was directly involved in constructing or managing such facilities (e.g., Palat 1987: 178).

Military protection was provided by the state along major trade routes connecting the coastal ports with the capital (Stein 1989: 75), but, otherwise, local communities funded and organized their own police forces (e.g., Saletore 1934, Volume I: 337). Major famines appear to have resulted in considerable mortality and emigration from affected areas, and the government lacked any established institutional response to famine (Mahalingam 1975: 173-5). Redistribution was not common, but rulers endowed temples, which, in turn, invested in agricultural development (Sinopoli 1994: 226), and the state endowed *mathas* or religious study and teaching institutions. But temples served also to legitimate rulership and to negotiate royal versus local status and prestige, so it is not clear if they can be interpreted entirely as public goods; as Stein puts it, royal or chiefly donations to religious institutions conferred *dharmic* prestige as well as material benefits to the ruler (Palat 1987: 178; Stein 1989: 96).

Pudukkottai (17)

Urban roads were constructed according to a palace-centered quadripartite city plan (Dirks 1987: 390). Dirks also (p. 148) suggests a role for early chiefs in the development

of irrigation in the area, and he demonstrates a higher density of tank irrigation in the vicinity of the capital center, Pudukkottai, and a correspondingly higher density of *inam* gifts (state grants of land and the income from it) to village officials who were charged with irrigation management in the central area (ibid.: 427). The system of *inam* gifts to water-management officials, although not a direct form of administrative management, does imply some state involvement in agricultural development. A small percentage of *inam* grants (*dharmadayam*) were made for charitable purposes (Dirks 1987: Appendix, Map 17). Roughly half of the population was supported at least in part through *inam* gifts from the king, but some of this was recompense for service for elite families or others who shared in the “structure of political privilege” (Dirks 1987: 124, 128), while others were made to encourage *brahman* immigration into the polity, i.e., they were selective incentives. Although some royal grants to village and temple officials may contribute to communal merit and societal prosperity, they manifest royal power as well as constituting a public good in a symbolic sense.

Royal gifts could be given for subduing bandits (Dirks 1987: 129), a rather passive public goods policy. However, a warrior nobility (*cervais*) were given land in marginal areas, in part, to provide for crime control (ibid.: 251) and other local officials (*ampalams*) were charged with maintaining order (ibid.: 281-2). Some redistribution seems to occur at the local level, by subcaste heads, but this was not a state policy, per se (Dirks 1987: 280).

Mughal (23.5)

The main arterial roads in the cities were paved by the state, while minor roads remained unpaved or were paved by individuals (Sarker 1963: 212). Many bridges were built around Delhi, Agra and other imperial cities (Farooque 1977: 46-7), and some roads had “resting walls” to aid porters (Farooque 1977: 54-6). The main trunk road from Agra to Lahore was planted with trees, and supplied with bridges and traveler’s houses (ibid.: 55). Roads were built “all over north India” (Grover 1994: 239), and some bridges were built (Farooque 1977: 45-54), as well as traveler’s lodgings, some of which provided storage facilities and defensive walls (Farooque 1977: 96-104). There was a road-building department, but Farooque (1977: chapter 2) indicates that much road construction carried out by this department benefited primarily the ruler’s movement on tours, campaigns, or hunting trips. Farooque (ibid.) also describes many instances of poorly-maintained roads, and the fact that many people avoided monsoon-season travel for this reason. Some bridges were built by merchants without state funds (Farooque 1977: 46), while others seem to have had military purposes, but others appear to be true public goods (ibid.: 49). Peripheries were somewhat served, for example, by bridge construction in Kashmir (Farooque 1977: 52-3).

Drinking water supplies came largely from citizen-built wells, but, upon a city foundation, the state constructed a major sewage drain (Sarker 1963: 211). In north

India, there was some state involvement in the construction of irrigation canals, but it was limited (Habib 1963: 31-2, 256). A lengthy canal was dug to serve the new center of Shahjahanabad that served also for agricultural and residential uses, and gardens (Blake 1991: 65). Canals in Punjab evidently were used for irrigation (Habib 1963: 32-4), and there was an official titled “canal superintendent” (ibid.: 34) whose job was to build and repair canals, but also required to attend to the equitable distribution of water. However, Habib indicates little overall involvement by in the state in promoting or managing canal irrigation (1963: 256; cf. Habib 1982b: 216), for example, some irrigation systems probably preceded the Mughals (Habib 1963: 31), and much cultivation was based on rainfall or well irrigation. *Caravansarais* for travelers were supplied with water (Blake 1991: 65).

Internal security was a service of the state, in the cities, through the office of the *kotwal* (Farooque 1977: 63; Sarkar 1963: 211). A rural community’s policing was done by *chaukidars* who worked for the village community, not the state; villagers as well as local *zamindars* were responsible for their own safety and that of travelers and merchants in their area (Sarkar 1963: 11; FR: 13-4), and appear to have carried much of the financial burden of crime control (e.g., Farooque 1977: 14; Habib 1963: 68-9). There was “considerable rural banditry,” so that insurance was required for valuable commodities in transport (Grover 1994: 242), and caravan merchants employed private guards (Farooque 1977: 61; Grover 1994: 238).

In conformance with Islamic canon, the ruler was expected to aid Muslim paupers (e.g., Sarkar 1963: 16), hence this would be a “lumpy” public good in a society with multiple religious affiliations. Most charity was in private hands (Sarkar 1963: 213), but some minor distributions were made by rulers, including poor housing and traveler housing, and famine relief (Hasan 1936: 282-7). Grants of land and stipends given by the office of *sadar* or directly by the ruler include those given to destitute individuals, supposedly of any religion (Hasan 1936: 261-74). The estates of persons dying without heirs, (and the balance owed from the estates of civil officials) was (theoretically) not to be used for ruler’s needs or state needs, and was to be used for charity; similarly, the 2.5% tax on Muslim income was reserved only for “pious works” (Sarkar 1963: 157-9). Transit taxes were sometimes remitted during famines (Farooque 1977: 167). There is some evidence of state response to famines including food distributions and revenue remissions, but some famines had serious consequences (Habib 1963: 102-4, 250-1). A postal system was present but was for royal use only (Farooque 1977: 149), so that merchants and others needing postal services hired messengers (ibid.: 153-5). Monasteries received grants from the state in some cases (Sarkar 1963: 144).

China (22)

The Grand Canal was a major transportation project, but no similarly large-scale road projects were undertaken, and road and bridge construction and maintenance was often carried out by local officials (Brook 1998: 608-9), but often, as well, was funded by

private benefactors, especially after the 15th century. The most expensive construction was reserved for official roads (Brook 1998: 608-9). The Ministry of Works was charged, in part, with the maintenance of roads and waterways, but did comparatively little to improve transport conditions except as a byproduct of flood-control efforts (Brook 1998: 606). A state courier system, a postal system, and transport offices (the latter to handle state-requisitioned goods) were established, but were reserved for official purposes (Brook 1998: 582, 594). The Grand Canal, developed after the 1420s, served primarily to bring surplus grain from the southeast to the new capital at Beijing and other northern regions, including military establishments in the Great Wall region (Hucker 1998: 71, 84; Ayao 1969: 45). The canal was also used for private shipping, although private use was not a major goal of the canal construction (Brook 1998: 597-603). Travel was highly restricted unless on official business or for licensed merchants, although travel and migration were not completely stopped (Brook 1998: 619-20). In the south, agricultural development and urban growth grew hand-in-hand primarily in areas with high river densities (Rawski 1972: 52), and Heijdra (1998:419) indicates generally poor road conditions in rural areas of north China.

State-sponsored expansion of water-control facilities near Beijing was deemed important to lessen the capital's dependence on southern grain (Chi 1936: 145-6). A table in Chi (1936: 36) tabulates official references to water-control works from provincial gazetteers, and shows a substantial increase in the number of Ming works compared with prior dynasties, averaging 291 for Sui to Yüan while the Ming total is 2270, and the occurrence of works expanded greatly in the Yangtze province as well as in Hunan, and Yunnan. Most provinces had large numbers of projects (up to 480 for Zhejiang), excepting the more distant provinces such as Sichuan. The first Ming emperor ordered that "all petitions in regard to water benefits, from the people as well as officials, be brought to his attention..." and he dispatched officials to the provinces to supervise water control works (Chi 1936: 143-4). A major flood-control project was carried out to inhibit the flooding of Suzhou (Brook 1998: 605). However, in Fujian "... as elsewhere, local gentry members played an important role in initiating and financing such repair and construction projects..." (Rawski 1972: 12).

Beijing and Nanjing were subdivided into wards in which officials supervised police and fire patrols (Hucker 1998: 15, 89). However, the territory adjacent to the capital, the North China Plain, was known for having roaming bandits, making some trips difficult (Brook 1998: 615). Military officers were sometimes required to quell "outlawry in a specified territory," and were rewarded for taking action against domestic bandits, although success in war was more highly valued (Hucker 1998: 58, 61). County-level militias also participated in controlling "small scale banditry or local disturbances" (*ibid.*: 67), although night travel between many cities was risky owing to banditry (Brook 1998: 613). Minor crimes and disputes were often left to "local authorities and clan institutions to resolve," but some cases involving commoners received extensive review treatment at the higher levels of the judiciary (Langlois 1998: 210).

There was considerable redistribution (Figure 7-2). Censors were sent to famine areas to supervise relief efforts following floods or locust infestations (Hucker

1998: 94). Grain from the main state granaries was sold at low prices, loaned, or distributed free to famine areas (Ayao 1969: 63; Bray 1984: 419-23). The policy of the “Ever-Normal Granaries” can be traced in various forms to as early as the Han Dynasty, and had been institutionally developed over subsequent dynasties; a detailed accounting written during the Late Ming includes a discussion of strategies to reduce the potential for administrator agency in relation to the granaries (quoted in Bray 1984: 419). The purpose of the Ever-Normal Granaries was to regulate price fluctuation and to serve as a storehouse for famine relief; official funds were used to purchase grain which could be redistributed or purchased at low government-set rates (*ibid.*) By the Ming Dynasty, management of relief granaries was placed largely within local non-official organizations, with a minimum of official regulation and oversight to detect discrepancies (Bray 1984: 422). The state subsidized Confucian schools scattered throughout all the prefectures that also trained young men for civil service careers (Ho 1962: 17). County-level officials of the state (*chih-hsien*) were charged with “supervising care of the aged and indigent;” they were expected to be benevolent in their contacts with the public (Hucker 1998: 89-90).

Japan (16.5)

The immediate hinterland of Edo featured a network of roads and canals, but paved roads were found mostly in the higher-status residential areas (Perez 2002: 125). Owing to a lack of city planning and road building in some areas, transportation and communication within Edo were inefficient and confusing to outsiders (e.g., Vaporis 1997: 40). The only major roads linked the few largest cities, such as the Tokaido highway linking Edo and Kyoto. These were built by the *shogunate*, while local *han* built roads to connect castle towns to their own rural areas (Nobuhiko and McClain 1991: 543). But roads were not often built connecting the *han*; most roads facilitated transportation to and from Edo, but, probably for military reasons, connections between *han* were not highly developed.

In 1722, an official was placed in charge of agricultural development in the vicinity of the Edo capital, including land reclamation and irrigation (Tatsuya 1991: 449), but it is not clear how much work got done, although an extensive canal system brought water to Edo (Toshio 1991: 500). Reclamation and water-control projects were often funded by wealthy households, or wealthy households working in conjunction with the *daimyo* or even the *bakufu* (Toshio 1991: 498-501). There was some administrative interest in agricultural development after 1722, to help generate new income (Tatsuya 1991: 449), but it is not clear how much impact this had.

There was some concern with maintaining public order, and this involved city elders, and commoner city dwellers (*chonin*) were organized into self-help groups of about 10 households, and these organized their own fire-watch and safety patrols and paid firemen (Perez 2002: 28; Nobuhiko and McClain 1991: 535-7). In spite of these efforts, fires in cities such as Edo were a difficult problem owing to inadequate development of fire-control capabilities (Nobuhiko and McClain 1991: 576).

Attempts to reorganize city governance to provide more city services to the *han* capitals were widespread, but, evidently, not always successful (Nobuhiko and McClain 1991: 579). In villages, disputes were usually settled locally without interference from the state (Perez 2002: 140).

“Famine was not unknown in many parts of the country” (Perez 2002: 27; cf. Toshio 1991: 495). Some resources were available for reconstruction following natural calamities, but not on a regular basis. The providing institution for food distribution in case of famine was the *han*, although the *bakufu* would at times grant loans to needy *han* (Bolitho 1991: 183, 204). *Terakoya* were small schools where commoners could learn to read and write (Tatsuya 1991: 455), but they were supported by local families and communities, not the state (Shively 1991: 719).

Tibet (19.5)

According to Carrasco (1959: 169) “Ordinary road repairs from village to village were performed by the regular landholders; the subordinate landholders were called upon to assist with extraordinary repairs only,” but near the capital some transportation infrastructure was built by the state, including a bridge that “is one of the most creditable pieces of Tibetan labor ... well constructed of granite ...” (Landon et al. 1906: 314-315). Other roads were not so fine as this, even ones used as trade routes, as Bell (1992: 112-113) points out: “And first it should be made clear that the term trade-route does not connote a well-made road. The track is sometimes of the roughest, but the animal that carries the load, agile and enduring, does not ask for much.” Or, from Landon et al. (1906: 114-115): “The road to Dongtse [from Gyantse] serpentines across the wide level plain of the Nyang chu, idly acquiescing in the obstacles which villages, water-courses, field boundaries ... houses, or irrigation ditches throw in its way.”

There was some state involvement in water management, as we see in this text from Carrasco (1959: 10): “In central Tibet records of the irrigation schemes are kept in the district forts. In each district those who hold landed estates from the government cooperate in maintaining the irrigation system; disputes among them are settled by the district officials or by the central government of Lhasa. The labor for irrigation works is supplied by the peasants in proportion to their holdings.”

Much of the lawlessness in Tibet appears to be confined to highland areas where state presence was limited, but Bell (1992: 140) paints a more pessimistic picture: “The political and social order of Tibet is several hundred years behind that which now holds in England; it corresponds to a period when highway robbery was rife in this country. The ordinary folk of Tibet are hardy, living the simple life in clear, cold air, courageous, mobile, and fond of adventure. It is not a matter for wonder that there should be brigands, but rather that they should not be more numerous than they are.” Little mention is made of problems with security in and around government sites, and according to Carrasco (1959: 81) a system of administration of justice was in place: “The administration of justice at the lower level is the

charge of the estate grantees and the district officials. For important cases special committees may be appointed from among the lay and monk officials. Ultimate decisions rest upon the four ministers and the Dalai Lama.” While there is little evidence for redistribution, some of the state’s tax revenues went to support temples and monasteries (Carrasco 1959:168). According to Carrasco (1959: 80) “The government of Tibet is dedicated to the service of religion. As stated in a Tibetan official document, ‘Tibet is a country in which political and religious affairs are carried on simultaneously, with its chief aims the propagation of Buddhism and the seeking of happiness for all souls on earth.’”

Egypt (20)

The state built roads and canals in the vicinity of main government centers (e.g., Montet 1981: 14-15, 253), and we infer from the following that there was road construction away from the cities: “[Ramesses II] could now at will continue up the ‘King’s Highway’ by Heshbon, Ammon, past Ashteroth-Qarnaim and so to Damascus and over to Kumidi, restoring the lost province of Upi to Egypt” (Kitchen 1982: 67). According to Montet (1964: 76): “Every province had a network of roads and canals ... Every year, when the canals were cleaned, the dredged up earth could be used to repair the gaps in the roads ... In the records, the repair and maintenance of the canals is often referred to. In one instance, the nomadic tribes, who often caused trouble, had thrown blocks of stone into a canal near Aswan... When Tuthmosis III was informed of the incident, he had the canal cleared and decreed that it should be the duty of the local inhabitants to keep it in good order.”

Montet (1981: 16-17) also mentions some evidence for water control facilities, including wells for public water supply, and pipes for sewage or water supply. Water control for irrigation is another matter. As Butzer (1976: 50) points out, “Despite the symbolic association of the pharaoh with this [Nile] inundation, Dynastic irrigation technology was rudimentary and operated at a local rather than a national scale...Perhaps the only centralized aspect was the traditional link between tax rates and the potential harvest, as inferred from the height of each Nile flood ... Altogether it seems that, away from the major urban hinterlands and the key royal domains, no form of centralized canal network was ever achieved in Dynastic times.” According to James (1984: 115), systems of basins, canals, and dykes were managed at the local level and local administrators, appointed by the state, helped manage these systems. Further, it is unclear how private individuals benefited from the construction of canals and basins as compared to state and temple estates and other official sites such as mines (e.g., Badawy 1967: 107-108).

The system for maintaining public order was well instituted, perhaps in response to a cognitive code that specified that an important role for the state was to control internal disorder (O’Connor 1983: 191), but maintaining order also served to protect royal and state properties. In part, this included a system of judicial councils that could resolve grievances among private individuals, although the councils

apparently had little enforcement power. “Police forces of one kind or another existed from early times, although their organization is often obscure. By the New Kingdom there was a well-organized force, the *medjayu*, distributed throughout Egypt and often involved in apprehending law breakers, guarding state possessions, and keeping order” (O’Connor 1990: 29). Ramses II boasted that “I made the woman of Egypt to go... to the place she desired, (for) no stranger nor anyone upon the road molested her. I set each man in his security, in their towns...” (Badawy (1967: 107-108), and in Montet (1964: 76) we are informed that “A certain Nomarch of Siut maintains that during his governorship, travelers could safely sleep on the road-side with their possessions beside them, because the fear in which the police were held was a sufficient protection against attack,” and “...in normal times, when the police were vigilant, travelers arrived safely at their destinations” (Montet 1981: 166).

We find little evidence for redistribution. Kemp (1989: 239-242) demonstrates that state directed redistribution was not an important component of domestic revenue and private economic transactions were an important source of wealth for ordinary households.

Athens (20)

Little evidence for road-building has been found from archaeological research. As Camp (1986: 45) describes it, the main road in Athens, the “Street of the Panathenaia” was wide but built only of packed gravel with no formal edges. One board of magistrates, five in number, was charged with road maintenance (Gulick 1973: 303; Hansen 1999: 243), but Blümner (1966: 199) writes that “we must not assume that ancient Greece possessed a well-kept complicated network of streets...”

Water control, including public water supplies, is difficult to code because, although there was some public expenditure on water supplies in the focal period city, the later Roman administrators (especially Hadrian) detected serious shortcomings in Athens and devoted many resources to improving the water supply (Wycherly 1978: 89). For the focal period, there was one board of magistrates charged with roads and water supplies (Hansen 1999: 243). The superintendent of springs, an “important office,” “repaired spring houses and water conduits” (Gulick 1973: 303). Substantial 4th century projects improved water availability for public buildings and public use in fountain-houses, but storm drainage, a persistent problem, was not adequately addressed (Wycherly 1978: 249-50).

While there was considerable concern to identify and punish corrupt officials (e.g., Gulick 1973: 302), less effort was devoted to the issue of public safety. Magistrates (*astynomia*) were assigned the task of public safety (as were the *agoranomoi* in the market places) (Hansen 1999: 196; Gulick 1973: 20), but their numbers were small and it is not clear how effectual they were. Crimes were not punished unless an accuser brought the case to the People’s Court (Hansen 1999: 196). Hansen (*ibid.*) indicates that other than in the market, in war, in the assembly,

or at a festival, a person was unlikely to come in contact with any officials, so there appears there was only a minimal institutional structure for policing or fire-fighting. According to Gulick (1973: 20) “there was no regular patrol of the city streets in the interests of the personal safety of private citizens, and the dark alleys and the outskirts of the town were infested with footpads, who clubbed the belated citizen and robbed him of his mantle or purse.” The presence of stone towers on some rural household sites (and hence, privately built) suggests that rural safety may have been a concern, but it is not clear what function the towers served (Whitley 2001: 394).

There was some redistribution. In emergencies free or cheap grain was distributed, but only to citizens (Hansen 1999: 87-8). Magistrate boards monitored grain imports and regulated grain prices (Gulick 1973: 302). Disabled persons could receive a subsidy from the state, and the state also helped with the costs of raising the sons of soldiers killed in battle (ibid.) The Council of Five Hundred distributed pensions to deserving disabled persons of low income (Hansen 1999: 259). In our miscellaneous category, we noted that the state was required to pay for and make a large number of ritual sacrifices (ibid.: 164).

Our decision to not code offense-defense as a public good perhaps does more of a disservice to Athens than to other polities in the sample, given the endemic nature of inter-polity warfare in the Greek city-state system. Border forts were constructed including a long wall (the “Dema Wall”) that protected a major route from Boeotia and the Peloponnese (Whitley 2001: 398). A major fortification system was first built during the fifth century, and later rebuilt and expanded, around Athens, later to include Piraeus, with long walls connecting Athens and Piraeus, and the Phaleric Wall connecting Athens and the Bay of Phaleron (Whitley 2001: Figure 13.17).

Rome (24)

Wide roads (*via*) connected Rome and the adjacent *suburbium* and other parts of Italy, but such roads were not always built within the city itself, where the road system was an “inextricably tangled net” (Carcopino 1968: 45). Most of the 85,000 km of roads built to link Rome and the provinces had been built during the first two centuries CE (Liversidge 1976: 157). Many of these were built using cut stone and well-established roadbeds. New major road construction was financed by the state, but most maintenance of roads appears to have fallen to the community magistrates or landowners (Galsterer 2000: 353, 357), but the state sometimes provided additional resources. Major new road projects and improvements in port facilities in Italy were undertaken during the focal period, especially under Trajan, for example, the Via Nova Traiana and the Via Traiana, possibly paid for with spoils and wealth generated from the victories in Dacia (Griffin 2000b: 114). Road density was less in some boundary or edge areas (e.g., Liversidge 1976: Map 65), but Hunter Blair (1963: 120) mentions Roman road and canal construction in the Fens of East Anglia.

First under Vespasian, then continued by Titus, major water control programs included the construction of aqueducts and roads in Italy and the provinces, at the

personal expense of the emperors (Griffin 2000a: 49). However, the majority of houses in Rome were not connected to the sewer and instead used a cesspit in or adjacent to the kitchen (Morley 1996: 41), and water diverted for Roman urban use appears to have represented a loss of water availability by some rural residents of the *suburbium* (Morley 1996: 104-5). The Tiber was declared a “public” river that could not be modified by farmers or used for irrigation (*ibid.*: 105). Most construction and maintenance of water supplies appears to have fallen to the community magistrates who depended in part on private donations (Galsterer 2000: 353), for example, when Tiberius Claudius Italicus donated two million *denarii* to pay for the massive aqueduct serving Aspendus in Pamphylia (Liversidge 1976: 34). Massive public buildings sometimes reflected rivalries between towns, paid for by “rich men who had few outlets for their wealth” (*ibid.*: 35). The state sometimes provided additional resources, for example when Hadrian financed a makeover of the Athens water supply (Wycherly 1978: 89; cf. Liversidge 1976: 35). In the western empire, new Roman town foundations, even those near imperial frontiers, displayed the same urban features found elsewhere in the empire, including baths and conduits “to set an example of Roman urban life to the neighboring tribes” (e.g., Liversidge 1976: 40-50). These frontier towns, sometimes growing out of military installations, appear to have benefited from imperial resources, for example, Augusta Treverorum (Liversidge 1976: 54).

Public safety was also a well-organized public good. A large number (7,000 by the 3rd century) of *vigiles* were organized to fight fires in the capital (Purcell 1996). Hassall (2000: 321) counts some 10,000 men in Rome in the service of public safety, including guards, police, and the fire service. A number of contemporary sources, however, emphasize the dangers of travel in the city at night (Carcopino 1968: 47-8). The main charge of chief magistrates in communities was keeping the peace, including the use of municipal slaves as policemen; if that failed, the provincial governor sent in soldiers as needed (Galsterer 2000: 351-2). Trajan sent Pliny as *legatus* (official representative of the ruler) to Bithynia-Pontus in part to enforce the law and bring tranquility to a province where many matters needed correction because of shortcomings of local governance (Griffin 2000b: 119). In border provinces, soldiers were assigned to maintain order (Eck 2000b: 282). By the end of the reign of Marcus (177-80) there are indications of a growing inability to control the countryside, for example in a growth of runaway slaves and banditry (Birley 2000: 181), but even earlier, banditry away from the cities was common and feared (Brent Shaw 2000: 387), even in Italy (Purcell 2000: 421).

Redistribution is difficult to code, since the famous Roman grain distributions benefited primarily the citizens of Rome, while in most communities redistribution was slight and rare, and the extraction of grain from locations such as Egypt to Rome may have actually exacerbated grain shortages in other cities previously supplied from Egypt (Garnsey 1988: 256). Community authorities were charged by the state with maintaining an adequate supply of affordable basic commodities, and might regulate prices to do this, and the state might also intervene to regulate price and supply (Galsterer 2000: 352), but in community governance poor relief was “rather exceptional” (*ibid.*: 354). The state, at least the emperor, seems to have been

more active in this way, but it is not clear to what degree this would have impacted on many persons on a day-to-day basis (e.g., Garnsey 1988: 252). The practice of emperor largess in cases of food shortages can be traced to Augustus who “thus established a tradition of liberality which his successors could hardly ignore” (Garnsey 1988: 218). Titus took great aims to respond to disasters that occurred during his reign, including the eruption of Vesuvius, an epidemic, and a serious fire in Rome (Griffin 2000a: 49-50). Nerva provided some land for redistribution to poor citizens (Griffin 2000b: 93). A program (the *annona*) was put in place to provide bulk goods, including 33 kg/month of wheat (and, occasionally, distributions of money), to the free (citizen) population of Rome, but a “sizeable proportion” of the grain needs were met by the market; during the focal period, oil was added to the *annona* goods (Morley 1996: 55). Just prior to the focal period, some 200,000 male freeborn were eligible for the corn dole (Morley 1996: 37), and Trajan added 5,000 free-born children of Rome to the list of persons eligible for corn distributions (Griffin 2000b: 106). He also extended the “largess of the *princeps*” from the city to Italy as a whole with an “innovative alimentary scheme to support the raising of children in Italian towns” (Griffin 2000b: 115). This plan involved loans made from the emperor’s treasury to Italian landowners. The interest on the loans was diverted to a fund for *alimenta*, thus benefiting town finances in the support of children. This plan “involved both imperial and civic munificence, while the agents [land owners] found themselves acquiring influence,” given that this was a period in which generosity towards one’s community was in high repute, but it also may be viewed in part as a pronatalist policy that could benefit military recruiting in Italy (Griffin 2000b: 115-17).

The postal service was for official use only and was financed in part by communities (Galsterer 2000: 357). Other activities could perhaps be construed as public goods. The emperor’s own treasury was sometimes used for public benefit, including roads and bridges, aqueducts, disaster recovery, but also such things as grants for cultural purposes such as stipends to professors and artists (Griffin 2000a: 31). Vespasian began, and Titus completed, the Colosseum (*ibid.*: 49) where public entertainment was provided. Hadrian cancelled taxation arrears at one point “and the records were publicly burned in the forum” (Birley 2000: 136) (as did Marcus in 178). As Hadrian traveled, he frequently sponsored public constructions in communities he visited, including the great Temple of Olympian Zeus in Athens (e.g., Birley 2000: 139-140). During a plague epidemic in Rome, Marcus used public funds to pay for funeral ceremonies for common people (Birley 2000: 167). Following a major earthquake in 178, Smyrna was rebuilt at government expense (Birley 2000: 182).

Venice (21)

Transportation infrastructure is described in Venice as follows (Chambers and Pullan 2001:6): “... for there are innumerable waterways called *rii* which lead out of the Grand Canal and pass through different neighbourhoods. Above them are

bridges; in olden times these were made of wood, but now they are being rebuilt in stone. There is also a very large wooden bridge over the Grand Canal; it is very high, strong and wide, and crosses the Canal at Rialto ..." (cf. Chambers and Pullan 2001: 136; Norwich 1982: 202; Romano 1987: 18). Romano (1987: 22) goes on to point out that "The subordination of private interests to the common good is evident in the establishment of the *giudici del piovego*, the officials who were in charge of the city's public facilities... The *giudici* resembled to some extent modern-day building commissioners, for changes in buildings, repair of streets, and maintenance of canals all required their approval..."

Water control was also an important public good. In Norwich (1982: 26) we find that drainage and flood control were problems addressed by the state from the earliest times and continued into the focal period, by which time "The *doge* and his highest councils made the basic decisions designed to keep the canals and the channels clear and, as early as 1224, there was a magistracy in charge of channels... Later, a *Magistrato all'Acqua* was created (1501) to handle all hydraulic problems" (Lane 1973: 16; cf. Romano 1987: 25-6). In Braudel (1972: 78-79), we learn that water-control projects extended beyond the immediate vicinity of Venice: "The low-lying regions of the Venetian countryside, which are also the richest and most populated, were the object of frequent improvements beginning before the end of the fifteenth century. We can guess at their scale without unfortunately knowing their geographic extent or their precise chronology... Every improvement... established for a defined areas of obviously marshy land a programme of various hydraulic works: dykes built or to be built... entry points for water... and canals and trenches for distributing irrigation streams..." In some cases the costs were borne by local land owners, but the state also provided advances at low interest rates, and might take a more direct role (*ibid.*)

The state also aimed to improve public safety, as we are able to read in Romano (1987: 9) that "In his studies of violence and criminality, Guido Ruggiero demonstrates that, by the early years of the fourteenth century, the government had a police force and judicial apparatus capable of meeting any challenge. With one policeman for every two hundred fifty inhabitants and a series of courts culminating in the ruthlessly efficient Council of Ten..." Similarly, in Chambers and Pullan (2001: 20), "Besides these customs posts, there are along various routes patrol boats of officials who search out smugglers, and this is done because there is no other way of guarding Venice. However, it is wonderful that there is no crime so great or deed so cruel in Venice that it does not come to light without discovery of who has done it. And this is because of the great sums that the *Signoria* sets on the heads of those who commit some wrong... Not only are there rewards fixed for delivering the wanted person alive to the *Signoria*, but also for delivering him dead, or for killing him on the spot, they can claim the reward from the funds of St Mark" (cf. *ibid.*: 88-9; McClellan 1904: 100, 172; Ruggiero 1980: 5-6, 12, 14, 15). An apparatus of public security also operated away from Venice, for example, "... the Rector, always a Venetian, [was] directly responsible to and in constant touch with the Senate and the Ten. He controlled the police; his was the ultimate responsibility for the entire government, civil and military, of the city or town" (Norwich 1982: 209).

Redistribution was also present, including commodity price controls (Chambers and Pullan (2001: 13). We learn from Lane (1973: 14) that “A little downstream on that same side of the Grand Canal was the main grain warehouse, operated by the government to keep the city supplied.” And grain was sometimes distributed to persons on the basis of need (Romano 1987: 18). Other occasions for distribution were present. Chambers and Pullan (2001: 76) report that on the day of his election, Doge Grimmani, “... had a huge quantity of bread and wine distributed to the poor, and ... wine and ... bread... was distributed to the poor upon his orders.” Bouwsma (1968: 64) reports that “The Venetians also tended to justify their celebrated system for poor relief on political grounds; they saw public assistance not as a religious duty but as a useful device to prevent public disorder and insurrection.”

We coded for several services in the miscellaneous category. From Norwich (1982: 91) we learn that the state “instituted among other things a rudimentary form of street lighting - making Venice the first city in Europe, with the possible exception of Constantinople, to be regularly and compulsorily lit at night.” In addition (ibid.: 202), there was a fire service. Further, “Public health was ... early accepted as a state responsibility, and to the Venetian Republic must go the honour of having founded the first national health service in Europe, if not in the world” (Norwich 1982: 274). And, “The Health Office, ruled by the *Provveditori alla Sanità*, had a continuous existence from 1490 onwards, and its powers were subsequently, in the late 1520s and late 1530, extended to include the co-ordination of poor relief, the suppression of vagrancy, and the control of prostitution...” (Chambers and Pullan 2001: 113).

Education was also a public good. From Norwich (1982: 284) we learn that “There too [in Verona], Venetians and Veronese together instituted a remarkable system of education, with free primary schooling and - for more mature students - professors of cannon and civil law, the humanities and medicine; all were paid out of municipal funds, exempted from personal taxation and contracted to hold public disputations during the winter months” (cf. Chambers and Pullan 2001: 355).

England (11)

The state provided neither funds nor labor for the maintenance of the national infrastructure. The repair of roads and bridges was the responsibility of local families or the individual (and his descendents) who constructed them, for example, from Flower (1915: 181, 195; cf. 1923: 1, 6-7), who provides examples from about 1280 to 1400, including the focal period and within a year or two of the focal period. The key feature of many agricultural strategies in England involved the use of drainage ditches. Again the same methods of maintenance were used for ditches as roads and bridges, with little evidence for state involvement (Flower 1923: xxviii; xlii).

Local officials, the sheriffs and the bailiffs, along with the keepers of the peace, were charged with controlling crime and punishing criminals (Morris 1940: 46).

Yet the system was so corrupt and the monitoring of officials so limited that the state utterly failed to provide any public security (Waugh 1991: 159). According to Plucknett (1940:103), “It is not necessary to stress the number of seeming crooks and bandits who were elected [sheriff], for it must be remembered that their generation was one of fierce faction and sometimes of civil war, which will explain most of the assaults, homicides, and house-breakings of which we hear.” Haven Putnam (1950) offers a myriad of examples of the government’s failure to maintain law and order and to offer individual households security during the focal period. In Platt (1982: 93) we learn that “In effect, the government that had set out at the beginning of Edward’s reign to restore the law and to reform many acknowledged abuses, had now reversed its policies in the interest of the wars and was itself pointing the way to a new chaos. Such former outlaws and criminals as returned from the campaigns, hardened in violence by their experience, might have old scores to pay off and would certainly have had problems in re-establishing themselves peacefully in the communities that had been glad to be rid of them. Complaints of disorder, always to be heard in medieval England, rose to a crescendo at the end of the thirteenth century and afterwards took many decades to die down. These were the years, most particularly in the first decades of the fourteenth century, of the criminal gangs and the birth of the legend of Robin Hood” (cf. Brooke 1961: 70; Waugh 1991: 158). Waugh (1991: 165) reports that “Keepers of the peace first appeared in the thirteenth century. After 1300, they became a regular part of the administration, primarily responsible for enforcing the Magna Carta and the statute of Winchester (1285). The mounting clamour over lawlessness forced the government to take additional action. But what action? The crown wavered...” And the lack of action resulted in a growth of public protest, as described in Waugh (1991: 167): “For the peasantry, local commissions were no better than central. They complained bitterly about both. Protest poems from the early fourteenth century lament the venality of all royal officials, whether sheriffs...judges, bailiffs, or commissioners of array, tax, and purveyance....”

Ottoman (16)

“The Ottoman government did not include among its functions the building and maintenance of roads, bridges, and ferries, the conduct of a public postal service, the promotion of agriculture, industry, and commerce, the organization of a system of public and universal education...” (Lybyer 1966: 147). Nomadic Turkoman pastoralists monopolized land transportation, including military transport, using camels, and for this reason the Ottoman state “lacked hard surfaced roads” (Inalcik 1994: 39). But water had a “religious connotation” and so considerable effort was expended to construct aqueducts and conduits, and this was carried out by a specialized bureaucracy, although private endowments to religious charities also could be a source of funds for such projects (ibid.: 81-3). So far as we can tell, these works primarily benefited urban populations. The state had little interest in building irrigation projects (e.g., ibid.: 83).

Outside the main cities, maintaining public order was a persistent problem. In times of peace, *Janissaries* (a military order) might “act as an organized and very dangerous mob” (Lybyer 1966: 92), and we learn that “...travel in general was hazardous for individuals, even for Ottoman subjects...” (Inalcik 1994: 191). Apparently, rural communities were exposed to attacks by “marauders” and, as peasants were not allowed to possess weapons, they depended on the local *sipahis* (*prebend* holders) for protection, which became more problematic when they were away on military campaigns (ibid.: 171-2).

There is some evidence for redistribution. Giving alms (*sadaka*) is a positive value in Islam and the Ottoman state pursued policies of redistribution in accordance with this obligation (Inalcik 1994: 47), although wealthy private individuals also contributed. Gifts by the sultan of “empty” (undeveloped) land (*temlik*) to wealthy persons were usually made if the owner proposed to use the land to establish “pious endowments” (*vakf* lands) such as dervish convents or mosques (ibid.: 123). Such lands were tax exempt and not subject to state control (ibid.: 120-6). To accommodate grain shortages and high prices, the state maintained some control over prices and would distribute free grain when needed through the “hospices” (ibid.: 180). Local officials were charged with monitoring commodity prices and local prices could be fixed to ameliorate wide fluctuations (ibid.: 182). However, Ottoman price-fixing is thought to have been a cause in the decline of grain production in the empire which was a cause of societal decline beginning in the late 16th century (ibid.: 186). *Vakf* endowments and the mosques they supported provided a degree of public education, albeit emphasizing religious study (Lybyer 1966: 200-4).

Aztec (21)

Transportation infrastructure was well developed, particularly facilities that connected the capital, built in a lake, to the mainland. In Zorita (1994:157), citing a letter of Cortés, we are told that “The great city of Tenochtitlan is built on the salt lake, and the distance from the mainland to the city is 2 leagues, whatever the direction from which you approach it. It is entered by four artificial causeways, each two lance-lengths in width.... Its streets (I speak of the principal ones) are very broad and straight; some of these, and all the lesser streets, are half dry land and half water, on which the people go about in canoes. All the streets have openings at regular intervals, to let the water flow from one to the other, and at all these openings, some of which are very broad there are bridges, very large, stone, and well constructed, so that, over many, ten horsemen can ride abreast...” (cf. Durán 1994: 110-111; Hassig 1985: 60). And van Zantwijk (1985: 107) points out that these constructions also serve a water-control purpose: “They began building causeways to connect the Aztec islands with each other and with the mainland. The causeways also served as dams to regulate the influx of fresh water from the rivers so that the saltpeter content in some parts of the lake was permanently reduced. Thus, *chinampa* (raised-bed) [agriculture] flourished around the Aztec sister towns and contributed to the economic progress of the area.”

Hassig (1985: 31) cites additional information on roads: “Beyond the confines of major urban centers in central Mexico, roads were not well developed. There were, however, a variety of types: *ohkli*, or road in the general sense; *ochpantli*, or main road, wide, but rough, with holes, muddy spots, and curves... The *ochpantli* linked nearby cities and are recorded in early accounts as leaving Tlaxcala, Cholula, Huexotzinco, Texmelucan, Chalco Atenco, and Tlalmanalco and going to Tenochtitlan. The *ohquetzalli* was a royal highway linking the cities of the Valley of Mexico and more distant cities.” Offner (1983: 68) notes “...Nezahualcoyotl’s legal rule ordering the sowing of roadsides with maize for travelers...”

We mentioned the role of causeways in water control. Davies (1987: 117) also sees considerable evidence for water control, especially in and around the major city, especially the Dike of Nezahualcoyotl that “was nine thousand meters long by seven meters wide and required three hundred thousand cubic meters of filling; Angel Palerm calculates that four million man days would have been needed to build it.” Durán (1994: 373) sums up the result of these public works: “In this way Tenochtitlan became well ordered, attractive, beautifully finished, with large and well-made houses, full of areas for recreation such as pleasing gardens and fine courtyards. The levels of the ponds were carefully controlled and around these were planted groves of willows and black and white poplars. Many defenses were put up where there were water sources so that even when they were full there would be no danger of their overflowing. All of these improvements and reconstruction were paid for by Ahuitzotl [ruler of the Tenochca], to the satisfaction of all the officials and the rest of the community.”

During the focal period a judicial system was undergoing development, emanating especially from the secondary capital, Texcoco, which was hierarchically organized to link high officials in Texcoco to lower-level judges in other provinces and towns (Offner 1983). Judges had the power to arrest offenders and were assisted by constables, and there were also local police (*topiles*) (Motolinía 1903: 306; cf. Torquemada 1975, II: 355).

There is a little evidence for redistribution on a limited and somewhat ad hoc basis. For example, in Offner (1983: 147) we find that “... the Texcocan ruler provided food and clothing to the needy and war-wounded...,” and Durán (1994: 239) writes that, in response to a great famine, “Motecuhzoma then, having agreed with Tlacaelel’s suggestions to avoid the depopulation of the city, ordered the stewards, in certain order according to their cities and provinces, to bring into the city each day some canoes filled with maize and other canoes filled with gruel... He told them not to bring corn in grains and ordered, under pain of death, that no maize be carried away to other parts” (other mentions of redistribution are described in Durán 1994: 400, 408).

There was also public education, most of which was strictly to prepare people for official positions in temples or the government, and not all of which was publicly funded. However, Offner (1983: 168) points out that “Each *calpulli* had its own god and temple; each apparently had its *telpochcalli* (youths’ schools); and some had a *calmecac* (priests’ house),” but during the focal period the state appears to have increased its influence over education. Offner (ibid.: 111-112) writes that

“Nezahualcoyotl established six ‘*ordenes*’ (‘orders’, ‘schools’) within the city... One order was attached to and served the temples and educated future priests (‘*tlamacazque*’), noblemen (‘*principales*’), and officials (‘*tequiztlatos*’). Two other schools prepared commoners to hold public posts and men of various classes to be warriors. A fourth school trained ambassadors, and a fifth, judges. A sixth school trained *calpixque* (tribute collectors) and minor officials involved in the production and management of tribute and labor services.” Offner (1983: 150) also relates that “...the [Council of Music, Arts, and Sciences] regulated the education of the youth, and so licensed teachers, saw to it that they were paid by their pupils’ parents or relatives, and inspected the students’ progress every year. The council also exercised censorship... over all crafts, since it could punish creators of defective works and products, and prevent their distribution” (cf. van Zantwijk 1985: 144; Durán 1994: 208-210).

Inca (22)

The capital, an elite enclave, was well provided with transportation infrastructure, as D’Altroy (2002: 115) indicates: “Many [streets in Cuzco] were paved with stones and contained stone-lined water channels running down the middle.” But road-building was also carried out in other parts of the empire (D’Altroy 2002: 232; Hyslop 1984: 256). As described by D’Altroy (2002: 242), “The Inca royal highway (*qhapaq ñan*) was a wonder of Bronze Age engineering that unified the empire physically and conceptually. Built using wood, stone, woven, and bronze tools, and without benefit of precise surveying equipment or draft animals, the network linked together about 40,000km of roadway...” Hyslop (1984: 222) indicates that some 23,139km of roads are known, but more will probably be discovered (ibid.: 224). And, “Very little was ever written by the earliest Europeans in the Andes about stone bridges. They apparently took them for granted, although thousands once existed on Inka roads” (Hyslop 1984: 319). However elaborate the road system was, it served primarily for official functions (e.g., D’Altroy 2002: 232, 243), and so was not coded as an important public good.

As with transportation, the capital was well-provided with water control facilities (e.g., D’Altroy 2002: 115-17), but rural areas also benefited from water management projects, especially irrigation canals (Murra 1980: 15, 18; D’Altroy 2002: 253). And the state took an active role in maintaining public order. As described in D’Altroy (2002: 237): “Although we cannot track Inca law over time, one major change clearly lay in the state’s removal of the right to resolve major disputes over property and life from the hands of the native elites. ... Blood feuds and local political violence were thus reduced at the cost of sovereignty” (cf. Murra 1980: 32, 53).

Redistribution presents coding difficulties in the Inca case. Many sources have emphasized the importance of the redistributive economy, as in the following from Murra (1980: 130): “The church warehouses, where the crops from the Sun’s estates were housed, were primarily used for sacrifices. Vast quantities of maize

were used to make *chicha* [beer] for ceremonial libations and cornballs for the Raymi celebrations ... [while] ... Blas Valera and Garcilaso de la Vega have created the impression that one of the major aims of the Inca state was the provision of reserves which could be used in time of drought, frost and famine." (cf. *ibid.*: 55, 128). Hence, Murra (*ibid.*: 131, 134) notes that state-sponsored distributions served political and economic purposes as much as they were a public good. For example: "There may have been some state relief in case of major frost and drought; the references to this are late and very few compared to the hundreds which describe the use of reserves for military, court, church and administrative purposes" (Murra 1980: 134). LeVine (1992: 20) sums up this kind of argument as follows: "Although vast quantities of materials flowed into regional storehouses, or were shipped directly to Cuzco, little evidence exists for redistribution... Redistribution to hinterland populations is also questionable. The exchange of local subsistence products between regions and between ecological zones for use by regional populations appears to have taken place below the level of the state..." And, according to Morris (1982: 167): "The state's involvement in the redistribution of food was probably limited to feast occasions and the support of labor service. Although the actual quantities of food were comparatively large, support was in most cases only temporary and involved a relatively small segment of the population... A role for the state storehouses in times of famine cannot be ruled out, but local economic units seem to have remained basically self-sufficient in subsistence goods, at least in the Peruvian central highlands." These interpretations seem to point to food and other goods distributions as more like direct payments for work for the state, or as selective incentives, rather than as evidence for a redistributive economy, hence, our coding indicates a moderate value for redistribution. And we gave a similar middle value for our miscellaneous category, reflecting the presence of some state-sponsored religious rituals and public feasts.

Chapter 8

Bureaucratization

In this and the following chapter we develop methods allowing us to measure the degree to which a state's administrative apparatus is consistent with collective action, following the theoretical implications laid out in chapter 3. To do this, our comparative coding scheme has two sections, the second of which, presented in the next chapter, is referred to as "Modes of Control of Principals." By principals we mean rulers, per se, or analogous roles representing the chief executive officers of a state, who hold the ultimate decision-making and policy-making authority. In the present chapter, we develop a method for measuring variability in the non-executive, administrative portion of governments to better understand how the state can recruit, motivate, monitor, and punish its operational staff ("agents") (Levi 1988: 26, *passim*), again, in a manner consistent with the requirements of a collective system. More collective polities must be able to provide public goods equitably and monitor and control the behavior of their agents. Solving these collective action problems requires the socio-cultural construction of a suitable institutional and organizational structure, a process we refer to as "bureaucratization."

Max Weber and Bureaucracy

To develop a measure of the degree of bureaucratization, we drew from the comparative literature on bureaucracy (e.g., Heady 2001), while modifying what we found there in order to develop a more precise and problem-focused measure suitable for hypothesis testing in relation to the implications of collective action. The foundational sources for studies of bureaucracy were written by Max Weber (1947: 329-37, and 1978: especially pp. 956-83), and these proved in many ways more useful for our purposes than many of the more recent sources that focus attention primarily on bureaucratic efficiency (e.g., Riggs 1969: 12-13), or dysfunction in bureaucratic performance (e.g., Simon 1952; Heady 2001: 73), while failing to specify whether dysfunction and efficiency are in relation to collective action.

Weber's conceptual frame is an evolutionary one in which bureaucracies of the modern legal-rational form, consistent with rule based on legal authority, have

developed out of earlier and more “primitive” or tradition-based systems of administration that reflect patriarchy (authority derived from models of a master in his household), patrimonialism (authority based on the idea that commoners and administrators are personal dependents of the ruler), feudalism (in which rulers make grants to vassals to obligate them), or the routinization of charisma (rule based on the extraordinary powers or sanctity of ruler). The transformation from these “primitive” forms to legal-rational bureaucracy was achieved, Weber argued, through the “rationalization of collective activities,” that makes possible the “purest type of exercise of legal authority” (Weber 1947: 333). While the present work does not take an evolutionary perspective, as Weber did, some aspects of the variability he discusses are relevant to our analysis. For example, Weber associates the growth of legal-rational bureaucracy, in part, with the growing demands in modern states for public goods such as public order, social welfare, justice, and education (Weber 1978: 972), although he adds to his list of causal factors the importance of bureaucratic reform to meet the needs of the growing capitalist economy (Weber 1978: 974-5), which is not a consideration for the present discussion. While none of the societies in our sample are “modern” in the Weberian sense, still, in whatever period, collective action processes, where well developed, should result in the development of an administrative apparatus illustrating many of the features of Weber’s legal-rational type.

Bureaucracy Versus Bureaucratization

Our measure of bureaucratization allows us to assess the degree to which an administrative apparatus is consistent with the predicted requirements of collective action, hence, it has a more specific content and purpose compared with the more general idea of bureaucracy (“government by bureaus”). Less collective states may have a bureaucratic governing apparatus, but are not predicted to illustrate the bureaucratization features we think are most consistent with collective action. For example, a state that is not highly collective might require an elaborate bureaucracy aimed at maintaining a regime of political centralization. Here, the bureaucracy would function primarily to manage state-controlled properties, protect state resources from theft, protect the private property of an elite, or maintain centralized control over trade monopolies and the like. New Kingdom Egypt stands as an example. By the focal period a complex bureaucracy was in place featuring strongly hierarchically graded offices in a number of functionally distinct bureaus (e.g., O’Connor 1983: Figure 3.4). In these respects it was one of the most complex bureaucracies in our sample while scoring close to the population mean for our bureaucratization measure, we would suggest because Egypt was not a highly collective polity. While we discovered much variation in the degree of bureaucratization, this measure cannot be used to distinguish types of societies, e.g., segmentary, feudal, patrimonial, or modern, as is often found in the literature on the evolution of bureaucratic societies (e.g., Eisenstadt 1956), although it is likely that some of these types, for example

feudal states, would score low on bureaucratization. Rather than identifying types, the bureaucratization variable is suited for quantitative comparative study of states in a manner that transcends typology.

The Bureaucratization Measure

Our bureaucratization measure is a complex theoretical construct that is difficult to measure simply or reliably, so, again, we developed a scale measure whose score is the sum of values for coded component elements. Components were identified that can be coded with only a minimum amount of inference, to increase face validity (Ember and Ember 2001: 47), and to increase inter-coder reliability. Of the many possible variables to choose from, we identified a small number for which we could reliably obtain information and which are central to understanding how a governing apparatus can be organized to meet the needs of a system of collective action, irrespective of whether a polity is “modern” or not. Weber’s (1947: 333-36; 1978: 956-964) descriptions of rationalization in the exercise of legal authority is a good starting point to identify suitable variables (cf. Heady 2001: 75), supplemented with ideas from Levi (1988) and Blanton (1998). From these sources we identified variables that reflect three central themes pertinent to the functioning of a collective system: (1) Is it possible for commoners to make appeals and complaints through regularized communication channels? (2) Can official agency be detected and punished? (3) Are office holder recruitment and mode of payment consistent with collective goals?

From these themes, we identified specific component elements that would contribute to variation in the bureaucratization scale, and each component was coded according to its degree of consistency with collective action (maximally ‘3’). Lower scores (‘1’ and ‘2’) indicate that feature is less likely to permit rational administration consistent with the demands of a collective system. The component variables and their justifications are (and see Table 8-1):

- (a) Feasibility of Commoner Appeals and Complaints. A bureaucratic apparatus consistent with the aims of collective action provides the maximum opportunity to accommodate taxpayer complaints and petitions (“voice”) by providing formalized communication channels linking taxpayers to appropriate officials. We looked for evidence that officials were required to be accessible to commoners, and we looked for evidence of a hierarchical (“graded”) structure of official positions and established procedures through which legal decisions could be appealed, and petitions or complaints presented, especially complaints about official agency or taxpayer free riding (“precise appeal hierarchy” in Weber [1978: 957]). Lower scores were given in cases where particular officials (or non-salaried officials working on behalf of the state), who might be damaged by complaints or judicial appeals, were routinely able to block communication or punish complainants. Lower scores were also given in situations in which it was routinely possible to privilege an elite in judicial decision-making in the absence of the potential for commoner appeal.

Table 8-1 Coding categories for bureaucratization. The letter designators refer to column locations of the coded data in Table 8-2

Feasibility of Commoner Appeals and Complaints (a)	
1	= government officials are routinely able to arbitrarily impede the flow of information from commoners or lower-level officials to higher authorities
2	= communication channels are present that facilitate the flow of information from lower to higher levels of the administration, but are weakly developed; or, such institutions are present, but operate only at great cost to complainants
3	= a well-developed appeal hierarchy makes the communication of petitions, appeals, and complaints to high officials highly likely
Degree of Tax Farming (b)	
1	= taxes are collected by private contractors (“tax farming”)
2	= taxes are collected through institutions that allow for more likelihood that feedback regarding taxpayer compliance and official agency will reach higher authorities (at least by comparison with tax farming)
3	= a state bureaucracy is charged with tax collection (in this case, officials are most likely to conform to expected regulations regarding fairness, and they provide direct feedback regarding taxpayer compliance)
Detection and Punishment of Official Agency (c)	
1	= no formal means are available to detect official agency
2	= some institutional means are available to detect official agency, but are weakly developed
3	= well-developed institutions (norms, values, and rules) are found along with an organizational capacity to collect independent information concerning official agency, and to punish deviations from the institutional behavioral code
Office Holder Recruitment (d)	
1	= access to offices typically is ascribed (i.e., heritable) or recruitment is only from select groups or sectors of society
2	= open recruitment is sometimes practiced, but most officials are drawn from specific groups or sectors and/or ascription is sometimes practiced
3	= most recruitment is across all sectors and geographical locations and not ascribed
Degree of Salaried Officials (e)	
1	= officials control a source of income (<i>benefice</i> or <i>prebend</i>), and this is usually heritable
2	= some or all officials may be provided with a <i>benefice</i> or <i>prebend</i> , but it is not heritable and may be easily rescinded (e.g., <i>appanage</i>)
3	= officials are paid a salary from the state treasury, and this is the primary mode of bureaucratic employment

- (b) Degree of Tax Farming. This variable allows us to assess the degree to which taxation or other state functions were placed in the hands of private contractors (“tax farming”). Tax farming often minimizes the state’s transaction costs of tax collection, but is likely to reduce the state’s ability to monitor taxpayer compliance and the agency of tax contractors (i.e., to discover and punish “rent-seeking” behavior, to use the phrase favored by economists) (e.g., Levi 1988: 85-92; Weber 1978: 965).
- (c) Detection and Punishment of Official Agency. In coding this variable, we looked for evidence of parallel or redundant communications channels that

could serve as independent sources of information concerning the actions of agents. While this kind of information may serve only principals, rather than collective interests (for example, in detecting theft of royal property), we looked for evidence that principals were seeking evidence of official behavior injurious to taxpayers and hence counter to the interests of the collective system.

- (d) Office Holder Recruitment. We assessed the degree to which the behavior of administrative officials is likely to reflect their own interests versus collective interests, and the degree to which principals are able to punish such agency, for example by removing officials from their positions or withholding payments to them. We had hoped to be able to code for the degree to which administrative cadre were trained in, and expected to adhere to, abstract norms of proper bureaucratic conduct, but, surprisingly, data were not sufficient for some of the sample since it was sometimes difficult to distinguish between technical training and moral training. We were able to code for the degree to which there was competitive and open recruitment for official positions. This variable was selected based on the prediction that officials recruited from diverse socioeconomic, ethnic, and territorial groups will be less likely in their official capacities to favor family, class or other narrow sectorial interests (“free selection” in Weber 1947: 335; “competition” in Lichbach 1996: 167). We gave lower scores in cases where principals have little ability to remove agents from office, for example when officials have some form of ownership of offices or when an office-holder is able to pass an office and its privileges on to heirs (ascription).
- (e) Degree of Salaried Officials. For this variable, we gave higher scores in cases where officials were paid a salary rather than being awarded some form of local control over a source of income in exchange for administrative or military services. The latter includes variations around *benefice* (“appropriation of receipts” in Weber 1947: 312) and *prebend* (assignment to an official of rent payments) (Weber 1978: 963-4). *Benefice* and *prebend* can reduce administrative costs, but may devolve into hereditary claims to ownership of offices and/or unfair taxation by comparison with salaried officials who can be made more accountable (Weber 1947: 335-6). *Appanage* is an intermediate strategy in which office holders are reimbursed by awarding them the right to extract receipts of rent payments from some specific locality or resource, in the manner of a *prebend* or *benefice*, but the award is made on a more contingent basis.

Assessing the Bureaucratization Measure

The bureaucratization scale variable proved to be an effective method for measuring variation in this important dimension of collective action, and it resulted in a considerable degree of variation in the total scores (Figure 8-1). The Cronbach’s alpha

Figure 8-1 Distribution of values for bureaucratization.

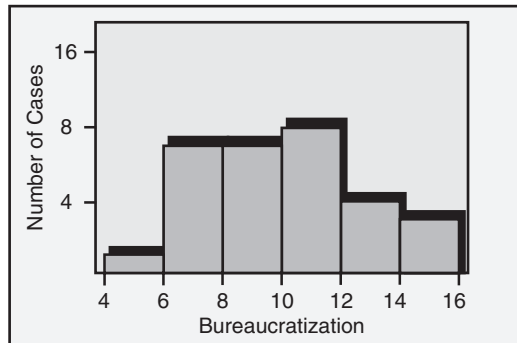


Table 8-2 Bureaucratization codes. The column headings are: (a) Feasibility of Commoner Appeals and Complaints; (b) Degree of Tax Farming; (c) Detection and Punishment of Official Agency; (d) Office Holder Recruitment; (e) Degree of Salaried Officials

	(a)	(b)	(c)	(d)	(e)	Total
Nupe	1.5	2	1	2	1	7.5
Yoruba	2	1.5	2	2	2	9.5
Asante	2	2	2	2.5	2	10.5
Bagirmi	1.5	1.5	1.5	2	2	8.5
Kuba	2	2	2	2	2	10
Tio	1	2	1	1	1	6
Buganda	2	2.5	2	2.5	2	11
Bakitara	1	1.5	1	1.5	1.5	6.5
Lozi	3	2.5	2.5	2	2	12
Swahili Lamu	3	2	2	1.5	3	11.5
Thailand	1.5	1.5	1	2	2	8
Burma	2.5	2.5	3	2	2	12
Bali	1	2	1	1	1	6
Aceh	1	2	1	1	1	6
Perak	1	1.5	1	1	1	5.5
Java	2	2	2	2	2	10
Vijayanagara	2	2	2	2	1.5	9.5
Pudukkottai	1	2	1	1.5	1.5	7
Mughal	2	2.5	2.5	2.5	2.5	12
China	3	3	2.5	3	3	14.5
Japan	1	1.5	1.5	1	2	7
Tibet	1	2	1.5	2	2	8.5
Egypt	1	2.5	2	2	2.5	10
Athens	3	2.5	3	2.5	3	14
Rome	2	2	3	2.5	2.5	12
Venice	3	3	3	2	3	14
England	1	2	1.5	2	2	8.5
Ottoman	1	1	2	3	2.5	9.5
Aztec	2.5	2.5	2.5	2	2	11.5
Inca	1.5	2.5	3	2	1	10

value for the variable set is a very strong .86, and, from factor analysis, all of the component variables correlate strongly with the first principal component, which explains 65% of the variance. The bureaucratization code is provided in Table 8-1, and scores for each variable and the summed values are found in Table 8-2.

Summary of the Bureaucratization Data

Nupe (7.5)

Under colonial administration, tax collection was organized by the village chief and elders (Nadel 1942: 58) and this may be a continuation of pre-colonial practices. Taxes were paid to royal tax collectors, but the latter operated much like tax farmers in that they kept a share of the revenues (ibid.: 116). For example, from Nadel (ibid.: 99) we learn that “Civil and military officers received no salary. The payment for their services took the form of a share in the booty of slaves, horses, or other property, made in the war by their household troops; of landed property and fiefs bestowed by the king upon his loyal servants; and, finally, of status and exalted social position linked with title and office” (Nadel describes this practice as “fief holding”). Recruitment was strongly, but not entirely, ascripted, as is indicated in Nadel (ibid.: 48), “... hereditary succession in Nupe is never understood in the narrow sense of a quasi-automatic appointment. Often it is a selection from a number of candidates of suitable seniority - younger brothers or eldest sons (in the classificatory sense) of the deceased.” Further, appointment “... to a first rank and promotion to a higher rank is granted by the king in council with royal princes and the other officers of state,” but favoritism, “... intrigues, [and] bribes play their part in appointment and promotion. The ranks which a family can accumulate reflects its influence at the court and its favour with the ruling king” (ibid.: 94). Some positions such as *alkali* (judge), and *liman* (head of the Islamic clergy), were strongly hereditary (ibid.: 100). We infer there was not much potential for commoner appeals or complaints (e.g., ibid.: 67). Theoretically there was right of appeal to the king (ibid.: 116), but ruler decisions could be influenced by bribes (ibid.: 116). We also infer that the provincial administration would not have allowed for much monitoring of agency or taxpayer compliance, since fief holders lived in the capital and rarely visited their properties, depending instead on retainers and slaves to govern locally (ibid.: 117).

Yoruba (9.5)

Most high officials were members of the royal lineage and other important descent groups (Lloyd 1971: 9-12 and Law 1977: chapter 5), and mid-level officials included lineage chiefs of local communities, but the latter were confirmed in office by *Alafin* (ruler) and they could be deposed by him. There was some

non-ascribed recruitment of salaried officials, including palace officials headed by the senior titled eunuchs, and palace artisans and professional staff recruited from slaves. Some served as *Alafin*'s representatives in the dependent towns or served in other administrative positions in the empire (ibid.)

With some exceptions (especially in the southwest, in Egbado), there was no specialized bureaucracy for tax collection from commoner households; local rulers brought revenues (or tributes) to Oyo in conjunction with the annual Bere festival (Law 1977: 112). However, Law (ibid.: 118) does note some tendency to extend bureaucratic control of semi-independent towns that were brought under more direct control of the *Alafin*. They did this by: (1) placing palace staff as agents representing provincial and town rulers vis-à-vis the *Alafin*; (2) palace staff were placed in dependent towns, providing a degree of *Alafin* control over local rulers; and (3) royal messengers linked towns to the Oyo palace. In provinces such as Egbado and perhaps Igbomina, even more direct *Alafin* control was exerted and a tax-collection administration was set up. *Alafin*'s administrative representatives "spy" on the local rulers (Law 1977: 111). However, spies and royal messengers did not function as tax collectors; revenues from conquered dependencies were delivered to Oyo by the town rulers (ibid.: 112), a system we think might not allow for administrative monitoring or control of agency and compliance. Disputants not satisfied with decisions made by local authorities could take them for resolution to the province ruler or even to the *Alafin* (or his representative), but the *Alafin*'s decision was final (Law 1977: 103). However, provincial and town rulers had personalized ties to palace officials in Oyo through whom they could communicate with *Alafin*'s staff to represent their interests (Law 1977: 108, 118), perhaps to the detriment of commoners making complaints.

Asante (10.5)

Rattray (1929, especially chapter 11), and Wilks (1975: chapter 10) describe an administrative system that included numerous appointed and salaried officials, but also some ascribed office-holders, including the clan chief of ruler's descent group and the *amanhene*, the divisional paramount chiefs, although the latter served at the king's pleasure and could be "destooled" (impeached) (Rattray 1929: 82). Clan chiefs played some role in local administration, as did community elders, but salaried "resident commissioners" (*amradofo*) were placed by the *Asantehene* (ruler) in the tributary provinces and represented state interests (Wilks 1975: 130). Male heads of matrilineage segments (lineages) of dispersed matriclans served as a village council. Minor disputes were adjudicated and punished at this level, but a person could appeal to higher authorities. The village chief was also responsible for tax collection and labor mobilization.

Positions of authority were not usually held by "nobility," i.e., descendants of the founders of the Asante state, because in Asante political culture achievement and wealth were far more important than noble status (McCaskie 1995: 78; Wilks

1975: 418). This is clearest in the case of appointed officials who were “pure” servants of the state rather than having significant ties to matrilineages (Wilks 1975: 468). Wilks (1975: chapter 4) has a useful discussion of how the Asante, after the late 18th century, had to devise new forms of government to increase their range of control (scale), the scope of control (to regulate spheres of activity not previously controlled), and proficiency, to transcend the managerial limitations inherent in the hereditary aristocracy of the pre-imperial period. These changes brought with them considerable upheaval, especially in their relations with the secondary chiefs (Wilks 1975: 127). Wilks (*ibid.*: 465-6, and 1966) describes this in part as growth of bureaucratic governance in the Weberian sense. For example, during the 19th century, head-taxes and inheritance taxes, collected by tax collectors, became more important as a source of revenue (Wilks 1975: 70). Trade was taxed by what appears to have been an elaborate bureaucracy (e.g., *ibid.*: 48, 55), but revenue collectors were paid a fee based on collections rather than a salary, resulting in some degree of “entrepreneurial tax-farming” (*ibid.*: 468), and some other tax farming was practiced, but only in tributary areas (*ibid.*: 75).

The Council of Kumase (*asantemanhyiamu*), which will be described in more detail in the next chapter, was a kind of arena council individuals could use to communicate with the ruler (Wilks 1975: 387-92), although it is not clear how effective this would be for many kinds of taxpayer complaints or appeals. Some other practices allowed for expression of voice, in a way. The *apo* ceremony was a rite of reversal in which commoners could criticize (“abuse”) officials, including the king (Rattray 1923: 154-8). Every subject had the right of appeal to the ruler’s court (Rattray 1929: 104) and a call to destool a divisional chief could be brought by any commoner able to mobilize public opinion (Rattray 1929: 145). A special court was established to consider adjustments in tribute (Wilks 1975: 65), but this probably involved only chiefs. Asante commissioners in the southern tributary provinces exercised considerable arbitrary power (Wilks 1975: 140), but a commission was appointed in 1810 to investigate complaints (*ibid.*: 141), but not before rebellions against the state reached a critical level (*ibid.*: 142). Some 19th century accounts suggest the ruler had considerable information about local affairs throughout the empire, and worked long hours to complete administrative work (Wilks 1975: 392).

Bagirmi (8.5)

Officials of the “Great Court” included some close relations of the ruler (“royal” members), but also some appointed (“non-royal”) officials, including palace offices reserved for slaves. Lower ranking staff officials (*agid*) were also slaves, in some cases (i.e., were appointed), while other officials inherited their positions, although their selection was subject to approval by higher authorities; however, offices could also be obtained by bribing higher officials (Reyna 1990: 62). Arab *sheikhs* who were heads of seasonal camps would participate in the political lives of nearby towns, and other local-level authorities such as Fulani *ardo* were heads of local

lineages. Tax collection was partially, but weakly, bureaucratized. Local village officials collected taxes (ibid.: 125) but payment might be directed to a court official who would then pass on some proportion of it to the ruler (*benefice*).

Communications channels to register complaints were poorly developed. In the “door” system the multiple wives of high officials (one pre-colonial ruler probably had between 700 and 1500 wives [Reyna 1990: 102]) served as conduits communicating information from diverse interests in society, and these could be addressed by the policy-making body (ibid.: 101-2), but Arabs and Fulani, in particular, would not benefit from this system, and we see it as very informal and subject to distortion by higher officials. Reyna (ibid.: 103) argues that this could represent a channel available to many persons wishing to articulate concerns to the court, but, since the *ngarman* (chief administrative official) was the main conduit for this information (ibid.: 115-6), it could be easily distorted or manipulated. Audiences, held in a special building (*dab mange*) were a second potential channel of communication connecting taxpayers with the court (ibid.: 103-4), but the venue apparently was used mostly for inter-official or diplomatic communication (the venue was a small room). At the audiences, the *mbang* (ruler) was present (along with high officials) but was kept invisible to participants (ibid.: 103). Lower officials also held courts for matters pertaining to the estates they managed (ibid.) Audiences were conceived of as a “right open to all” (ibid.: 104) but it is not clear how effective this system could be.

Kuba (10)

Ascripted status remained an important determinant of access to official positions, including the Crown Council members, since the state was built by combining previous social formations ruled by clan aristocracies. Yet, in the construction of the Kuba state, many new administrative offices (*kolm*) were developed, based on open recruitment, that recognized achieved status, although some titles were reserved for the chiefly aristocracy (Vansina 1978a, chapters 6 and 8). There were local titled chiefs (*kum*) and lineages that controlled specific villages and their territories and who “owned” land (and thus were paid taxes such as a share of elephant tusks), but *kolm* at the capital and in the provincial administration limited local chiefly powers. *Kolm* had roles in tax collection, the military, ritual, information gathering, and justice, including special titles reserved for representatives of women (Vansina 1978a: 132, Table 2). *Kol mat* were a special police charged with monitoring tribute collection and collectors (ibid.: 139).

There were limited communication channels for taxpayers. The *ibaanc* council was open to all (probably the capital population only), and originally had been a judicial council but lost some of these functions as traditional chiefs lost judicial decision-making powers to civil authorities (Vansina 1978a: 149-50). The council meetings allowed officials to both assess and sway public opinion (ibid.: 150). The *durbar* was a more closed meeting with the ruler in which village headmen

accounted for their tribute payments and reported a census (Vansina 1978a: 150). Villages had councils (*ibid.*: 150). Descendants of villagers lived in the capital and were charged with collecting the annual basic tribute from their home village, and they also provided information about their village to the ruler, including the activities of the local chiefs (Vansina 1978a: 139). Could this be a channel for voice? Other state officials (*mung*) provided judicial services and hence undercut the independent authority of the traditional chiefs (Vansina 1978a: 139). The main judicial court at the capital (*ibaanc*) served as an appeal court for rural areas (although appeals to this level were rare and very costly) and for serious offenses such as murder, and made use of separate juries for each case, a practice not reported elsewhere in Africa (Vansina 1978a: 150-1).

Tio (6)

This was a strongly ascripted system in which most functions of the government, including tax collection, were carried out by “lords” and other local ascripted elite, “squires” in the terminology of Vansina (e.g., 1973: 320, 322). This was also true at the local level, where community heads (*wookuru*) were leaders of an extended family or wider group based on kinship (*ibid.*: 75). According to Vansina (1973: 324), “Lords were ranked by the status of their *nkobi* [sacred objects] in the hierarchy of *nkobi*...”

Communication channels were poorly developed. As Vansina (1973: 342) describes it, “...no clear judiciary structure with set levels of appeal existed at all. If a case was lost in one court, the loser could either pay or bring it to some more powerful authority, usually a lord, try to get it reversed in his favour and hope that the lord would enforce his court’s decision.”

Buganda (11)

Patrician heads, including the ruler himself, played a role in governance, but the rural administration featured appointed officials (*mukunga*) of the 10 *ssazas* (administrative districts), *batangole* (military chiefs), and lesser division chiefs (*bakunga*), side-by-side with *bataka*, chiefs of clans, although in some cases the latter’s status had to be approved by the king (Wrigley 1996: 63, *passim*; Roscoe 1965: chapters 7 and 8; Southwold 1961). In addition, *kitongle* were special state troops who enforced the king’s will and provided information on the chiefs and could be ordered by the king to replace a chief. Local chiefs (*mwami*) were heads of local clan segments. However, some high officials, rather than being salaried, were given estates (Roscoe 1965: 235).

The king had secret police (Roscoe 1965: 208-9), and officials were sent out to confirm that taxes were properly collected (*ibid.*: 236). These officials appear to

have conducted a form of household census to determine tax amounts due (*ibid.*: 244), and the king could fine or imprison a chief he felt was becoming too rich (Roscoe 1965: 259). Another official was charged with collecting taxes in the capital market (*ibid.*: 452). Decisions made by chiefs at all levels could be challenged and the appeals sent to higher levels, all the way to the king (Roscoe 1965: 241).

Bakitara (6.5)

This was a strongly ascripted system built around the patrilineal clans of both the ruling *Bahuma* pastoralists and the aboriginal *Baheru* horticulturalists (Roscoe 1923: 11). Most palace officials and district and local chieftainships reflected the clan structure, but one role, *batongole* consisted of persons who were given estates and gifts by the ruler in exchange for service, including providing servants for the king's household and herding the king's private herds of cattle; they were responsible directly to the king, not to district or local chiefs (Roscoe 1923: 56, 83-6, 116). Taxes were collected by messengers with insignia of the king, but they collect from chiefs, not ordinary people. They appear to have been "paid" from fees they could earn settling disputes or taking bribes (or overcharging), so this was not a well-developed bureaucratic system for revenue collection (e.g. Roscoe 1923: 59). District chieftainship positions were largely hereditary, but had to be approved by the king (Roscoe 1923: 54). By local officials here, we refer to local clan heads and their "serfs." The ruler had a hand in approving the selection of even some lower officials, even though a son would normally succeed (*ibid.*: 54, 294, 298). Any person, "cow-man" (*Bahuma*) or "serf" (*Baheru*) could appeal a judgement made by a lower chief, even to the king as a last resort (Roscoe 1923: 55). But ruler's extensive daily ritual round left little time available for official business and he was usually confined to the royal enclosure (e.g., *ibid.*: 91, 99), so it is unlikely very many people actually could gain access to him.

Lozi (12)

Government by council was an important principal of Lozi administration (Gluckman 1961: 52). The main council (*kuta*) was constituted to provide representation for the state, the aristocracy, and commoners; in fact, the chief councilor in this body (*ngambela*) was always a commoner (Gluckman 1961: 47). Ascripted chiefs of the outer provinces retained considerable local autonomy, but ruler also had some salaried representatives in the outer provinces as well (*lindumeleti*). The latter were primarily concerned with tax collection. Some individuals selected by the ruler for service on the capital's council were awarded "temporary ownership" of lands (mounded garden and village areas) associated with their specific council title or name (Gluckman 1941: 32-3) (an *appanage* system). Village headmen and lineage

elders and chiefs of outer provinces as well as ruler's representatives were charged with collecting the basic tax on production and organizing the *corvée* labor tax.

Barotse (citizens) expected ruler to heed voice and they had direct right of appeal to the ruler (Gluckman 1961: 20, 39). Litigants could appeal from their local or sector council to the capital council (ibid.: 33). Each person had a complex set of obligations to the ruler as well as to a local elite, and was careful to meet obligations to them while at the same time using their local elite to gain influence at higher levels (ibid.: 39). The *katengo* sub-council of the capital council was expected to be aware of the "people's wishes and feelings" (ibid.: 51-2).

Swahili Lamu (11.5)

Although clans played some role in Lamu society, the polity had many features of non-ascripted governance, and communication channels were well developed through a system of councils. A council of state (*diwan*) represented "the people" and elected those who served as leaders. But leaders were chosen by the council only from "noble" families (Prins 1967: 100; Prins 1971: 50), rather than being an open election, but, still, there was no dynastic rule and elections did play a role in the selection of office holders. The highest office-holders were the elected Zaina (or Zena) moiety leader and elected Suudi moiety leader, resulting in a dual or diarch system in which the central official, *mngwana wa yumbe* was one of the elected moiety section leaders. Moiety halves alternated the office of ruler for four-year periods of office, with the respective moiety section leader governing the whole polity (Prins 1967: 100), apparently with the aid of salaried officials, although the administrative system is not well described. *Benefice*, *prebend*, and *appanage* are certainly not applicable here. The moiety structure to some degree allowed for voice and political participation by diverse taxpayer factions (Ylvisaker 1979: 70). The council of elected clan and ward leaders who served as advisors to the ruler and *amirs* who served as military leaders of two regiments, also were split by moiety affiliation. There were also ward (neighborhood) councils which elected city council representatives.

Thai (8)

The government of Thailand featured elements of both *prebend* and *appanage* in its system of *kroms* (a department or division of the government that was basically a grant of labor). *Kroms* were awarded to *nai* (*krom* holders), who could be persons appointed to direct a bureau of the central government (representing an *appanage* award), but *krom* holders could also be members of the nobility (in which case the award was more like a *prebend*). Holding a *krom* implied having access to the labor of a population of dependents (*phrai luang* if obligated to a state official, *phrai som* if the dependent of a noble) (From Rabibhadana 1969: chapter 4).

Thailand scored low on bureaucratization owing in part to its *krom* system, but also owing to the fact that tax farming was becoming more important during and after the reign of Rama III (Hong Lysa 1983). Interestingly, this strategy was intended to mitigate the abuses inherent in the *krom* system in which *nai*, who collected tax from their *phrai*, were often corrupt and able to inhibit the communication of complaints and appeals concerning excess taxation (Rabibhadana 1969: 73, 143). Lysa (1983: 385) indicates that tax farmers were more likely to correctly report on economic conditions than the *nai*, who were more likely to withhold information, but later in the paper the author alludes to corruption problems associated with tax farmers, and how difficult it was for grievances to be communicated to the state (*ibid.*: 392-9).

In spite of the weak degree of bureaucratization overall, in Thailand there was a concern that the state make available communication channels for the expression of commoner voice, going back to the Sukhothai Period (Rabibhadana 1969: 40). This was consistent with a notion of a “patriarchal” king who was like a father figure to all, but later changes made it difficult to petition the king (*ibid.*: 41). Bangkok Period kings reinstated modes of voice and were more concerned with responding to petitions dealing with corruption (Rabibhadana 1969: 45-6, 51-2), but we doubt their strategies could be effective. For example, the king made a weekly appearance at which he accepted petitions (*ibid.*: 45-6, 51-2) so he could become “the true protector of the people” (*ibid.*: 51). But how many people were able to petition the king? Realistically, the only channel for voice continued to be a person’s *nai* (patron) who, theoretically, could represent his client to higher levels of the government (Rabibhadana 1969: 89). As Vella (1957: 16) put it, the “...system of directly petitioning the king was, however, more of a formality than a truly effective institution.”

Burma (12)

While all the high officials were appointed, there remained a considerable degree of hereditary authority (*myo-thu-gyi* and *thu-gyi*), particularly at the local level and in the traditional villages (*athi*). However, especially in the core zone, in the area of the “Crown Service Units,” that provided the bulk of the state’s resources (Koenig 1990: 107-8, chapter 4, *passim*), there was direct state administration by appointed officials. A well-developed taxation bureaucracy, managed by the appointed territorial governors (*wuns*), was able to impinge to some degree on the customary powers of the hereditary elite (Koenig 1990: 105, 107, 147).

In Koenig (1990: 99) we learn that the “...rulers also maintained extensive intelligence networks, which provided alternative communications channels separate from the formal administrative apparatus.” These were channels through which aggrieved “officials or individuals could communicate with the throne. There was, in addition, a crown intelligence staff which blanketed the realm and kept the king apprised of developments and affairs” (*ibid.*)

Bali (6)

Bali has a low bureaucratization score owing to its lack of an extensive governing apparatus able to connect ruler to the general population, and owing to the preponderance of ascription in the recruitment of officials. Officials were drawn from two of the three upper castes (*brahmanas* were in this category but normally were excluded from political offices, but they were important as religious authorities for their “liturgical expertness” Geertz [1980a: 26, 37]). Commoners, as a *sudra* caste, could not hold supravillage authority, but sometimes held minor administrative roles. Ruling castes had ranked endogamous agnatic descent groups (*dadia*) (ibid.: 27-31) that often constituted “rivalrous factions” (p. 28). A local polity (*negara*) would have many noble houses, a “royal” lineage, and several non-related client *dadia*.

This arrangement barely constituted a bureaucratic system (Geertz 1980a: 62). Heads of royal *dadia* below the level of ruler were largely autonomous because they weren’t selected by the *puri* Mayun (palace of the ruling lord) at Mengwi, and even had their own “satellite” lords (Schulte Nordholt 1996: 146-9). They were kept within the ruling family’s orbit through a belief in the symbolic importance of rulership and the fact that the central power could at times come to the aid of a dependent lord. In addition, clientship (including hypergamous marriages) was a “field for independent political maneuver” (Geertz 1980a: 34-5). Alliances between semi-autonomous polities took place for political purposes and were expressed in part in terms of treaties (ibid.: 41).

Commoner obligations to lords, as tenants working lord-owned land, were managed by “foremen” (*perbekel* whose local village agents were *bekelans*). The tax on irrigation water used (in grain) was collected from each peasant by *sedahans* (tax collector) who also collected rents due on lord-owned land (Geertz 1980a: 68). *Sedahans* were somewhat like private contractors in that they received a share (usually 1/6) of the tax collected (ibid.: 180, fn 68-30; Schulte Nordholt 1996: 130). Communication channels appear to have had little institutional development. According to Schulte Nordholt (1996: 85), “On other occasions the king went outside the *puri* to sit on a stone specially reserved for him. Now the people could approach him, though they would usually not find it opportune to do so directly, and would ask ... [others] ... to speak for them.”

Aceh (6)

The *ulèëbalang* (territorial rulers or *rajas*) of the 22 *mukims* (districts) of Aceh were a strongly ascripted and highly autonomous level of government below the Sultan of Aceh (Hurgronje 1906: 88), for example, they could threaten the sultan (Reid 1975: 55). The sultan seems to have little power over them, although he certified their status with official documents and stamp seals (Hurgronje 1906: 64, 87, 89). However, in the Sultan’s territory (*dalam*), there was something more like a

bureaucratic system of appointed officials (Hurgronje 1906: 334), but this was a small area in which only 24 villages were administered. Even the village-level headman system was strongly hereditary (Hurgronje 1906: 75-7). There were no tax farmers, but the tax collection bureaucracy was minimal (e.g., Hurgronje 1906: 87, 94, 128). Hurgronje (*ibid.*: 84) indicates the minimal interest of the sultans in the affairs of the interior.

Perak (5.5)

Perak was a weakly bureaucratized government in which the *sultan's* major zone of control was only a local "royal district." Beyond that zone, district chiefs "could and sometimes did flout his wishes with impunity" (Gullick 1958: 44). District chiefs (*jajahan* or *daerah*) were members of non-royal, but aristocratic lineages charged with local administration, justice, defense, and revenue collection. By contrast, the headmen of major mining towns (*capitan China*) were appointed by the ruler (*ibid.*: 24). District chiefs had considerable autonomy and often fought among themselves. Village headmen were charged with keeping the peace, providing labor for a defense levy, and other administrative tasks assigned by the district chief (*ibid.*: 36). Taxes were collected by district chiefs, although, evidently, they rarely passed along their earnings to the sultan (e.g., *ibid.*: 127). However, tax farmers were sometimes used to collect taxes at the mouth of the Perak River (*ibid.*: 85, 127).

Communication channels were weakly developed. There were no "large assemblies of the common people" (Gullick 1958: 46, 50-51), but, at least theoretically (if not in very practical terms), petitions could be presented at the main assembly of the *sultan* and the chiefs, which was open to the public (Andaya 1979: 29). It is not clear how successful such actions might be. As Gullick (1958: 65) put it "It is folly for a commoner to stand up against his betters. ..." Gullick (*ibid.*: 107) mentions the custom of convening an assembly in front of the district chief's house, which common people could attend. But it is not clear whether this was for the purpose of articulating discontent, or more an opportunity for chiefs to issue commands.

Java (10)

This was a strongly ascripted system in which even the highest officials, such as the Grand Vizier, public prosecutor, and other central functionaries ("Vice-royalties") of the core region were usually staffed by the close relatives of the king. Chief regional administrators of outer regions (who maintained order, collected taxes, supplied labor for war, and built roads and canals) could be either trusted local nobility selected for official office by the king, or commoners elevated to high administrative status (Moertono 1981: 103, 109).

The central administrative philosophy was to make lower level administrative units as highly autonomous in their finances and other operations as possible, to reduce the work load on higher offices. Correspondingly, lower officials' support (at various levels) was based on royal *appanage* grants (Moertono 1981: 88-9, 91, 102), and villages (*desa*) were highly self-sufficient administratively (ibid.: 92). An extensive ideological system emphasized the importance of individual moral behavior in the management of tax resources, but few institutional mechanisms seem to have existed to evaluate compliance or to communicate problems about compliance or agency to the state (e.g., ibid.: 119; cf. Carey 1986: 109). Some tax collectors were officials, but some were private contractors; taxing contracts for whole territories were sold to Chinese collectors, mostly later in the dynasty (Moertono 1981: 122).

Ordinary taxpayers appear to have had some channels of communication. They could demand to be placed under another administrative jurisdiction, and complaints to higher officials could be made through a procession called *nggogol*; a person could also sit in the square of the *kraton* (palace) until a king agreed to listen to a petition (Moertono 1981: 76). Clown shows and puppet plays also provided a framework for expressing dissatisfaction with policies and actions of the state (ibid.: 77-8).

Vijayanagara (9.5)

From Saletore (1934, Volume I: 251-330), we learn that there was some open recruitment of officials in this system, for example the members of the main administrative council, the Council of Ministers (*pradhana*) were appointed by the ruler, and selected according to ability and merit, not "caste or family" (ibid.: 255). *Nayaka* (or *amara-nayakas*) "Great Lords" of the kingdom, could be recruited openly, while some were members of prominent families or were princes. They governed loosely-defined and semi-autonomous *prebendal* territories (or revenue districts), usually outside the more directly-administered core zone. Through their economic activities (for example, they might mint their own coinage), they could become wealthy and somewhat independent of the central state (Sinopoli 1994: 227).

Governance of some areas was in the hands of traditional lords, whose authority was based on *ksattra* or *utai* (local ascribed lordship) and who were required to pay homage and minor tributes to the state, for example, the royal houses of the Cholas (Saletore 1934, Volume I: 322). Numerous small chiefdoms conquered by the polity paid tribute but were largely self-governed, for example the Telugu chiefdoms of the central spine of the southern part of the polity (Stein 1989: 46). Excessive taxation by provincial rulers was often punished, but a lack of control of lower administrative levels seems to have been a common problem (e.g., Saletore 1943, Volume I: 383), and it is not clear how the state could monitor every taxpayer. Outside the core zone, there was some tax farming, possibly in the Arabian Sea ports, and at the customs gates of commercial cities (Stein 1989: 41-2).

Ordinary people retained the right of direct appeal of judicial decisions. Traditional legal theory, such as from the *dharma shastras*, was applied through regular courts of

justice and military officers, although justice remained primitive, depending in part on trials by ordeal to assign guilt or innocence (Saletore 1934, Volume I: 387). Theoretically, commoners had direct rights of access to the king (*ibid.*: 370), but this could not have involved a large number of people. Saletore (*ibid.*: e.g., 195-8) describes “instances” in which the government “redressed the grievances of the people,” for example, by tax remission, and he mentions the personal involvement of particular rulers in addressing grievances, but these are cases where people simply refused to pay taxes and the government responded with some kind of compromise or was able to discover instances of excessive and illegal taxation (*ibid.*: 198). We infer that ruler action in such cases was on an ad-hoc basis, for example, when they detected significant migration away from over-taxed provinces (*ibid.*: 232). Rulers occasionally made trips through the kingdom to visit temples, but also to “inquire into the welfare of the people” (*ibid.*: 321), but these were not frequent or regularly scheduled.

Pudukkottai (7)

Ascription played an important role in the recruitment of officials, although ruler appointments were also made (Dirks 1987: 117-28, 171-92, 230-9). Royal *jagirdars*, important offices of the state, were assigned to collateral relatives of the ruler, and *cervaikarars*, a warrior nobility, often had affinal ties to the ruling family. Caste also played a role in recruitment, even at the local level, where village elders and other officers (*ampalams* or *miracidars*) were from locally dominant castes and had an “important role in organizing village rights and responsibilities” (*ibid.*: 426) as well as collecting taxes and otherwise representing the state’s interests. Some officials (e.g., those who managed water systems) may have been selected by the ruler but this is not clear in the focal source (e.g., *ibid.*: 282-33). These and most other official positions were supported by *inam* (*prebend*) grants rather than salaries (*ibid.*: 124, 126-7).

Some communication channels are apparent, but appear not well developed institutionally or organizationally. There were *natu* (subcaste) and village assemblies (Dirks 1987: 211, 231), but it is not clear how these served to communicate complaints or appeals to higher levels of the state. Lower castes sometimes expressed dissatisfaction by boycotting their normal ritual and social services (e.g., failing to remove carcasses of animals) (*ibid.*: 277), but other means of expression of voice seem not well developed. Dirks (*ibid.*: 212) mentions a royal *darbar* (open meeting), but doesn’t elaborate on how it functioned.

Mughal (12)

Ali (1995), Sarkar (1963), Habib (1963: chapter 5), and Hasan (1936) portray a vast Mughal bureaucratic system based strongly on open recruitment (e.g., Ali 1995:

271-2; Hasan 1936: 350, 356, Habib 1963: 182) and salaried officials, but not entirely. One important feature related to taxation was the development of an administration of provincial revenue collection (*diwan*), accountable to the prime minister of finance, separate from the provincial governors (*subahdar*), a system that allowed for more direct control of revenue matters by rulers. Below the *diwan* there were several kinds of officials (*amin*, *amil*, *chaudhuri*, and *karori*) charged with revenue assessment, collection, and accounting. Outside the core region of northern India, government was more likely to be in the hands of *zamindars*, petty *rajas*, who were local hereditary rulers holding traditional proprietary rights over land and taxes. Although they governed somewhat more autonomously than state-recruited officials, they were required to pay taxes and provide military services to the state, as well as being responsible for some aspects of governance in their territories, and many had a *mansab* grade (i.e., an administrative grade) in the manner of state administrators (Habib 1963: 174, 292). The official revenue administration extended deeply into the rural communities, including the *qanungo* (“friend of the peasant” [ibid.: 290]) and *muqaddam* (who served as state revenue officials at the subregional or village level), although there were also village headmen, councils of village elders, *chaukidars* (village police), and *brahmans* involved in governance at the village level (there was considerable autonomy at this level according to Sarkar 1963:12, 13). State officials (*mansabs*) were paid a salary or given a *jagir*, an *appanage* grant of land from which a specified income could be derived (e.g., Habib 1963: 178). The *mansab* was an appointment based on open recruitment (Ali 1985: xvi), and the *jagirdar* “had no rights or privileges apart from those received from the Emperor” (Habib 1963: 319).

In this highly bureaucratized system, “revenue-farming” was officially prohibited, but did occur in some cases (Habib 1963: 234-5). A massive survey of taxable land by province and village was compiled during Akbar’s reign (ibid.: chapter 1). This and other ongoing surveys were central to “*zabt*” administration found primarily in the core regions of Hindustan (the area from Lahore to Bihar). This survey based taxes on an estimated crop yield and on farm size. It resulted in a specific tax rate for each household, which was then commuted it into a required cash payment amount based on market conditions (Habib 1963: chapter 6). This elaborate system allowed for a considerable degree of centralized control over tax obligations of individual households, but was subject to the agency of lower officials who measured the fields (ibid.: 214-5).

Jagirdars in rural areas appear to have had some discretion in deciding how much tax to collect, and penalized merchants who had avoided proper taxation (Grover 1994: 247), but considerable state control was maintained over prices and taxes during the 17th century (ibid.: 249-52). The *faujdar* was a local territorial agent of the state charged with correcting the “withholding of land revenue” (Sarkar 1963: 12). Governors were charged to “keep all classes of men pleased” by protecting the weak, and were expected to report regularly on their actions to the court (ibid.: 49). *Diwans* were urged to watch for local officials who may collect excessive tax (Sarkar 1963: 54). *Zamindari*-governed areas were more difficult to control than the core zone, and had higher potential for tax collector agency and corruption,

implying considerable administrative costs to identify and punish agency; however, the state claims to have had as much administrative control of *zamindari* areas as of areas directly administered by the state (Habib 1963: 172, 173), and *zamindar* status could be awarded and rescinded by the central court (ibid.: 180, 182). An extensive bureaucracy of “news reporters” and spies with a variety of titles “honey-combed” the Mughal empire, charged with “reporting cases of irregularities and oppression” (Habib 1963: 296). Beyond the core zone of the empire administered by officials or *zamindars*, tributary rulers were assessed labor and revenue by the state, but were free to administer as they saw fit; citizen complaints could not reach the ruler from these areas (Habib 1963: 185).

Countering the ability of the administrative system to collect taxes fairly and monitor both compliance and administrative abuses at the lower levels, was the insistent pressure on lower-ranking officials to provide gifts for higher-ranking officials and the ruler, coupled with their low salaries (Sarkar 1963: 72). Various kinds of taxes and trade practices by officials had to be declared illegal by both Akbar and Jahangir (Sarkar 1963: 77-80), and, some harsh revenue collectors were punished when “complaints reached the emperor’s ears” (Sarkar 1963: 69).

Rulers spent much time traveling around the empire, in part for the purpose of collecting information about the state of the provincial administrations (e.g., Hasan 1936: 318-19), and they had daily scheduled meetings in the public audience hall (*diwan-i-am*) (Sarkar 1963: 17, 96; Hasan 1936: 68-9). In a public court of law held once per week, plaintiffs could report grievances (Sarkar 1963: 94). Jahangir allowed people to tie grievances to a gold chain outside the Agra fort so petitions could reach him directly (ibid.: 94-5). Beginning with Akbar, rulers made a daily morning appearance at the eastern wall of the palace fronting a large plain where common people could observe them and make petitions (ibid.: 120). *Mansabdars* were urged to use the bazaars as an opportunity to listen to grievances from shopkeepers (Blake 1995: 290). However, local officials were noted to have prevented peasant complaints from reaching the provincial governor in some cases (Habib 1963: 296).

China (14.5)

The Chinese system was highly bureaucratized with its civil service organized under the emperor and six grand secretariats, each consisting of 4 or 13 bureaus, as well as a separate group of service agencies including the Hanlin Academy, Astronomy, Parks, Medicine, and Education and many other specialized agencies such as the Horse Trading Offices. The military administration was separate. Civil service officials were organized into 9 ranks, each with two degrees (upper and lower), and each with a prescribed costume, stipend (reckoned in bushels of rice) and prestige title (Hucker 1998: 41). The civil service territorial administration was organized into metropolitan districts, provinces, prefectures (*fu*), sub-prefectures (*chou*), “counties” (*hsien*), and 9 special defense districts. In addition, the civil service

was organized as two separate hierarchical agencies. “General administration” was distinct not only from the military service but also from the “surveillance-judicial” administration (Censorate) which “disciplined and rectified all agencies of government” (Hucker 1998: 73, 91-99), as did the separate Offices of Scrutiny and the Court of Judicial Review (*ibid.*: 95, 98). Each provincial administration commission, with their branch offices (circuit), was in charge of census of population and land, tax assessments and collection, disbursement, personnel, ceremony, construction, water control, and coordination with local agencies (Hucker 1998: 87-8).

The general population had contact with the government through the office of the *chih-hsien*, at the county (*hsien*) level, which had generalized administrative responsibilities of census, taxation, administering justice, providing public services such as care of the aged, keeping the peace, and performing sacrifices; they were expected to be benevolent in their contacts with the public (Hucker 1998: 89-90). Below the *hsien* level, non-governmental agencies called communities (*li*), consisting of ca. 100 households, had certain responsibilities for maintaining order, maintaining local irrigation facilities and schools. “Tithing groups” of ca. 10 households were subdivisions of each *li*, one household of which was charged with collecting the grain tax while other households were assigned to consolidate the grain and deliver it to the *hsien* office (Hucker 1998: 91). The *li* system was a small group that would have allowed for efficient monitoring of taxpayer compliance at the local level, and it conformed to the founding emperor’s intention that “localities ... govern themselves as far as possible” (Hucker 1998: 91). However, the state was concerned with non-compliance (e.g., Rawski 1972: 22), and a “secret police” was charged to identify non-compliant taxpayers (Huang 1998: 109).

While most civil service staff were recruited through an examination system, palace staff was made up of thousands of palace eunuchs (their numbers fluctuating between 10,000 and 30,000), Noble titles could be awarded to persons whose service to the state was distinguished, and they were paid stipends. Heritability was controlled by the ruler, however, so the nobility “did not constitute an independent power-wielding element ...” (Hucker 1998: 29). Recruitment for the Ministry of War was strongly hereditary, although recruitment and the use of mercenaries increased in importance later in the dynasty (Hucker 1998: 55, 68). An examination system also provided a path to one of the military schools, and training was provided at the capital although it declined over time (Hucker 1998: 66).

“The civil service dominated government to an unprecedented degree. It was not seriously challenged by hereditary nobles or military officers” (Hucker 1998: 9), and bureaucratic routines were developed to minimize corruption, for example, related persons could not serve in the same agency and no official served in his home province (*ibid.*: 46, 53). A formal legal code was promulgated as early as 1368, including a vernacular commentary on it that was intended to make the code widely known among the people (Langlois 1998: 172, 179-80). Beginning in 1370, a household census was conducted, in part to implement the *li-chia* system (Heijdra 1998: 428). Cadastral records, sometimes updated from the Sung dynasty, recorded and certified land holding and tax obligations.

The Confucian social theory affirming the importance of “equal educational opportunity for all” (Ho 1962: 255) resulted in the gradual institutionalization of a competitive civil-service examination system during and after the T’ang Dynasty, and, by the Ming Dynasty, a corollary school and scholarship system was implemented that could feed potential recruits into the merit-based civil service exams (Ho 1962: 255). This resulted in a degree of social mobility, in Ming times “probably unparalleled in Chinese history” (ibid.: 261). Recruitment to the civil service was through: (1) promotion of sub-official functionaries; and (2) through the examination system (especially common after 1440), with the latter the preferred path to higher office (Hucker 1998: 30). Administrative positions could not be purchased (Hucker 1998: 41). A wide array of schools that could prepare officials were patronized by the state, including military and medical schools, as well as local schools and private academies (ibid.: 31). The state also subsidized the Confucian schools scattered throughout all the prefectures that trained young men for civil service careers and fed a small number each year into the national universities, an important path to a civil service career (ibid.: 39). The examination system was “competitive” and “open” although there were some categories of persons not eligible to take them (e.g., beggars and vagrants) (ibid.: 35-6, 39). Successful test-takers were given public acclaim as well as symbolic and material rewards (ibid.: 37). All these “graduates” were eligible for the grand competitions that took place in the capital, and that involved the emperor in the later stages of the competition. The exams were based on the “Four Books,” the “Five Classics,” and Chinese history, following the texts of the neo-Confucian Chu Hsi.

Rulers had more influence in selecting and evaluating officials of the higher ranks, but, even so, they had little direct control over the civil service under normal conditions, although, at times they undertook to extend their degree of control through purges (Hucker 1998: 52). For example, when selecting higher officials, councils of administrators were convened, who provided the emperor with a nomination or a selection from which to choose. He could reject a candidate, but would then depend on the council for another recommendation (ibid.: 47).

Upon entering civil service, higher-ranking recruits went to the Hanlin Academy for training for the “grand Secretariat” administration (Hucker 1998: 42). Others were given various lower ranked positions, and were evaluated for merit ratings at regular intervals (but also experienced unscheduled evaluations); promotions were based on favorable evaluations. At the “Great Triennial Court Audience” a large number of provincial officials were gathered at the palace for an audience with the emperor and high officials, following which a round of promotions and demotions (or criminal charges) were made (ibid.: 44). The names of officials found wanting or subject to prosecution were published in a book that is described as being circulated widely. Punishments could be quite harsh and humiliating (ibid.: 52-3).

The Ming founder promulgated “generally egalitarian attitudes” that undid some of the social distinctions instituted by the prior Mongol Yüan dynasty, replacing their more vertically structured system of official statuses with a simple classification in which most families were registered simply as “civilian families,” while other categories included military families and artisan families (Hucker 1998: 62).

The Hung-wu emperor declared that any person “commoner and official alike” could submit a memorial (official document) to the emperor, and he would read it (Brook 1998: 638). In order to make official communications more effective, so the emperor could learn more about “the affairs of the people,” several new administrative branches were established including the Office of Transmission, and memorials approved by the emperor and the administration were published in a gazette that provided a record of the activities of the state (Brook 1998: 639).

The “surveillance-judicial” administration (Censorate) “disciplined and rectified all agencies of government,” and had “ombudsman-like surveillance and judicial supervision” (Hucker 1998: 72-3, 94). Government evaluators (censors or inspectors) “were expected to make aggressive inquiries and to welcome complaints from anyone who had a grievance, especially about the conduct of an official in local administration” (ibid.: 45, 94); this kind of information could be used in the periodic evaluations of civil service personnel. Inspectors also “accepted complaints and petitions from the people” (ibid.: 94). The various merit evaluation systems took into consideration evidence for: avarice, cruelty, frivolity, instability, inadequacy, senility, ill health, weariness, and inattentiveness (ibid.: 44).

Japan (7)

This was a mixed system consisting of, first, the salaried bureaucracy of the *shogunate* administration (and the separate administration governing the vast properties of the Tokugawa family), although including some hereditary *daimyo* (“feudal warlords”) in palace service. Below the *shogunate* there was the hereditary *daimyo* administration of the approximately 270 provincial territories (*han*) (e.g., Perez 2002: chapter 3; Hall 1991b; Bolitho 1991; Tatsuya 1991). Some of these were related to the Tokugawa clan, others were enfeoffed or liege vassals (to use the European-derived terminology often found in this literature) who had been created early in the *shogunate*, as well as the hereditary *daimyo*. The *han* functioned semiautonomously, and were charged with the conduct of justice, taxation, administration, and maintaining local military forces, within limits specified by the *shogun*. Initially, *daimyo* and their vassals owned *han* land as fiefs, although by the 18th century most proprietary control of land had been converted into right of taxation rather than ownership per se (“the evolution from fief to stipend” [Hall 1991a: 15]). Formal certificates of enfeoffment gave *daimyo* a certain security of tenure, but also implied the possibility that the *shogunate* could deny their tenure. *Daimyo*, in turn, exerted increasing control over their vassal *samurai* by moving them into the castle towns and transforming them into stipended administrators who governed the growing cities as well as rural areas. Tension between *shogunate*, *daimyo*, and *daimyo samurai* vassals characterized the focal period, although each component depended on the others for their governing services.

Beyond Edo and the *han* centers, rural administration was poorly developed; “... regional administrators occasionally ventured out into the provinces to “inspect,”

particularly at harvest times, in hopes of garnering a few bribes to turn a blind eye to tax-collection irregularities” (Perez 2002: 26). Once the *samurai* had moved away from rural areas to live with stipends in the castle towns, peasants were freer to engage in tax evasion (Bolitho 1991: 190). Attempts to gain more control over tax collection, and to increase tax revenues, prompted an increase in peasant protests (Toshio 1991: 496-7). Although taxes were not collected by private contractors, tax collection was left largely in the hands of local hereditary headmen (*gono*) and there appears to be almost no monitoring of taxpayer compliance or any way to address taxpayer complaints (Perez 2002: 26); a corrupt *gono* “could cheat and embezzle almost at will” (ibid.: 33). Only a very small administrative staff was involved in the administration of taxes (Hall 1991b: 170), suggesting a strongly hands-off approach to detecting compliance and official corruption.

Officials in the administration of urban centers were charged with receiving complaints from townspeople and checking for tax compliance (Nobuhiko and McClain 1991: 534), but rural voice appears much less likely to be heard. Appeals for lower-level judicial decisions could be made, in theory, but usually were not (Perez 2002: 30). A revised law code developed in 1742 “was never made public” (Tatsuya 1991: 454). “Since the villages had no real representative voice in the *samurai* administration ...” (Perez 2002: 32), and since villagers who did write letters of complaint could be punished (ibid.), alternatives were “appeals by force” and collective violence (e.g., Hall 1991a: 24). There were 724 peasant uprisings from 1716 to 1750, involving up to as many as 84,000 farmers in one case (Tatsuya 1991: 459). Even under the reform *shogun* Yoshimune (1716-1745) the institutions available to communicate about dishonest lower officials were poorly developed (Tatsuya 1991: 443). Peasant demonstrations were taken as evidence of poor *han* administration, and could have repercussions for the *daimyo* (e.g., Perez 2002: 34), but this is a passive system of voice and control.

Tibet (8.5)

Tibet was partially bureaucratized, at least in those areas the state controlled directly, but not including the semi-autonomous kingdoms of Sikim and Ladak, where the “Lhasa type” administration was not found. This was also true of the uplands occupied by pastoral nomads (“the lands of insolence”) which were not directly governed (Carrasco 1959: 221). The characteristic governing system found in the central administration and its fifty-three districts (*rdzong-kha*) was based on a dual administration by monk and lay officials (ibid.: 80). The monk officials were paid a salary (ibid.), and were more likely to be recruited competitively, while the income of the lay officials, many of which were nobles “... derives primarily from... titular family estates, other family estates, office land (in some positions), and land leases. The family estates are the most important source of income” (Carrasco 1959: 132-133). “Office lands” were awarded on an *appanage* basis (Carrasco 1959:208), and terms of office-holding were short, usually for three years, which would seem to give the

ruler some ability to control provincial agency, but there appears to have been agency problems in spite of these policies. For one thing, although “Promotions depend theoretically on seniority and ability... there is always room for intrigue and bribes in securing promotions, and the lay officials of the most important noble families, or monk officials of noble birth, receive preferential treatment” (Carrasco 1959: 82), and the system provided considerable leeway for provincial officials to over tax. As Carrasco (1959: 93) indicates: “The position of district official is held on farming terms; that is, the amount of taxes and fines to be made over to the government is settled at a certain amount and all excess becomes the private income of the official. There is no clear report as to whether this practice is legal or not, and if not, which are the customary limitations. Officials are said to abuse their power in collecting too high taxes, using the labor services of the peasants for their own benefit, and exacting presents.” Even local tax-collectors earned most of their income from “presents” given to them by taxpayers (ibid.: 97). The state attempted to correct these kinds of problems with proclamations laying down rules of official conduct (ibid.: 93), but these failed to correct problems with corruption, even on the state-owned properties (ibid. 95-6). We know that “Officials can also be degraded, fined, or banned by the Dalai Lama or the regent. In some cases they have had their estates confiscated, and have been thrown into prison or killed” (ibid.: 82-83), but, in the absence of a suitable organizational capacity to monitor and punish officials on a regular basis, this, and the issuance of proclamations, was not likely to be highly effective (ibid.) Communication channels were weakly developed. District officials were urged, in another proclamation, to heed “petitions or requests” (ibid.: 93), but they were not likely to do so if the complaints concerned their own actions.

Egypt (10)

Tax collection was carried out by an elaborate bureaucratic system under the civil administration of the *viziers* (prime ministers) of the northern and southern zones (e.g., Brier and Hobbs 1999: 65; James 1984: 53, 55; Murnane 1998: 201), and included several administrative levels of treasury officials and scribes concerned with taxation (e.g., Montet 1964: 66, 75, 78; O’Connor 1983: Figure 3.4), as well as specialized police who assisted in tax collection (O’Connor 1990:29), but also including local mayors (Murnane 1998:193). However, since these duties were not functionally distinct from other civil administration activities, complaints of over-taxation by an official were initially made to that same official who made the collection as opposed to an independent civil official.

Most officials were appointed by the pharaoh or other high officials (e.g., Montet 1964: 75, 1981: 201), and these appointments could, at times, bypass “local bigwigs” and patrilineal inheritance (Kitchen 1982: 145), but the pressure to turn offices into “hereditary family possessions” was strongly felt (Bierbrier 1975:113; Cerny 1973:126; Edgerton 1947: 156). Yet, in the focal period, including Ramesses II’s reign, “ability not status could be the key to the door of opportunity, regardless

of whether a youngster's family was rich or poor" (Kitchen 1982: 145; cf. James 1984: 56; Murnane 1998: 185, 188).

The judicial system was weakly developed as far as providing formal channels for appeal. Some decisions were made by priests (oracles), but since the state controlled the priesthood (Edgerton 1947: 158), it seems unlikely they would make objective judgements against officials. However, official agency could be punished, as we learn from Montet (1981: 258-9): "Horonemheb, always seeking an opportunity to stamp out injustice and punish falsehood, issued an edict against those that betrayed their office. Any magistrate convicted of having abused his position was sentenced to having his nose cut off and was deported to a kind of concentration camp at Silé on the Suez Isthmus." However, most of these infractions seem to have involved crimes against the state itself, as O'Connor (1990: 28) indicates: "... infractions against the state... were taken most seriously. These offences were described in great detail with the penalties specified. Typical concerns were malfeasance on the part of an official, such as accepting bribes or embezzling property; and the evasion of compulsory labor or other required services," and complaints appear to have been handled on an ad hoc basis rather than representing a consistent policy (Kemp 1989: 235-236). From sources such as Kemp (1989: 238), we see little in the way of formal communication channels: "Government in ancient Egypt was by royal decree, the system of administration was the sum of these decrees, and the resulting overlaps and confusions of responsibility were tackled by fresh decrees in response to specific complaints. This cycle of decision - petition or complaint - redress was a basic part of bureaucratic life, to the extent that collections of model letters used in the training of scribes often contained a model letter or petition of complaint. The universal picture of the rapacious tax-collector and the suffering peasant is joined in ancient Egypt by the picture of the predatory official victimizing his colleague." James (1984: 78) arrives at a similar conclusion: "The realities, unfortunately, tend to weigh more heavily in the balance of justice than honesty and fair play. Consequently the poor were always at a disadvantage unless they had the wit sufficient to turn the tables on their adversaries... That the poor and weak could obtain justice was a fundamental object of the legal process in ancient Egypt; but justice for such did not come easily" (cf. Edgerton 1947: 160).

Athens (14)

The general theory of democracy embraced during the focal period was operationalized in a way that exhibited many features of bureaucratization. The key expectations for this social design were, first, to allow voice for diverse social sectors (at least for citizens), to maintain procedures for open recruitment of agents (again, from the population of citizens), and to assure the accountability of government agents, the magistrates (*archontes*). The term for magistrates means "rulers," but, in contrast to the oligarchic rule of some other Greek polities, in Athens these positions were open to all eligible citizens, and were normally charged only with administration,

not legislative decision-making, although they exercised authority in some limited capacities, so the difference between agents and principals in this case is not always clear. There were ca. 700 magistrates in office, some (ca. 100) elected and the rest selected by lot in cases where special skills were not required, and another 500 were councilors (*boule*) serving the People's Assembly (*ekklesia*) (this summary is from Hansen 1999: chapter 9). Offices were held for one year, and, ideally, were circulated rather than being held by particular persons. Many persons held several offices over their lifetimes. Theoretically, magistrate positions were restricted to more affluent citizens, but by the focal period even less affluent individuals could serve, although there is no evidence that magistrates were paid (other than those serving on the Council), and some magistrate positions entailed a cost (*ibid.*: 241-2) that represented part of a citizen's obligation to the state.

The Assembly of the People of Athens was often described by political philosophers and other critics of democracy as a "political organ in which the city poor, the artisans, traders, day laborers and idlers could by their majority outvote the minority of countrymen and major property-owners" (Hansen 1999: 125). Its meetings also provided an opportunity to evaluate whether the magistrates were "doing their jobs properly" (from Aristotle, quoted in *ibid.*: 132). Petitions could also be presented (*ibid.*) Citizens and *metics* (foreigners) were allowed to bring accusations against magistrates at the end of their term of office (*ibid.*: 222-4). Citizens could bring a private suit against a magistrate they felt had infringed on their rights (*ibid.*: 78). In addition, "Every summer thirty officials sat three entire days in the Agora to receive written complaints handed in by the citizens" (*ibid.*: 78).

The Athenian system of government required considerable transparency. "Publication was a prerequisite for a democracy, so the Athenians had to display everything they could in public" (Hansen 1999: 11). The Metroön in the Agora was a state archive where "every public document, written on papyrus, was available to any citizen on request" (*ibid.*) The inscribed marble slab (*stele*) was a frequent means of political communication (*ibid.*) The People's court exercised control over magistrates and generals "at the point of entry into office...and at their rendering of accounts at the end of their period of office" (*ibid.*: 218). *Euthynai*, the required rendering of accounts at the end of the period in office, was used primarily to evaluate the ca. 700 magistrates and the 500 councilors (*ibid.*: 222-4). Courts could also hold magistrates accountable for their behavior during the term of office through public prosecutions (*ibid.*) *Dokimasia* was an evaluative process to confirm the candidate's commitment to democracy and that he met other requirements of office (*ibid.*: 219). Magistrates could be evaluated during their term of office, and any citizen could bring a complaint about a magistrate to the Assembly or the Council, to be adjudicated by the court (*ibid.*: 220). Annually, a board of ten inspectors, chosen by lot, was selected from the Council to inspect the books of all magistrates (*ibid.*: 221). Magistrates could be charged with bribe-taking or other immoral acts, and could then be denounced in the Assembly and taken to People's Court (*ibid.*: 193). This might result in a death penalty or fine. Hansen (*ibid.*: 217-8) mentions the high proportion of denunciations and prosecutions of officials in Athens, especially military leaders, suggesting that accountability of officials was a serious issue.

In spite of all this bureaucratic complexity, "...Athens possessed no bureaucracy capable of assessing and checking the property of its citizens..." so monitoring of wealth to assess taxes was left in part to fellow citizens (Hansen 1999: 111, 262), and some tax collection was contracted out. The import-export tax was collected by tax farmers (*ibid.*: 260). Some additional internal taxes such as the personal tax on *metics* and the tax on prostitutes also were farmed out (*ibid.*) Citizens who neglected their civic duty or who were indebted to the state could be declared *atimoi* (those who had lost honor) (*ibid.*: 88). They were excluded from the political community, lost the right to attend the market and the religious festivals. One board of magistrates was involved with taxation issues and could sell property confiscated from non-compliers (Gulick 1973: 303).

Roman Empire (12)

The Roman system combined elements of ascriptive, especially *equestrian* (aristocratic), and open recruitment of officials, with the Senate serving as the epicenter of inherited privilege. The Emperors depended on modes of open recruitment to fill administrative posts (we summarize this system, in part, from Eck 2000a, b, c; Burton 1996a, b; and Levick 1996). The Senate was a law-making body of approximately 600 that served also to confer official powers to a new emperor, but could also condemn him and rescind his acts (although this was unlikely by the focal period, given how the balance of power had shifted to the emperor). While the Senate had been strongly hereditary and restricted to the patrician order (aristocratic clans) and other extremely wealthy persons, during the focal period its membership became more variable, with emperors able to promote families to patrician status and bring in new members, reflecting the growing importance of imperial patronage. This is related to the fact that the Senate became more cosmopolitan (i.e., not exclusively Italian) during the focal period (Eck 2000d: 217-19; Levick 1996), including members especially from the eastern provinces and Africa. Individual Senators could be important in imperial governance, for example, holding important military posts in the provinces and provincial governorships (*proconsul*), and, when succession was in doubt, new emperors were chosen from the ranks of the Senate. The Senate was thus a pool of talent from which an emperor could draw on to fill important military and civil positions. The fact that senatorial governorships tended to be of short duration (usually one year) meant that, at any time, the Senate's membership contained a cadre of experienced individuals directly familiar with the nature of provincial administration and military matters.

The magistrate governance of the Republican Period (prior to the focal period), that was similar to the Greek system of elected officials (except with less public accountability), had been largely bypassed by an appointed civil bureaucracy by the focal period, although some titles, such as *consul* (the highest office of the Republican state) were retained in a more symbolic than administrative sense (e.g., Derow 1996). One aspect of centralization characteristic of the Principate, by

comparison with the Republican Period, was the frequent employment of imperial freedmen (emancipated slaves from the emperor's household) in diverse and sometimes quite important administrative positions. An innovation of the focal period was the assignation of independent administrative officials, by the emperor, sometimes on a temporary basis, to solve specific problems (*procurators* of several types) separately from the normal provincial administration (Eck 2000b: 279). Over the course of the focal period, *procurator* numbers fluctuated, and many of these positions tended to be replaced by *equestrian* appointments, although in some cases freedman and *equestrian* would be assigned side-by-side to the same office, perhaps as a check on *equestrian* agency by freedmen who were more directly accountable to and obligated to the emperor (Eck 2000a: 253). *Procurator* and other paid administrative posts were direct appointments by the emperor, usually following military service, and were open to both *equites* and, for some positions, to freedmen and free men who had risen from the ranks (Burton 1996b). Regular stages of promotion were recognized, graded by level of pay (ibid.; Eck 2000a: 261), and the holding of offices (usually for one to five or so years) of gradually greater scope and significance (although there was no set sequence) substituted for any formal training for bureaucratic duty or to develop specialized skills (Eck 2000c: 257-60).

There was no formal office of personnel matters (Eck 2000a: 261), and office holders might spend extended periods holding no office, so state employment was not always a civil service "career" for *equestrians*, but it could be so for imperial slaves and freedmen (ibid.: 263). Given the restrictions that applied to imperial slaves and freedmen in devolving wealth to offspring, "power and prestige could not be...passed on from one generation to another" (Eck 2000a: 265). Eck (ibid.: 264) indicates that there were "many thousands" in this slave and freedmen "civil service."

Peripatetic emperors could gauge the state of the empire in part through direct experience, although military actions occupied them. For example, Trajan spent one-half of his reign out of the capital on military campaigns (Griffin 2000b: 102), and Hadrian was absent from Rome on military business for two extended provincial tours, from 121 to 125 and from 128 to 132 (Birley 2000: 136-46). However, even when away from Rome, emperors managed many administrative aspects of the empire through correspondence, which, given the detailed degree of emperor involvement in decision-making, "must have been massive" (Eck 2000b: 268).

Provincial governors were charged with conducting civil and criminal trials, and over the empire, Roman law appears to have been used as the basis for trials (Eck 2000b: 273-4). Although provinces varied greatly in size, governor's staffs everywhere were similar in size. Hence, many communities saw little effective central provincial governance (ibid.: 275). As Eck (ibid.: 275) puts it, "The everyday point of reference for provincials was and remained their home community, within which and through whose officials and resources the public needs could normally be satisfied." Eck (ibid.: 275) describes Roman governance by the emperor and at the provincial (governor) level as "reactive" in the sense that most actions were in relation to problems that occurred, such as grain price controls in famines ("short-term solutions" in Eck [2000d: 281]) rather than constituting the development of policy

or bureaucratic routines. Specially-assigned *curators* would be assigned as needed to resolve a problem, then depart (*ibid.*: 281), and their relationship to existing provincial administrators was not clearly laid out (*ibid.*: 289). In such cases, edicts were issued to resolve problems rather than basing governance on a set of bureaucratic routines or rules. The roles of types of officials were not clearly laid out, and the first handbooks of administrative responsibilities were not produced until the very end of or after the focal period (*ibid.*: 291). The Romans wrote little about the administration of empire (Galsterer 2000: 344). That requests made to an emperor for dispute resolution were often sent back for resolution at lower levels suggests a lack of clear guidelines concerning a division of labor in decision-making at various administrative levels or procedures for vetting petitions to appropriate levels of the hierarchy, so that, for example, even executions were at times ordered by municipal magistrates (Galsterer 2000: 351). Governors were not regularly involved in the governance of cities except in a few areas, such as approving the construction of large buildings to help control municipal spending (Eck 2000b: 276). Administrative details were difficult to keep track of.

Tax collection was done by a variable combination of administrative officials, tax farmers, and citizens of cities who took on the duty of tax collection as a *liturgy* (Eck 2000a: 257; Galsterer 2000: 357). There were tax farmers (*conductors* and *publicani*, “lessees of public taxes”) in some provincial areas (and even in Italy), but during the focal period there was an evident attempt to involve the state more directly in many categories of taxation, for example inheritance taxation, by appointing special officials (Eck 2000a: 247-8, 2000b: 284). This evidently did open new, or at least more specialized, channels of communication for the resolution of inheritance tax disputes (Eck 2000a: 252), but the dependence on local officials for tax collection and the sparse number of state officials in the provinces (or in Italy) meant that “there was ample room for abuse” (Hopkins 1980: 121).

By the focal period, the Roman people, broadly speaking, had lost all direct governing functions they had enjoyed during the Republican Period (Millar 1981: 20). No popular assembly functioned in Rome (and town councils functioned primarily to elect magistrates), but mobs could mobilize to bring pressure on legislators or an emperor in some cases in the absence of any institutionalized voice (*ibid.*) Voice could also be expressed, again in an ad hoc fashion, during the public entertainments. The Roman Circus was a “place where above all the masses come together to behave as an assembly” (quote from Herodian in Purcell 2000: 417-18). Councils, from the Roman Senate down to the community councils, were made up of elite representatives and “participation of the whole citizenship was not intended” (Galsterer 2000: 355).

Theoretically, all Roman citizens had the right of appeal to the emperor, but it is not clear what practical use this might have had given the small number of cases any emperor could consider and the possibility that provincial governors might limit appeals going forward to the emperor (Brent Shaw 2000: 369; cf. Garnsey 1988: 249). While members of the elite might mount an effective appeal, it was much less a possibility for an ordinary taxpayer (*ibid.*: 370). During the Republic, the institution of *provocatio* allowed for appeal against coercive or criminal magistrates, but

with Augustus, this was replaced by the possibility of direct appeal to the emperor, and the idea seems to have developed that the emperor was “accessible even to individual subjects” (Eck 2000b: 271), although this is unlikely in practical terms. Appeals to judicial proceedings at the community or provincial level were at times forwarded to the emperor, but often rebuked (Galsterer 2000: 351). Persons without “official position generally had to turn directly to the emperor, either in person or through the mediation of a third party, to deliver a petition...,” and this also applied to a collectivity such as a community or assembly (Eck 2000b: 268). Hence, the emperor seemingly was available to acknowledge voice, but this was not highly institutionalized. There were “no general rules governing the way in which communication between emperor and communities of his subjects should be carried out” (ibid.: 268). For example, Hadrian, on one of his trips, arranged, ad hoc, an assembly “to which representatives of the Spanish communities were invited” (Birley 2000: 139). Marcus Aurelius and Verus (co-rulers) “were popular with the people of Rome, who particularly approved of the fact that they conducted themselves *civiliter*, with lack of pomp, and permitted freedom of speech” (Birley 2000: 157). In Eck (2000c, e.g., p. 211), mention is made of various forms of commoner access to emperors (including emperor consorts) that sometimes had influence on him.

Venice (14)

In Venice, the base of the government and the source of all political power was the Great Council (Norwich 1982: 282-283; Lane 1973: 96-97), with its, variously, 1,500 to 2,000 members. Membership on this council was limited to the hereditary nobility and membership was a prerequisite for holding any elected office in the government. Below the Great Council and its various elected offices and committees, there was a plethora of bureaus staffed by boards of salaried officials, including officials charged with tax collection matters (Lane 1973: 266), as well as a large cadre of secretarial and accounting positions that were filled by the ordinary citizens and the locally selected officials in the governments of cities on the mainland (Lane 1973: 266; Norwich 1982: 208-9). In conquered areas, the Venetians established systems of governance like their own. As Norwich (1982: 208-9) put it, for their new imperial possessions “Some new machinery must be devised; and Venice’s solution... - which was to be applied, with minor variations, in most of her other mainland dependencies - was essentially a miniature version of the system that worked so well in the Republic itself.”

A well-developed administration was in place that could monitor and control official agency, and which served as a communication channel for taxpayer voice. State attorneys (*avogadori di comun*) were able to convict officials, “from parish chief to the doge” for abuse of office (Lane 1973: 100). And, as Chambers (1970: 97-8) writes, “Impartiality and accountability were implied by the elaborate machinery of short-term appointments and collective judgments; for even the judges of the appellate courts were non-professionals elected from the greater

council, and their verdicts were reached by voting. The same system of appeal in civil cases, whereby the appellant first referred himself to one of the auditors of the court, was extended as far as possible to the empire *da mar* and *terraferma*: special auditors or *sindaci* were sent on circuits at regular intervals, so that those who sought justice were saved the expense of coming to Venice.”

England (8.5)

The governmental structure of early 14th century England was strongly ascripted in the central government, the king’s household, and in the feudal hierarchy, although within all three, salaried staffs carried out some administrative functions (e.g., Cam 1950: 143-83; Haven Putnam 1950: 185-217; Holmes 1962: 59-88; Morris 1940: 3-81, 1947: 41-108; Waugh 1991: 153-169; Wilkinson 1940: 162-206). Rural administration (on lands governed by the state) was in the hands of salaried staff, including the sheriff and his staff, with the assistance of the coroner; some of these positions were locally elected (Cam 1950: 143). We also see justices of the peace and keepers of the peace at the local level with duties and responsibilities parallel to the sheriff and his bailiffs, but these officials were controlled and manipulated by the local elites and their relationship to the central administration is unclear. All officials from the sheriff downward were chosen from the local population and were usually local gentry, so they were not bureaucratic officials and many positions were only part-time. There was also a hierarchy of courts but no official judicial branch of the government. The revenue administration was poorly developed and not sufficiently monitored. Plucknett (1940: 102) lists a number of private landowners who served as tax collectors and points out (*ibid.*: 103; cf. Johnson 1947: 203; Strayer 1947: 12, 17, 36) that “As for financial probity, it must likewise be remembered that handling or collecting public funds was a difficult task which often placed the official between the upper and nether millstone. The system was complicated and ineffective, and the crown bore hard upon its agents who in turn had to get the money where they could find it.” And in Strayer (1947: 4) we find that “There were never enough paid civil servants to collect the king’s revenues, and thousands of unpaid assessors and collectors had to be pressed into service. These men were naturally not eager to squeeze the last farthing out of their neighbors and their lack of zeal is reflected in the tax returns.” That this system led to corruption is attested in Waugh (1991: 159).

During the focal period few communication channels were available for commoners. For one, “over half of the peasant population was juridically servile, subject to *seigneurial* jurisdiction and with only rare access to the royal courts” (Hilton 1992: 21). Parliament was beginning to take shape and increase its influence but it remained a body of the gentry and commoners (peasants) were excluded from participation. Appeals could be made to the king and council (Morris 1940: 7), but they often could be ignored even in cases of official agency, as described by Strayer (1947: 15), “Political misconduct was sufficient cause for replacing a

sheriff, but personal peccadillos, inefficiency, and even extortion had a better chance of being overlooked” and corruption was common (Baldwin 1940: 146, 153; Waugh 1991: 159). As Wilkinson (1940: 202-3) points out “It was the great expression of order and the supremacy of government and law, which stood, and still stands, as a thin barrier between civilization and barbarism; but despite its imposing façade there was inevitably much weakness within. Too often, we may suspect, the office was, as individuals were, a lackey of the great, and oppressor of the poor. It needed a revolution to enable Geoffrey Cotes to bring a successful complaint against Henry Burghersh, and even then his action was attended by a very limited success. On the other hand the power of a great lord could make itself felt in the vary antechambers of the king.”

Ottoman (9.5)

A kind of open recruitment of officials, the *kul*, or “slaves of the sultan,” was found in the Ottoman civil (Ruling Institution) and military administrations (Lybyer 1966: 46, *passim*; much of the following is drawn from this source, especially chapters 2-7 and Inalcik 1994: 73, 84). *Kul* were slaves or Christian free-born persons selected and trained by the sultan for dedicated service to the ruler. Some *kul* went into administrative careers, while others were placed in the military orders. This implies that a large proportion of the administrative cadre were not chosen according to ascripted criteria except for the princes (*voyvodes*) of dependent polities in Wallachia, Moldavia, and the Republic of Dubrovnik.

While the jurists/theologians of the Religious Institution of the government were Muslims, the personnel of the Ruling Institution were slaves, hence, Christian, although once in the sultan’s household, Christian *kul* were required to convert to Islam. They were taken into the institution between the ages of 10 to 20 (Lybyer 1966: 48). The total number of *kul* in the system in the 16th century was about 80,000, requiring an estimated 7,000 to 8,000 replacements per year, owing to a high rate of loss in warfare (*ibid.*: 49). Slave status could be very high and being taken as a slave into the sultan’s ruling institution was viewed largely favorably as it implied the possibility of social advancement and wealth accumulation, although among *kul* sons could not inherit father’s position (e.g. Lybyer 1966: 60-1, 69). Hence, there was no Ottoman “nobility,” although certain families were given preference to hold high offices (*ibid.*: 117-18). The favoring of merit over inheritance, according to Lybyer (*ibid.*: 118), reflects Chinese influence on the Central Asian Turkic antecedents of the Ottomans.

Kul in the sultan’s governing institution were passed through a lengthy and extensive educational program, including physical training; the most capable students received years of training in Muslim and Ottoman law and administration and in languages including Turkish, but also Arabic and Persian (Lybyer: 71-8). “Merit was recognized everywhere, and regularly led to promotion” (*ibid.*: 73, 82-8). An elite group went through the “College of Pages” (or palace school) and served in

the sultan's various palaces, potentially achieving high government posts, while many of the remainder worked their way through a series of training positions, perhaps eventually joining the elite military force, the *janissaries* (ibid.: 79). After training, a regular order of pay raises and promotions to official and military positions was used (ibid.: 78). The *harem* was a training ground for slave-wives for high officials or even the sultan (ibid.: 79).

"Feudal" *sipahis* were a non-salaried component of the bureaucracy. These troops numbered 50,000 in Europe and 30,000 in parts of Asia where there was state-owned land that could be awarded as *appanages* to troops. In areas of foreign conquest and military boundary zones, such as Bosnia, some elements of the soldiery as well as *janisseries* and other *kuls* were granted *timar* (state-owned) lands and they then became the local officials in charge of land and taxation (and could keep a portion of the taxes collected) (Inalcik 1994: 72-3), although they did not have direct possession and hence were not the "owners" of the land or the peasants on it. *Timar* lands were not inherited (except in some frontier areas), there was frequent dismissal from *timar* allocations, and *timars* were retained only as a consequence of active service (ibid.: 115). This implies some degree of bureaucratization, but is limited by the fact that to obtain a *timar*, bribes often were made to the provincial governor who was actually in charge of dispensing them (ibid.: 116), although, under Suleiman, an attempt was made to assert central control over the granting of *timars*.

Timar grants not only provided a form of inexpensive local governance in conquered areas, they generated new revenues in conquered areas, and they served to recompense soldiers and others who had served the government without having to pay them a salary. *Sipahis* had some governmental duties in their respective territories, for example, they had police authority, although they could not penalize wrong-doers without a verdict from a local judge (except for those *timar*-holders in autonomous regions, who were immune from central government interference). Regional governors carried out periodic "security tours" of *timar* lands, presumably to monitor agency (Inalcik 1994: 114), but we find little evidence of any systematic ability to monitor or punish agency of the *timar*-holders.

Surveys done in conquered areas had the intention of fairly establishing a rational basis for tax collection and to "protect the *reaya* (peasants) from abuses introduced by the local military," but other goals included maximizing imperial income and discovering tax evasion (Inalcik 1994: 132-4). The system of surveys was not highly developed until the 16th century, close to the end of the focal period, but for that time constituted some 2,000 volumes providing data on demography and land use (ibid.: 139). There was considerable concern expressed by the central government that excess taxation not be practiced in order to "win over" the *reaya* but it is not clear how such abuses could be discovered and punished (ibid.: 134). There is also a concern that surveyors not take bribes, but, again, how would this be discovered and punished? In some cases, land surveys were assigned to persons who "guaranteed that he would find a considerable surplus" (ibid.: 138) which seems to challenge the idea that surveys were always done with fairness in mind. In some cases there was opposition to the Ottoman surveys and their registration of

tax-eligible persons, including “cases of mass flight, particularly among the nomads, to evade registration” as well as rebellions (ibid.: 134-5).

Tax-farming “became the major means of capital formation in the empire” and some tax contractors became important in state finances and could play a political role in the state (Inalcik 1994: 209). Many key sources of tax revenue were farmed out to private contractors, for example, salt producer enterprises working state-owned salt sources (ibid.: 55, 60). This was a “financial decentralization” of state enterprises (ibid.: 62). Tax farmers were often punished for failing to pay taxes (ibid.: 64-5), but evidently not for charging excess tax. “The huge tax-farms, such as the customs zone of Istanbul...called for consortiums of Turkish, Greek or Jewish financiers to manage the tax district...The government resorted to the tax farm or *mukataa* system to levy certain revenues which required rather complicated organizations or were difficult to follow up and collect” (ibid.: 66). Sharp criticisms were leveled at the unfairness of the tax-farm system (ibid.: 72), but there is no evidence of any response to them.

Communications channels were poorly developed. For example, “The sultan’s... stately royal processions through the city [became] highly charged events providing the people with a rare opportunity to give written petitions to their ruler by hand [but the main purpose seems to have been a display of power since] ...Such carefully staged performances reinforced the secluded monarch’s awesome magnificence” (Necipoglu 1991: 30). Theoretically it was possible to present petitions to the grand vizier’s council, which met “four times a week to dispense justice in the sultan’s name. Any male or female subject of the sultan, Muslim or non-Muslim, could petition this high court of justice to have his case heard and decided” (ibid.: 76). The location of the Council Hall (*divan*), expanded and elaborated on under Suleiman I, however, located in the comparatively isolated second court of the palace, would imply only limited access by ordinary persons. A Chamber of Petitions (or Inner Audience Hall), located just inside the third gate (and, hence, inside the royal residential zone) served for the sultan’s audiences in an extremely materially elaborate setting (ibid.: 100-102), but only a few high officials or ambassadors were likely to be brought this far into the palace for consultations.

In cases of inter-village land disputes, villagers “had the right to complain directly to the sultan by submitting a joint petition or by sending a delegation,” using an *imam*, from among the villagers or an outsider, as their representative (Inalcik 1994: 175), but it is not clear whether such complaints could accomplish much. Court decisions were made quickly and appeals evidently were not possible, even those leading to death (Lybyer 1966: 221). There appears to have been a constant struggle between *sipahi* and their dependent peasants concerning payment of taxes, as *sipahi* regularly exploited their positions (Inalcik 1994: 72), and there is no mention of any institutionalized recourse for the peasantry in such cases. To protect peasants from the agency of *sipahis* and government agencies “the rules regarding the collection of taxes were particularly detailed and restricting” (ibid.: 172), but in the absence of a suitable organizational structure to monitor and punish agency, or accommodate voice, such regulations mean little in practice.

Aztec (11.5)

In most Aztec polities (*altepetl*), administrative responsibilities were divided between an external ruler (*tlatoani*) and an internal ruler (*cihuacoatl*), who governed alongside a council made up of the noble heads of the *calpultin* (descent groups) (Durán 1994: 75-76, 264; van Zantwijk 1985: 97, 99, 102). During the focal period in Tenochtitlan, the role of noble families was sometimes reduced and high offices were filled with both commoners and noble appointments based on merit (Davies 1987: 114, 115; van Zantwijk 1985: 96-7, 123; see also Anguiano and Chapa 1976: 140, 151-152; Durán 1971: 137; Hirth 2000: 254, 260; Muñoz Camargo 1947: 56-57; Nava Rodríguez 1966: 37; and Offner 1983, for discussions of social mobility in late pre-Hispanic Central Mexico). As van Zantwijk (1985: 113) put it: “Perhaps an even more important fact was that no one despite his belonging to a high-status family, could ever be considered for high office unless he had performed great services for the community or the regime.”

In addition to a well-developed bureaucratic structure of administrative staff, councils were an important feature of administration in the Triple Alliance, ranging from the supreme ruling body (*tlatocan*) to a variety of hierarchically and functionally distinct councils of a middle rank (Offner 1983: Table 6.1; van Zantwijk 1985: 111, 112, 117-119; see also Durán 1994: *passim*), to various governing councils at lower levels (Davies 1987: 117; Offner 1983: 56-57, 60, 83, 155, 157, 161; van Zantwijk 1985: 120, 121, 122). Bureaus were often chaired by a combination of elite and commoner officials (Davies 1987: 113; Offner 1983: 56-57, 152). Appointed officials were monitored and malfeasance was severely punished while diligence was rewarded (Davies 1987: 118; Offner 1983: 155, 242, 251; Zorita 1994: 128). Appointments to low and middle level offices were made for limited periods, usually one or two years (van Zantwijk 1985: 91) and important officials were awarded *appanage* grants (Hicks 1978; Offner 1983: 132,136; van Zantwijk 1985: 284; Zorita 1994: 124-125). We suggest that councils were a strategy to permit a wide range of voice in government. As Offner (1983: 123) puts it: “Although Nezahualcoyotl centered legal and political power in the office of the Texcocan ruler, he encouraged participation by the various classes and subgroups in the empire’s legal and political processes in order to minimize discontent and alienation.”

Tax collection was carried out by a central government office, the *calpixcacalli* (van Zantwijk 1985: 275-276), that extended its reach into conquered provinces (e.g., Berdan 1996; Carrasco 1971: 365; Offner 1983: 96), although traditional groups such as the *calpulli* and urban neighborhoods served as the units of tax collection at the local level (e.g., Offner 1983: 169-170). Offner (*ibid.*: 155) also points to the role played by a non-noble and non-official groups involved in tax collection: “[The Treasury council] was composed of the ruler’s *mayordomos* (tribute collectors) and the most important merchants (presumably the long-distance traders, or *pochteca*) of Texcoco. These people were charged with the collection and distribution of the imperial tributes, and their jurisdiction included all offenses relating to the collection, payment, and misuse of such tributes... Tribute collectors who gathered excessive tributes were punished by death.” The staff of the *calpixcacalli*

included investigative officers who could monitor the behavior of tax officials (e.g., *ibid.*: 155).

The Aztec court system included features consistent with collective action. During the reign of Motecuhzoma I, an order of judges was established in Tenochtitlan, directed by a supreme judicial council that oversaw a series of hierarchically arranged and linked courts (Durán 1994: 210). In Acolhuacan, Nezahualcoyotl established a series of courts culminating in a supreme council that was overseen by two higher judges and the ruler (Offner 1983: 148). This supreme judicial council also acted as the supreme imperial court and cases were referred to it from other parts of the empire for final decisions (Offner 1983: 84). Decisions could be appealed from lower to higher courts and potentially could be decided by the *tlatoani* or *cihuacoatl* (Davies 1987: 119; Zorita 1994: 126). It is also clear that the state maintained a system of equal justice regardless of social class or position, both in ideology and in practice (Offner 1983: 77, 242; van Zantwijk 1985: 280). Judicial agency was punished by fellow judges (Offner 1983: 251). According to Offner (*ibid.*: 242), “Nezahualpilli [an Acolhua ruler] seems to have been particularly involved in rooting out judicial corruption and incompetence.” For severe breaches of the public trust, including favoring the nobility over commoners, a judge could be executed (*ibid.*: 77, 242, 251). Direct petitions to the ruler were possible (Durán 1994: 199, 484). In all three imperial capitals special tribunals were established to hear the complaints of the common people (Durán 1994: 210; Offner 1983: 60). These tribunals were staffed by four officials (*oidores*), who worked with the ruler, and were housed in special rooms in the palace (Durán 1994: 210; Offner 1983: 60).

Inca (10)

The whole top level of the Inca state was recruited from nobility, from the advisor court made up of Inca royal kin groups (*panaqa*) (D’Altroy 2002: 99) through several levels of administrative hierarchy down to the *kuraka*, hereditary local elite (Julien 1982: 125). Noble status appears to have had a strong resonance in the Inca system. As Murra (1980: 36) points out, “In the process of territorial expansion, the state faced new bureaucratic, military and technological imperatives which would no longer be satisfied by the limited personnel of the twelve royal *ayllu* [aristocratic Inca descent groups]. This led to the creation of ‘Incas by privilege,’ men loyal to the Inca state and familiar with its procedures, who were promoted’ and at least in part assimilated to Inca status.” However, below the level of *kuraka*, anyone could be appointed to office, commoner or noble (D’Altroy 2002: 233), including *hunu*, highest regional administrator (Murra 1980: 75) who managed 10,000 tributaries (Julien 1982: 123) in the Inca decimal administrative system (in which the size of administrative units was figured in multiples of 10 tributaries).

The granting of *prebends* (including grants of labor) appears to have been the key means to reward appointed officials, and these apparently could be inherited (Murra 1980: 33-8). This system gave principals limited ability to remove officials

from office, for example, even *pachaka* officers (who managed 100 to 500 tributaries) may have been appointed for their lifetime, and could be removed only for a serious offense (Julien 1982: 125).

Through the decimal system, the Inca administrative system penetrated deeply into society, to the level of local officials (*chunka*) who managed 10 tributaries (Julien 1982: 123) and the *llacta camayoc*, local officials who supervised the working of community lands (Murra 1980: 91), although traditional local leaders (*curacas*) also played a role in governance at the local level (e.g. Murra 1980: 109). While this system provided great leeway to monitor and punish taxpayers and local officials, it appears to have been especially oriented toward the proper management of state lands. For example, when Murra (1980: 112) points out that: “Castro and Ortega Morejón tell us that to have neglected working the state lands, abandoned or absconded with a load or otherwise to have ‘failed to tribute’ was a crime severely punished. There was a *hucha camayo*, or clerk of offenses, who exercised his discretion and could even kill the violator along with his whole family. Violating the land limits set by the state, which I suppose means an attempt to reoccupy the alienated lands, or the use of state waters for village irrigation was ‘severely punished’” (cf. D’Altroy 2002: 235, 301). Murra (1980: 109) describes an inspector, *tucuy ricu* (‘he-who-sees-all’), who made periodic visits to communities, checking accounts and doing censuses, and “Cieza tells us that complaints and appeals against existing assignments and quotas could be presented at this time.” This could be a channel for communication of voice, but Murra (1980: 112) tells us there was only a low probability that there would be any “redress for grievances.”

Chapter 9

Modes of Control of Principals

The role of the principal or principals, whether ruler, monarch, king, or some other category such as chief magistrate or ruling council (below, we use whatever terminology is most often found in each state's literature), combines two primary dimensions of state power, the symbolic-cohesive, representing the polity as a whole, and the bureaucratic, as chief administrative officer(s) of the state (Eisenstadt 1956: 21). The potential for agency among principals represents a particularly difficult collective action problem and we can expect collective action process to be reflected in how this role is defined. For one, since principals serve as the primary symbolic objectification of the state their actions are key to the trust-building that is crucial in the functioning of a collective polity. As Levi (1988: 52-3, 56, 60-4) hypothesizes, quasi-voluntary compliance depends in part on whether taxpayers are confident that principals will honor their bargains. They are expected to govern transparently, use tax revenues to benefit the collectivity, develop and maintain effective systems of governance able to monitor and punish agency and free riding, and accept constraints on their potential for political agency and on their standard of living, the latter to confirm that revenues are not being used to support a "luxurious lifestyle" in the capital (Levi *ibid.*: 56). The theory predicts that in the more collective polities taxpayers assess the principal's degree of commitment to the collective enterprise through public scrutiny, but trust comes also from knowing that when principals violate collective norms they can and will be held accountable.

The Principal Control Scale Measure

We operationalized hypotheses about trust-building, limits on agency, and accountability of principals based on suggestions found in Blanton (1998) and Levi (1988). The resulting measure, "Principal Control" is a complex, "messy" theoretical construct that we measured by summing across easily-coded component variables (found in Table 9-1; the coded values are found in Table 9-2). These variables address three key questions regarding the actions of principals:

- (a) Monitoring of Principal Behavior. Institutions that require principals to act in such a way as to allow for public scrutiny give taxpayers a sense of their

Table 9-1 Coding categories for the Principal Control Variable. The letter designators refer to column locations of the coded data in Table 9-2

Monitoring of Principal Behavior (a)	
1	= there is a lack of institutions that would make principal behavior public knowledge
2	= some institutions require principal behavior to become public knowledge
3	= well-developed institutions permit the monitoring of principal behavior
Principal Adherence to Moral Code (b)	
1	= no moral code informs the expected behavior of principals
2	= there is a weakly-developed idea that principals should be moral
3	= a well established moral code applies to principal behavior, and it is widely disseminated among the population
Role of High Officials or Advisory Council (c)	
1	= high administrative officials and/or a council serve the principal, and are unable to judge or reprimand the principal
2	= high administrative officials and/or council have some autonomy to judge and reprimand, but rarely do
3	= high administrative officials and/or council are highly independent and able to judge and punish or impeach principals
Restrictions on Principal's Control of Material Resources (d)	
1	= few or no restrictions apply
2	= some regulations limit principal control of material resources
3	= strong restrictions exist limiting principal control of material systems (for example, when they are not allowed to own private estates).
Restrictions on Principal's Control of Ideological Resources (e)	
1	= principals control important cognitive systems (e.g., writing, or religious leadership roles)
2	= principals control some minor cognitive systems, but these are not significant sources of power
3	= principals have little control over important cognitive systems, for example when religious institutions are separate from the state and outside the control of principals
Principal's Standard of Living (f)	
1	= the material standard of living of principals is quite elaborate and not likely to be replicated by others in society
2	= the standard of living of principals is not outside the range of some other households in the society
3	= principals live in a way that is similar to many other persons in society

demeanor and degree of devotion to the collective system (“reflexive communication” in Blanton [1998: 162-6]), and enhance the trust-building necessary to gain the compliance of taxpayers in more collective states (e.g., Levi 1988: 52-3). Here we coded for required public appearances, open council meetings, and other communication channels that make it possible for a broad public to assess the decision-making process and the degree of commitment of principals to the collective enterprise. We differentiated, where the data allowed, between reflexive communication and kinds of public behaviors whose intention was to confirm the power of principals and the grandeur of their role.

Table 9-2 Principal Control codes. The column headings are: (a) Monitoring of Principals' Behavior; (b) Principal Adherence to Moral Code; (c) Role of High Officials or Advisory Council; (d) Restrictions on Principal's Control of Material Resources; (e) Restrictions on Principal's Control of Ideological Resources; (f) Principal's Standard of Living

	(a)	(b)	(c)	(d)	(e)	(f)	Total
Nupe	1.5	1	1	1	1.5	2	8
Yoruba	2	2	3	1	2	1	11
Asante	2.5	2.5	3	3	2.5	2	15.5
Bagirmi	1	1	1	1	1	1	6
Kuba	2	1.5	2	1	1	1	8.5
Tio	2	1	1	1	1	2.5	8.5
Buganda	2	2	1	1.5	2	2	10.5
Bakitara	1	1	1	1	1.5	1.5	7
Lozi	2	3	3	2	3	2	15
Swahili Lamu	3	1.5	3	2	3	2	14.5
Thailand	1.5	3	1.5	1	1.5	1	9.5
Burma	1.5	2.5	1	1	2	1	9
Bali	1	2	1	1	2	1	8
Aceh	1	2	1	1	2.5	1.5	9
Perak	2	1	1.5	1	1	1	7.5
Java	2	3	1	1	1	1.5	9.5
Vijayanagara	2	3	1	1	1.5	1	9.5
Pudukkottai	1.5	2	1	1	1	1	7.5
Mughal	2.5	2	1	1	1.5	1.5	9.5
China	2.5	3	2.5	2	3	1.5	14.5
Japan	1	2	1	1	2	1	8
Tibet	1	1	1	1	1	1	6
Egypt	2	2	1	1	1	1	8
Athens	3	3	3	3	3	3	18
Rome	2.5	3	2	1.5	1.5	1.5	12
Venice	2.5	3	3	3	3	2	16.5
England	1	2.5	1.5	1	1	1.5	8.5
Ottoman	1	3	1	2	1	1	9
Aztec	2	3	2.5	2	2	1	12.5
Inca	1	2	2	1	1	1	8

- (b) Principal Adherence to Moral Code. This variable assess the degree to which a well-developed moral code informs the expected behavior of principals. The presence of a code itself might be only propagandistic, so, as in the remainder of the coding, we looked for evidence that punishment would result from code violations.
- (c) Role of High Officials or Advisory Council. We looked for high-ranking civil administrative officials and/or a highly independent advisory council able to judge and reprimand (and even impeach) principals. Here we looked for

evidence that impeachment resulted from abrogation of moral code, and was not just a reflection of political struggle over access to high office.

- (d) Restrictions on Principal's Control of Material Resources. Here, we assessed the degree to which principals were able to marshal material resources to augment their power in society. We address this by looking for aspects of the cultural code that specify restrictions on their personal control of material assets such as trading monopolies, imperial revenues, and private estates.
- (e) Restrictions on Principal's Control of Ideological Resources. We also looked at the degree to which cognitive or ideological resources potentially could be deployed to augment the personal power of principals. For example, to what degree are principals sacralized, thus making their actions above question? To what degree are principals able to occupy or dominate religious leadership roles? Do major religious organizations fall under the control of principals, or do such organizations operate autonomously?
- (f) Principal's Standard of Living. Lastly, we assessed the degree to which the standard of living of principals was or was not likely to be replicated by others in society, in other words, the degree to which principals limited their material expression of wealth (the degree of "ruler self-abnegation") (e.g., Levi 1988: 56; Lichbach 1996: 171; Popkin 1988: 62, *passim*).

Assessing the Principal Control Scale

These component variables all contributed to the variance in the principal control scale variable, including the principal control total. The Cronbach's alpha for the entire component set is .86, and a first principal component calculated from the bivariate correlation values explains 60% of the total variance and correlates positively with all the components. The distribution of values for the sum of Ruler Control is depicted in Figure 9-1.

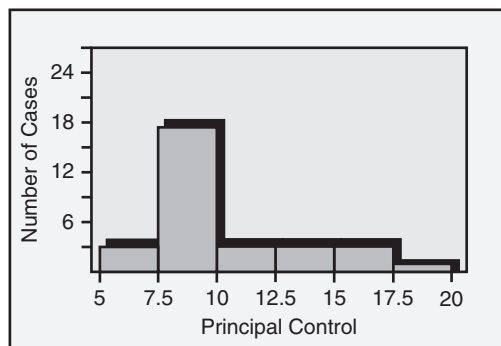


Figure 9-1 Distribution of values for principal control.

Summary of Principal Control Data

Nupe (8)

We were unable to detect any formal procedures that would allow taxpayers to monitor rulers, although they participated publicly in one religious ritual (see below), and we were unable to discern a well-developed moral code for rulership. We also failed to identify any restrictions on rulers' control of material resources, and they were able to marshal some important cognitive resources to their benefit (e.g., Nadel 1942: 88). Rulers were Muslim and used Islam as the state religion and the mosques in each village to spread state propaganda (ibid.: 142). As part of this focus on Islam as state religion, the ruler participated each year in the Sallah festival, which was a pageant and feast (ibid.: 143). On the second day of the Sallah, the *Etsu* (ruler) would host a massive reception in which all ranking officials paid homage to the king, and offered and received gifts (ibid.: 144). During this festival tens of thousands of peasants descended on the capital to see the spectacle (ibid.: 144). Additionally, the Fulani rulers seized the royal insignia of the earlier Nupe kings (ibid.: 142), and, as Nadel (ibid.: 141) describes it, "A powerful secret society, organized to combat witchcraft, the order of the *ndakó gboyá*, became...a King's Cult, only half a century ago. There is no doubt that the *ndakó gboyá* cult itself existed long before that. But under *Etsu* Masaba the head of this order, the grandfather of the present head of the *ndakó gboyá* society, was invested with the pompous title of *Maji Dodo*, Master of the Monster, and with this royal recognition the organization of the society was made subservient to Nupe kingship." There was no balance of power between ruler and advisors or council, and they appear to have been unable to criticize the *Etsu*; other royal houses competed for power with the standing ruler, but this was not a system of ruler evaluation in relation to a moral code (Nadel 1942: 41, 89). Royal palaces were elaborate, but other wealthy households also had elaborate houses (ibid.: 41).

Yoruba (11)

Senior members of the royal lineage "were expected to admonish the *Alafin* (ruler) if he brought the throne into disrepute with his people..." (Lloyd 1971: 10). A council of representatives of descent groups (the *Oyo Mesi*) formed a supreme council of the kingdom (ibid.: 11). The head of the *Oyo Mesi* (chief council) appears to have been very powerful and able to observe and judge ruler's behavior and (with the full council) declare it unsatisfactory (Law 1977: 74). The ruler was expected to heed their advice in order to "retain public confidence" (Law 1977: 65), and they had the right to reject him through the mechanism of the Orun festival (Law 1977: 74, 77) (see below). While the ruler's power stemmed in part from his

control of the palace, the *Oyo Mesi's* power stemmed from their descent groups and clients in their quarters; this problematized the balance of power in society, and provided for a check on ruler agency. Rulers could be deposed for various reasons, including one who was deposed for being “wicked and superstitious” (Lloyd 1971: 14), although it is likely political battles between the ruler and the high council were a common reason for deposition rather than abrogation of a moral code.

There was little in the way of established practice that would make the nature of ruler's behavior evident to ordinary persons, since he was mostly confined to the palace, and was required to make only three public appearances each year (Law 1977: 65). We were unable to detect significant controls over ruler's control of material resources, and they were able to control at least some important cognitive systems. The Oyo rulership had considerable symbolic power owing to claims of descent from Oduduwa, but it was also constrained in several ways. Members of the royal lineage segments determined the succession, not ruler himself (Law 1977: 66-7), and succession approval also had to be granted by the non-royal chief lineage heads (*ibid.*: 66-7). Father-to-son succession had probably ended early in the 18th century, perhaps to further limit ruler power (*ibid.*: 67).

Other symbolic systems were connected with rulership, but not in a consistent way that always sanctified the office holder. The ruler participated in three major religious festivals, but didn't have much control over them, although a high palace official, the *Otun Efa*, controlled the Sango cult (deity of thunder and lightning), an important sanction for political obedience to the ruler (Lloyd 1971: 11; Law 1977: 31). The ruler's funeral involved human sacrifice and “enforced suicides” of some wives and slaves (Law 1977: 65), but the ruler was not considered divine; he was instead a “Companion of the Gods” (*ibid.*: 66). And other ritual cycles don't seem to offer the degree of symbolic affirmation as does the Sango. The Orun festival was an occasion in which the gods were given an opportunity to decide whether or not to allow the ruler's reign to continue (Law 1977: 65), and it was controlled by the non-royal chiefs. Islam was present in Oyo by the end of the focal period but had little impact on the system of governance (Law 1977: 76).

Ruler's palaces were large and elaborate and not equaled by other households. The Oyo palace is estimated to have covered 26 ha (Law 1977: 64). Yoruba palaces were elaborate complexes located at the centers of their respective cities, surrounded by high walls (Ojo 1966: chapter 6).

Asante (15.5)

Ruler's actions were in full view during sessions of the inner council and the larger council (see below), given the requirement that open debate should occur before decisions were made (e.g., Wilks 1975: 672), but it is not clear to what degree the general public could witness such events. There appears to have been a general theory of moral rulership, for example, a divisional chief was read a list of requirements upon assuming his stool, that listed his duties and limitations on his power (Rattray

1929: 81-2). Departures from the list could lead to destoolment (impeachment) (ibid.: 82). Such ideas applied to principals as well. At the very end of the focal period, two rulers were destooled, one because he was financially derelict, and another because of the “corruption of his personal nature” (McCaskie 1995: 69). Another was destooled in 1803 for failure to preside over the Kumase *odwira* ceremony (ibid.: 136) (described below). One ruler was criticized for retaining fees for his personal use rather than forwarding them to the treasury (Wilks 1975: 470-1).

The *asantehene* (ruler) was strongly subject to control by other officials and a high council. The king’s mother had her own stool and she alone had the power to rebuke the king, his spokesman, and his council “in open court” (Rattray 1923: 82). The king could be arraigned before a “national tribunal” composed of the *amanhene* (paramount chiefs of administrative provinces) and other officials (Rattray 1929: 105). The ruler’s successor was selected by the high council and the queen mother, and this same group could also destool him (ibid.: 85; Wilks 1975: 252, 395). The Council of Kumase (*asantemanhyiamu*) served to represent the claims of all kinds of individuals before the ruler (Wilk 1975: 387-92).

A ruler’s control of material resources was strongly limited. A stool (office) itself did not bring individual wealth to its holder, and even a district’s reserve fund was not property of the stool holder (Rattray 1929: 116, 146). Rulers controlled some important cognitive systems while in office. The possession of prestige goods signified ruler’s status, including, the golden elephant tail that was the most important of all elephant tails in the kingdom, and, especially, the Golden Stool (*sika dwa kofi*), which signified legitimate political authority and power (McCaskie 1995: 47-8, 127). Key signifiers of rulership, such as the Golden Stool or lesser stools, however, were not controlled by individuals, but, rather, represented the office they held (e.g., Rattray 1929: 83). The Golden Stool was a potent marker of rulership because of its supposed supernatural origin and its role as a repository of the collective essence of the Asante people (Rattray 1923: 289). Stool-holding chiefs were considered to have considerable spiritual power, but, if destooled, they became ordinary persons who could be criticized and punished for their actions while holding the stool (Rattray 1929: 83).

Rulership is to some degree sanctified (but not individual rulers), for example, some clans providing rulers are thought to have emerged from the earth and hence these rulers had a connection to the earth diety Ya (Rattray 1923: 214-5). However, major ritual sites and temples were located in northern areas (such as Tekiman), not in the political capital (Rattray 1923: 151, 170). Priests had little political influence, and the state regarded them as being potentially politically subversive (McCaskie 1995: 124). The *asantehene* played a key role in the Odwira or annual yam harvest festival (Rattray 1929: 279; McCaskie 1995: 145). This is interpreted by McCaskie (p.145) as a renewal ritual that was oriented toward a “ritual mediation on the seamless unity of dead, living, and unborn” (p. 145), but that also had political functions in manifesting the state’s control over food consumption, the affirmation of its past military victories, the glorification of the succession of *asantehene* rulers, in the affirmation of political subordination of conquered groups, and in the functioning of the assembly of Kumase office holders (pp. 146-7). This

was a major event that brought *amanhene* with large retinues and many commoners from all over the polity to Kumase, swelling its population to nearly 100,000 participants in an alcohol-soaked event of considerable visual opulence and emotional power (McCaskie 1995: 201-27) and that included human sacrifice (p. 213).

It is not clear how rulers' material standard of living compared with that of other households, since some Asante households had accumulated considerable wealth (McCaskie 1995: 53). All the houses of officials in the capital were similar in layout and construction to the ruler's palace (although, we assume, smaller), but the palace did not appear to display the individualized wealth of the occupant. According to Bowdich's plan of 1817 (reproduced in Wilk 1975: Figure 6), the main palace in Kumase covered 2 ha, much less than the Yoruba palaces. A long entry corridor led to the architecturally elaborate Great Court where the Council of Kumase convened. The administrative offices of the government were situated in rooms behind the Great Court, and behind these, the living quarters of the ruler.

Bagirmi (6)

Bagirmi rulership and the state were highly sanctified. Four of the highest officials of the central court, the "masters of the earth," were concerned with rituals and other matters that would insure "the normal operations of society and nature" (Reyna 1990: 105). They might have been a source of moral guidance to the ruler, but no examples of this are provided. The ruler was charged with collecting two religious taxes but used the proceeds as he saw fit (*ibid.*: 122), suggesting little pressure to behave morally according to the dictates of *sharia* (Islamic expectations that the state should provide aid to needy persons).

Daily, high officials would sit with the *mbang* (ruler) and "gossip" (Reyna 1990: 104), but this practice did not allow widespread monitoring of ruler by ordinary persons. Eight of the highest holders of named positions formed a Council of Succession that elected the new *mbang* (Reyna 1990: 105), and the *mbang* could not make unilateral decisions about wars or succession (*ibid.*: 105). It is not known if the council could impeach the ruler, but the powerful spiritual dominance of the ruler vis-à-vis court officials (*ibid.*: 108) makes it unlikely.

It is not clear whether any restrictions applied to ruler's control of material resources. There was no fiscal administration, so the ruler evidently had considerable personal control over revenues (Reyna 1990: 132). Rulers controlled important cognitive systems. They were sanctified by the two forces that animated the universe, Mao, a snake, associated with the underground and germination, and Karkata, a 12-legged creature associated with sun, above-ground, and hunting. The ruler represented the product of these forces combined and, as a result, was a conduit from powerful supernatural forces to the world of people (*ibid.*: 59). As such he was thought to be "electric" with animating forces and was regarded as a divine Sun King (*ibid.*) with his high officials constituting the "planets" revolving around him (*ibid.*: 92). This all very much in contrast with the secular concept of rulership found in most Islamic polities.

Rituals and insignia of office (lances, fly whisks, and drums) also represented ruler divinity (ibid.: 108). There is no evidence of self-abnegation, although the data are spotty. The palace in Massenya was distinguished from other houses by being surrounded by a wall of fired brick (rather than the usual mud brick) (ibid.: 62). It had a high wall (14-18m high) and massive wooden and iron gate.

Kuba (8.5)

Each year, the crown council meeting (*ibaanc*) was required to be open to the public, and might be construed as a venue for monitoring ruler behavior. Vansina (1978a: 150) indicates that its participants attempted to both assess and sway public opinion. The *ibaanc* council was open to all, and originally had been a judicial council but lost some of these functions as chiefs lost judicial decision making authority (ibid.: 149-50). A *durbar* was another open meeting that convened over a period of weeks and allowed village headmen to account for tribute and report a census (ibid.: 150).

We could not detect a moral code for principals, nor were there any means for deposing the ruler. Five councils that functioned in the capital (Vansina 1978a: 145-52) are described as having had some influence over the ruler (they could “rebuke” him [ibid.: 146], but they could not depose him) (ibid.: 153). The crown council “could and did veto any of his [the king’s] proposals by moving their [symbolic] belts up and down,” although over time, rulers “whittled away at the group’s privileged position” (ibid.: 130). A chiefly council (*ishyaaml*) could also block royal projects (or attempt to do so) (ibid.: 146-7).

We were unable to detect any controls on ruler control of material resources, and Kuba rulers did maintain extensive controls over cognitive resources. Rulers controlled the most potent charms, “coopted” the work of prophets, and abolished ethnic spirit cults (Vansina 1978a: 203-4, 8). Rulers maintained careful control over religious movements, and the ritual surrounding rulership was elaborate. The ruler was considered a nature spirit (*ngesh*) and in other ways royal pageantry and ideas about ruler spiritual power justified his wealth, worldly power and his arbitrariness as a source of innate justice (ibid.: 129, chapter 11). The king also controlled powerful “charms” (ibid.: 130). The burial rites of a ruler and the installation of a new ruler were elaborate, and involved the whole population, requiring an entire year to complete (ibid.: 129). Other symbols of ruler authority included a royal costume, double bell, stools, drums, dynastic statues, iron staff, and kaolin clay (as a ball); and an elaborate system of insignia indicated ranks in the complex bureaucracy (ibid.: 132-3, passim; chapter 11). *Bulaams* (official custodians of narrative traditions) held a high position because they could establish ruler precedence from their knowledge of Kuba history (ibid.: 17). They used accounts of dynastic migration and ruler history as a charter for legitimizing kingship (ibid.: chapters 3, 4).

The palace contained a maze of walls, courtyards, and plazas, and was very different from other buildings in the polity (Vansina 1978a: 137), and rulers lavishly consumed all kinds of prestige goods (ibid.: 186).

Tio (8.5)

Public speaking was a requirement of officials in the political culture of Tio (Vansina 1973: 319, 393), but it is not clear if the ruler engaged in this behavior also. However, the ritual of *lisee* was an important rite of ruler initiation (ibid: 381-382), ending with the ruler performing a solo dance and hosting a large feast. Each year the king headed a ritual celebration involving lords and commoners, called *imwooni*, which was believed to make the country strong (ibid: 382). Little is evident regarding a moral code. Rulership was in conjunction with councils (e.g., ibid.: 321), but it is not clear whether or not they could impeach a ruler.

There is no mention of restrictions on ruler control of material resources. Rulers did control important cognitive systems, including regalia such as the lion's skin (upon which he sat), a brass collar with twelve points, a royal drum played with the royal rhythm, special feathers, a sacred hat, rings, and other items (Vansina 1973: 386-387). The most important symbol was the lion's skin which invoked the name of Nkwe Mbali and "symbolized the subordination of all chiefs" to the king (ibid: 387). According to Vansina (ibid.: 374) "The sovereign was king because he was the 'master' of the national spirit Mkwe Mbali. This male spirit held sway over the whole kingdom..." We also learn from Vansina (ibid.: 378) that "The fear of the king's powers was real ... He had the power to make it rain in torrents, destroying crops and houses when his wrath was aroused. This was only a warning before unleashing the lions ... No magic whatsoever could prevent his lions, his rains, or lightning and the curse of his staff."

While the ruler held important ritual objects and prestige goods, otherwise his standard of living may not have been very different from other wealthy persons (Vansina 1973: 392-393), and, based on the photograph on page 366 of Vansina (ibid.), the ruler appears to have lived in a structure of wood and grass like all other Tio. As Vansina (ibid.: 157) put it: "... differences in the standard of living between great men and small men were minimal. The Tio never developed a monumental architecture ..."

Buganda (10.5)

Evidently, all levels of district chiefs as well as palace officials could attend the council meeting (*lukiko*) held almost daily in the king's reception hall, the largest such space in the kingdom (Roscoe 1965: 257-8). At the council meeting, anyone could speak (ibid.: 258). This should provide for some degree of monitoring of ruler behavior, although it was not a fully public venue. There was a moral code for rulers but is not explicitly described. One candidate for the office of ruler was rejected, reportedly, because he was a killer (Wrigley 1996: 67). At investiture, kings agreed to an oath swearing correct behavior and fidelity to the polity, while the people present swore to honor him (Roscoe 1965: 198-9). Royal clan leaders and other high officials (Roscoe 1965: 12-13) were charged with appointing a new

king (ibid. 104), and could depart from king's wishes (ibid. 189). A high official, the *katikkiro*, was influential but was more of an administrative officer for the ruler than a near equal (ibid.: 234-5).

We could find little evidence of restrictions on control of material resources, although neither chiefs nor ruler accumulated wealth that could be inherited (Roscoe 1965: 269). We coded control of cognitive resources as a '2' since there was some separation of religious institutions and rulership. For example, kings alone, when mad at the gods, were known to loot a temple and its estates (Roscoe 1965: 273; Wrigley 1996: 248; cf. Southwold 1961: 14). Also, there was considerable separation of king and palace from the main and minor temples, which were located in various places around the polity's territory (ibid.: 273). The essential separation of ruler from temples implies rulers had little control of some aspects of religion, but rulership had its own ritual cycle and system of symbolic representation that also was powerful. The ruler had a connection to what Roscoe (1965: 273) calls the "national gods," (for example, the king financed the rebuilding or repair of temples), but he himself was largely a secular figure, not a god (Ray 1991: 15, *passim*). This does not deny the symbolic significance of Bagandan rulership, since the office itself was surrounded with complex symbolism and ritualization. On a site near Lake Nalubaale, at Buddo, the rulers' installation rites were carried out (Roscoe 1965: 191-6, Wrigley 1996: 79), which involved human sacrifice (Wrigley 1996: 243). At death, the ruler's jaw bone was wrapped and placed in a shrine to him, while the rest of the body was buried in a royal graveyard (Wrigley 1996: 25), and there was also a royal temple with staff devoted to his honor (e.g., Roscoe 1965: 204). Hundreds of persons were killed around the deceased ruler's tomb, including his wives (ibid.: 107), and many others were killed in later rituals honoring a deceased ruler (ibid.: 112).

Rulers had to be of royal descent (Roscoe 1965: 232), and continuity from the supposed original king Kintu was symbolized by a perpetual fire kept in the palace grounds said to have originated with him (ibid.: 202). The sacred stool of rulership (*namulondo*) was brought out only on special ritual occasions, and the royal drums so strongly symbolized rulership that they had to be guarded to prevent an illegal usurpation (ibid.: 104-5). Drums also signified chiefly positions (ibid.: 188), as did leg bangles (Southwold 1961: 6).

Bugandan kingship was powerful owing to the fact that ruler played a central role in the most important institutional structures of society. Ruler was both king of the domain in an administrative sense as well as chief of all the patrilineal clans (*ssa-bataka*), that is, he held the apical positions in the parallel hierarchies of state administration and clan officials (Wrigley 1996: 64). The centrality of this institutional role enhanced the king's ability to maintain social order (e.g., Ray 1991: 178).

Rulers were wealthier than other chiefs, but apparently lived in houses architecturally similar to others, and he ate most of the same kinds of foods (e.g., Roscoe 1965: 439) except that milk was a luxury food consumed more frequently by a ruler's household (ibid.: 440). The royal enclosure was on a hill top, and was oval shaped, 1.6 by 2.4 km, enclosed by a reed fence some 3 to 4 m high (Roscoe 1965: 368), but construction methods used to build it were similar to normal houses, namely,

pole and thatch construction. But the palace compound was far larger than even those of important chiefs, containing some 450 residential structures and other buildings, and holding a population of 3,000 (ibid.: 366).

Bakitara (7)

The ruler's extensive daily ritual round left little time available for official business (e.g., Roscoe 1923: 99), so it is unlikely very many people actually had access to him. Normally, he was confined to the royal enclosure, and depended on officials to keep him informed about matters in the kingdom (ibid.: 91). We could find little evidence for a moral code informing ruler behavior, except that he was obligated to perform frequent rituals. No council or other entity could impeach ruler, as "The king's power was absolute over all his subjects" (Roscoe 1923: 61), and offending subjects, even wives, could be "struck down" (ibid.: 63). The hereditary Sacred Guild of chiefs was consulted on most matters of state (ibid.: 51), and one mythic tale implies that ruler should listen to advice of elders, but it is not clear how institutionalized this was (Beattie 1971: 260-1).

There is little evidence of restrictions on the control of material resources. And rulers controlled important cognitive systems. Every aspect of kingship was considered sacred (Roscoe 1923: 90). The importance of the king's role in maintaining and enhancing the well-being of the people of the kingdom was expressed in a complex series of rituals required of ruler and those in his palace, including both formal ritual events and ritualized everyday practices, the latter involving numerous avoidances and scripted sequences of activities, especially surrounding cattle herding, food preparation, eating, human waste, curing/health, reproduction, and death (e.g., Roscoe 1923: chapters 5 and 6). A special place was set aside for the royal tombs (ibid.: 120). Nine of the ruler-related rituals involved the ritual killing of humans, including the burial of two of the ruler's widows with the deceased king, and annually a man was killed on the anniversary of a king's death (ibid.: 108, 122, 126, 127, 134, 235, 309), in addition to numerous animal sacrifices. Humans could be killed for various infractions of ritual purity pertaining to the king (e.g., ibid.: 115, 130). The king's *kraal*, just outside the royal enclosure, contained a special herd devoted to providing the king's and other royal family members' milk and meat supply (ibid.: 113).

While the ruler was sacred, gods and priests were institutionally distinct from him and the royal compound; for example, the ruler was not a priest (Beattie 1971: 107). The main god, Ruhanga, was regarded as having little involvement in ordinary affairs, but priests of the Bachwezi spirit cult were consulted for various matters (Roscoe 1923: Chapter 3). This perhaps represents a means of incorporation by the royal Babito clan of residual cultural and institutional elements of an earlier group of Cwezi chiefdoms, in which the Babito gave Bachwezi priests considerable autonomy and respect (Robertshaw 1999b: 127). High-ranking "medicine-men" were closely linked to the palace and aided in cases of ruler illness, or sickness in the country, and provided prognostication (Roscoe 1923: 34). Sacrifices and some

ruler-related rituals were performed at sacred hills at scattered localities (ibid.: 44-5), not just in the royal enclosure.

Lozi (15)

There were required venues in which ruler actions were made public, or semi-public, for example, decision-making in governing council meetings (see below) required a “full and free discussion” (Gluckman 1961: 41). The ruler was in full view of the political community at the annual movement of all the people, as one, out of the flood plain. At this time, elaborate ceremonies preceded the ruler’s processional migration from his flood plain capital to his flood season capital, traveling on the royal barge (for which components were assembled from different parts of the polity), and during which the “national drums” (representing the people) were played (Gluckman 1961: 11; Prins 1980: 115-17). And, some tribute coming to the capital was distributed by the ruler “before all the people” (Gluckman 1961: 40; Gluckman 1943: 93). During the installation ceremonies for all official offices, the person was reminded that he rules by virtue of the people, while the people were urged to support the official (Gluckman 1961: 20-1).

A moral code for rulers is evident. An ideal ruler was “wise, gentle, and soft-tempered” (Gluckman 1961: 54). All Barotse (Lozi and subject tribes) owed allegiance to the ruler, entailing tax-paying compliance and respect. In turn, subjects were entitled to “claim the king’s help and protection,” to express voice, and to obtain resources, including land (ibid.: 20, 43). The ruler/subject reciprocity was expressed in patrimonial terms with ruler as ‘parent’, hence, “the king is the nation” (ibid.: 21), while, at the same time, ruler was “servant of the nation” (Prins 1980: 71), thus expressing a theme of “symbiosis, of mutual responsibility” (ibid.: 118). Lozi structural history identified an alternating sequence of good and bad rulers (Prins 1980: 120-1), evidently as a kind of moral guide to what constituted correct rulership. The key governing council of the polity, the Council of the Capital (*kuta*) included the ruler’s senior deputy or *ngambela*, a commoner, who was highly regarded in society as a representative of the Lozi people and “is expected to constrain and upbraid the king in private” (Gluckman 1961: 45-6). The council selected the new ruler (ibid.: 47).

Few overt restrictions on ruler control of material resources could be identified, but we get a sense that rulers had to be cautious in how they used wealth. Rulers were expected to avoid a display of wealth and were supposed to display the “quality of generosity” by distributing food and goods, including cloth and cattle (Gluckman 1961: 14). Rulership was strongly symbolized. An elaborate “etiquette of words and actions” was used when greeting the ruler, reflecting his “semi-divine” status (Gluckman 1961: 21). Royalty (even affines of princes or princesses) were accorded considerable respect. The Lozi ruler claimed descent through males going back to the first king Mboo (Gluckman 1943: 12). But the operative theory of governance in its totality combined rulership, epitomized by the ruler, with government, epitomized by the commoner *ngambela* (chief councilor, representative of the people),

the two symbolically represented by two kinds of drums (Gluckman 1961: 47). Through an elaborate installation ritual, ruler was transformed into a more powerful spiritual being (Prins 1980: 120-1). At ruler's death, all fires were extinguished until a new fire was ceremonially lighted by a priest in every village (Gluckman 1961: 62; Prins 1980: 121). Royal burial sites and cenotaphs were sacred sites and deceased rulers even retained some spiritual potency, and offerings are made at the burial sites (the "cult of the royal graves," e.g., Gluckman 1961: 26, 30-1; Prins 1980: 123-9). However, there was some separation of ruler from important ritual sites and supernatural forces. The polity's symbolic organization was dualistic, reflected in northern and southern capitals. Greater political power was vested in the north (male) ruler and his capital compared with the south (female) ruler and her capital, but the southern capital had more ritual and religious significance, and the leadership of the south capital could criticize the ruler (Gluckman 1961: 27-8).

Ruler standard of living was higher than most other persons, but kept within acceptable limits. Palace construction appears similar to ordinary house construction, although more costly (Prins 1980: 47-8). Ruler was not allowed to use wealth to substantially elevate himself above ordinary people, reflecting a strong tendency toward wealth equality in the society at large (Gluckman 1961: 14).

Swahili Lamu (14.5)

Presumably, council meetings would have provided a venue for monitoring of the demeanor and actions of principals, although it is not clear from the sources what kinds of leadership behaviors were considered desirable. We are provided only with one hint in the sources we used, a comment that one governor, Sayyid Sud, was said to be a governor who had been "just to all people" (Ylvisaker 1979: 114). Since the council of state (*diwan*) represented "the people" and elected those who served as principal (Prins 1967: 100), there would have been ample opportunity to remove unsuitable persons from office, and Prins (*ibid.*: 49) indicates that governance was more in the hands of the council than any one individual.

Principals could not use state revenues for their own purposes, but, otherwise, they were drawn from a group of "patrician" families whose wealth came from their agricultural estates and trading activities. Few cognitive resources could be marshaled for political purposes. The symbolic representation of leadership was not as highly developed on the east coast as it was in other African regions (Horton and Middleton 2000: 175-6). In Lamu, political or other social status was not related to religion or spiritual power. Instead, religious precedence was expressed through a household's degree of Muslim purity (e.g., Koranic inscriptions in doorways). The most important symbolic system in Lamu related to governance was the didemic (moiety) organization (*mitaa*). Rather than legitimating principals, this was a symbolic apparatus capable of incorporating diverse social elements of the political community (e.g., Allen 1993: 224), and of sharing power between them. As Allen (*ibid.*) states, in this dual organization, divergent interests were reduced to two

groups, and “tensions between them were catharsised by a number of forms of ritual expression: competitive dances, poetry competitions, solo wrestling performances and the like” (cf. Prins 1971: 48). Each half had a council of elders and both had a *diarch*, with the two councils and their *diarch* ruling the town alternately for four year periods, during which time the non-ruling council was a “shadow council” that was consulted as needed (Prins 1971: 47).

The didemic structure of Lamu has been subject to some symbolic analysis (Prins 1971). The north division of Lamu (Zena or Zaina) was associated with “senior”/ “elegant” versus the south division (Suudi), associated with “junior”/ “lower” (ibid.: 46). The north half had ritual precedence, and was closer to Mecca, while the south half was nearer to the sea and hence with more connection to commerce. Economically, north was associated more with land ownership and artisanship, while the south was associated with risk and enterprise. The contrasts can be summarized as follows: patrimonialism/descent emphasis/ historical depth/ritual (north) and capitalism/immigrants/innovation (south)(following Prins 1971: 52).

Few symbols of office are apparent in this republican form of governance. Chronicles were rarely produced, according to Horton and Middleton (2000: 159) because, as they put it, these are usually written to “record and legitimize ruling dynasties,” of the sort lacking in Lamu. Palaces were not present, but there was a council chamber (ibid.: 160). The main symbol of office was a brass *siwa* (trumpet), probably a Persian antiquity (ibid.: 160). Elaborate tombs are mentioned for Lamu elite, including pyramidal-shaped tombs in enclosures (Prins 1967: 106), but these were private rather than “royal” since rulership rotated between elected officials of the moiety divisions.

Thailand (9.5)

Doctrinal reform during the early Bangkok Period deemphasized Hindu concepts of divine rulership and foregrounded Buddhist *thammasat* doctrine. This doctrine emphasized the meritorious behavior of the ruler and the expectation that he will display the ten kingly virtues: alms giving, morality, liberality, rectitude, gentleness, self-restriction, non-anger, non-violence, forbearance and non-obstruction (Rabibhadana 1969: 41-3, 44-46), and that rulers’ actions could be “judged against the Dharma ...” (p. 53). However, it is not clear how such judging could actually happen since there were few opportunities for a broad populace to observe the ruler, and high officials appear to have served primarily in administrative positions and were not in a position to criticize him. Further, the Buddhist Order never attempted to exercise political power (Vella 1957: 34). Yet, Rabibhadana (1969: 170) implies that a king could be removed if he failed in his duty.

We saw no evidence of restrictions on ruler control of material resources, and rulers did control important cognitive systems. Rulers appointed high officials of the Buddhist Order; this and the financial dependence of the *sangha* (monks) on the crown, and the crown’s control over them, made them politically weak (Tambiah 1976: 185-89). In addition, it appears that some aspects of Brahmanism and its idea

of divine kingship continued to inform the cognitive code of the Thai state of the focal period in spite of reforms, as is indicated in Rabibhadana (1975: 103): “At the apex of society was the king, in whom inhered infinite *bun* [merit] and infinite *sak* [power]. Thai kingship was sacred because it represented the *dharmā*, the moral order of society...” Ruler’s material standard of living was very elaborate, although we could find no comparative data regarding the standard of living of other wealthy households.

Burma (9)

We were not able to find evidence of venues in which a broad population could observe and judge ruler’s demeanor. Rulers were required to participate in some ritual cycles (see below), but it is not clear how public these were. The central executive committee of the polity appears to have had only bureaucratic functions that did not include the monitoring or punishment of rulers (e.g., Koenig 1990: chapter 3). Theravada Buddhism provided a moral code for rulers (Koenig 1990: 42-3); kings were expected to be men of “supreme integrity and morality” (ibid.: chapter 3). Rulers neutralized the non-meritorious acts they engaged in (such as executing rivals) with merit gained through their charitable acts, especially, but also through moral behavior, ascetic meditation, and building pagodas or by providing other support for the *sangha*. All this allowed the ruler to serve as a “collective savior for the Burmese” (ibid.: 43), but there does not seem to be an institutional provision for ruler evaluation by the Buddhist officials.

The rulers controlled important cognitive systems. “By the early Kon-baung period, state control of the *sangha* was beyond question...” (Koenig 1990: 83-4). The palace was the “magical center of the kingdom” (ibid.: 95), and the ruler conducted the annual ceremonial plowing that signified the beginning of the main growing season (Aung-Thwin 1990: 11). Although the cognitive code placed the ruler as central to society’s fund of meritorious behavior so as to promote the “religious well being of the population” (Koenig 1990.: 126), still, it posed a dilemma in that ruler power (including war and other violence) is counter to Buddhist ideals, so “the state was unable to translate its absolute authority into total power” (ibid.: 97).

Bali (8)

We detected few opportunities afforded to the political community to monitor a ruler’s actions or demeanor. However, through participation in state ceremonies and religious rituals, including processions of the gods through Mengwi territory, the ruler was performing what was required to ensure the continued prosperity and fertility of the realm, and this legitimated a ruler’s appropriation of labor and wealth (Geertz 1980a: 128-33; Schulte Nordholt 1996: 136). A reciprocal exchange is implied here between ruler and subject, in which ruler provided coherence and order in exchange for loyalty and material support. High-ranking bureaucratic officials capable of monitoring or criticizing rulers were absent. Rulers shared power with

lesser branches of their descent group, or servants of lesser than royal status, but none of these could monitor or impeach the ruler (e.g. Schulte Nordholt 1996: 120). *Brahman* priests could not rule but were important to rulers because they were liturgical experts who could properly “mount the ritual extravaganzas of the theatre state” (Geertz 1980a: 37), but there is no mention that they could judge or depose rulers. We are informed that one ruler was deposed because he was insane (Geertz 1980a: 14), but his brother, the new king, was “only dissolute” and was not deposed. Correct caste behavior was expected of rulers (e.g., Schulte Nordholt 1996: 153).

Rulers had control of important elements of the cognitive code. In Bali, hierarchy and social status distinctions were central to social life, and these were idealized by relating divine royalty to the hierarchicality of the universe (Geertz 1980a: 102)(although Schulte Nordholt [1996: 332] points out that “The history of Bali after 1650 mentions no divine kings. Kings were mortal...”). The king’s actions expressed the themes of the four-cornered universe (*padmasana*, or throne or lotus seat of Siva), the potency of *lingga* (phallus of Siva), and a divinely inspired charisma, *sekti* (religious power) (Geertz 1980a: 104-6). The latter was reflected in part by the possession of royal regalia (“sacred heirlooms”), including a renowned *kris* (sword) (e.g., Schulte Nordholt 1996: 152), and ritual sites, including the ruler’s palace (Geertz 1980a: 109-20). For example, when a competitor of Mengwi lost power, he was “forced to relinquish his *kulkul* (wooden slit gong)...thus surrendering the ‘voice’ which mobilized his men...” [Schulte Nordholt 1996: 36].

Geertz (1980a: 13) characterizes the ritualistic dimensions of Balinese rulership in his idea of the “theatre state” in which “...the kings were the impresarios, the priests the directors and the peasants the supporting cast, stage crew and audience.” The cremation of a prior ruler (symbolically paving the way for the ascension to the throne of the successor) was the most important royal ritual, but the inauguration ceremony was also elaborate (e.g., Schulte Nordholt 1996: 113-14). *Puri* (the palace of a ruling lord) was a sacred symbol and sanctified space (Geertz 1980a: 109), and its design, like a Hindu temple (Lewandowski 1980) architecturally symbolized the axis of the world (*ibid.*).

However, Balinese ruling families did not control all important temples. Cultural integration of the region as a whole was provided in part by annual rituals in the “Six Great Temples” and a “Mother Temple” at Pura Besakih on a sacred volcano that provided a “physical expression of the overall unity of Bali” (leading lords made offerings there) (Geertz 1980a: 40). Stuart-Fox (1991: 37) refers to these practices as a “separation of religious centre from political centre.” Rulers did not control the important temple of the Goddess of the Lake (Dewi Danu) that played a key role in the island’s organization of irrigation societies (*subaks*) (Lansing 1995: 76, *passim*).

Aceh (9)

We were unable to identify any formal venues for the monitoring of ruler actions or demeanor. Historically, the sultans of Aceh upheld the sanctity of rulership as defined by Islamic law, but, it would appear, only to a minimal degree (Hurgronje

1906: 322-3). There was a voluntary 10% tithe of harvested grain, given as a religious donation to poor persons and for the advancement of Islam. Its distribution was irregular, however, and it was not administered by the state (*ibid.*: 268-70). One important element of the moral behavior of rulers was the requirement that they rule in conjunction with an advisory body, but in practice in Aceh these requirements were not usually observed (*ibid.*: 322-3). The high council of important *uleebalangs* (provincial chiefs) and the *ulamas* (priests) played a role in the election of a new Sultan (*ibid.*: 138, 332), but they appear to have had little say in day-to-day governance.

The sultans controlled some significant symbolic systems, for example, they issued letters of appointment for important district offices (Hurgronje 1906: 129-31). Potent Hindu-Javanese symbolic elements were expressed in the architectural rhetoric of the palace (Brakel 1975). For example, the palace was oriented north-south, and the royal city around it appears to have had a quadripartite organization reflecting cosmic design with South Asian, not Islamic inspiration. Formal religious roles were distinct from the organization of the sultanate, but the religious leaders (*ulamas*) had little independent power or say in most matters of governance (Hurgronje 1906: 333, 336). The Sultan's standard of living was quite opulent, but the wealthy *uleebalangs* (provincial *rajaks*) might have equaled the opulence of the court.

Perak (7.5)

There were no large assemblies in which the ruler came before a broad public (Gullick 1958: 46, 50-51), but petitions could be presented, theoretically, at the main assembly of the sultan and the chiefs, and these were open to the public (Andaya 1979: 29). The ruler was the apex of the state, bore the title Yang di-Pertuan Besar (he who is made lord), and rule was supported by an "elaborate apparatus of belief in the dignity and supernatural power of the sultan," but district chiefs didn't always recognize this degree of ruler power or sanctity (*ibid.*: 47-8). No explicit moral code for rulership is mentioned in the sources, although some power sharing was required, and district chiefs charged with choosing a new sultan would not choose a person whose actions they judged to be questionable (*ibid.*: 54-5). In his decision-making, a ruler was expected to consult other members of the royal family close in line to succeed, and the four chiefs of the first grade, and, sometimes, the eight chiefs of second grade (or even a larger assembly of chiefs), but such meetings rarely took place (Gullick 1958: 51). Ordinarily, the sultan consulted a small group of close advisors, but these were more like administrative assistants (*ibid.*: 51-2). No real institutional means were available to cope with an incompetent or despotic ruler except "enforced abdication or assassination" (*ibid.*: 58).

There were no restrictions on ruler control of material resources, in fact, some forms of material consumption were reserved for the sultan alone (Gullick 1958: 46). While there were no formal restrictions over material resources, the inherent

political decentralization of the state implied that comparatively few resources were, in fact, controlled by the sultan (e.g., Gullick 1958: 127). The sultan's palace has a special title (*istana*) (ibid.: 46), but some 19th century sultans could not afford a suitable house (ibid.: 63).

Rulers controlled significant symbolic systems. The royal dynasty of Perak was established by a son of a Sultan of Melacca in the 15th century, but the cognitive code of rulership had earlier roots from the Melaccan heroic age based on Hindu ideas about rulership (Gullick 1958: 8). This Indianized heritage was combined with Indonesian/Malay elements, and, beginning around CE 1400, Malays adopted Islam (hence the ruler title *sultan*), but they did this only incompletely and selectively. So cognitive elements legitimating the ruler's authority represented a syncretizing of diverse cultural streams, some of which strongly sanctified rulership (ibid.: 20, 45). As in other Southeast Asian polities, royal regalia were important in political life, and included a royal monopoly on yellow clothing, umbrellas, and other items, certain musical instruments, insignia such as a sceptre, seal of state, etc., and "magical" weapons (ibid.: 45-6, 123). Writing was prestigious and elaborate, and was used only by the sultan (illiteracy was common), as were official stamp seals to give validity to documents (ibid.: 52-4).

Java (9.5)

Kings did hold public audiences (Moertono 1981: 72) in a "great square," but they seem to have functioned primarily to display his "splendor and beauty." That there was a widely-held sense of moral obligation of the ruler is found in the *wajang* plays (puppet plays) that served as a medium of public criticism that could point to violations of moral actions (ibid.: 25). The ruler's beneficence, moral certitude, and effective maintenance of order was expected, and this was ruler's part of the expected reciprocity between rulers and ruled (e. g., ibid.: 36-8, 40). The concept of *momongan* implied a duty of master vis-à-vis dependents, a system of "protective superiority," while at the same time dependents should show gratitude for the efforts of the master (ibid.: 25-6). A 16th century text called the *Asta-brata* described the eight virtues of the ideal king (ibid.: 43-4).

No council or high official was able to impeach a ruler. Originally, the religious authorities, *walis*, appear to have constituted a kind of advisory committee representing religious matters, and played a role in the selection of new kings, but their power was reduced after the 16th century (Moertono 1981: 30, 40). Moertono (ibid.: 40) relates an example of a criticism of a king related in the *Babad Tanah Djawi* or royal chronicle, which appears to have justified a rebellion against the king, although the general principle was that the kings could not be regulated "by worldly means." The highest administrative officials were largely administrative assistants to the king (ibid.: 105).

There is no evidence of limitations on ruler control of material resources. The splendor of the palace and the elaborateness of royal audiences confirmed the ruler's

command of great wealth (Moertono 1981: 72). The adoption of Islam would seem to imply that rulers would have been willing to accept limits on their control of cognitive resources, since the monotheism that formed the basis of Islamic rule, unlike Hindu concepts, was not consistent with the sacralization of ruler or rulership (e.g., Cook 1986). With the adoption of Islam, rulers became secular authorities who sometimes came into conflict with religious authorities (Moertono 1981: 29). But, by the 17th century, as a result of political struggles between the Mataram rulers and Muslim priests, rulers adopted new symbols of rulership to counter the influence of the religious figures, including the adoption of the title *Susuhunan Ngalaga Mataram* (ibid.: 34), thus "...sacral and temporal power was gathered into one hand..." (ibid.), and the ruler claimed to be the representative of God on earth (ibid.: 35), an ideology of "monarchical absolutism" (cf. ibid.: 84). And the symbolic legitimation of kingship was also built around the personal greatness of particular kings or dynasties, called the "Cult of Glory" (Moertono 1981: 61-72). This is reflected in the king's actions as a religious leader of sorts, for example in the sponsorship of mosque construction. Kings were also concerned with noble descent, because the coming and going of dynasties was thought to reflect cosmic cycles (ibid.: 54-8, 81-2), and they manufactured claims of descent from the Prophet Mohammed, members of the spirit-world, and early Javanese kings (Moertono 1981: 634). Symbols of office were important, including such items as a jacket, *kris*, a crown, and men with congenital deformities in the ruler's court, among others (ibid.: 65-7).

A display of wealth by the ruler was expected (Moertono 1981: 72-3), although there are references to kings wearing rough clothing when "seeking divine guidance" in the chamber of worship (ibid: 40). A theme in texts describing ideal kings was the necessity to restrict "worldly pleasures" (ibid.: 45, 73), however, it is not clear how ascetic practice was enacted by actual kings in everyday governance. The splendor of the *kraton* (palace) was a mark of the king's greatness (ibid.: 62, 72).

Vijayanagara (9.5)

Rulers were required to make public appearances on some occasions. The major annual religious rite, the nine-day Mahanavami festival (Stein 1989: 37), took place at the capital (summarized in Sinopoli and Morrison 1995: 87) in association with a large 10m high platform, the largest structure in the main civic-ceremonial and palace complex. Here there was a throne seat for the ruler to occupy during the festival (Fritz et al. 1984: 99-102). The festival celebrated kingship and empire, and tributary obligations may have been paid at this time (Sinopoli and Morrison 1995: 87). In reciprocation, rulers dispensed (in other contexts) honors and prestige goods such as fly whisks, *palanquins*, parasols, garments, betel leaf (a popular intoxicant), and sculptural records of honors, given in public contexts (Fritz 1986: 48). Other public audiences are mentioned (Kotraiah 2003: 38) but not described in detail. However, large semi-public areas were located in the palace complex. The "zone of royal performance" was located west of the royal residence, and included a massive "king's

audience hall” (40 m by 40 m) with 100 columns that faced a large public entry court; this probably was the major public site for dispute resolution by the king and his high officials (Fritz 1986: Figure 3). Rulers occasionally made trips through the kingdom to visit temples, but also to “inquire into the welfare of the people” (Saletore 1934, Volume I: 321), but these were not frequent nor were they regularly scheduled.

Hindu-Brahmanic ideas about governance and the moral expectations of rulers were largely followed by the Vijayanagara rulers (e.g., Saletore 1934, Volume II: chapter 5). Rulership was legitimated in part by a moral code emphasizing the *dharmic* duty of rulers to protect “Hindu shrines from the desecration of Muslims” (Stein 1989: 27), to maintain cosmic order and public morality (by supporting the needy, by speaking the truth, and by treating all subjects fairly), while bringing material prosperity (Fritz 1986: 46; Saletore 1934, Volume I: 144, 245). In exchange for these protections and actions, ruler maintained the right to levy taxes on the people (ibid: 143).

There was no well-developed institutional basis for judging or impeaching rulers. The office of “Royal Chaplain” (*raja-guru*) provided religious advice, but it is not clearly stated that this person could monitor or criticize the ruler (e.g., in Saletore 1934, Volume I: 262-4). The high minister (*diwan-khana* or *maha-pradhana*), and council of ministers (*pradhana*), appointed by the ruler, appear to have had significant input to ruler decision-making, and could disagree with him (e.g., ibid.: 254), but there is no specific mention of them evaluating the ruler.

We could find no evidence for limitations on ruler control of material resources. While rulers did not hold important religious roles, still rulership was extensively symbolized. Rulers claimed “universal” sovereignty as well as the rulership of Karnata (modern Karnataka), thus reviving what they viewed as the earlier kingdom of the Chalukyas (Stein 1989: 1). Further, a connection between Vijayanagara rule and religious sanctification is evident in the materialization of state power, especially at the capital, but also in the many temples sponsored by rulers in multiple localities, typically with inscriptions mentioning the beneficent ruler (Fritz et al. 1984; Fritz 1986: 48). The capital, including the urban core and adjacent areas, was constructed as a “cosmic city” or “sacred landscape” that reproduced in material form “a pattern that exists in the cosmic realm” (Fritz 1986: 49-53; cf. Sinopoli and Morrison 1995: 88), and the palaces and civic buildings of the state were situated into this cosmic plan. The main civic-ceremonial complex (especially enclosures III-IV and V in Fritz et al. 1984: Figure 3.2) was centered around the royal temple, dedicated to the god-king Rama (the Ramachandra Temple), that was closely associated with the early Vijayanagara rulers (Sinopoli and Morrison 1995: 87). The Ramachandra temple was located on an axis formed by a wall between the “zone of royal residence” and the “zone of royal performance,” providing a dual division of the main civic-ceremonial-palace complex that signified symbolic contrasts between women and men, private and public, rest and activity, taking in an giving out, east and west, and, perhaps, left and right (Fritz 1986: 52).

There is no evidence of self-abnegation. “The king’s wealth ... was used to enhance royal power [through the display of] sumptuous possessions ... and richly furnished quarters” (Fritz 1986: 47).

Pudukkottai (7.5)

Institutions making it possible for the public to assess rulers were weakly developed. Dirks (1987: 212) mentions a royal *darbar* (open meeting), but doesn't elaborate on how many people attended or how frequent it was, although, in the palace complex there were large open spaces for "assemblies and displays" including a *darbar* hall. (ibid.: 390). Rulers participated in the annual Dasara festival, that honored the ruler and Brihatampal, the tutelary deity of the royal family (ibid.: 167). However, the latter appears to have been primarily an event soaked with symbolic significance legitimating rulership while foregrounding the largess of the ruling family.

Gifts to *brahmans*, temples, and other religious and charitable institutions were made for purposes of "fulfilling kingly *dharma*" and bringing prosperity to the kingdom and prestige to the rulers (Dirks 1987: 128, 249, chapter 9). This gifting symbolized the king's "mastery" of the land and its wealth (ibid.: 126), as well as his "moral preeminence." At the same time it also created or reaffirmed social ties between ruler and various groups of society which consented to receipt of the gift but then became obligated to the ruler and to give service to society, often in ritual capacities (ibid.: 126, 134, 410-11, *passim*). Hence, royal gifting aimed at control of people and the services they provided and was not simply the realization of moral expectations.

We could not find evidence of any institutionalized means of judging or reprimanding rulers, or any restrictions on their control of material resources. Rulership entailed control of important symbols. The Tondaiman kings, although not *Ksatriya* (ruler) caste status (they were *Kallar* caste), were regarded by local *brahmans* as true kings ("and gods"—who claimed descent from Indra) (Dirks 1987: 130, 156). By the middle of the 18th century, the Tondaiman rulers had incorporated the symbolic elements of kingship in the manner of the earlier rulers of Vijayanagara, including their own Dasara festival, dedicated to their tutelary deity Brihatampal (ibid.: 166-7). In addition, rulers awarded prestige goods, titles, and sealed scrolls that certified statuses of officials or commemorated special occasions, for example, the symbols of *cervaikarar* (warrior nobility) status, including elephants, cloth, horses, umbrellas, torches, *palanquins*, drums, swords, spears, shields, and fly whisks" (ibid.: 176-7, 180). The control of symbolic resources was combined with a control over material resources reflected primarily in the king's ability not only to levy taxes on production but to award revenue grants, *inams*, through which the ruler extended his right to the first share of the produce of the land (ibid.: 117-28). The palace was in the center of the main town, and streets emanating from it reflected a cosmic design oriented to the points of the compass (ibid.: 390). The sources do not mention any ruler self-abnegation.

Mughal (9.5)

The Mughal rulers allowed for public scrutiny of their behavior in several respects and they were interested in shaping their presentation of self as accessible and affable

(Richards 1998: 287). For example, Richards (ibid.: 288-9) points out that that the “unremitting public scrutiny” of ruler’s behavior “gave the young emperor [Akbar] an opportunity to create an image of certain, absolute (but not capricious) power.” Rulers had daily scheduled meetings in the public audience hall (*diwan-i-am*) (Sarkar 1963: 17, 96; Hasan 1936: 68-9) (Figure 9-2), and in a public court of law held once per week, plaintiffs could report grievances (Sarkar 1963: 94). Beginning with Akbar, rulers made a daily morning appearance at the eastern wall of the main palace fronting a large plain where common people could observe him and make petitions (ibid.: 120). Palace architecture made some provision for semi-public appearances. At Shahjahanabad, for example, the *diwan-i-am* or public audience hall (“Hall of Ordinary Audience”) was fitted with a canopy in its courtyard that measured 70m by 40m and could hold 1000 persons (Blake 1991: 31). Rulers endeavored to extend their presence over the wide expanse of the empire. Akbar constructed several large imperial palaces, including Agra (central Hindustan), Allahabad (eastern Ganga), and at Lahore (Punjab) and moved frequently between these and his main palace at Fatahpur Sikri (Richards 1998: 289). Later, he adopted an even more ambulatory strategy reflecting his “Turco-Mongol ancestry,” moving frequently in tent-capitals that included tented versions of the public audience hall (ibid.: 294-5).

In developing an Islamic state, a ruler was expected to be bound by a moral code (e.g., Hardy 1998: 223). In Classical Muslim theology, rulers were expected to be protectors of Islamic Law (e.g., Hasan 1936: 255). These theories posited an exchange between ruler, who overcomes “anarchy, confusion, man’s selfish nature and the tyranny of the strong” in exchange for spiritual merit and revenue from the people (e.g., Hasan 1936: 57). To Muslims, the ruler was head of both state and religion (Sarkar 1963: 4). As “the Khalif of the Age” the ruler was also the highest judge and the “fountain of justice” (ibid.: 22, 93, and chapter 8). On the other hand, there was “...no constitutional machinery for controlling or judging...” ruler (ibid.: 14). While important priests (*ulema*) could issue a decree deposing a ruler as a “violator of Quranic law...,” rebellion was the only enforcement for such a decree (ibid.: 14). The *wazir* or *diwan* was the highest government official below the ruler, and appears to have served as an administrative official under ruler’s control (ibid.: 15). The council of high officials could advise the ruler but not vote on policy (ibid.: 15).

We could find little evidence of restrictions on ruler’s control of material resources, although tax revenue from persons dying without heirs was not to be used for ruler’s needs or state needs, and was to be used for charity; similarly, the 2.5% tax on Muslim income was reserved only for “pious works” (Sarkar 1963: 157-9). Theoretically, there should have been limitations on ruler control of cognitive resources, especially since in canonical Muslim concepts of rulership, authority was vested by god in the king but the king himself was not consecrated (e.g., Hardy 1998: 224-6). However, Akbar’s concept of rulership went beyond Muslim canon. His success is attributed in part to a “glorification of the emperor’s person,” including an idea that the ruler was accessible and affable (Richards 1998: 287), but also because he emanated “God’s light,” a concept adopted from Persian mystic philosophy (ibid.: 298-303). In addition, he traced his ancestry to biblical prophets,



Figure 9-2 Jahangir at *Darbar* (daily public meeting), by Abu'l Hasan. Reproduced with permission of the Freer Gallery of Art, Smithsonian Institution, Washington, D. C., Purchase F1946.28.

Timur and nine other Mongol-Turk rulers, and he replaced daily Muslim prayer with sun worship (ibid.: 306). We add to these features a kind of Weberian “patrimonialism,” since high officials were indoctrinated as ruler’s personal disciples (based on a master-slave or a patriarchal metaphor)(Blake 1995: 281; Richards

1998: 307, 311-3). However, in spite of the ability of the rulers to marshal key symbolic resources, they did not totally control religious institutions. For example, the *mullas* and mosques operated largely separately from the state, and there was some opposition to Mughal ruler ideology among those Muslims who opposed Akbar's claims to incarnation as counter to Islamic theology (Sarkar 1963: 135).

There is some slight evidence of self-abnegation, in spite of the fact that Mughal palace-fortresses, tombs, and so on were opulent (e.g., Ziad, ed., 2002). Yet, in official ruler images, such as those found in Ziad's book (*ibid.*), we can observe how the emperor's self-presentation portrayed him as accessible and embedded in the social fabric (e.g., Figure 9-3). In these scenes, Akbar and other rulers of the focal period are depicted wearing clothing that, while certainly luxurious, was not unlike the attire of officials or other persons in the scene. The ruler typically is shown at the same scale as others, and often is portrayed at the same level as other persons, and scenes typically include many other persons with the ruler, and in the illustrated figure commoners are portrayed as foreground elements, going about their ordinary business just outside the palace walls. By using this vantage-point, the ruler is portrayed as one element of the broader society.

China (14.5)

During the Early and Middle Ming Period, the monitoring of emperors was possible in several institutional settings. For a brief period, special remonstrance officials (*chien-kuan*), among the surveillance administration, were charged with "watching over the conduct of the emperor and denouncing his errors" (Hucker 1998: 92), but, generally, the surveillance administration came to be used primarily to identify and impeach unworthy officials rather than to evaluate and criticize emperors, "contributing to the growth of imperial autocracy" (*ibid.*) However, other communication channels were maintained through the focal period. The official court gazette (the Veritable Records) allowed a view into the deliberations of the high councils (e.g., *ibid.*: 69), and the Office of Scrutiny for Personnel could reject memorials (edicts and other messages) coming from the emperor and the palace if they were deemed "inappropriate or unwise" (*ibid.*: 95). The emperor's participation was required in certain rites that were public events (see below) and at the "Great Triennial Court Audience" where a large number of provincial officials were gathered at the palace for an audience with the emperor and high officials (*ibid.*: 44).

The central ideological orientation of the Ming emperors was the "vigorous promotion of an ideological orthodoxy based upon neo-Confucianism" (Farmer 1976: 6). In the Confucian system, the rule of a dynasty was certified as legitimate, that is, it had the Mandate of Heaven, irrespective of whether it was Han or non-Han, insofar as the dynasty was able to maintain domestic order and make the polity secure from external invasion (Farmer 1976: 16-17). In exchange, taxpayers were obligated to be compliant in what Elvin (1973: 43) characterizes as the "moral unity" of the political community. In addition, the social order was thought to "flourish



Figure 9-3 Akbar in his palace. Reproduced with permission of the Chester Beatty Library.

or perish by its harmonious or disharmonious relations with the encompassing cosmos" (Taylor 1998: 840), and the cosmos was thought to be responsive to human actions including emperor's sacrifice and prayer. Hence, the official religion was constituted as a specified sequence of public rites, organized by bureaucratic offices including the Bureau of Sacrifices, the Ministry of Rites, and the Court of Imperial Sacrifices (ibid.: 841). Emperors were not sacralized, but they did participate in some religious rites. A hierarchy of imperial sacrifices identified great, middle, and minor rites and emperor participation was normally expected at those classified as "great," especially the worship of Heaven and the Imperial ancestors; other important sacrifices in this category were to the August Earth Spirit, the Morning Sun, The Evening Moon, and the Great Earth and Grain Spirits (Taylor 1998: 843).

The emperor received his mandate to rule from heaven, but the mandate was confirmed only through sacrifice and "by living as a man of piety," and the mandate could be revoked for immoral behavior (Taylor 1998: 861) or lack of "demonstrated accomplishments" (Farmer 1976: 98). One recorded prayer by a ruler in the court of the Lord of Heaven included the statement "my government still has some deficiencies, and I fear that I would be punished" (ibid.) Ideally, the Confucian code provided for the evaluation of ruler's conformance to moral guidelines. Officials of the civil service could criticize an emperor (for example, in a protest about "the Cheng-te emperor's capriciousness" or "civil service idealists who stood up against their bullying rulers") but emperors could respond with "a reign of terror over the civil service" and with public punishments of officials (Hucker 1998: 53). Clearly, the Ming emperors, beginning with the dynastic founder, while largely embracing Confucian ideas, were at the same time often at odds with the high Confucian officials, reflecting a desire to enhance royal power at the expense of the Confucian literati of the civil administration. For example, in some cases the Yung-lo emperor assigned important duties to eunuchs of the imperial household rather than to Confucian officers of the civil administration (Farmer 1976: 106).

There were some restrictions on an emperor's control of material resources. Although they directly controlled large sums of state revenues for their own palace and other expenditures, still, according to Confucian dogma they should not enrich themselves through commerce or other forms of profit-making, as this was thought to be unbecoming of the exalted status of a person who holds power and who should exhibit a "lack of selfishness" and "frugality" (e.g., Elvin 1973: 46). Emperors had little direct control of important cognitive systems, including religion, although they did play a pivotal role in certain ritual cycles as described above (Farmer 1976: 98; Taylor 1998: 861). There was an element of self-abnegation in Ming Dynasty rule. The emperor was provided with a substantial income from the treasury (one million *taels* of silver per year) out of which came some palace expenses such as the pay of army officers in the capital (Huang 1998: 116). The standard of living of the emperor was by far higher than anyone else in society, yet, the first Ming emperor established a policy of "frugality ... to be practiced by everyone from the monarch down to his lowliest subjects" (Huang 1998: 107). For example, while vast resources were expended to build new capitals and palace complexes at Fengyang

and Nanjing, the emperor criticized architects for proposing an excessively decorated palace at the latter site (Farmer 1976: 55).

Japan (8)

We were unable to identify any occasions in which the *shogun* would come before the public or in other ways could be evaluated by taxpayers. However, there was some sense of adherence to a moral code. Tokugawa rulership was based on a theory of benevolent rule in which the *shogun* was to serve as guardian of the state and protector of its people, and, to some degree, this moral imperative applied also to *daimyo* in their *han* domains. In this Japanese variant of a social contract, a reciprocity between rulers and ruled was based on the idea that "...the peasants owed payment...of taxes and in exchange were owed the assurance of a livelihood..." (White 1988: 23). As White sees it, though, the state was none-the-less often oppressive, and adhered to the social contract mostly owing to what he describes as "the cold rationality of a regime dependent on a land tax" (*ibid.*)

The moral code pertaining to rulership loosely followed Buddhist and neo-Confucian ideas. In Japan, this was particularly interpreted to mean that each person should behave righteously according to one's social status, including those who ruled. In this concept, there was a hierarchy of moral expectations, the highest of which were expected from those involved in governing society, while merchants were regarded as the most likely to be immoral (Perez 2002: 25, 50). Peasants sometimes invoked neo-Confucian and Buddhist ideas of just governance when they made petitions to the government (Perez 2002: 33), but moral codes seemed to have little resonance in actual government practice. While the Tokugawa government was based on a theory of moral rule, no official channels for remonstrance, such as a council, allowed for recall of immoral officials (Hall 1991b: 156; Bolitho 1991: 228-9). High officials appear to have served primarily as administrators in the employ of the *shogun*, so there is little in the way of any independent officialdom able to critique the *shogun*, in spite of the adoption of many aspects of Confucian governing theory. According to Hall (1991b: 165) "The shogun in theory was a despot, accountable to none but the emperor."

We did not find restrictions on the *shogun's* control of material resources, and they controlled some important symbols. The Tokugawa as *shoguns* were high military officials, not emperors, and yet they represented the center of political decision-making for the polity. As Eisenstadt (1996: 195) observed, this represents an interesting situation of "bifurcation between authority and power" because the authority of rulership was vested in the traditional emperors, but they lacked the power to govern (*ibid.*: 196). Rather than authority, the Edo *shogunate* depended on its ability to maintain control over the *daimyo* through the exercise of military power, through confiscations of *daimyo* holdings, and through some elements of administrative organization, including a supreme court of adjudication (Hall 1991b: 150, 160-1). Yet, there were some symbolic dimensions of *shogunate* rule. For

example, their rule depended on the substantial prestige gained through its efforts to consolidate power and to reduce inter-*han* warfare. In addition to its enduring prestige, symbolic elements contributed to *shogunate* legitimation. Even though the Tokugawa house could not claim royal descent, they claimed direct descent from the historically significant Minamoto clan. In addition, the Edo *shogunate* aided in the maintenance of the emperor and court at Kyoto, and used its ties to royalty, for example marriages into the royal family, as an additional source of symbolic legitimation (Hall 1991b: 149). In addition, the Tokugawa *shoguns* also made use of religious sanctification to some degree, manifested by the deification of founder Ieyasu as “Great Shining Deity of the East” (Hall 1991b: 149). The *shogunate* exercised powerful control over religious establishments, reducing the wealth and influence of Buddhist monastic orders (*ibid.*: 160). We found no evidence of self-abnegation.

Tibet (6)

Little information is available regarding the daily practices of the Dalai Lamas, but we can infer that public scrutiny of his actions or demeanor would be unlikely since the Dalai Lama is described as living a “secluded life” (Carrasco 1959: 217). While Buddhist thought espouses a moral code in which principles are expected to exhibit virtues including wisdom, and compassion, it is not clear how these values or *dharmic* ideas of statecraft (such as we have seen, for example, in Burma and Thailand) figured into the moral obligations of rulers in Tibet. For example, O’Connor (1906: 443; cf. Shakabpa 1967: 129-130) writes: “From all accounts [the Dalai Lama] is a man of pronounced traits of character, violent temper, and stormy passions, and when quite a youth evinced uncomfortable symptoms of an intention to have his own way...No person or party of the State dared for a moment to oppose him ... His brief rule was signaled by numerous proscriptions, banishments, imprisonings, and torturings. His friends were raised to high honors in the State; his enemies or political opponents were banished and deprived of property and place.” The basis for a reciprocity between the Dalai Lama and taxpayers, according to Carrasco (1959: 217) was only his “personal ownership of all the land, and the subordination of all the people as his subjects.” No person or group was able to reprimand or impeach the Dalai Lama, in fact, they appear to have had considerable control over both civil and monastic officials. According to Carrasco (*ibid.*: 82-83), “Officials can also be degraded, fined, or banned by the Dalai Lama or the regent. In some cases they have had their estates confiscated, and have been thrown into prison or killed.”

There is little indication of restrictions on control of material resources. The position of Dalai Lama was symbolically potent in Tibetan society, even though he was reincarnated in a commoner and thus did not benefit from noble status (Carrasco 1959: 216, 218). A key component of the symbolic force of rulership by the Dalai Lama is the fact that he was head of the most important system of monasteries in Central Tibet, the *dGe-lugs-pa* (*ibid.*: 122).

Although ruler standard of living is not well described, certainly the Potala palace was an impressive sight from a distance, although in Landon et al. (1906: 374) we are informed that, once inside, the interior was found to be “cheap and tawdry” and dirty. In Landon et al. (1906: 325) the Dali Lama’s palace is described as follows: “...a man can have no eye for anything but the huge upstanding mass of the Potala palace to his left; it drags the eye of the mind like a loadstone, for indeed sheer bulk and magnificent audacity could do no more in architecture than they have done in this huge palace-temple of the Grand Lama. Simplicity has wrought a marvel in stone, nine hundred feet in length and towering seventy feet higher than the golden cross of St. Paul’s Cathedral...The central building of the palace, the Phodang Marpo, the private home of the incarnate divinity himself, stands out four-square upon and between the wide supporting bulks of masonry a rich red-crimson, and, most perfect touch of all, over it against the sky the glittering golden roofs...”

Egypt (18)

There were times when the pharaoh was required to be in public, including required participation in several important religious rituals (Montet 1981: 195). “Pharaoh had to board the sacred vessel and ride from Karnak to Luxor for the festival of Opet. For the festival of Min, the Pharaoh had to “read a handful of *boti*-wheat”” (ibid.: 196). And, according to O’Connor (1998: 130), “Palaces were reserved for the pharaoh, not the gods, and undoubtedly included areas to which access was very limited, even for the elite. But palaces, too, often stood in urban settings, and they included courtyards in which the pharaoh presided over ceremonies that could involve much of the bureaucracy. Important acts within palaces often had an intended impact on the public, and often the pharaoh himself would emerge from the palace and appear in public. He might lead religious processions, ride in a chariot at the head of his officials or troops, or sail in splendor up and down the Nile.”

Pharaoh’s moral charge was to maintain, through correct actions, the essential cosmic order (*ma’at*) while repelling chaos (*isfet*). However, while this implies a moral duty, this ideology is also a cosmic justification for absolute power, as we are reminded in O’Connor (1998: 137): “Chief ritualist for all deities, the king was in particular cultically involved in the sun god’s sometimes dangerous, but ultimately always triumphant, cycle around the cosmos, on which the latter’s well-being and renewal depended. More specifically, the pharaoh has to bring justice to humans, governing Egypt wisely but with absolute power, and quelling with overwhelming force the potentially chaotic foreigners surrounding Egypt.” However, no institution allowed for a formal evaluation or reprimand of the ruler, who appears to have had the final word on all matters of government (e.g., Edgerton 1947: 152-60). No 18th or 19th dynasty ruler was deposed (O’Connor 1983: 201).

Pharaoh had direct control of most of the important material and cognitive systems of society. Pharaoh was, as we mentioned at the center of the continuing struggle for cosmic and social order. Rulers came close to claiming divinity (e.g., Bryan 2000: 232), although not going so far as to claim to control the seasons

(Montet 1964: 60). Pharaohs either assumed high priesthoods of important temples (e.g., Montet 1981: 197) or appointed members of the priesthood to administrative positions in the temples (*ibid.*: 201; Kitchen 1982: 44). The pharaohs' regalia, worn in public processions and rites, included some of the most sacred objects in ancient Egyptian culture: the southern crown, "a high conical hat with a bulbous tip," the northern crown, "which was a sort of cap with a high peak at the back, and a metal projection, terminating in a spiral, standing out from the front," a monogram symbolizing the union of Upper and Lower Egypt (made up of a southern plant and a northern plant wound around a hieroglyph meaning union), scepter, flail, necklaces, rings, pendants, and a blue helmet (Montet 1964: 40).

Ruler standard of living was far more elaborate than others in society. They resided in vast palaces (O'Connor 1989: 76-8; cf. Brier and Hobbs 1999: 147). And from Montet (1981: 197) we learn that "Not only was the monarch's attire more sumptuous than that worn by princes and civil and military leaders, but it was designed to emphasize the unique status of its wearer."

Athens (18)

In the Athenian democracy, no person or high council constituted what could be called a principal or principals distinct from taxpayers, since taxpayers made up the decision-making and policy-making assemblies and councils. However, the code still applies since we want to know about the kinds of restrictions placed on the agency of principals in this case as in the other states. Political authority was vested in assemblies and councils, described next, which had separate but overlapping areas of authority, resulting in a system of separation of powers that could inhibit any attempt by a group or person to assert centralized control:

- (1) People's Courts (*dikasteria*). Courts consisted of panels of between 201 and 2501 members, chosen from among the 6000 citizens who had been selected by lot at the beginning of each year, and who had sworn a citizen's oath (Heliastic Oath) (e.g., Hansen 1999: 182), and who were over 30 years of age. Lot selection of jurors took place using a complicated procedure of random selection at the beginning of each court day to "foil any attempt to bribe them" (*ibid.*; cf. pp. 198-9). Criminal cases were handled by the Council of the Areopagos and some magistrates, while the People's Courts were more involved in legally controlling the People's Assembly (see below) and prosecuting or denouncing persons accused of crimes against the state. The courts could overturn decrees issued by the Assembly and came to have jurisdiction over political prosecutions, including persons who had proposed illegal decrees to the Assembly. The operation of the court and its judgments were by jurors who were always ordinary citizens (rather than professional judges), nor were professional advocates used (although professional speech-writers might be); jurors were paid for their services.
- (2) People's Assembly (*ekklesia*). This large citizen assembly was convened four times each 35 or 36 day month of the civic calendar. The Assembly met in the Pnyx, an area that was rebuilt at the beginning of the focal period to

formally enclose ca. 3000 sq. m and to upgrade seating, access, and slope (Hansen 1999: 128). Out of the 30,000 or so eligible male citizen participants, usually about 6,000 would actually participate in ordinary meetings, a number sometimes required for a quorum. Those in attendance probably included a majority of poorer (i.e., non tax-paying) citizens who benefited from daily payments made to participants. When published, decrees made by the Assembly included the word *demoi*, signifying a decision of the people of Athens (*demos*), even if the decree was simply a ratification of a proposal made by the Council (see below). The chairman of the Assembly (*proedroi*) was selected by lot the morning before it began, again, to avoid bribery (Hansen 1999: 141). A pig sacrifice, a prayer, and a curse on speakers who might mislead the Assembly marked the beginning of the meeting. Citizen-speakers (*rhetores*) came forward to present speeches favoring or opposed to a proposal, usually persons who had received special training in public address and rhetoric, and such speakers could become important in the political life of the community. Votes were taken following the speeches, usually with little additional input or discussion from the audience, although interruption might be used as a political tool. The power of the Assembly was limited to passing decrees (a norm with a limited duration, such as an award, as opposed to laws, which would have greater duration). Most decrees pertained to foreign policy and military operations, but also pertained to citizenship issues and honorary rewards for laudable behavior, some judicial sentences, and the election of some magistrates and envoys, although most magistrates were selected by lot (Hansen 1999: 151-60). The assembly was required to vote, at the first meeting of each year, on the acceptability of the entire corpus of laws; changes could be proposed at this time, and the assembly had to agree to form a board of *nomothetai* to argue the legislative change and to decide whether to ratify it (ibid.: 166).

- (3) Boards of Legislators (*nomothetai*). These boards evaluated proposals to amend the revised law code of 403/2; this council alone had the power to pass laws, although, as mentioned, the Assembly also had to vote on the acceptability of the law code once per year. The *nomothetai* was part of the citizen system of governance of the *demos*, but its membership was restricted to the ca. 6,000 citizens who had sworn the Heliastic Oath and were over 30 years of age. Laws (*nomoi*) were passed concerning important matters such as mining, customs, and external trade. One Board was elected by the Council, and was charged with codifying laws, the other, elected at the *deme* (local community) level, was required to certify what the first board had proposed. Additions or changes to the legal code (i.e., norms set in place more-or-less permanently) were prefaced by the phrase “It was decided by the *nomothetai*...” (Hansen 1999: 167).
- (4) The *areopagos*. This was a council composed of all former *archons* (highest magistrate officials) that was viewed as a kind of council of elders. It served to judge homicide trials in cases where the victim was a citizen, but during the fourth century its powers were increased (Hansen 1999: chapter 12), and it could reverse decisions made by the other decision-making bodies (ibid.: 291). Membership was for life.

- (5) Council of the Five Hundred (*he boule hoi pentakosioi*). This council was composed of fifty persons from each of the *demes* (local administrative groups) of the ten *phylai* (“tribes,” really districts) each selected by lot from citizens nominated by the *demes*, although representatives had to be at least 30 years of age, and could serve only twice in their lives. The fifty-person council rotated monthly between the 10 tribes. Its business was to prepare items for the Citizen Assembly and the *nomothetai*, and “was at the head of the administration of the state” (Hansen 1999: 388). It had some rights to fine or imprison or even impose a death penalty in certain kinds of cases involving magistrates (ibid.: 257-8). Much of the military, diplomatic, and civil administration of the polity was done by the Council (ibid.: 259-65). However, genuine debate over policy occurred in the Assembly, not just in the Council, and legislation was codified and certified by the *nomothetai*.
- (6) Tribes (*phylai*) (of which there were ten). Each tribe had a small assembly-place in or close to Athens, and sent 50 members to the council. Each tribe maintained a sanctuary in Athens where its Eponymous cult hero was honored and where tribe meetings were held. In addition, a monument in the main public zone honored the Eponymous Heroes, and it was here that information was posted relevant to citizen activities. Tribal divisions organized the council and the military into ten parts, and some magistrate and court positions were chosen according to tribal divisions.
- (7) *Demes* (of which there were 139). Each *deme* had a local assembly, and members participated in it even if they had moved away (usually to the city). These varied in size, and the number of representatives sent by each to the council varied depending on *deme* size. The *demarcho* (*deme* leader) was chosen by election or by lot for a one-year term, and presided over local government, although decisions were made by the assembly. *Demes* certified citizenship (at age 18), and maintained a register of citizens that was the basis for military call-ups, and *demes* identified representatives from their respective tribe for the Council.

Several institutional practices contributed to the ability of the Athenians to monitor and control the actions of principals. A citizen’s obligation to the political community was certified in public by oath-taking, for example the oath required of 18 year olds as they entered obligatory military service (Hansen 1999: 100), and oaths of office taken upon assuming a magistrate position (ibid.: 227-8). Oaths were but one of many social mechanisms designed to avoid what was considered to be the inevitability of free riding and official agency that was acknowledged in the pessimistic Athenian view of human nature (ibid.: 310). Hansen (ibid.: 217-8) mentions the high frequency of denunciations and prosecutions of officials, especially military leaders, suggesting that accountability of leaders was a serious issue. A formal procedure for denunciation existed, including public curses, and officials could be impeached (e.g., Hesk 2000: 56-64).

Restrictions were placed on principals’ control of material resources. All resources used by magistrates or other officials was public property and their actions were carefully monitored. And, there was some impetus to diminish or downplay the potential political significance of wealth differences. Veyne (1990: 75)

points out the transition from “political gift” to “civic gift” (*euergeiai*) that emerged in the development of the Greek democratic *polis* served to disconnect wealth from power by restricting the degree to which wealthy patrons could deploy their resources for the construction of client followings for political purposes (cf. Humphreys 1978: 69-70; Millett 1989). Other social and cultural mechanisms served to restrict the influence of the wealthy, including gossip and “Old Comedy” (performances in festivals) that made fun of wealthy families (Morris 1997: 98).

No person acting in a position of authority could unilaterally control important cognitive resources for personal gain, because in Athens *demokratia* itself was the most potent symbolic system. *Demokratia* was thought to entail several elements, first, the rule by the people. Second was liberty (*eleutheria*), the freedom to participate in the political process, and the “private liberty to live as one pleased” without political oppression from one’s own government or foreign rule (Hansen 1999: 74) (for “citizens” only, not slaves, women, or foreigners). *Eleutheria* was expressed in freedom of speech, the ideal of due process in law (“no executions without a trial”), the forbidding of torture of citizens, and the protection of private property (ibid.: 76). Third, *demokratia* implied equality (*isegoria* and similar terms implying equality of opportunity). This equality was conceived of primarily in political terms, including equal rights to address the assemblies and equality before the law irrespective of wealth (ibid.: 81).

Religion could not be manipulated for political gain. State festivals were frequent and costly, promoting *polis* solidarity and civic devotion through ritual action (e.g., Snodgrass 1981: 118), but, as Carlton (1977: 235) points out, religion was not “harnessed for the needs of the state” (or, the state does not “have its root or centre in religion” in Hansen [1999: 64]). Religious rituals were carried out in the open air largely separate from temples or priests (“...very little took place within the temple itself” [Carlton 1977: 239]), and individuals were free to make sacrifices without the aid of priests; in fact, there was no professional priesthood (ibid.: 225-6, 239). Late in the 6th century BCE, the decision was made to transform the *agora* into a special zone emphasizing the emergence of a new civic identity for the people of Athens, separate from the acropolis, which was the center of religious life (Hölscher 1991: 365). The *agora* featured many non-religious monuments that materialized Athenian civic consciousness, including the paintings in the Painted Hall glorifying battles in Marathon and Oinoe (ibid.: 371). According to Hölscher (ibid.: 371): “...it [the *agora*] suddenly became a center which attracted from all over Attica hundreds and soon thousands of citizens for political and judicial functions” aimed at the development of a “*présence civique*.” There were some temples in the *agora* area, including the substantial Hephaisteion, where Hephaistos and Athena were honored. Both were market-related deities, reflecting that the *Agora* also had commercial functions (Camp 1986: 82).

Wealth inequalities were strongly present in the polity, and may have increased during the fourth century, as indicated by the construction of “increasingly large and elaborate houses,” and this engendered some critical commentary and debate at the time (Nevette 1999: 162). The Athenian ideal, espoused by Demosthenes, was that the leading men of the 5th century should live in modest houses similar to

their neighbors (Camp 1986: 149). A new writing style, “plain style,” was used on burial monuments and *stelae* commemorating war dead. According to Whitley (2001: 366), “A plain style is an effective means for stressing the essential equality of those who died in war...” and was consistent with the abandonment of “elaborate marble grave markers...that had been so characteristic of late sixth-century Attica...” (ibid.) There was also a decline in elaborateness of grave offerings beginning in the fifth century (ibid.) Other burial monuments display individuals fighting in service of the polity (ibid.: 372).

Rome (12)

In spite of the scale of the empire, emperors were expected to present themselves in public or semi-public venues. Some, for example, participated frequently in the Senate (Birley 2000: 136). At times, rulers conducted official acts in public, for example Vespasian tried cases in the forum, to which the public enjoyed “uncontrolled access” (Eck 2000c: 208). Additionally, Roman emperors were judged by their demeanor in public places such as the public entertainments (Veyne 1990: 304), and in some cases Roman imperial edicts appear “not so much to be obeyed as to prove to his people that he shared the principles and sufferings of his subjects; as if the law was not essentially imperative but aimed at bearing witness” (ibid.: 300). Emperors were expected to be responsive to petitions and requests from a wide range of persons (Millar 1977: 477), and, to this end, they appear to have developed strategies for accepting petitioners in public venues. In the palace built by Domitian (and used by later rulers), it appears that a separate architectural space was created where people could gather for the daily public appearance called the *salutatio*, since on these occasions the emperor was required to be approachable (Zanker 2002: 109). Emperors were also available to smaller groups of senators, *equites* (wealthy elite), and *plebs* (commoners) at the occasional social events held in large dining rooms in the palace, and some writers commented especially on the relatively free access to the palace that was afforded to the public during the reign of Trajan (ibid.: 115). The architectural design of Domitian’s palace realized the desire to project a public presence in other ways. One façade faced the Circus Maximus in such a way as to symbolize “the constant presence of the emperor, even when he had not personally descended into the Circus...This symbolic opening onto the Circus expresses the closeness to the *plebs*, his concern and generosity to the populace that Domitian often sought to demonstrate” (ibid.: 109).

We find a well-developed moral code in operation during the focal period. In the Graeco-Roman tradition, the ideal emperor was viewed as something like the sun, “working constantly on behalf of mankind,” or a “shepherd who cares for the welfare of his flock” (in Eck 2000b: 266). The general theory of reciprocal exchange and patronage was basic to any understanding of how a person attained and maintained high social status, emperors included. For example, a patron was expected to provide protection for poorer clients, especially in law courts (Saller 2000a:

844), and the emperor's clientage network was expected to exceed all others (ibid.: 840-2). Emperors were also expected to live moderately and to devote resources to the public good. For example, Vespasian devoted time to relaxation and exercise, to distinguish himself from his dissolute predecessors (Griffin 2000a: 19). He also made palaces and gardens available for public use that had been reserved for previous emperors, and commenced with the construction of the Colosseum and other examples of "public munificence" (ibid.: 19-20). Through his actions, Vespasian hoped to inculcate in the broader society the values of "modest lifestyle and self-effacing industry and obedience of a public servant..." (Griffin 2000a: 25), and this was followed by Titus (ibid.: 49-51). Later emperors highlighted the contrast between Vespasian and Titus, on the one hand, and Domitian, on the other, and treated the latter's reign as a "tyrannical aberration" that could be used to foreground the behavior of a good *principes* and use the contrast to justify usurpation (Griffin 2000a: 55). Hadrian continued many policies of Vespasian, for example participating frequently in the Senate (Birley 2000: 136), sponsoring gladiatorial contests and games as well as funding major construction of temples in the precinct of the temples of Venus and Rome (ibid.) His general remission of unpaid taxes was one of the largest of any Roman emperor (Duncan-Jones 1990: 66). Antoninus adhered to the expected moral sense idealized in a Roman emperor of the period, including "judgments made after full investigation; no vainglory about outward honors... perseverance; readiness to listen...rewarding [honorees]...impartially... according to deserts ... was a good steward [of the empire's] resources ... He was prudent and economical in his provision of shows, in carrying out public building, in largess to the people..." (quoted from Marcus in Birley 2000: 150).

Two bodies, one constituted (the Senate) and one ad hoc (the *consilium principis*) could advise the emperor (Burton 1996a: 1387). The latter was an ad hoc body of loyal advisors selected by him, who often were of senatorial or equestrian rank, but they would not censure the emperor. The Senate was able both to confer official powers to a new emperor, and could condemn him, rescind his acts, and condemn his memory (Burton 1996a: 1387), although, given how the balance of power had shifted from the Senate to the emperor by the focal period, this seems unlikely or would be something that would happen only post mortem. As Eck (2000d: 234) puts it: "The constant menace of tyranny continued, and indeed there was no legally enforceable security against it."

Emperors maintained a considerable degree of control over material resources, but were constrained somewhat because of the ideal of a ruler as frugal and careful with spending. Titus was recognized for having granted exceptions to poll taxes and for being generous to districts and communities. For example, he had ornaments stripped out of his villa for use in rebuilding damaged buildings after a natural disaster. He avoided confiscations of property, and did not accept gifts (Griffin 2000a: 50-1). Among the evidence for Domitian's "rapacity" was his heavy spending and taxing, including expensive celebrations of military triumphs, but some of this spending reflects his egalitarian sensibility, for example, his pay increases for soldiers (Griffin 2000a: 69, 71). Nerva "financed his generosity to the city *plebs* and soldiers through an ostentatious frugality," including the sale of imperial properties

which helped to “restore the social parity of *princeps* and subject” (Griffin 2000b: 92). To fund military actions, Marcus auctioned off public property, including “clothing, drinking cups and gold vessels, statues and paintings by great artists” (Birley 2000: 167).

Roman emperors routinely marshaled important symbolic systems to legitimate their rule. Roman rulership was symbolized by ideas about continuity from glorious predecessors, especially continuity from Augustus, and they made use of the symbolic significance of descent symbolism (*patria potestas*) in Roman culture, for example, when Domitian converted his family’s house on the Quirinal into a temple honoring the Flavian *gens* (descent group) (Griffin 2000a: 57). Religious sanctification also figured in to the symbolism of rule, including post-mortem deification and the emperor-sponsored construction of temples and royal mausoleums. Domitian defended “the state religion and indeed the sacred hearth on which the welfare of Rome and its empire depended,” for example, he punished vestal virgins who broke their vows of chastity (Griffin 2000a: 79-80). Trajan’s punishment of Christians indicates the power the state had over religion and the role of an emperor in decisions concerning religious beliefs (Griffin 2000b: 121-2). Hadrian seems to have taken a rather aggressive stance in Judaea, described as the “Hellenization of Jewry,” when he ordered construction of a new temple to Jupiter Capitolinus at Jerusalem and founded a new city, Colonia Aelia Capitolina; at that time or shortly thereafter, he prohibited the Jewish practice of circumcision (Birley 2000: 143). Emperors played an important role in the religious and symbolic life of the empire, but some restrictions limited the degree to which the sacred could be conflated with rulership. Deification was post-mortem, and had to be approved by the senate (which it did not do in the case of Domitian). Laws forbade the burial of rulers (or other mortals) within Rome’s sacred space (*pomerium*); the burial of Trajan’s ashes in the base of his column thus was controversial for its abrogation of the ancient law (Carcopino 1968: 6).

Trajan was actively involved in the manipulation of cognitive resources and in the strategic presentation of self (Griffin 2000b: 100). In some respects these actions were consistent with his strategy to express the expected civic virtues of devotion to the political community and moderation, for example, in depicting himself as “the soldier-emperor serving Rome in an unostentatious way, labouring alongside his soldiers, accessible to his officers, striving for peace rather than glory in war,” and in his triumphal first arrival in Rome, he arrived “on foot and mingled with the crowds” (Griffin 2000b: 103). But his actions weren’t so modest when he sponsored a massive reconstruction of the Circus Maximus and the construction of Trajan’s Forum, by far the largest of the imperial *fora* built to that time (Griffin 2000b: 98-100). He adopted a grandiose name, Caesar Nerva Traianus Augustus, and deified his sister Marciana and his niece Matidia, as well as his natural and adoptive fathers, making him “‘*divi filius*’ twice over” (Griffin 2000b: 100).

Self-abnegation was a theme in Roman rulership, for example, Vespasian wanted his officers “to smell of garlic, not perfume” (Griffin 2000a: 15). But Hadrian’s actions illustrate the difficulty of coding for self-abnegation in this case.

He lived more lavishly than others. His massive palace in Tivoli covered an area we estimate at slightly over 150,000sq. m (based on the plan in Bacon [1974: 90-1]). However, while on military business in Upper Germany, Britain and other sites, he was known for “living off camp fare, fat bacon, cheese, and rough wine, marching up to twenty miles in armour and wearing the humblest uniform...Luxuries were done away with” (Birley 2000: 137).

Venice (16.5)

The Venetian system allowed for some public scrutiny of principals, especially the *doge*. The palace was built to house the central offices of the state as well as the *doge*'s living areas (Zorzi 1999: 46-7), and the palace appears to have been highly accessible, judging, at least from one account from a visiting pilgrim who was permitted to walk through the interior of the palace “from top to bottom” and even see the *doge*'s audience chamber (Chambers and Pullan 2001: 21). And Norwich (1982: 212) comments that “...the *Doges*' Palace is [unlike] the corresponding seats of power in the mainland cities of Italy. They are, nearly all of them, dark and threatening reflections of the violence of the age ... [and] ... built as a protection for the civic authorities...In Venice, by contrast, those for whom the Palace was built had no need for protection and no wish to terrify.” Public processions also brought the *doge* and other high officials into the public eye. For example, “The Prince ... every year makes various progresses to different parts of the city on certain festal days, solemnized either by the rites of the Church, by public decree for perils averted, or as an act of thanksgiving” (Chambers and Pullan 2001: 50). The elaborate Ducal Procession was the largest such event (e.g., Muir 1981: 189-192). Norwich (1982:167) describes an initiation ritual for the *doge* that we think persisted into the focal period in which “the bells of St Mark's rang out and the people flocked to the Basilica, surrounding their new *Doge* and ‘tearing the clothes from his back’ - which they seem to have been traditionally permitted to do ‘as a sign of his humility and clemency’. Barefoot before the high altar, he took the oath of office and was invested with the banner of St Mark. Then, newly robed and enthroned...he was carried ceremonially round the Piazza, scattering coins as he went, before entering the...Palace and addressing his new subjects.”

The moral code applying to the *doge*, as stated in the oath of office (*promissione ducal*), appears to have been very specific regarding expectations for the proper exercise of his office (Muir 1981: 253). It specified attendance at the Great Council and regular meetings with high officials. And, in Muir (1981: 277-278) we find that “...the five correctors rewrote even more precisely the legal prescription of ducal powers: they enacted provisions directing the *doge* to preserve, honor, and fairly execute the laws; aid other magistrates; meet frequently with the ducal counselors; supervise the collection of taxes; be vigilant in conserving the resources of the lagoon; stimulate operations at the Arsenal; encourage speedy trials; oversee hospitals; fulfill his religious duties; and refuse princely obeisances.” To confirm

the *doge's* adherence to the code, the Great Council was charged with monitoring his actions (e.g., Chambers and Pullan 2001: 73; Norwich 1982: 292). The council could impeach him, force him to abdicate his position, or even behead him (e.g., Chambers and Pullan 2001: 55; McClellan 1904: 105; Norwich 1982: 338).

The *doge* was severely restricted in his control of material and symbolic resources. According to Muir (1981:256), “[The *doge*] was not able to ... own property outside Venetian territory ... was prohibited from displaying the ducal insignia outside of the Ducal Palace ... could not permit anyone to address him as ‘My’ or ‘Our Lord,’ [or] decorate his apartment as he pleased....” A contradiction resulted from these restrictions because, while the *doge's* position in some ways symbolized the polity as a whole, and thus, presumably, would require the display of a degree of suitable presentation of luxuriousness, success, and power, still, internally, the political system was constructed so as to disconnect wealth from power. As Muir (1981: 277) puts it, “... *doges* in general had to follow a narrow path, which was by no means clearly defined in the early sixteenth century, between indecorous frugality and inappropriate splendor; and they were constantly subject to contrary political pressures that tempted or forced them from the ideal course.”

Doges or other high officials could not deploy religious symbolism for political gain because this secular polity kept religious expression under close control. As Norwich (1982: 282) puts it, “The Church was kept rigidly in its place, its duties exclusively pastoral, barred from the slightest interference in affairs of state: bishops were elected by the Senate, their elections being only confirmed in Rome.” From the same source we learn that “The families of Venetians holding ecclesiastical positions were also suspect. Their members...who belonged to the various governing bodies of the state, by a series of laws beginning in 1411 were regularly excluded from all deliberations concerning ecclesiastical matters. Some appointments, such as the coveted embassy to Rome, was closed to these families altogether. No member of the clergy was allowed to serve the Venetian state in any capacity, even as a clerk or notary, or to have access to the public archives.”

A *doge* faced additional restrictions. They could not leave Venice without permission of the Great Council, could not communicate with foreign officials independently, and even their near relatives were prohibited from holding public office (McClellan 1904: 164-5). Since the *doge* was a member of the nobility, they likely enjoyed high living standards, but not necessarily higher than that enjoyed by other noble families. Further, they were expected to use some of their personal fortune to support their office (Muir 1981: 277).

England (8.5)

We could find no context within which king's demeanor or actions could be publicly evaluated. He did attend meetings of parliament (Morris 1940: 11), but this, and the king's council, typically were restricted to aristocrats and high-level officials such as the chancellor and the treasurer. Kings were obligated to uphold a

moral code as outlined in a coronation oath that stated their obligations codified in the Magna Carta (Waugh 1991: 191). This is described by Brooke (1961: 222-223): “By a long-standing tradition a new king swore at his coronation to keep Church and people at peace, to put down iniquity, and to show justice and mercy in his judgments.” It is not clear how dutifully this moral code was followed. As Brooke (1961: 220) points out, one stipulation of the Magna Carta was that there “is or ought to be a recognisable body of law covering all essential operations of royal government and the relations of king and subjects; and that royal government was tolerable only if this body of law was known.” This seems to have been problematic in practice, for, as Hilton (1992: 21) points out, over half the peasant population remained juridically servile, “with only rare access to the royal courts.”

No highly independent council could judge and reprimand the king (Morris 1940: 13, 27). The nobles removed Edward II from the throne (Waugh 1991: 201, 211), but they did not have the legal (constitutional) authority to do so at that time. Normally, as Morris (1940: 4) reminds us, “The king in the fourteenth century... was the mainspring of the executive. He exercised an undiminished prerogative in all matters not regulated by statutes...,” but statutes appear not to have been followed faithfully (Morris 1940: 6), so “Government was still in a real and effective way government by the king; the king alone was central and essential to the whole” (Wilkinson 1940: 162).

We could find little in the way of restrictions on ruler control of material or cognitive resources. According to Morris (1940: 10), the king maintained strong control over religion: “The two archiepiscopal churches, all the English episcopal churches except one, and a very considerable number of abbeys and priories were under his patronage ... This meant in general that to the king belonged the custody of the temporalities of these churches during vacancy; that his consent was required before the chapters or convents held new elections, and his approval of the election after it had taken place; and that he exacted the oath of fealty from the new prelate before turning over to him the estates held temporarily in the royal custody.”

Kings lived luxuriously, as much or more so than even the wealthiest aristocratic households. As Holmes (1962: 68) put it: “... government was less concerned with national welfare than it is today and more with the glorification of the king ... Royal magnificence, exhibited in a splendid court, in the wearing of jewels, the maintenance of a large retinue, the building of lavish castles such as Edward III’s at Windsor, and the waging of expensive wars in support of the claim to France, might sometimes be resented by those who were squeezed to pay for it, but it was generally accepted as a proper object of policy.”

Ottoman (9)

Ottoman rulers rarely made themselves available in public venues. Various accounts emphasize that the secluding of the ruler was one reason for selecting the isolated sea-side location for the “New Palace” (now Topkapı palace) of Mehmed II.

This was consistent with Ottoman policy, carried forward from Persian and Byzantine precedent, that emphasized “royal seclusion and the sanctity of the emperor...such isolation was made necessary by the sacredness of the sultan, not for his safety: This spiritual being, endowed with divine light, could not possibly dwell among ordinary mortals in the populous center of the city. It was fitting that his dwelling place be a sanctified enclosure, cleansed of impurity and resembling the heavenly realm” (Necipoglu 1991: 16). Architectural changes made by Mehmed II further materialized the strategies of a secluded, unresponsive sultan, and physically removed him even from the discussions of the *divan* (high) council. The sultan was separated from the council chamber by a screen, so that the high officials of the council had to present petitions and deliberate with him in private (ibid.: 18-20). A so-called Chamber of Petitions was built, but it was isolated inside the third residential court, i.e., deep within the architecturally complex and hierarchically ordered palace spaces, where only high officials could enter. “By declaring that only these high-ranking dignitaries could regularly enter his presence, Mehmed made it a rare privilege to present petitions to him...and his successors Selim I and Suleiman did not present themselves in the second court, except on the two annual religious holidays” (ibid.: 21-2). In a focal-period painting published in Necipoglu (1991: Figure 14), Mehmed III is shown exiting the outer gate of the palace accompanied by a large and regimented retinue (Figure 9-4). Along his route, a crowd of subjects is depicted attempting to present him with written petitions, but he looks the other way.

Perhaps these public appearances on religious occasions would allow for the monitoring of ruler demeanor and action. But authorities judge these events to have been highly formalized occasions that only “... reinforced the secluded monarch’s awesome magnificence. These extensions of palace ceremonial into the larger urban fabric of Istanbul were displays of imperial power that turned the iconic sultan, accompanied by thousands of richly dressed and hierarchically ordered courtiers, administrators, and slave soldiers, into a showpiece for the populace” (Necipoglu 1991: 30). Although the pattern of seclusion was initiated by Mehmed II during the late 15th century, it was continued through the focal period and was further exacerbated late in the 16th century. By that time “Even in his private quarters the sultan had contact with very few people ... Only three favorite pages were allowed to address him in words; the others could communicate only through signs...” (ibid.: 26).

It is instructive to contrast Ottoman practice with that of the Mughal, the other large Islamic empire in the sample, from comments in Necipoglu (1991: 256). While the palaces of the Mughal emperors resembled Topkapi in some architectural aspects, still, “...unlike Tokapi, where the most architecturally elaborate area was primarily accessible to the secluded sultan, his family, his silent eunuchs, and obedient slaves ... Mughal palaces, like those of the West, had more accessible private zones, where the ruler constantly entertained guests.”

A moral code informed the actions of the ruler, based on the Sacred Law of Islam (*shari’a*) that was taken from the Koran and the sayings of Muhammad (the *Hadith*) (e.g., Wright 1935: 22), and to a considerable degree, it was followed.



Figure 9-4 Mehmed III exiting the outer gate of his palace. Reproduced with permission of MIT Press and Gülrü Necipoglu. From Necipoglu (1991: Figure 14).

For example, most administrative offices made use of judges and religious authorities (*muftis*) who could render opinions based on *shari'a* (Lybyer 1966: 225). Rulership was conceived of in terms of a reciprocal exchange in which the *reaya* (commoner) class must submit to military and administrative leadership, and pay taxes and rents, while ruler was depicted as “the shepherd protecting his flock, the *reaya*, and leading them in the righteous path” (Inalcik 1994: 17). However, the presence of a moral code seems superfluous since no institutional means were available to judge or reprimand the ruler. The Grand Viziers were by far the most important administrative officials in the state, and key functions of government were vested in them, but they were under tight control by the ruler, especially during and after Suleiman, who deposed or executed 5 of 9 of them (Lybyer 1966: 167).

There were some restrictions on ruler control of material resources. From Islamic ideas of governance, alms-giving was a positive moral value, and the state was obligated to distribute some of its revenues toward this goal (Inalcik 1994: 47). Religious conceptions of land tenure also implied some restrictions on ruler action that created tensions within the empire. Even though Islamic Law specified a strong sanction for private property (in Islamic areas of the empire), the Ottoman state's revenues were based primarily on revenues from *miri* (state-owned) land, and the rewarding of this land as *prebends* was the major form of material support for the military. Hence, an important source of new revenues was the costly conquest of new lands in non-Muslim areas. Conflicts ensued over control of land given as gifts by the sultan to wealthy elites. These grants were made if the landowner proposed to use the land to establish “pious endowments” (*vakf* lands) such as *dervish* convents or mosques (Inalcik 1994: 123), reflecting Islamic ideals of ruler support of religious institutions. Such lands were tax exempt and not subject to state control (ibid.: 120-6). But these private lands proved to be a drain on the state's revenues (e.g., ibid.: 130). This came to a head in Mehmed II's land reforms in 1478 in which the state reclaimed much *vakf* land. This action “triggered a deep social and political crisis throughout the empire” when groups who lost land such as the Sufi orders rose up against the state. Under the subsequent reign of Bayezid II, this land was restored and the sultan was praised as the “restorer of the Islamic Law and tradition, but similar tensions persisted in later reigns” (ibid.: 127).

The degree of ruler control of powerful symbols presents a difficult coding issue in the Ottoman case. Sultan was head of the religious institution and carefully controlled it (e.g., Lybyer 1966: 229-30), and, beyond Islam, rulers marshaled other symbolic systems, including some from drawn from their Hellenistic, Roman and Byzantine imperial predecessors (e.g., Inalcik 1994: 143 and Necipoglu 1991: 12). Expansion of empire was based in part on a harkening back to the Eastern Roman empire, and even Alexander was a role model for Mehmed II (Necipoglu 1991: 12). Mehmed II “styled himself Caesar and the ruler of the two continents and two seas” (Inalcik 1994: 18), and Mehmed II's “New Palace” was built on the site of the “prestigious acropolis of ancient Byzantium,” in part, for symbolic effect (Necipoglu 1991: 13). This palace was situated so as to maximize the symbolism of a location that not only resonated with the glorious past of the Byzantine empire, but also allowed for views of both the Black Sea and the Mediterranean. In these

two symbolic senses, the palace could serve as a “metaphor for world dominion” (ibid.: 13). The palace site covered 600,000 sq. m and required extensive new construction owing to its rugged topography. European observers remarked on the fabulous scale and decorative elaboration of the palace (ibid.).

By Suleiman’s time, the symbolic connection of state and religion was evident, for example in sultan’s attendance at mosque and in the elaborate celebrations of important Muslim religious festivals in the palace (Lybyer 1966: 135-6). This did not imply a sanctification of the sultan because *shari’a* was above sultan and “beyond his alteration” (ibid.: 26). God, through Mohammed, “entrusted to him [sultan] the functions of administration and justice, subject always to the prescriptions of the law” (ibid.: 151), hence, sultan’s role was theoretically little more than that of an administrator (ibid.) Other contradictions between religious canon and the potential for ruler agency are evident that minimized the power of the sultans. For example, the development of a slave-based governing institution reflects the fact that *shari’a* “tended to restrict so narrowly the power of a ruler over his Moslem subjects that the discipline necessary for the administration of a vast empire could barely be maintained,” hence the sultan “avoided the difficulty by building up an administration composed almost entirely of slaves” (Wright 1935: 22), who had to be Christian. Even external warfare could be restricted by *shari’a*. Ottoman dominance of other Muslim polities (for example in the defeat of the Mamluks in Egypt and Syria) (Inalcik 1994: 20) was fraught with contradictions owing to the Muslim concept that legitimates *gaza* (combat against the infidel), but which precludes legitimate wars against other Muslims. But the Ottomans were able to establish themselves as protectors of Mecca, which had been under Portuguese threat, and through this they elevated themselves to the status of caliphate, making them the central protector of the Islamic world and especially its sacred places of Mecca and Medina (ibid.: 20). From this lofty perspective, the sultans justified defeating Muslim regimes, including the Safavids of Iran, by accusing them of “obstructing the Ottomans in the latter’s performance of their essential duty, the Holy War against Western Christendom” and because they declared the Shiite Safavids as “heretics” (ibid.: 21).

Similarly, Islamic dogma impacted on the standard of living of at least earlier Ottoman rulers. Muslim sacred law “discouraged display of every sort,” and Ottoman rulers for many reigns maintained a simple life; yet, by the time of Suleiman, court ritual was highly elaborated and structured by an important administrative manual, the Law of Ceremonies (Lybyer 1966: 134-5) that encouraged a vast display of wealth to the degree that “Suleiman’s splendor embarrassed his finances” (ibid.: 144).

Aztec (12.5)

Aztec rulers made public appearances during important religious and civic rituals such as the commemoration of new temples and coronations. For example, their

participation was required in some of the ceremonies marking the sequence of 18 Aztec months (e.g., Smith 2003: 229-30). In aboriginal pictorial documents (*codices*) they are sometimes shown leading their armies (e.g., Barlow 1949: *Plancha* 19). More typically, they are depicted interacting only with a small number of diplomats or other high officials and close family members (e.g., in Bachyla 2006). However, we know that even high councils included commoners (e.g. Offner 1983: 152), and their participation in these venues could have served as a source of information about ruler demeanor and actions that could be circulated widely beyond the ruler's immediate circle.

A well-developed moral code informed Aztec rulership. Zorita (1994: 93) writes that, upon accession to the throne, the high priest addressed the new ruler as follows: "My Lord: Consider the honor your vassals have done you. Now that you are confirmed as ruler you must take great care of them and regard them as your sons; you must see to it that they be not offended and that the greater do not mistreat the lesser... You must be very diligent in affairs of war. You must watch over and punish the wicked, lords as well as commoners, and correct and reform the disobedient. You must give special care to the service of God and his temples, so that there will be no lack of what is needed for the sacrifices. Thus all your affairs will flourish and God will watch over you." In passages cited in Davies (1987: 103) we learn that rulers were expected to be dedicated to their subjects' well-being and to care for the poor *macehuales* (commoners) so that rulership "involved rights as well as duties."

Aztec rule typically involved councils, and the highest of these apparently had the ability to criticize and even to depose rulers, as we find in this passage from Davies (1987: 110): "Supreme power in Tenochtitlán was thus based on a very small group of princes. This compact oligarchy in some respects recalls that of Venice... Moreover, in spite of the supremacy of the *tlatoani* [ruler] the apparent ability of this oligarchy ... to eliminate a ruler should not be overlooked; of the eight *tlatoanis* between the foundation of the dynasty and the triumph of Cortés, three met a violent end, if we include Tizoc; Ahuítzotl's death is veiled in mystery, and that of Axayácatl was premature." In Tenochtitlan, the highest council also controlled ruler succession (e.g., Davies 1987: 108-9; Durán 1994: 371; van Zantwijk 1985: 25).

While rulers benefited from direct control of some appropriated land (e.g., Hodge 1991), they faced limits as to what lands could be appropriated either for personal income or direct state control. The great majority of land was that of the traditional rural organizations (*calpulli*), and these probably were beyond ruler control (Davies 1987: 124). Also, rulers had limited control over tribute incomes, "...for the people would be displeased if he took what was not his share, since all the rest was destined for other purposes" (Zorita 1994: 182).

While rulers were considered important religious authorities, could appoint priests to high positions (e.g., Offner 1983: 150), and sometimes coerced priests to do their bidding (Durán 1994: 475), but rulers were not strongly sacralized or deified, and, instead, were considered to be god's "representative, or substitute" (Davies 1987: 101). In some accounts, deities criticized rulers for improper actions, voiced through priests who were considered able to speak for the gods (e.g., Durán 1994: 484, 486).

By the focal period, the material standard of living of rulers was far greater than that of other persons, and even impressed the Spanish invaders. We find in Davies (1987: 117) that “The Spaniards were spellbound by the luxury of Moctezuma’s palace and by his lavish style of life; they were impressed by the scale of the gardens, the zoo, and the aviaries, in which each species had its special diet provided by zoo attendants ... Ixtlilxóchitl describes in great detail the palace of Texcoco and its rather similar role.”

Inca (8)

Rulers did not appear in many venues where their actions or demeanor could be evaluated. They did participate in religious rituals, but these actions evidently were aimed at confirming rulers’ role at the center of cosmic forces more than providing information about ruler demeanor. We learn from Bauer (1996: 333) that “The elite of Cusco reinstated and redefined their right to rule through their control of rituals and their dominant position in the state cosmology not only in corn-planting and harvest ceremonies but in most, if not all, state-sponsored celebrations of the imperial city... Direct participation in these ceremonies by the ruler of Cusco confirmed his position as a semidivine being...[and]...the ruling Inca stood as the sole mediator between the populations of the Andes and the cosmogonic forces of the heavens.”

A ruler’s action were, ideally, informed by a moral sensibility. According to Murra (1980: 121), “The generosity of the lord, and by projection of the crown, was culturally mandatory: one of the king’s honorific titles was *huaccha cuyac*, ‘he who loved (cared for) the weak.’” In addition, the state and ruler were obligated to provide large scale feasting and hospitality in exchange for taxpayer compliance in state *corvée* obligations (D’Altroy 2002: 280; LeVine 1992: 20; Morris 1982: 155, 166; Murra 1980: 75, 128). However, we can detect no institutions that would allow for monitoring of ruler adherence to the moral code or punishment for violating it. Inca monarchs ruled absolutely, and appear to have had a considerable degree of control over high officials (e.g., D’Altroy 2002: 99). Rulers “... had to work closely with Cuzco’s contentious aristocracy to take the throne and rule afterward. The royal epics recounted time and again how rulers had been elevated, counseled, assisted, deposed, and even assassinated by their relatives. The two faces of monarchy - the omnipotent ideal and the negotiated practice - were found throughout the oral histories” (D’Altroy 2002: 91). However, we interpret these struggles primarily as internal political struggles between important factions among the royal Inca over succession matters (e.g., D’Altroy 2002: 99).

Rulers controlled important material and symbolic resources with few restrictions. We have previously discussed ruler ownership of vast estates. Symbolically, the royal Inca descent group was considered to be “a creation separate from the rest of humanity” (D’Altroy 2002: 51-2), and the ruler himself was considered a divine being with “a celestial mandate to rule the world” (D’Altroy 2002: 91; cf. Bauer 1996: 331-2). We can find no evidence of self-abnegation.

Chapter 10

Theory Testing and a Question: Is State Formation a Product of Rational Choice or Symbolic Structure?

In the opening chapters of this book, we critiqued prevailing theories of sociocultural evolution and proposed that an approach based on the rational choice theory of collective action might lead to a productive rethinking of political evolution. To explore that possibility, we operationalized collective action theory in a manner that allows for theory testing using a method of cross-cultural analysis, then we assembled the necessary data. Now we are prepared to evaluate collective action ideas. Beyond that important goal, in this and the final chapters we also pursue some additional lines of inquiry and analysis that go beyond the theory as it is presently stated. We hope these new directions will enrich the theory and point to new directions for future research.

Summary of Project Goals and Methods

Before presenting the results of our analysis, we briefly reiterate our goals and methods to place the results of the analysis within the context of the research project we have completed. Our research goal has been to make a theoretical contribution to the study of state formation by formally evaluating the explanatory potential of collective action theory. Achieving this goal has required that we operationalize collective action ideas for comparative coding and analysis, and in so doing we developed four constructs or scale variables that are symptomatic of collective action as a social process, namely, revenue source, public goods, bureaucratization, and principal control. In the coding of the component variables constituting these complex constructs, higher scores signify a greater degree of conformance with the theoretical expectations of collective action theory. As a result, the values of the scale measures should vary, depending on revenue emphasis, and they should be positively statistically correlated with each other if the arguments of collective action theory have relevance to how we understand the formation of pre-modern states.

Main Results of the Analysis

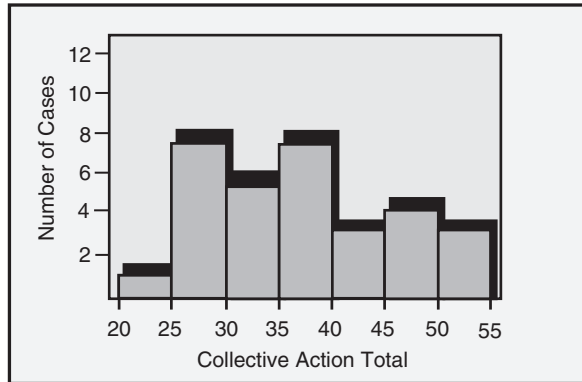
“Resource” as a Dichotomized Revenue Measure

We present the summary values of the main collective action measures, public goods, bureaucratization, principal control, and what we label resource, in Table 10-1 (the distribution of values of the collective action total scores combining public goods, bureaucratization, and principal control is illustrated in Figure 10-1). Resource is taken from Table 6-3, where Revenue Emphasis was presented as three categories (internal, mixed, and external), but dichotomized, so that we have only ‘external’ (coded as ‘1’) and ‘other’ revenues (coded as ‘2’). The ‘other’ category

Table 10-1 Summary of collective action variables

	Public Goods	Bureaucratization	Principal Control	Collective Action Total	Resource
Nupe	10	7.5	8	25.5	1
Yoruba	16	9.5	11	36.5	1
Asante	18.5	10.5	15.5	44.5	2
Bagirmi	13	8.5	6	27.5	1
Kuba	13.5	10	8.5	32	1
Tio	12.5	6	8.5	27	1
Buganda	15.5	11	10.5	37	2
Bakitara	10	6.5	7	23.5	1
Lozi	22	12	15	49	2
Swahili Lamu	10	11.5	14.5	36	1
Thailand	18.5	8	9.5	36	2
Burma	20	12	9	41	2
Bali	14	6	8	28	1
Aceh	10	6	9	25	1
Perak	12.5	5.5	7.5	25.5	1
Java	18.5	10	9.5	38	2
Vijayanagara	18	9.5	9.5	37	2
Pudukkottai	17	7	7.5	31.5	2
Mughal	23.5	12	9.5	45	2
China	22	14.5	14.5	51	2
Japan	16.5	7	8	31.5	1
Tibet	19.5	8.5	6	34	2
Egypt	20	10	8	38	1
Athens	20	14	18	52	2
Rome	24	12	12	48	2
Venice	21	14	16.5	51.5	2
England	11	8.5	8.5	28	1
Ottoman	16	9.5	9	34.5	1
Aztec	21	11.5	12.5	45	2
Inca	22	10	8	40	2

Figure 10-1 Distribution of values of collective action total.



combines the internal and mixed categories because these two proved not to be statistically significantly different based on 2-tailed t-tests of difference of means for public goods, bureaucratization, and principal control.

Statistical Evaluation of Collective Action Theory

We find generally strong statistical support for collective action theory. This is evident when we compare the mean values of public goods, bureaucratization, and principal control, split by ‘external’ and ‘other’ resource (Table 10-2). For all three measures of collective action, mean scores are higher when revenues are ‘other,’ compared with the values for ‘external,’ in multiples of 1.3 to 1.5 (from the ‘R’ column in the table), and the differences are highly statistically significant based on two-tailed t-tests of difference of means (the column labeled ‘p’).

We also found a high value for Cronbach’s Alpha for the variable set bureaucratization, public goods, and principal control, at .78, and the first principle component explains 74.5% of the variance, and all three variables are strongly correlated with it. Table 10-3 reports the bivariate correlation values (r) for public goods, bureaucratization, and principal control by resource, and by each other, using a regression approach in which resource was coded as ‘1’ (external) and ‘2’ (other). The correlations are all quite high and all are strongly statistically significant, although principal control has some lower values that we discuss below.

We also made use of a non-parametric correlation analysis to evaluate the statistical relationships among the public goods, bureaucratization, and principal control measures. This approach makes the somewhat less stringent assumption that the coding methods, rather than providing precise interval-scale measures of the variables, only permit us to properly rank-order the sample of societies along each

Table 10-2 Mean values of public goods, bureaucratization, and principal control, split by external and other revenue categories, with the significance values of two-tailed t-tests for differences of means. The last column (R) is the mean value of other revenues divided by the mean value for external revenues

	Mean Value (External)	Mean Value (Other)	p	R
Public Goods	13.2 (N=14)	20.1 (N=16)	.0001	1.5
Bureaucratization	8. (N=14)	11. (N=16)	.0004	1.4
Principal Control	8.7 (N=14)	11.4 (N=16)	.013	1.3

Table 10-3 Bivariate correlations (r) and statistical significances for the resource variable and the three collective action measures (n=30 for all variable pairs)

	Resource	Public Goods	Bureaucratization	Principal Control
Resource	–	.79**	.61**	.44*
Public Goods	–	–	.68**	.4*
Bureaucratization	–	–	–	.76**

Two-tailed *p<.05 **p<.01

variable dimension. Higher correlations result when two variables rank the societies in a similar rank order. This correlation method also produced high correlation values that are statistically significant well above the .05 level, again, signifying that collective action predictions are strongly supported through statistical analysis of comparative data.

We pursue the analysis in more detail below, but even these simple statistical indicators based on differences of means, bivariate correlations, and rank-order correlations, all point to strong statistical support for the predictions of collective action theory. Counter to neoevolutionist and Marxist theories, these results also provide support for the contention that state formation is a process involving rational social action on the part of taxpayers as well as rulers. Specifically, to the degree that a state’s revenues come from a broad population of taxpayers, then rulers and taxpayers face a collective action problem. Because humans are rational, it is only with great difficulty that taxpayer-funded governments can be established and maintained. Taxpayers may free ride or choose not to comply if they feel they are getting nothing in return for their taxes, if they have little trust in rulers, or if other taxpayers are free-riding without penalty. Principals and other government officials may abuse their power or misdirect tax revenues for personal benefit. The only way to build an enduring collective polity is through organizational change and the formulation of new cultural schemes, so that, in exchange for taxpayer compliance, rulers provide public goods, control the agency of officials (bureaucratization), and relinquish some aspects of their power (principal control) to validate their trustworthy participation in the collective enterprise.

Were Taxpayers More Compliant in the More Collective States?

One factor that is missing from our analysis is a measure of taxpayer compliance. The coding scheme included a compliance variable, and we devoted considerable effort to researching it, but we found that data are often limited or we judged them not dependable. In several cases, there were no data at all. As a result, we report on the statistical results of the compliance variable tentatively, and with the caveat that the results cannot be considered definitive or highly reproducible. While we found a positive correlation of compliance with public goods ($r = .44$, $p < .05$, $n = 27$), it is not statistically significantly correlated with either bureaucratization or principal control.

Validity and Reliability of the Research Results

The results of our analyses are not trivial (the compliance variable excepted). They represent the product of a sustained effort that was informed by the well-established methods of systematic cross-cultural comparative analysis. The data were coded systematically and comparatively from a large and broadly representative sample of polities using methods that maximized inter-coder reliability. We coded from carefully selected sources representing the efforts of several generations of regional experts in order to maximize the validity of our conclusions. And, our goal was to conduct a sincere and methodologically astute attempt at falsification. Our research design did not entail selectively searching for facts that would support the theory. In fact, neither researcher felt strongly about the validity of collective action ideas at the outset. Rather, we developed a research design in which objectivity and transparency are key goals. We also strived to facilitate replicability by describing our methods and sources carefully and by providing summaries of our data with page references and all of our codes. An important goal was to code a sufficiently large sample so that probability statistics could serve as an additional indicator of the validity of the research results. The sample was not purposively selected to pre-determine the results of the research. Societies were included in the sample according to whether they could be coded for the 60 variables we anticipated using, although developing a broad world-wide sample was another factor that influenced our selection decisions. Every aspect of the research design was tailored to make valid theory falsification a genuine possibility. We should point out that during the coding process we were so swamped with data we had little sense of whether we were falsifying or supporting the theory, although variation in degree of collective action was becoming apparent.

The “Main Model” of Collective Action

Figure 10-2 proposes a model for collective action in pre-modern states that is consistent with sources such as Levi (1988). We’ll call it the “main model.” The

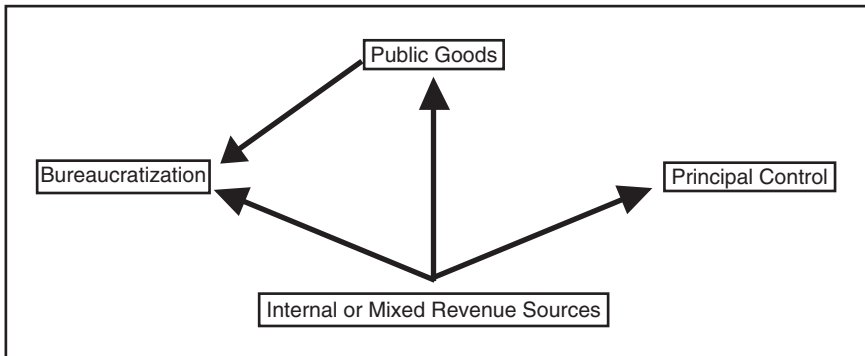


Figure 10-2 The “Main Model” of collective action.

figure indicates the proposed causal connections from revenues to public goods, bureaucratization and to policies consistent with the control of principals. With internal or mixed revenues, rulers are expected to encourage taxpayer compliance by providing public goods, and by developing a bureaucratic system able to manage public goods and tax collection while controlling the agency of officials. Additionally, principals are expected to relinquish some elements of privilege and agency in order to instill a sense of trust among taxpayers. The results of statistical analyses reported in Tables 10-2 and 10-3 lend credence to the main model.

What Determines Revenue Sources?

In spite of the positive statistical outcomes, we see two possible problems with the main model. First, its beginning point is a given constitution of state revenues, and begs the question: What determines the nature of revenues? We lack the data to fully address that question here, but one factor to investigate is the role of principals in determining what kinds of revenues will be emphasized. Levi (1988: 2) provides us with predictions about the rational choices of principals in revenue decision-making. She proposes that principals will be revenue maximizers, subject to their power to bargain with taxpayers, their transaction costs, and their discount rates (*ibid.*), the latter referring to the likelihood that a tax policy will have a negative impact on the future potential for tax collection (for example when a ruler demands a special tax for a war that he then loses). We infer from these proposals that, where possible, rulers will favor external revenues because these taxes will minimize their need to bargain with a broad populace of taxpayers, will entail fewer transaction costs, and will entail minimal potential discount costs since ruler doesn't depend on taxpayers very much anyway. The information available to us does not allow for a full evaluation of Levi's theory, but we found some supportive evidence in our sample. In ancient Egypt, external revenues were a clear ruler maximization choice.

At the “fulcrum of Asia and Africa,” the control of long distance trade in precious goods could be very profitable and relatively easy for rulers to monopolize. In addition, the patchy population distribution of the Nile Valley (Butzer 1976: 95) left unused land available for agricultural development by the state or ruler without upsetting prior claims to land.

Javanese rulers had been extensively involved in the control of foreign trade before the focal period, and turned to an increased dependence on internal revenues only when they were forced to by the loss of trade to the Dutch VOC (Schrieke 1957: 228). The Javanese example suggests that internal revenues may be a less desirable alternative, but we doubt this could be a complete theory of internal revenues. However, in other cases where we documented external revenues, principals had few revenue choices to make, for example, in the export-oriented port polities of Southeast Asia such as Aceh and Perak, where there was great potential to tax or control long distance trade, but, with only small and unstable populations and almost no land suitable for grain agriculture, internal revenues were not a viable option.

Other examples from the sample suggest a maximization theory of ruler tax strategy might be incomplete. In some situations found in the sample, internal revenues were the strategy of choice in spite of the inevitable collective action problems they entail. Thailand may be one example. Prior to the focal period, rulers received revenues from foreign trade (they even had royal cargo ships) and maintained monopoly control of some trade commodities (Rabibhadana 1969: 67, 141; Wales 1965: Appendix 1). For reasons that are not clear, by the focal period Thai rulers had decided to reduce their foreign trade involvement and depend more heavily on sources of internal taxation (Cushman 1981; Lysa 1983). Other state-builders depended more heavily on internal revenues than external, including the Mughal rulers of the focal period (e.g., Chaudhuri 1982: 407). The founder of the Ming Dynasty, the Hung-wu emperor, is our preeminent example of what we call an internal revenue strategist. He built a state funded largely by a free peasantry, in spite of the transaction costs that choice entailed, including a massive land and population registration (recorded in the “Yellow Registers”) and a substantial reorganization of rural communities into the *li-chia* system (Heijdra 1998: 428; Wiens 1988: 20). In other respects as well, clearly the founding emperor was not a revenue maximizer. Pursuant to Confucian principles, low taxes were a state policy, because he believed that the “the nation’s wealth should be ‘preserved with the people’” (Huang 1974: 183). The emperor also pursued a policy of land confiscations from wealthy landowners, and, rather than retaining state control over these lands, redistributed them to poorer households in order to increase the population of free tax-paying peasants (Huang 1998: 110). Foreign trade was of little interest to the Ming emperors of the focal period (Huang 1998: 124). This was in spite of the fact that China’s foreign trade had been growing during the centuries prior to the Ming Dynasty, reflecting the growing world-wide popularity of Chinese commodities such as silk textiles and porcelain pottery, and in spite of a persistent silver shortage in China (Elvin 1973: chapter 14). Trade and its revenue potential were ignored primarily because the founding emperor wished to minimize relations with foreigners (Atwell 1998; Rossabi 1998: 221). In this and other choices, the Hung-wu

emperor pursued a state-building program strongly predicated on collective action. Part of the rationale for adopting these policies is found in the fact that the Hung-wu emperor objected to what he saw as the oppressive policies of the prior Mongol Yüan Dynasty, and endeavored to build a more egalitarian society (Hucker 1998: 62) that could promote collective action while keeping taxes low.

Cultural Code or Rational Actors in the Evolution of More Collective States?

A second potential difficulty with the main model is that its explanatory architecture implies a linear causal force starting from revenue sources to public goods and the other policy variables. We could ask: Is the imputed linear causality of the main model a useful guide to what actually happened in particular instances of state formation? In spite of the strong statistical support we found for the main model, some anthropologists would probably answer this question in the negative because it posits a material condition, revenue sources, as the basic factor determining a state's overall constitution, including some aspects of its cultural code. From a "culturalist" standpoint, the main model might be criticized as an example of the "utilitarian fallacy" in which it is argued that "human cultures are formulated out of practical activity" (Sahlins 1976: vii). Culture is important in several aspects of collective action processes, particularly in relation to the various elements of principal control such as a moral basis for rulership, and in ideas about the limitations on principals' control of symbolic resources. Since any state is built within a prevailing system of culture it is imaginable that a cultural code itself could promote collective action, or inhibit it, irrespective of whether revenues are internal or external.

To investigate in more detail whether the main model is as powerful as it appears to be from the results of our statistical analysis, we need to look in more detail at the potential causal force of cultural codes that are prior to state formation. We do this using several analytical approaches. We start by doing a multivariate analysis to assess the relative contributions of different variables toward collective action outcomes, to see if any can be eliminated from a causal model. Then we compare collective action as it has played out in situations where we can evaluate the impact of established civilizational traditions on collective action. Lastly, we compare collective action by major world region to answer the question: do collective action experiments tend to cluster by macroregion?

Stepwise Regression Analysis

Stepwise regression is a method that we can use to evaluate how several independent variables relate to the variance in a single measure of collective action (as a dependent variable), while controlling for the influence of the independent variables

on each other. It allows us to identify the most plausible model that would predict when collective action is likely to develop, because the method enters the independent variables into the model in order of the strength of their correlation with the dependent variable. Variables that have very low correlations ($p > .1$) with the collective action measure when controlling for the other variables are dropped out of the analysis and should not be considered as potential causal factors. We ran the model to comparatively evaluate the amount of variance in public goods (as a proxy for collective action) that is explained independently by principal control, resource, and bureaucratization. The stepwise regression method identified revenue source as having the highest correlation value, with bureaucratization also highly correlated. Principal control, by contrast, the variable most likely to reflect elements of cultural code, accounts for only about 16% of the variance in public goods, although it was not dropped from the model. Similarly, when we used revenue source as the dependent variable, public goods has the highest correlation value. This analysis points to a possible causal priority of “practical” matters in the evolution of key dimensions of collective action, namely, that internal (or mixed) revenues bring in their wake public goods and bureaucratization, with principal control a more weakly-connected variable, meaning that the domain of moral codes and restrictions on principal behavior may have been less central to the main social processes.

The Influence of Islam, Hinduism, and Buddhism on Collective Action

The stepwise regression, however useful, is a rather abstract way to get at questions about causality. Another, perhaps more straightforward approach is to statistically compare groups of societies that are likely to show different degrees of expression of prior cultural codes. If collective action developed primarily as a result of social process, rather than culture history, the two groups will show few statistical differences in the collective action variables. We do this by investigating the influence of two main religio-philosophical systems that are sufficiently numerically well represented in the sample, Hinduism and Buddhism (which we combine here, given their similar histories and similar theories of rulership) and Islam, and can be regarded as subpopulations for comparative statistical analysis with other societies. As previously indicated, Hinduism, Buddhism, and Islam are well-developed and widely-adopted cultural codes that specified constraints on ruler agency in the sample societies and address the nature of the reciprocal moral obligations of rulers and taxpayers. Of course, all states are brought to life within influential systems of culture, some of which, such as the Confucian and Christian-influenced societies in the sample, represent comparably influential systems of culture. We exclude these from the comparison along with those societies in which political ideas were carried forward from classical Athenian democracy, because the numbers, for each cultural system, are too small for statistical comparison. The remaining societies, that we term “non-canonical,” were not substantially impacted by any of these

major civilizational patterns (including Yoruba, Asante, Kuba, Tio, Buganda, Bakitara, Lozi, Japan, Egypt, Aztec, and Inca). By non-canonical we do not imply that state-builders were completely free to act without regard for cultural precedent, but that, as a group, they do not reflect the impact of any particular widely-adopted system of state ideology.

As we have discussed in the background chapters for South Asia, Southeast Asia, and sub-Saharan Africa, Classical Islamic ideas about states and their rulers are reflected in some of our principal control variables, including notions about the expected moral behavior of rulers who were defined as secular beings (e.g., von Grunebaum 1961: chapter 7). Our sample includes 8 societies impacted, albeit to varying degrees, by Islam, Nupe, Bagirmi, Swahili Lamu, Aceh, Perak, Java, Mughal, and Ottoman. Hindu and Buddhist theories of government are represented by 6 societies in the sample, Thailand, Burma, Bali, Vijayanagara, Pudukkottai, and Tibet. As we outlined previously these related cultural codes can be traced to the Indo-Gangetic Vedic and Later Vedic periods, and, especially to early texts on statecraft such as the Arthashastra. Codes like this idealize just rulers who are obligated to provide positive material, spiritual, and emotional benefits to their populations. As in Islam, Hindu and Buddhist theories of the state defined a mundane political order distinct from the transcendental order (e.g., Eisenstadt 1986), although, in all three, ruler had a role in the religious life of the community. Hinduism and Buddhism specified the nature of ruler morality, although in Hinduism rulers were consecrated (Heesterman 1998) while in Buddhism they were not.

Table 10-4 compares Islamic-influenced societies with the non-canonical group. To control for revenue source, we include in this analysis only societies with external revenues, as most Islamic societies featured this revenue category. This excluded Java and Mughal, both with internal revenues. The table also gives the value for the whole sample, again, with external revenues. Table 10-5 summarizes the mean values of the collective action variables for the Hindu-Buddhist sub-sample, (excepting Bali, which we excluded because it was the lone case with external revenue); all have 'other' revenues, so we compare them only with non-canonical and the whole sample in this same revenue category. We think a culturalist would predict that in Table 10-4 we should see higher than expected indicators of collective action in the Islamic group if a prior moral code for benevolent ruler action did in

Table 10-4 Mean values of collective action measures in cases of external revenues, split by Islamic (n=8) and non-canonical societies (n=6). The latter group includes Yoruba, Kuba, Tio, Bakitara, Japan, and Egypt. The non-canonical and Islamic means are not significantly different based on t-tests

	Public Goods	Bureaucratization	Principal Control
Islamic	11.9	8.1	9.
Non-Canonical	14.8	8.2	8.5
Whole Sample	13.2	8	8.7

fact overwhelm social process and rational action. That prediction is not supported. In Table 10-4, the Islamic sample's values for public goods, bureaucratization, and principal control are not statistically significantly different from the mean values of the non-canonical societies with external revenues. In fact, in public goods the societies influenced by Islam have a lower mean value than the comparison group and the whole sample. This is an interesting result from which we are able to conclude that a cultural code requiring moral rulership does not necessarily trump the social processes posited by collective action theory. When revenues are external, as in this sample, public goods, bureaucratization, and principal control are not likely to be highly developed because, whether influenced by Islam or not, principals do not face a serious collective action problem. As we have previously mentioned, the adoption of Islam in some of the societies in this group seemed aimed primarily at gaining benefits from long-distance trading (e.g., Schrieke 1957: 230-67, for Java) rather than as a model for correct state-building. In these cases, especially those located a great distance from the major centers of religious learning and policy-making, rulers may not have cared to observe the niceties of religious ideas in their governing practices. Recall that the ruler of Bagirmi was considered to be "electric" with animating forces and was regarded as a divine Sun King (Reyna 1990: 59)! We are also reminded that Javanese rulers adopted Islam, but bridled under its restrictions on their power and took measures to counter it (Moertono 1981: 34).

The culturalist prediction for the Hindu and Buddhist societies would be that cultural code served to augment collective action process when revenues were internal or mixed. The statistics in Table 10-5 do point to a possible impact of culture on collective action in this case, but the impact we can detect from our sample is one in which collective action was inhibited in spite of moral codes. While the mean value for public goods is lower for the Hindu and Buddhist societies than for the non-canonical group, the means are not statistically significantly different. For the two other measures of collective action, the values for Hindu and Buddhist polities are lower than the non-canonical societies, and the differences are statistically significant. Hinduism, in particular, seems to violate the culturalist expectations. Although its cultural code of statecraft and rulership specifies the nature of ruler morality, and insists that the ruler bring prosperity and well-being, these specifications

Table 10-5 Mean values of collective action measures in cases of 'other' revenues, split by non-canonical societies (n=5) and Hindu and Buddhist societies (n=6). The non-canonical group includes Asante, Buganda, Lozi, Aztec, and Inca

	Public Goods	Bureaucratization	Principal Control
Hindu-Buddhist	18.6	9.2	8.5
Non-Canonical	19.8	11*	12.3*
Whole Sample	20.1	11	11.4

*Non-Canonical means are statistically significantly different from the Hindu-Buddhist means ($p < .05$) based on t-tests

would have been difficult to realize in practice with so little bureaucratization and so few institutional means to control principal agency. Rather than principal control and bureaucratization, in the sample there was a tendency toward ruler sacralization, that inhibited accountability, and by the characteristic segmentary organization of Southeast Asian and South Asian Hinduized states (e.g., Anderson 1972: 22; Geertz 1980a: 132; Hall 1980; Stein 1980; Tambiah 1977: 74) that can be traced back to the policies of the Gupta Empire in India (CE 320-500) (Thapar 1975b: 46-8). These are states in which ascription to ruling (and administrative) roles was common, ties between principals and secondary elites were weak and highly contingent, and ruler supremacy was validated in part through competitive ritual cycles (e.g., Geertz 1980a: 133), all of which are counter to the elaborate bureaucratic systems required in more collective polities. It is of interest to note that while the rulers of Vijayanagara did attempt the construction of a more bureaucratized state within the confines of a broadly Hindu framework, they did so with only limited success. Like Vijayanagara, the Buddhist polities of Thailand and Burma were mainland polities with internal revenues that reflect collective action processes to a greater degree than most of the Hinduized polities in the sample, although their values for public goods, bureaucratization, and principal control are all close to, or below, the population mean values.

We conclude from these limited data that prior cognitive code does impact state-building in a way that may influence the outcomes of collective action as a social process based in the rational choices of social actors. Yet, cultural causation is not simple or consistent with theoretical expectations, so we conclude that the culturalist position is only weakly supported from our data and analyses. Moral ideals of rulership may be well developed but will have no force in the absence of a suitable administrative apparatus coupled with institutionalized mechanisms of principal control. We conclude the culturalist position carries little weight in the matter of state formation. On the contrary, the predictions of collective action theory, as mapped out in the main model, are strongly supported.

Comparing Geographical Regions

We begin a comparison by geographical region in Table 10-6. This table orders the coded societies by total collective action score, the summed values of public goods, bureaucratization, and ruler control (CA Total). It is evident from the table that no clear sorting of collective action by region is possible (here we exclude the New World societies from discussion since there are only two cases). What is most striking about this table is that societies in the remaining regions are spread across a range of collective action values. Less collective societies are more common among the sub-Saharan Africa and Southeast Asia sub-samples, in part because these areas contained higher proportions of periphery or semi-periphery polities that developed in the early history of the modern world-system (discussed further in chapter 11), and these states were funded heavily by external

Table 10-6 Coded societies ordered according to scores on the total of collective action measures (public goods, bureaucratization, and principal control), and indicating world region. (1) sub-Saharan Africa, (2) Southeast Asia, (3) South Asia, (4) East Asia, (5) North Africa/Mediterranean/Europe, and (6) New World

	CA Total	(1)	(2)	(3)	(4)	(5)	(6)
Bakitara	23.5	X					
Aceh	25		X				
Nupe	25.5	X					
Perak	25.5		X				
Tio	27	X					
Bagirmi	27.5	X					
Bali	28		X				
England	28					X	
Pudukkottai	31.5			X			
Japan	31.5				X		
Kuba	32	X					
Tibet	34				X		
Ottoman	34.5					X	
Swahili Lamu	36	X					
Thailand	36		X				
Yoruba	36.5	X					
Buganda	37	X					
Vijayanagara	37			X			
Java	38		X				
Egypt	38					X	
Inca	40						X
Burma	41		X				
Asante	44.5	X					
Mughal	45			X			
Aztec	45						X
Rome	48					X	
Lozi	49	X					
China	51				X		
Venice	51.5					X	
Athens	52					X	

revenues gained from gold, slave, ivory, or other export economies. Southeast Asian societies tend not to be found among the more collective states, because, as we discussed earlier, Hindu and, to an extent, Buddhist modes of governance tended to inhibit the playing out of collection action process. In sub-Saharan Africa, by contrast, there are two polities that are among the more collective polities, Lozi and Asante.

Next, we grouped our sample by four major geographical regions South, Southeast, and East Asia; sub-Saharan Africa; N. Africa/Mediterranean/Western Eurasian; and New World, and summed the collective action measures for external

and other revenues (Tables 10-7 through 10-9). As we detailed in prior chapters, the Western social science and historical literatures are replete with broad generalizations about characteristic properties of “Western,” “Asiatic,” “African,” etc., forms of the state. We have known for some time now that such comparisons often are biased or exhibit the fallacy of alterity (creating an ‘other’ that is the logical inversion of ‘self’) (e.g., Asad 1973), and with this kind of bias in mind we selected a world-wide sample of societies for the purpose of evaluating differences and similarities in collective action process at the scale of sub-continental or continental-scale regions. Of course, such macro-groupings encapsulate a bewildering array of sources of between-group difference, including diverse agroecological and biotechnological emphases (to over-simplify, rice, wheat, perennial-based horticulture and maize in our four groups). Do sources of variation such as this impact on political action? Or more specifically, is it possible to detect collective action process everywhere states have developed in spite of the numerous possible local confounding factors?

Table 10-7 Mean values and value ranges for public goods, split by revenue source (R is ‘other’ revenue divided by ‘external’ revenue)

	External	Other	R
South, Southeast, and East Asia Combined	mean 13.3 range 10-16.5	mean 19.6 range 18.5-23.5	1.5
sub-Saharan Africa	mean 12 range 10-16	mean 18.7 range 15.5-22	1.6
North Africa/Mediterranean/Europe	mean 15.7* range 11-20	mean 21.7* range 20-24	1.4
New World		mean 21.5 range 21-22	

*p < .05 based on t-test

Table 10-8 Mean values and value ranges for bureaucratization, split by revenue source (R is ‘other’ revenue divided by ‘external’ revenue)

	External	Other	R
South, Southeast, and East Asia Combined	mean 6.1 range 5.5-7	mean 10.2 range 7-14.5	1.7
sub-Saharan Africa	mean 8.5 range 6-10	mean 11.2 range 10.5-12	1.3
North Africa/Mediterranean/Europe	mean 9.3* range 8.5-10	mean 13.3* range 12-14	1.4
New World		mean 10.8 range 10-11.5	

*p < .05 based on t-test

Table 10-9 Mean values and value ranges for principal control, split by revenue source (R is ‘other’ revenue divided by ‘external’ revenue)

	External	Other	R
South, Southeast, and East Asia Combined	mean 8.1 range 7.5–9	mean 9.4 range 6–14.5	1.2
sub-Saharan Africa	mean 9.1 range 6–14.5	mean 13.4 range 10.5–15.5	1.5
North Africa/Mediterranean/Europe	mean 8.5 range 8–9	mean 15.5* range 12–18	1.4
New World		mean 10.3 range 8–12.5	

*p<.05 based on t-test

Table 10-10 Bivariate correlation coefficients (r) for public goods by resource, bureaucratization by resource, and principal control by resource, split by major world regions

	Public Goods by Resource	Bureaucratization by Resource	Principal Control by Resource
South, Southeast, and East Asia Combined	.8*** n=12	.71** n=12	.3 n=12
Sub-Saharan Africa	.79** n=10	.62 n=10	.64* n=10
North Africa/ Mediterranean/Europe	.72 n=6	.93** n=6	.88* n=6

*p<.05, **p<.01, ***p<.0001 (two-tailed)

Tables 10-7 through 10-9 provide mean values and value ranges for our main collective action measures by external revenues and other revenues. The values in the ‘R’ columns are the ratio of ‘other’ to ‘external’ (rounded). The statistics found in these tables point strongly to the conclusion that collective action developed similarly in pre-modern states in a great diversity of historical, social, cultural, and environmental-biotechnological settings. In Tables 10-7 through 10-9, the ratios (‘R’) of collective action values split by ‘external’ and ‘other’ revenues are broadly similar, ranging from 1.2 to 1.8, with most around 1.3 to 1.7. The variable ranges between geographical groups in some cases are strikingly similar, and in all cases each geographical group’s values overlap with values from the other groups.

Table 10-10 substantiates the conclusion that between-group differences are not highly dissimilar. This table gives the bivariate correlation coefficients (r) for the collective action measures by resource. Here we can observe that all the correlation coefficients are positive, mostly strongly so, and nearly all are statistically significant in spite of small sample sizes.

Comments on the Group Comparisons

We could have predicted some of the between-group differences that are apparent in Tables 10-7 through 10-10. The lowest values of principal control, and the lowest correlation coefficient of principal control by resource, are in the Asian sample, where, as we have seen, there was a comparatively high proportion of segmentary polities whose basic political architecture would have had an inhibiting effect on collective action (this area also has the lowest values for bureaucratization)(keep in mind, though, that segmentary-like polities are found outside this area, including focal period England). However, mean values mask the variation within the Asian group. Here, the Ming Dynasty has among the highest overall ratings for collective action on all three measures, placing it, alongside Athens and Venice as one of the most collective polities in the sample.

It is of interest to note some other between-group differences. Mean values in Tables 10-7 through 10-9 that are statistically significantly different from at least one other value in that column are indicated. These values demonstrate the tendency for the North African/Western Eurasian/Mediterranean societies to score higher on public goods, bureaucratization, and one aspect of principal control (for the latter, in relation to 'other' resources). Are these results a confirmation of the frequently-stated idea of Western exceptionalism, for example that sees the origins of the modern world in Greek democracy? Although this subsample is not "Western," per se (it includes ancient Egypt and the Ottoman Empire), it does include four societies somewhat influenced by Athenian political practices, albeit, in the case of 14th century England, very indirectly. If we look just at these four cases, however, rather than exceptionalism we see values that overlap with other regions. The values for England are actually quite low, in some respects placing it in the same collective-action neighborhood as societies such as Nupe, Bakitara, and Aceh (Table 10-1). Overall, Athens is one of the most collective polities in the sample, but, by comparison is only exceptional in its score for principal control. In other respects its values are similar to many others, for example, the public goods score is similar to Lozi, Burma, Mughal, China, ancient Egypt, Aztec, and Inca, obviously quite a diverse group. The Roman Empire also has one exceptionally high score, for public goods, but otherwise it is only moderately above the population mean value for some other measures.

Concluding Thoughts

Rather than confirming Western exceptionalism, what impresses us about the results of our analysis is that through its methods and diligent collection of comparative data, we have been able to identify the broadly comparable outcomes of human choice in the construction of systems of government across environments, technologies, cultures, civilizations, and time periods. The comparison between

macro-regional groupings, in particular, we think, confirms that collective action is a surprisingly robust social process representing, in a manner of speaking, a crystallization of human thought and action that has appeared and reappeared across many time periods and in a great variety of circumstances. What is perhaps even more striking to consider is that collective action process is evident in spite of the variable quality and character of the sources we coded from and in spite of the fact that our method, while robust, by no means provides perfect measures of the collective action variables.

Chapter 11

Collective Action Processes at World-Economy, Polity, and Community Scales

This chapter takes a more exploratory turn by thinking about collective action in frames of reference not often addressed analytically in the collective action literature. We do this by investigating collective action processes at three scales of human interaction: world-economy or macroregional, region (the polity and its nearest neighbors), and rural communities and households. Summaries of data and the sources we used are found in Appendix 2, and the coded values of the data analyzed statistically are found in Appendix 1 and Appendix 3.

Social Action at the World-Economy Scale and its Consequences for Collective Action

The variant of world-system referred to as “world-economy” refers to situations in which there is a system of commodity exchange between culturally diverse groups at continental or intercontinental scales (Wallerstein 1974: 16). The architecture of a world-economy is hierarchically structured, with a dominant core zone extending its economic influence beyond its polity limits to incorporate surrounding peripheries. As commodity exchange transcends political boundaries, periphery societies are incorporated into a multi-societal division of labor, with peripheries typically, but not always, serving as providers of raw materials, and sometimes, labor, to cores zones in exchange for finished goods. In a growing world-economy, “semi-peripheries” emerge as trade *entrepot*, intermediating between periphery and core economies (Chase-Dunn and Hall 1997: chapter 5). It is well documented that a growing world-economy brings social, cultural, technological, demographic, and agroecological change in the periphery, semi-periphery, and core polities (e.g., Blanton et al. 2005; Chase-Dunn and Hall 1997; Hall 1986). Here we investigate, preliminarily, some of the impacts of world-economy participation on collective action process.

The Impact of World-Economies on the Coded Societies

The coded societies display considerable variation in the nature and quantity of cross-boundary trade and in its social consequences. Below we point to situations where world-economy involvement brought in its wake social and economic change, and that could provide rulers with new sources of external revenues from controlling or taxing cross-boundary trade. Yet, the managers of state economies did not always attempt to maximize such revenues. In some cases, foreign trade was present, but state policy aimed to minimize its social consequences, for example, as we discussed previously in the case of Tokugawa Japan and Early and Middle Ming China. Buganda is an interesting example to ponder in this regard, since world-economy ties are usually considered basic to understanding sub-Saharan political evolution. But Bugandan rulers were able to restrict what was potentially the most profitable trade—in slaves—by keeping slave traders out (Wrigley 1996: 66-7), because the state was concerned to recruit labor, not sell it, owing to internal labor shortages (Robertshaw 1999a). Rulers even encouraged people to produce and wear the traditional locally-made bark-cloth clothing (Roscoe 1965: 403), evidently in order to reduce demand for imported cotton cloth, although by the end of the focal period, cotton imports increased (Wrigley 1996: 60). In other situations, a low level of world-system involvement was due to relative isolation from main trade routes rather than to ruler strategies (e.g., Tibet, Lozi, Bali).

We were particularly concerned to identify those polities in which considerable wealth could accrue from periphery incorporation and semi-periphery status, reasoning that such wealth accumulation might have had an impact on collective action. Specifically, we hypothesized that in these polities rulers would strive to monopolize profits from inter-polity trade, and hence, they would tend toward dependence on external revenues, and, in turn, limiting expressions of collective action in state formation. This meant looking for a sub-group of the sample in which periphery and/or semi-periphery-based exchange was central to state revenues. We include the following in this group:

- (1) Athens and other Greek polities saw economic and political change as a consequence of their emerging periphery status in an early Iron Age world-economy whose core zones were in the Near East (including Egypt), after about BCE 900 (e.g., Morris 1999: 77; Runciman 1982: 367). By the focal period, Athens had a mixed revenue base, but revenues from state-owned silver mines, a major Athenian export product, continued to be important to political economy (Hansen 1999: 285).
- (2) Venice and the Ottoman state emerged as key semi-periphery players in the context of a Eurasian world system that grew after CE 1250 (Abu-Lughod 1989). The Ottoman state eventually was able to capture much of the trade in silk and other goods between Asia, the Middle East, and Europe through the growth of its trading centers at Aleppo (Inalcik 1994: 57) and Bursa (*ibid.*: chapter 10). Venice's domination of the Adriatic Sea allowed it to funnel much of the trade

between Europe and Asia through its market (Lane 1973; Norwich 1982). England was just beginning to be incorporated as a periphery in this same phase of world-system expansion, as a supplier of fine wool (Holmes 1962: 31), but, during the focal period only modest revenues accrued from taxing or controlling long-distance trade, and so it is not included in the periphery group.

- (3) For ca. 1000 years, long-distance trade through the Swahili area has connected interior African peripheries into the Persian Gulf and Indian Ocean trade routes (Abungu and Mutoro 1993), and by the focal period Swahili Lamu was a major semi-periphery in this part of the coastal region (Ylvisaker 1979: chapter 7). It also was a periphery exporter of some locally-produced goods such as simsim oil (*ibid.*: 111).
- (4) In prior chapters we have detailed how the trade in gold, ivory, and slaves, among other commodities, linked coded societies into trans-Saharan and Atlantic Ocean trade networks. These trade connections were important sources of state revenues for Nupe, Yoruba, Asante, Bagirmi, Kuba, and Tio.
- (5) Of our Southeast Asian societies, Aceh and Perak are the most pronounced examples of periphery economies during their respective focal periods.

Analysis

We identify this sub-sample as the “world-economy group,” referring to the relatively great degree of world-economy involvement found in its members and the attendant potential that states had to bolster external revenues. Among the group, we did find evidence supporting one of our predictions, namely, that periphery and semi-periphery economies will tend to have externally-focused revenues (Fisher’s Exact Test, 2-tailed, $p = .02$), although some members of the group, such as Athens, had a mix of external and internal revenues. In other respects, though, the world-economy group displays an unexpected feature, namely, that the mean values for principal control, for both ‘external’ revenues (9.1) and ‘other’ revenues (at 16.7), are considerably higher for the world-system group than the corresponding values for the remainder of the sample (7.9 and 10.2, respectively; the latter values are significantly different from the world-economy group at the .01 level based on two-tailed t-tests).

The high mean values for principal control are exceptional also in relation to other collective action variables. Figure 11-1 is a scattergram of principal control by public goods (as a proxy for collective action) for the whole sample. In it, Asante, Athens, Swahili Lamu, and Venice are outliers, at or beyond the 90% confidence limit for the bivariate distribution (and perhaps, Yoruba could be included in this sub-group). Interestingly, these four outliers display considerable variation not only in revenue sources, but also display a wide range of values for public goods, suggesting that principal control in these cases is not resulting from collective action process in the manner proposed by the “main model” (Figure 10-2).

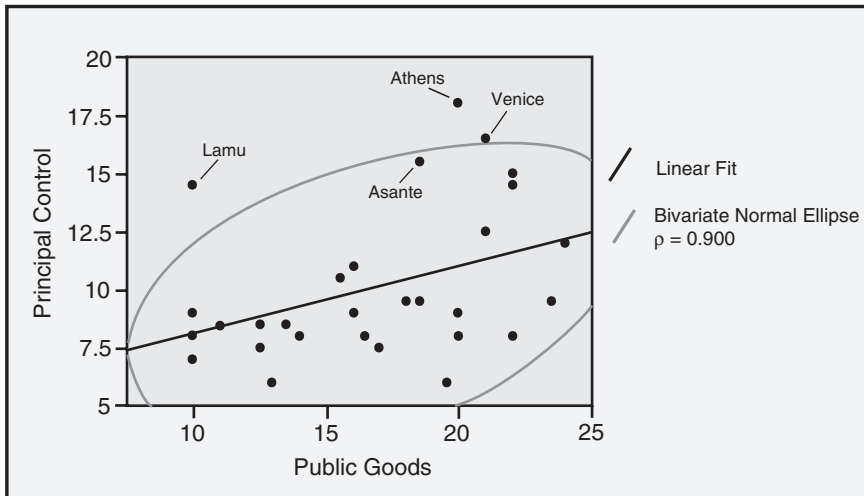


Figure 11-1 Scattergram of principal control by public goods.

A Partial Theory of Variation in Principal Control

Could the unexpectedly high values of principal control for Athens, Lamu, Venice, and Asante explain the relatively weak covariations between resources and principal control that we have noted in previous analyses? In part, yes, but low correlation values also can be attributed to the unexpectedly low values for principal control, in relation to other collective action measures, found in some Buddhist and Hindu societies, as well as in Inca, Mughal, and Rome. Weak correlations result when principal control values are either unexpectedly low or high in relation to other collective action variables, and thus depart from the predictions of the main model (although some values of principal control are very close to theoretical predictions, including Ming China).

These findings suggest that the principal control variable will require theorizing beyond the limits of collective action theory as it is now stated, and, to this end, we propose a hypothesis to explain why some of the values we coded are unexpectedly high (while recognizing that we currently lack the data to empirically evaluate the proposal): We hypothesize that periphery (or semi-periphery) incorporation in a world economy in some cases creates a conflictive environment favoring the socio-cultural construction of strong controls over the behavior of principals and others who might benefit politically and personally from an influx of wealth (note that the four societies in question also score at or above the mean value for bureaucratization). This would be more likely in situations in which rapid economic change fuels conflict when political actors convert wealth into political influence and faction-building to a degree exceeding the limits of the traditional constraints on political competition and the centralization of power. In response, affected groups demand the development of new political institutions and moral codes that disconnect

wealth from power, in particular aiming to limit the degree to which persons holding official positions could use wealth to augment their political influence. This proposed dynamic could be considered as one expression of collective action, although distinct from the causality implied by the main model since it is played out somewhat apart from revenue source and public goods. The following briefly summarizes key aspects of these four interesting polities in relation to the hypothesis:

Athens

According to Morris, with the expansion of the world-system, the Greeks were “coming to terms with the new wealth and sophistication which the expansion of Phoenician activity made available from c. 925 onward ...” (Morris 1999: 77; cf. Sherratt and Sherratt 1993: 369). Some specialists have pointed to the struggles of commoners (the *demos*, or people) against a “wealthy upper class” (Wallace 1998: 17, *passim*; cf. Humphreys 1978: 83) at this time that eventuated in the system of democracy in polities such as Athens. In Attica, according to Humphreys (*ibid.*: 27), by 508/507 BCE, the *demos* “had made four decisive interventions in the government” and they demanded that the actions of office holders be scrutinized (*ibid.*: 18). One reaction to a growing wealth disparity, discussed by Veyne (1990: 75), was the institution of a system of required civic gifting that restricted the ability of wealthy patrons to build networks of clientage and unduly influence the political process.

Swahili

Swahili communities also exhibited marked social diversity including wealth differentiation, and social distinctions reflecting “old” and “new” wealth. Vast wealth accumulation by some families is clear from the large and decoratively elaborate coral houses of affluent traders, that count among the most admired forms of vernacular architecture in the world (e.g., Donley-Reid 1990). We hypothesize that dual ward organization (*mitaa*), and its corresponding system of citizen participation in ward councils, elected officials, and power-sharing by rotation of elected diarchs, developed, in part, as a way to accommodate the interests of diverse constituencies and to minimize the degree to which wealthy families could dominate the political process (cf. Allen 1993: 224; Prins 1971: 48).

Venice

Many aspects of the Venetian political system were oriented to constraining the possible political consequences of wealth inequality and control of wealth for personal political ends. The behavior of the chief principal officer of the state, the *doge*, who stood in a position to influence decision-making concerning matters of

international trade, was highly constrained (Chambers and Pullan 2001: 47; Lane 1973: 266; McClellan 1904: 160; Norwich 1982: 282). He was expected to strive to be loved by the people, to favor the poor, to ensure justice, to supply public goods, and to give an ear to voice (Chambers 1970: 98,99). Conformance to expectations was carefully monitored by the ducal councilors (Lane 1973: 97; Norwich 1982: 283), and he could make no decisions without their consent. The *doge* was an elected official (Lane 1973: 97; Norwich 1982: 283), could be removed from office at any time (McClellan 1904: 105; Norwich 1982: 228, 292, 338), and was not allowed to own properties outside Venetian territory (Muir 1981: 256). The *doge* was bound by a powerful legal code of behavior, the ducal oath (Chambers and Pullan 2001: 47; Muir 1981: 253, 277-278), and, at the end of his reign was investigated by the state attorneys, and his estate was subject to fines and confiscation for malfeasance (Chambers and Pullan 2001: 47; McClellan 1904: 164-165; Norwich 1982: 388-389). That there was a concern with wealth differentiation in Venetian society is evident in limits placed on conspicuous consumption, including the wearing of plain black robes by the nobility and citizenry, and the tradition of tearing off the *doge*-elect's clothes during the accession ceremony (Chambers and Pullan 2001: 177; Lane 1973: 253; Muir 1981: 282; Norwich 1982: 167; Queller 1986: 238).

Asante

In Asante society, individuals could accumulate vast wealth (McCaskie 1995: 53), but wealth accumulation in families was inhibited by a well-enforced inheritance tax on personal property (McCaskie 1995: 48-9; Rattray 1929: 107-9). Power and wealth were strongly separated. Holding a stool (signifying a high administrative position, including ruler) did not bring personal wealth (Rattray 1929: 116, 146), even though the state was a major player in foreign trade. Rulers could be criticized for retaining tax revenues for personal use (Wilks 1975: 470-1), and ruler power was limited and he was subject to scrutiny. The *asantehene* was expected to abide by the requirement to allow for open debate in decision-making (Wilk 1975: 672), and rulers could be arraigned before a "national tribunal" composed of high officials (Rattray 1929: 105). All stool holders could be removed for violating expected behavior (McCaskie 1995: 69; Rattray 1929: 81-3), and any commoner could call for the destoolment of a divisional chief (Rattray 1929: 145).

Final Thoughts on How to Theorize Principal Control

While this is too small a sample of societies to draw many broad conclusions, we suggest that in Athens, Asante, Lamu, and Venice a collective action process was played out that is not anticipated in the main model of collective action. In Swahili Lamu, wealthy families provided polity leaders, and both Athens and Venice depended extensively on a comparatively small number of wealthy households for

revenues (the Asante inheritance tax could be understood in this way as well) and governing services. For example, in Athens, only the wealthiest households paid property tax and they were required to do public service, often at considerable cost to themselves (Hansen 1999: 111), and in Venice, forced loans from wealthy families often substituted for direct taxation of the general population (Chambers and Pullan 2001: 157). All four societies are interesting in the way they depended on very wealthy families for revenue, or even governmental services, while, at the same time, asserting powerful controls over their agency. We suggest that, rather than a revenue basis for the emergence of collective regimes, in some of the peripheries and semi-peripheries the maintenance of public order emerged as an especially compelling social problem. Differential wealth accumulation, in particular, brought in its wake political reforms that aimed to control the behavior of wealthy entrepreneurs, principals, and other officials, by maintaining a separation of wealth from power.

However, such a theory is not a complete accounting of collective action in peripheries and semi-peripheries. In other periphery societies in the sample (Aceh, Perak, Nupe, Bagirmi, Kuba, and Tio) principal control policies did not develop so forcefully, if at all. It is interesting to note, however, that, in late 17th century Aceh, political reforms were carried out that aimed to achieve "... stability without tyranny in a system of female rule" (Reid 1975: 55). The resulting mode of governance had fallen out of use by the focal period (in part owing to interference from the Caliphate, which did not approve of female rule), by which time intra-polity conflict was common and the state was unable to control even feuds and revenge killings (Hurgronje 1906: 47, 56, 78-9, 84, 94, 142). Also interesting is the finding of Bates (1983: Table 20, p. 42), from his comparative study of pre-modern African states, that economic stratification is positively correlated with commoner governing councils that could exercise influence over principals.

We can only make the limited conclusion that world-economies had significant but varied outcomes on collective action process, especially, judging from the limited data at our disposal, in semi-peripheries and peripheries, but not necessarily in core zones. For example, in ancient Egypt, where the wealth of the ruling elite came in part from monopoly control of foreign trade (e.g., O'Connor 1983: 206; Smith 1995: 22), extreme wealth differentiation and political domination by a wealthy elite was continuously socially reproduced over thousands of years, excepting perhaps during intermediate periods.

Collective Action Process at the Regional Scale

As in the case of world-economies, many potential research questions might be asked about collective action process as it is impacted by social forces operative at the regional scale. One is the possible political consequences of migration across polity boundaries. In collective action research, and in some anthropological theorizing about state formation, migration is seen as a factor influencing the strategies of principals (Bates 1983: 41; Levi 1988: 43). For example, Levi (1988: 20)

argues that taxpayers are more likely to abide by state policies to the extent they find defection from the polity (exit) difficult (cf. Ross 1988: 74, who evaluates the proposals of Hirschman, from his “Exit, Voice and Loyalty” book [1970] as they might apply to pre-modern polities). Similarly, Gilman (1981: 7-8) argues that a consequence of the adoption of polyculture was investment in agricultural capital that increased the cost of exit from the emerging chiefdoms and states of the European Mediterranean (cf. Carneiro 1970). In this context, an emergent ruling class could become self-aggrandizing without fear of driving taxpayers away. We’ll call this the “Gilman Hypothesis.” It follows, at the other end of the spectrum of exit possibilities, that rulers are more likely to strike bargains with taxpayers when exit is reasonably feasible, especially if rulers compete with other rulers for followers (e.g., Colson 1969; Ross 1988: 83).

In some of the coded polities, principals did seem to recognize taxpayer defection as a potential problem. During the Thai focal period, rulers recognized that under-population and a propensity for emigration made it difficult to develop a “viable kingdom” (Rabibhadana 1969: 19). People who are “lazy” may run away to hide in the forests and hills, and regional governors appointed officials to find defectors and bring them back (*ibid.*: 16); in spite of this, the number of dependents who had escaped in to the jungle “was not small” (*ibid.*: 57-8, 88). A similar problem was found in New Kingdom Egypt. According to Smith (1995:3), “Egyptian political renegades and deserters from the labor *corvée* ...[migrating to Nubia]... provided both a drain on Egyptian state resources and a budding threat in the service of potential rivals like Kerma.”

A Method for Testing Hypotheses About Exit

To evaluate the possible role of exit in collective action process, we developed a code for what we call “exit opportunity cost.” Only rarely is it possible to comparatively code actual rates of exit from a polity, so we depend on a measure that estimates the degree to which exit would entail opportunity costs in such a way as to influence exit decisions. In this measure, opportunity costs of exit are greater if emigration implies the loss of ability to replicate existing agricultural practices in potential migration locations, if it implies loss of access to comparable public goods, and if it implies loss of valuable agricultural capital investments (the variable descriptions and coded data are in Appendix 1). We coded so that higher scores signify fewer opportunity costs to exit, that is to say, when exit is more feasible. Hence, if defection is an important factor in collective action process, exit opportunity should correlate positively with measures of collective action.

Analysis of the Exit Opportunity Data

The Gilman Hypothesis has no statistical support. Collective action total is negatively correlated with exit opportunity (Collective Action Total by Exit Opportunity,

$r = -.44$, $p < .05$, $n = 30$). Hence, where there is more exit opportunity we found weaker expressions of collective action. This result is unexpected if we follow the argument that when exit is not a threat, rulers will ignore demands for collective benefits. Yet, it is with the lowest scores on exit opportunity (i.e., when exit is unlikely) that we see the greatest expression of collective action. One possible explanation for this result is that taxpayer exit is a cogent threat only in those societies featuring “wealth-in-people” political economies. In chapter 5 we alluded to the particular political significance of the control of people in the sub-Saharan African and Southeast Asia societies. If we repeat the correlation analysis, however, using only societies from the latter two areas, we get a similar negative correlation of collective action total by exit opportunity ($r = -.57$, $p < .05$, $n = 16$).

We think there are two explanations for these results. First, the hypothesis as stated, based on Gilman (1981) and similar sources, reflects the neoevolutionist assumption that taxpayers with limited exit opportunities will have few options other than to sit there and take whatever an autocratic ruler can dish out. This assumption fails to incorporate the entirety of exit theory as proposed by Hirschman (1970). Hirschman identifies exit as one possible reaction to dissatisfaction, but, when exit is less likely, the alternative is that people will exercise voice, that is, they will make demands for beneficial institutional change from within. Neoevolutionists and Marxists, with their assumption of the herd mentality of the subaltern, would not have conceived that voice (or even non-compliance)—standing up for oneself—could be alternative responses to dissatisfaction when exit is difficult, and we think this voice factor goes some distance toward explaining why exit opportunity costs are not a predictor of collective action.

Exit Opportunity, Collective Action, and Polity Scale

We investigate exit further by looking at the relationships among exit, collective action, and polity scale. The potential to exit is reduced when borders are distant and/or when large states have expanded their territorial boundaries to the limits of the most desirable agricultural land. This is evident in the negative correlation of exit opportunity by log of population ($r = -.59$, $p < .001$, $n = 30$), which implies that exit is less likely in larger polities. As we will document below, it is also the larger polities where we tend to see more collective action, suggesting that, contrary to the Gilman hypothesis, collective action is more likely when people are less likely to defect. But is collective action a product of low potential for exit, or is there some other scale effect at play? To investigate this, we did a multiple regression analysis with the collective action total score as the dependent variable and revenue source, exit opportunity, and log of population size as the independent variables to compare them as possible causal factors. The results indicate that revenue emphasis explains most of the variation in collective action (as it has in many of our analyses), a result consistent with the main model. Population size, however, is identified as another feasible possible causal factor (we explore population size in more detail in the next

section). Exit opportunity was not identified as a significant causal factor. We conclude that, in spite of all the effort we put into coding for exit opportunity (we had to study the environments, agriculture, and public goods of all polities adjacent to the focal societies), we have doubts about the analytical usefulness of this variable, except to conclude that the Gilman Hypothesis is definitely problematic.

Scale Effects of Population Size

Early theory sources such as Mancur Olson (1971) point to the disadvantages of larger group size for collective action, given the difficulties and growing costs of monitoring and controlling free riding and agency when group size exceeds possibilities for sustained face-face interaction (cf. Hardin 1982: 43-45). But collective action theorists have not addressed scale effects as they would apply to the evolution of pre-modern states. Anthropologists have investigated some of the consequences of scalar change in the evolution of pre-modern polities (e.g., Ember 1963; Feinman 1998; Johnson 1978, 1982), although not in relation to collective action variables. These latter sources point to how larger population size brings “scalar stress” to governing institutions, and that scalar stress is resolved by administrative reorganization of the governing apparatus (Johnson 1982: 411-17). Ultimately, according to these theorists, scalar stress reflects information-processing limitations of the human brain that restrict the number of organizational units or individuals that a superordinate authority can monitor and control (span of control)(e.g., Johnson 1978: 105-9, 1982: 410-13). To some degree, growth in the number of subordinate units can be accommodated by increasing span of control, but this solution implies a diminishing ability to monitor and control subordinates, probably not a good solution in the case of a more collective polity. To maintain a given degree of control, larger scale requires administrative change such as adding additional hierarchical levels to incorporate larger numbers of organizational units, but additional complexity also brings higher costs and increased communication problems between hierarchical levels (Johnson 1982: 415).

Another possible response to scalar stress is to alter lower-order organizational units in terms of size and institutional make-up. As Johnson (1982: 413) points out, scalar stress may be mitigated by organizing society into nested “basal” groups, resulting in diminishing administrative costs at larger sizes. In this case, basal groups are functional local decision-making entities that intermediate in flows of information between individuals or households and higher authorities, reducing the number of information sources that higher authorities are required to monitor. From the point of view of collective action, however, the nature and functioning of basal units needs to be carefully considered, since basal units that are highly autonomous will inhibit collective action. We are reminded of the governing policies of some of the more segmentary states such as Java, where the central authorities strategized to reduce the work load on higher offices of the state by making lower level administrative units as highly autonomous as possible (Moertono 1981: 88-9, 102). Yet,

for this very reason, segmentary states such as Java have comparatively low scores on our bureaucratization variable. Unlike segmentary states, collective states need to extend their administrative reach deep into the fabric of society to address collective action problems. In the next section we look at how collective states in the coded sample achieved this at the local level.

Scalar Stress and Collective Action

None of the scalar-stress literature in anthropology makes the distinction between more or less collective polities (although Feinman [1998] alludes to this problem). Per capita, the more collectively organized polities should require more complex and costly administrative systems than the less collective (Hechter 1983: 25; Lichbach 1996: 155; Ostrom 1998). This is due to the considerable task and role differentiation required in the administrative systems of collective states which must provide public goods, monitor and control free-riding, allow for taxpayer voice, and build trust by controlling official and principal agency. To better understand organizational change, we developed a proxy measure of administrative complexity by estimating the maximum number of levels of administrative hierarchy in the administrative apparatus of each coded polity. In doing this, however, we depart from the approach pioneered by Wirsing (1973), that sees hierarchical complexity only as a measure of degree of power of “maximal political authorities.” Ours is a more neutral measure of complexity, to evaluate the hypothesis that collective action requires more administrative organizational complexity than will less collective polities. Power in the sense of collective action is more like what Mann (1984: 188-9) refers to as “infrastructural power,” in which authorities are able to “penetrate civil society, and to implement logistically political decisions throughout the realm.”

Administrative hierarchy was difficult to estimate, for three reasons. First, especially in the more complex states, we found diverse bureaus (e.g., civil, financial, provincial, military, imperial, palace, etc.), each with its own hierarchical arrangement of offices, so the value of administrative hierarchy (column ‘a’ in Appendix 3) refers to whichever bureau had the largest number of hierarchical levels. Secondly, the descriptions of administrative systems in the sources are not always presented as neat and tidy organizational charts like those we might see in a textbook on organizational theory. This meant that sometimes we had to infer hierarchical levels by identifying offices with roughly similar scopes of authority, but this was not always a highly replicable method. Lastly, adding additional hierarchical levels is only one possible response to scalar or other sources of stress on administrative organs. In polities like Venice, Athens, and, to some degree, Aztec, governance was vested in numerous councils or committees that were not always clearly ranked with respect to one another, so that hierarchy is not a complete measure of organizational complexity. Our measure of hierarchical levels of the official structure of a state includes local community-level administrative institutions only in cases where the state has developed governing institutions at this scale, or has made such institutions a part of the official structure.

Administrative Hierarchical Complexity and Collective Action

Administrative hierarchy is strongly correlated with all three collective action measures (with public goods, $r = .57$, $p = .001$; with bureaucratization, $r = .69$, $p < .0001$; with principal control, $r = .6$, $p = .0004$; all two-tailed, $n = 30$). As predicted by the scalar stress approach, administrative hierarchy also correlates positively with population size ($r = .52$, $p = .003$, $n = 30$). Which is the more important causal variable for hierarchical complexity, population size or collective action? We did a stepwise multiple regression with administrative hierarchy as the dependent variable to see whether population size or collective action (using collective action total) is more likely to have been the main causal factor. Here, the model identified collective action as the more important causal factor, although it did enter population as causally significant above the .1 level. We take these results to mean that a scalar stress approach to explaining organizational change in administrative systems is inadequate if its only causal variable is population size. Collective action involves distinct organizational problems that transcend population-caused scalar stress. These problems were particularly acute in pre-modern states by comparison with contemporary states, because the latter are able to reduce administrative costs per capita using superior information-processing technology and rapid transportation.

Collective Action and Territorial Size

The problem of primitive administrative technologies can be seen in another scale approach to pre-modern state formation that centers on territorial size. Montesquieu (1989 [1748]: 124-6, *passim*) first alluded to the transportation and communication problems of early states in a way that is restated in recent Russian literature (e.g., Korotayev 1995; cf. Johnson 1982: 415). In this argument, pre-modern “democratic” republics were always small societies in which face-to-face communication made government by consensus a possibility. As a consequence of territorial consolidation, political decision-making was shifted from local communities to distant centers. The high cost and slowness of communication allowed political elites in distant capitals to become autocratic and unaccountable (Korotayev 1995: 67), hence the emergence of the “Asiatic” and “Oriental Despotisms” of the old empires.

Our data provide no support for this scenario, because in the more collective polities in the sample, governing officials were not sequestered in distant and inaccessible palace-centers. Rather, systems of provincial administrative were established that extended governmental functions to rural areas through a hierarchy of secondary and lower-ranked centers. We arrived at this conclusion from our measure of number of levels in regional central-place hierarchies. While few of our sources achieve the sophistication in regional analysis that we see in the work of G. William Skinner for Late Dynastic China (Skinner 1964, 1965, 1977a, b, and c), information was available on major and minor central places for the focal periods, although the sources do not always distinguish between temple, market, and

governmental functions of centers. We found that number of levels of central-place hierarchy is a function of scale, correlating with territory size ($r=.8$, $p<.0001$, $n=27$) and total population ($r=.78$, $p<.0001$, $n=27$), but also with collective action ($r=.57$, $p=.01$, $n=27$). The presence of these complex systems of hierarchically-ordered centers means that territorially large states have the potential to be collective, counter to the suggestions of Montesquieu and Korotayev. This is also evident since territory size (including all territories directly administered, but not including self-governing tributary vassal peripheries) correlates positively with public goods ($r=.54$, $p=.002$, $n=30$) and bureaucratization ($r=.42$, $p=.02$, $n=30$). Principal control, as always, goes its own way, since some of the high values pertain to the smaller periphery and semi-periphery societies in our world-system group ($r=.14$, $p=.42$, $n=30$)(but excluding Athens, Lamu, Asante, and Venice, $r=.47$, $p=.02$, $n=26$).

More on Collective Action and Population Size

Collective states will be administratively costly, and at larger population sizes, whether in population or territory, scalar stress problems could inhibit collective action. To evaluate such ideas, we did bivariate regression of the collective action variables by log of population (found in Appendix 3; log of population gives the same r values as raw population size, but is easier to graph). Surprisingly, public goods, especially, but also bureaucratization, correlate positively with log of population size ($r=.69$, $p<.0001$; $r=.42$, $p=.02$, respectively, $n=30$). Principal control has a positive but small correlation with population size ($r=.08$, $p=.04$, $n=30$). This low value is caused, in part, by the smaller periphery and semi-periphery polities that have exceptionally high scores on principal control. If we exclude Athens, Asante, Lamu, and Venice, then $r=.4$, $p<.05$ for principal control by log of population. Interestingly, collective action total has only a very weak and not statistically significant correlation with population density. So total population, but not population density, is the demographic variable we want to investigate.

That the more collective polities tend to be larger in total population is surprising from a scalar stress theoretical perspective, but, early on in the coding, we realized that some of the most collective systems, such as Early and Middle Ming China, were among the largest in population (and territory size) in our sample. In fact, they are among the largest social formations that ever developed in the pre-modern world. We were left wondering: Why would more collective systems tend to be larger in population size and territory? Evidently, scalar stress resulting from the rigorous administrative demands of collective action is not an acute problem for building more collective states. We propose several hypotheses to explain this interesting result while lacking all the data we would need to satisfactorily evaluate them:

- (1) Voice Substitutes for Exit. We have already mentioned that in territorially larger polities taxpayers will be less prone to exit even if they are dissatisfied and so are more likely to remain in place and turn their energies toward bargaining with rulers.

- (2) **Low Cost of Empire.** More collective polities may be able to expand territorially at comparably lower cost because, although local political elites will resist, commoners may not resist incorporation into a more collective system if it offers more public goods and other benefits of a collective system. At the same time, annexed provinces may have less tendency to struggle for autonomy, so that larger territorial and population sizes can be maintained for longer periods, again, at comparatively low cost. These two features, expansion and retention of provincial territories at relatively low cost, may represent scale advantages where collective action is more developed. For example, recent ethnohistoric and archaeological work in highland Peru points to the possibility that incorporation into the Inca empire brought increased labor demands on households, but, at the same time, an increase in public goods such as land improvement as well as selective incentives that were provided in exchange for *corvée* labor (e.g., Morris 1985: 481; Murra 1980: 75). Following Inca conquest, there was increased commoner consumption of valued foods such as maize and meat and a more equitable distribution of metal objects that previously had been elite prestige goods (Costin and Earle 1989; D'Altroy 1994; Hastorf 2001), and population growth (D'Altroy 1994: 191).
- (3) **Population Growth.** Collective political economy might be a spur to population growth, for several possible reasons. An increase in public goods might bring an increase in life-extending or fertility-improving material and emotional benefits. Also, in more collective polities, defection might be less common, while, at the same time, migrants might choose to move from less to more collective polities. Was population growth more common in the more collective polities? We looked for evidence of population growth during the focal periods and found at least some evidence for it in Yoruba, Asante, Kuba, Buganda, Lozi, Thailand, Burma, Perak, Java, Vijayanagara, Mughal, Ming China, Ottoman Empire, Aztec, and Inca (all others either definitely had no growth or there was simply no evidence either way). Of course, population growth or its absence may have nothing to do with collective action since there are so many other demographic factors to consider. One problem with studying population growth is that in such a broad-ranging sample, we are conflating distinct macroregional demographic patterns. For example, the historically low propensity for growth in the Classical Mediterranean world (e.g., Horden and Purcell 2000: 378) could suppress growth even in more collective polities. In particular cases, local demographic factors could overwhelm any potential impact of collective action. Venice might be one example. Probably owing to its role as an important node in the Eurasian trade, the population of Venice experienced severe bouts of plague (Lane 1973: 19; Romano 1987: 28), resulting in wild swings in population size and no overall population growth during the focal period that we could detect.

To understand population growth, ideally, we would like to be able to determine whether it resulted from free decisions to immigrate versus forced immigration, especially slavery, or whether growth was due to a surplus of births over deaths, or lengthier life expectancy, or some combination of these factors. For example, we noted that in Lozi, one of the most collective polities in our sample, rulers brought

in followers from distant provinces who became “loyal dependents” (Gluckman 1941: 32, 1943: 21), but we don’t know what “brought in” implies in terms of whether immigration was forced or was the result of choice, although Colson (1969: 30) points out that large numbers of refugees came into the region to seek safety. This observation points to another possible comparative problem, and we see it when we consider the Ottoman Empire. This polity, while not one of our foremost examples of collective action, grew initially in population size, in part, owing to “Turkish immigrants from Anatolia, landless peasants, nomads, and all kinds of uprooted people seeking a new life...” (Inalcik 1994: 11, 31). It continued as a magnet for displaced and uprooted people and attracted a continuous stream of Turcoman migrants from Central Asia (*ibid.*: 31, 34). In this case, a measure of relative collective action between donor and receiver polities would perhaps be more telling than the information we have that is restricted to a measure of collective action for the focal polity. In spite of all these potentially confounding factors, we found that the mean value of public goods for the polities with population growth (18.5, $n=15$) is statistically significantly higher than the value for polities lacking growth or where we could find no evidence for growth (15.2, $n=15$, $p<.05$, two-tailed, based on a t-test of differences of means), even though the range of public goods values is similar (12.5-23.5, 10-24, respectively).

We also attempted to measure the degree to which there was evidence for an increased material standard of living for commoners during the focal period of each society. This was very difficult given that there is so little evidence presented in the sources concerning how people lived in rural communities, but we looked particularly for widespread change in rural as well as urban housing, increased consumption of desired foods and valuable cloth. We coded this so that positive evidence is signified by ‘2’ while evidence for no change, or no evidence at all, is signified with ‘1’ (the coded values are found in Appendix 3). Using public goods as our proxy for collective action, we find that the cases where there is evidence for increased living standards, the mean value of public goods is 19.2 ($n=11$), while for the other societies it is 15.8 ($n=18$). These values are statistically significantly different at the .02 level (two-tailed, based on a t-test of differences of means).

Market, Community, and Household in the Evolution of Collective Action

Here we address the general problem of the nature of social complexity at the base of society in relation to state formation (data summaries for the variables addressed here are found in Appendix 2). This brings us back to some fundamental issues addressed by Marxists and neoevolutionists, who saw early states as instruments by which an elite was able to dominate a primordial social landscape of self-sufficient rural communes. In our coding, we encountered a far more complex set of interactions between state formation and institutions at the base of society, interactions that cannot be simply summed up as domination. To begin, contrary to the

expectations of most Western social science, rural landscapes were often highly commercialized, and we wondered if there might be relationships between commercialization and collective action.

Rural Market Systems

To study markets in relation to political evolution required a comparative measure of degree of rural commercialization. Comparison is not always easy because few sources provide the kind of analytical detail on rural economy as, say, Skinner (1964) provides for China. However, we looked for evidence of markets and market participation, to determine if there was a well-developed hierarchy of local and central markets, and whether most ordinary households routinely participated in the regional commercial economy. Our coding method and measures of rural commercialization are found in Appendix 3.

We had two hypotheses in mind that relate market systems to collective action. First, as Eisenstadt (1980: 850) argues, “broad markets cut across ascriptive units.” If true, market system growth would tend to weaken the kind of secondary ascripted elite whose actions are likely to be inimical to collective action and its legal-rational modes of administration (e.g., Elvin 1973: 244-5). Secondly, we reasoned that well-developed market systems could be an important source of internal revenues for more collective polities. Both hypotheses are weakly supported. Although there is only a weak correlation of public goods by degree of rural commercialization ($r=.25$, $p=.18$, $n=30$), both bureaucratization ($r=.41$, $p=.02$, $n=30$) and principal control ($r=.35$, $p=.05$, $n=30$) are somewhat strongly correlated with commercialization and are statistically significant.

We conclude that collective states are more likely to develop in situations of well-developed rural commercial institutions, but the nature of causality linking markets to state formation is not highly deterministic or simple. For example, two of the more collective polities in our sample, Asante, and, especially, Lozi, lacked highly-developed market systems (for Lozi, see Gluckman [1941: 23]; for Asante, see McCaskie [1995: 35]). An additional problem is that markets systems may be a dynamic feature of the rural social landscape that developed somewhat independently of political processes, and not necessarily in relation to collective action. Two examples of notable market evolution in our sample, China and Japan, span a wide range of degrees of collective action. On the more collective side, commercialization is evident during the focal period in Ming Dynasty China. Interestingly, though, it does not appear to have been part of any state-building policy. In fact, the official Confucian perspective embraced by Ming state builders was an “ancient agrarian ideal” of self-sufficient villages (Brook 1998: 670-3, 674; Ho 1962: 259) (similar to Marxist, neoevolutionist, primitivist and substantivist economic theory in the West). In spite of state policy, periodic markets proliferated, and, in this highly commercialized rural economy, markets conditions had an important influence on agricultural decision-making (Heijdra 1998: 496-516; Rawski 1972: 4).

On the less collective side, during the focal period in Japan there was an increase in commercialization, production intensification, and increased material standard of living in rural areas. These economic changes appear to have had little impact, at least during the focal period, on political change, and commercialization developed in spite of official opposition to rural markets rooted in a rigid theory of social class and sumptuary restrictions (e.g., Bolitho 1991: 190; Nobuhiko and McClain 1991: 538; Perez 2002: 27, chapter 9; Toshio 1991: 506).

Community and Household in the Evolution of Collective Action

Earlier we alluded to the suggestion of Gregory Johnson (1982) that a reorganization of the base of society into more self-governing basal units could be a response to scalar stress in the evolution of systems of state administration. In this section we follow up on this suggestion by investigating how communities and households figured into processes of state formation in the coded societies. Our point of departure is the insight that self-governing basal units minimize a state's administrative costs by reducing the number of information sources that higher authorities are required to monitor. However, in more collective states, while a self-governing base would reduce administrative costs, it will be inimical to collective action as a social process because autonomously-functioning basal organizations devolve power to local systems in a manner similar to segmentary states, and, as a result, are not consistent with the requirements of bureaucratization. If this is true, how can a collective state accommodate scalar stress while addressing collective action problems?

In this section we also evaluate a related argument found in some political science literature that explains variation in state formation by reference to causes stemming "from the bottom up; that is, by variation in the power and interests of societal actors in their confrontations with central states" (Boone 2003: 330). In this scenario, the state is assumed to be the means by which an elite extends its domination over the base of society, and it is the mode of organization of the base ("regional mode of production" in Hechter and Brustein 1980: 1061), that determines the form of the state. We look at proposals such as these although our theoretical orientation is quite different. For one, we question the neoevolutionist/Marxist assumption that states are built through a process of domination of an ancient or primordial substrate of "natural" rural communities that is implied in these scenarios (Boone 2003: 320; cf. Hechter and Brustein 1980: 1063). These authors should not have presumed to know whether rural communities are "primordial" or whether they are products of a dynamic, changing social landscape that may be no more or less "ancient" than superordinate systems. Even though our assumptions depart from the political scientists, there are many interesting questions coming from these kinds of theoretical propositions that address the interplay of a society's base and state formation and we explore several of them here: (1) Do socially complex basal organizations inhibit or promote collective action in state formation? (2) Is collective action in common-property management at the base of society a model for how collective states can be constructed? (3) Do collective states reorganize the base of society?

Do Socially Complex Basal Organizations Inhibit or Promote Collective Action?

This question originated in a suggestion made by Hardin (1982: 43) that, to minimize transaction costs, collective strategists will “piggyback” on to existing institutions, modifying them to suit the needs of their collective system. An implication of the piggybacking idea is that collective action might be inhibited when pre-existing institutions are absent or are only weakly developed. Our data on rural communities were coded to arrive at comparative measures of social complexity, or, more precisely, degrees of “social capital.” Rather than assessing complexity, per se, social capital gets at the importance of institutions that facilitate cooperation between households in domains such as resource management, sharing of labor, and dispute resolution (e.g., Katz 2000; cf. Blanton 1994: 129-36). We looked for evidence of well-developed practices for local governance and recruitment of officials, for common property management, and for communal ritual cycles that would promote community social cohesion. We also asked: Is community life symbolized and objectified in public spaces, community temples or monuments, or other physical facilities that provide a formal material setting for social action? The resulting comparative codes are found in Appendix 3, and range from ‘1’ (little evidence for social capital) to ‘3’ (considerable evidence for social capital). These codes aim at a central tendency for each polity, as not all rural communities were identically constituted.

The hypothesis that more collective states may piggyback onto complex rural community institutions is weakly supported. The correlation coefficient for public goods by our Community variable is very strong ($r = .66$, $p < .0001$, $n = 28$), while the other two collective action measures, while also positively correlated, are not statistically significant (bureaucratization, $r = .31$, $p = .1$; principal control, $r = .16$, $p = .4$; for both, $n = 28$). These results do not clearly support a piggybacking hypothesis. Apart from the mixed statistical results, another weakness in this argument is the assumption that rural communities were a pre-existing feature of the social environment for state-builders and available for piggybacking. Instead, to some degree, states in the sample clearly were involved in the creation of new institutions at the base of society. We investigate that possibility in relation to collective action below.

Is Collective Action in Common-Property Management a Model for How Collective States are Constructed?

Here we pursue the possible consequences of complexity of the base of society by investigating social capital more specifically in terms of common-property management. We propose two possible mechanisms by which this kind of collective action at the base of society might enable the evolution of collective action in state formation. First, practices associated with local common-property management, such as accountable leadership and enforceable rules, could become a model for state

formation. An example might be the Burmese, Thai, and Vietnamese “wet-rice specialists” in which flow management irrigation was associated with well-developed common-property practices. As Richard O’Connor (1995: 974) proposes, this irrigation focus became the “nucleus of their states and the mold for their culture.” Similarly, as Boone (2003: 326-7) proposes, local systems for managing common-property resources (“horizontal cohesion”) facilitate collective state formation, both because existing patterns of leadership are suited to “enforcing downward accountability on community-level political leaders,” and because “horizontal cohesion can work as an impediment to top-down attempts to manipulate local political process,” facilitating the evolution of “democratic local government” (*ibid.*)

To evaluate these ideas, we identify those societies in which local communities are described as having well-developed systems of communal resource management. The most elaborate arrangements of this type involved flow management irrigation, where water was shared from a common weir and canal system. In most cases there were variant forms of rural social organization, but we looked for cases where “horizontal cohesion” was a major mode of rural community organization and where communal resources were managed largely locally without the extensive involvement of central authorities. We found such arrangements for the focal periods of Thailand (Vella 1957: 15), Burma (R. O’Connor 1995: 974; Stargardt 1992), Bali (Geertz 1980a: 47-53), Java (Christie 1992), Vijayanagara (e.g., Sinopoli 1994: 226; Stein 1989: 100), Pudukkottai (Dirks 1987: 120), Japan (Toshio 1991: 486-7), and we also included Rome in this group. Although the Roman state (or the emperor) sponsored water-management facilities in some instances, when we considered the empire as a whole we concluded that most management of water supplies for civic purposes was based in community institutions (e.g., Galsterer 2000: 353). Mughal is not included in this list because cooperative associations for flow-management irrigation were found only in a few areas (Habib 1963: 31). China is not included even though there were some local water-management cooperative groups (Bray 1984: 109). According to the same author, the most common irrigation method involved flood management using small farmer-owned tanks (*ibid.*: 109-10). In other cases water management involved local institutions but also saw extensive state involvement or private investment, including Lozi (Gluckman 1941: 92; Prins 1980: 58-70), Tibet (Carrasco 1959: 8, 10, 175), Egypt (James 1984: 115; Montet 1981: 252-3), Venice (Braudel 1972: 78-9), Aztec (Parsons 1991: 40; Sanders, Parsons, and Santley 1979: 176-7), and Inca (e.g., Murra 1980: 15, 18-20).

The hypothesis that collective action in common-property management is a model for collective states, or facilitates their development, is not supported. In most cases where we found community common-property management it involved wet-rice irrigation in societies that were highly segmentary and had low scores on our collective action measures. While the mean score for public goods is somewhat higher for the common-property group (18.3) compared with others in the sample (16.3), the difference is not significant at the .05 level (two-tailed, based on a t-test of difference of means). In other measures, the common property group is lower than others (mean of bureaucratization=8.9, others=9.9; mean of principal control=9.1, others=10.5, the latter significantly different at the .03 level, two-tailed, based on a t-test of difference

of means). We conclude that common property systems at the base of society did not provide models for state formation, nor did they facilitate the development of collective institutions for the political community as a whole.

State Formation and Irrigation

In cases where there was extensive state involvement in water management for irrigation, drainage, or other purposes, there is a slightly greater tendency toward collective action. This is not a surprising result, given that water management is coded as a public good. For the group where we identified considerable state involvement, the mean for public goods (20.9) is statistically significantly higher (at $<.0001$ level, two-tailed, based on a t-test of difference of means) than where there is less state involvement (15.6). Where states were more involved in water management, we also found higher mean values of bureaucratization (11 versus 9.3) and principal control (11 versus 9.9), although not statistically significantly different at the .05 level. We would not claim from these statistics that somehow water management was a causal factor in collective state formation, but we do find the results consistent with the idea that collective states must exercise infrastructural power, including the provisioning of public goods to the base of society, as one solution to collection action problems.

These results are important because they provide one more critique of one of the most sacred and enduring axioms of the Western historical social sciences, that water control was a causal force in the evolution of despotic Asiatic states (e.g., Harris 1979: 104; Levi 1988: 19; Midlarsky 1999). This idea is an antique European conjecture (e.g., Sherratt 1989: 164) given new life by the cold-war warrior Karl Wittfogel (Wittfogel 1957) in his theory of "total power" in oriental despotisms such as China. This is an idea that, "like Elvis, refuses to die" (Butzer 1996: 200), even though it cannot be empirically supported (e.g., Elvin 1984: 386; Hunt 1988; Isaac 1993: 451-60) and is clearly a relic of Orientalist propaganda. Hopefully, our results will help to convince European social scientists and historians to move beyond irrigation and domination as key themes for understanding the oriental "other."

Do Collective States Reorganize the Base of Society?

Rather than seeing state formation as a process by which an elite is able to penetrate and exploit a primordial and unchanging base of society, we explore the nature of mutual causal interactions between states and the domestic and communal social formations they govern. Table 11-1 lists some major categories of social change resulting from state policies found in the sample, with an emphasis on state involvement in rural organizations. It is important to point out that these should not all be interpreted as cases in which the state was the only social actor bringing

Table 11-1 Examples of kinds of state involvement in rural social formations in the coded sample

I.	State policies impacted rural communities and households but without much direct official intervention: Japan (Hall 1991a: 7; Naohiro 1991: 51-3)
II.	Distinct categories of rural households and/or communities were under direct state control: Buganda (Kottack 1972: 362; Wrigley 1996: 63-4), Bakitara (Roscoe 1923: 56, 83-6, 116), Lozi (Gluckman 1941: 32, 1943: 21, 1961: 22, 62), Pudukkottai (Dirks 1987: 189), Egypt (O'Connor 1990: 17)
III.	Particular communities, provinces or subregions were reorganized and/or populated with state intervention: Asante (McCaskie 1995: 89; Wilks 1975: 52), Thailand (Vella 1957: 26), Burma (Koenig 1990: 54, 107-8), Java (Moertono 1981: 68, 113, 133-5; Schrieke 1957: 146-9), Vijayanagara (Morrison 2001: 265; Sinopoli 1994: 234), Mughal (Habib 1963: 178, 290; Sarkar 1963: 12), Ottoman (Inalcik 1994: 72-3, 145, 176-7), Aztec (e.g., Blanton 1996: 67), Inca (e.g., Murra 1980: 38, 54, 71-2, 101)
IV.	Direct state intervention in the broad restructuring of communities and other institutions: China (Hejdra 1998: 461, 468-71; Wiens 1988), Athens (Hansen 1999: 34; Whitley 2001: 340), Rome (Birley 2000: 139; Galsterer 2000: 249, 350), Venice (Norwich 1982: 208-9, 284), Inca (Julien 1982: 123; Murra 1980: 75)

about change. Instead, one would suspect that social change may have provided mutual benefits to rulers and taxpayers and so were carried out by mutual agreement, but the historical details are rarely known or discussed in the sources. Verona, for example, readily accepted new modes of governance instituted by Venice since its “machinery of civil government had largely crumbled away during the long years of Scaliger rule...” (Norwich 1982: 284). That there was mutual agreement that change would bring benefits probably helps explain the exceedingly rapid pace of institutional change in situations like Ming China, Mughal, Athens, and Inca, where significant and far-reaching transformations of basal organizations were implemented in a matter of decades.

Based on the categories found in Table 11-1 we comparatively coded for the degree of state involvement in restructuring rural social institutions (the coded values are found in Appendix 3). Values of ‘1’ signify that local institutions, even those co-opted to serve some state functions such as tax collection, were not strongly impacted by state action, and, so far as we can tell, probably were prior to the state formation of the focal period. An example is the Kuba villages that Vansina (1978a: 111, fn. 14) describes as the “cornerstone of sociopolitical organization.” A value of ‘2’ signifies that many rural institutions were untouched by direct state involvement, while in some respects state actions did bring rural change, for example, when particular regions were reorganized while many “traditional” communities were left intact. A value of ‘3’ signifies that extensive restructuring of rural institutions took place in conjunction with state formation reflecting state policies.

The results of this analysis provide strong support for a theory of rural organization that is quite different from ideas drawn from European political philosophers such as Marx. Rather than an unchanging primordial base of society that served as a foundation for the construction of the state, we conclude that, in the more collective

states there was a complex process of mutual social change involving the state and rural groups. These suggestions are supported by the bivariate correlation of state involvement by public goods, that produced one of the highest correlations we have seen in this analysis ($r=.74$, $p<.0001$, two-tailed, $n=30$). State involvement by bureaucratization also produced a high correlation ($r=.73$, $p=.0001$, two-tailed, $n=30$). Principal control, as always, appears to be a somewhat separate process, although, it, too, is positively correlated with state involvement ($r=.57$, $p=.01$, two-tailed, $n=30$). The lower correlation coefficient in this case is due, in part, to the presence of several states that scored high on state involvement in rural institutions but not very high on principal control, including Rome, Inca, and Tibet.

Concluding Thoughts

We conclude that the more collective a state is, the more likely it is to be involved in modifying and building new institutions, both inside and out of the official structure of the state, and we think often these were developed in conjunction with motivated commoners who saw advantages in social change. In some cases social change went beyond “piggybacking” to create whole new administrative systems, for example, the *li-chia* system of administration of units of 10 and 100 households in Ming China, the highly parallel decimal administration of small household groups instituted by the Inca, and the massive census of northern South Asia pioneered by the Delhi Sultanates and carried much further under Akbar, as part of the complex *zabt* administration of tax rates assigned to particular households (Habib 1963: chapter 6). The Kleisthenic reforms, with their regional organization of ten “tribes,” 30 districts (*trittyes*), and 139 *demes*, as well as a new calendar, ritual cycles, and symbolic representation of the 10 tribes, can be added to this list.

The problem remains that such massive administrative programs are costly. How did state builders accomplish them within budgets? We think the most effective approach was to enhance the social capital of local governing institutions so they were able to function semi-autonomously (e.g., Blanton 1998: 166-70). This strategy was combined with institutions that allowed for periodic monitoring with a realistic threat of punishment of local agents or commoner managers who might behave amorally. We end this section by providing two examples in which social change at the base of society was coupled with institutional change that allowed for some degree of state monitoring for agency and taxpayer compliance. This is exemplified in the case of Rome, where, from the time of Julius Caesar, a charter was developed to enhance self-governance in municipalities (*lex Iulia municipalis*) (Abbott 1963: 452). This charter specified details of municipal structure and function, but, if local problems became sufficiently serious, the emperor could order a *curatore*, *correctore*, *logiste*, or a similar category of official to correct problems with city administrations (e.g., Galsterer 2000: 359; cf. Mitchell 1993: 98).

China’s policies also aimed at semi-autonomy as a strategy to build a collective state while keeping taxes low and governing society with a “skeletal administrative

staff, coupled with a policy of noninterference in the administration of local villages” (Huang 1998: 112). Policies of this type have a long history in China and have had consequences for the evolution of governance. For example, from the Han Dynasty through the Late Imperial Period, the Chinese state bureaucracy did not increase in size proportionate to the increasing scale of society, at least insofar as total population size of the society can be used as a proxy for scale, and insofar as scale of bureaucracy can be measured as the number of basal units of field administration (*hsien* and their administrative officials, *yamen*). Assuming a consistent level of administrative intensity (measured as the number of *yamen* per person) at the level in place by CE 200 (Han Dynasty), then we would expect one *yamen* per 50,000 persons, or a total of 2600 *yamen* (assuming an Early Ming average population of 130 million). But the Ming figure is an estimated 1385 *yamen*, or one per 94,000 persons on average (these figures are from Skinner 1977a: 19-20, and the population estimates discussed for CE 1500 presented in Appendix 2).

Skinner (1977a: 20-1) suggests that diminishing returns to bureaucratic efficiency would account for the lack of correspondence between population increase and bureaucratic growth, following some suggestions of the administrative science literature (e.g., Kasarda 1974). According to this interpretation, bureaucratic growth proportionate to increasing population size would have entailed unacceptable administrative costs, forcing the state to place limits on the size of the bureaucracy. This can be seen in a history of Imperial policies that aimed to restrict bureaucratic scale and complexity by limiting the workloads of field administrative officials. Beginning in the 8th century, the state relinquished control of many commercial transactions (T'ang and Sung Dynasties)(Skinner 1977a: 23-26; Twitchett 1968). Skinner (1977b: 338-44) comments on an increase over time in the number of, and importance of, various forms of informal paragovernmental organizations headed by members of important gentry and merchant households, that, with official approval, took on some of the administrative tasks forfeited by the state. This included local-level organizations organized to facilitate taxation and control at low administrative cost to the state. We would include Confucian ideas about households as another factor to consider in the relatively light presence of government in China in spite of its strongly collective properties. The Confucian reforms augmented the importance of the household in society and culture by proposing that:

- (a) The preeminent values of society are those governing relations among immediate family members. This critiqued the prevailing cultural code that emphasized clan and aristocratic descent, by foregrounding family ties (filial piety), giving kinship priority over descent (Creel 1964: 170).
- (b) A family expressing the ideals of unity, righteousness, propriety, and good order would be “regulated,” and hence able to function semiautonomously over multiple generations (e.g., Chen 1972: chapter 8).
- (c) The proper functioning of the state is dependent on the proper functioning of families: “With filial piety, families are regulated, and with the regulation of all families, society is sure to be stabilized” (Chen 1972: 409).
- (d) Familistic values of filial piety were extended to the expected behavior of rulers and others holding official offices (Creel 1970: 376-8). Hence, culturally,

society and the state were restructured with the intent of constraining state power, and of channeling power in socially approved directions based on familistic values inherent in the base of society.

These social and cultural ideas were then encoded in domestic habitus, including formalized architecture, everyday practices, and ritual (e.g., Bray 1997: chapter 3).

To this broad theory of state in society, the Ming founder established semi-autonomous community organizations, institutions and ritual practices (Heijdra 1998: 468-9). We see this in the establishment of institutions promoting ideas of moral discipline, including drinking rituals intended to inculcate communal values, community halls (Village Court Pavilions) where “local offenders were publicly subjected to community shame,” and the Village Exemplary Pavilion “in which social virtue was propounded” (Heijdra 1998: 469-70). The new *li-chia* organization placed the responsibility for tax collection in the hands of local community leaders, and public granaries were also locally managed (Bray 1984: 422), but the state needed to be able to detect non-compliance (Rawski 1972: 22) and irregularities in granary management. As a result, various surveillance-judicial bureaus were developed, including a “secret police” (Huang 1998: 109), but, especially, the Censorate (Hucker 1998: 73, 91-9), whose members watched over the actions of both official agents and persons outside the official structure responsible for government functions. These diverse policies were consistent with the founding emperor’s focus on personal integrity and benevolent government, with “unruly persons punished by their own elders” so that “local communities needed little official supervision” (Huang 1998: 106). In this and other instances we studied, administrative self-sufficiency of the rural communities was not a reflection of a primordial natural state of humans. Instead, administrative self-sufficiency was artfully constructed by state-builders, who, in cooperation with taxpayers, strived to build collectively-organized political systems.

Chapter 12

Collective Action and Political Evolution

In these final comments, we ask the socio-cultural evolutionary question: Does collective action represent evolutionary progress in state-building? An evolutionary perspective is based on the assumption that human history, since the end of the Pleistocene, can be understood as a series of progressive social transformations, culminating in the modern world. From the data summarized in previous chapters we could, plausibly, interpret collective action as an expression of social progress. The more collective societies in our sample exhibited, by comparison with the less collective and more autocratic, a tendency toward increased population size, economic growth, and increased material standard of living for ordinary persons in addition to the many benefits accruing from collective action politics such as accountable rulers, voice, and public goods. However, can we say that humans have made progress in overcoming the limitations of more autocratic regimes by developing the ability to build collective political systems? To answer this question, we address three issues: Is collective action found in the earliest phases of state formation, or does it appear primarily as an evolutionarily late phenomenon? Do the “Axial Age Civilizations” represent a progressive transitional phase in the evolution from “Pagan” civilizations to the modern democracies? Lastly, was the widely-accepted transition from pre-modern autocracy to modern democracy truly evolutionary?

Is Collective Action Found in the Very Earliest States?

The fact that the very earliest states are known primarily from limited archaeological and textual sources makes it difficult to answer the first question with a high degree of certainty. Although it is not possible to measure the collective action variables for these cases with the same precision that we were able to with our sample, we would answer the question with a provisional affirmative. This assertion is based on what we see as evidence that collective action was present in some of the earliest phases of political evolution and state formation. We include in our list the “primitive democracy,” dating to perhaps as early as the fourth millennium BCE, in Mesopotamia, first proposed in Jacobsen (1943) (e.g., Postgate 1992: 80-1;

van de Mierop 1997: chapter 6). We would point also to the third millennium BCE in South Asia, where Indus civilization is widely recognized as one of the world's preeminent centers of pristine state formation (Possehl 1998). As we described this archaeological period in chapter 5, this was a highly complex society with planned cities of up to 50,000 people, but that had no ruling class and was highly egalitarian and collective in other respects, including evidence for vast communal grain storage facilities (Wheeler 1968). Society was integrated, in part, through what may be termed a shared egalitarian ethic rather than a stark division between a wealthy elite and a subaltern (e.g., Kenoyer 1998; Sarcina 1979; Rissman 1988; cf. Miller 1985: 48, 53; Possehl 1998).

Another of the world's preeminent examples of early state formation, Teotihuacan, in the Basin of Mexico, also indicates that early political evolution could be based in collective action. Like Indus civilization, this was a large and complex society whose main political capital was a planned city populated by more than 100,000 people (Millon 1973). Like Indus civilization, at Teotihuacan we find no overt indicators of a ruling aristocracy during the post CE 200 period (Millon 1992: 396; Cowgill 1997). Wealth stratification was muted, possibly owing to a pervasive "... utopian view ... in which the individual was de-emphasized for the sake of the group ..." (Pasztory 1992: 288).

Other early phases of political evolution may reflect the outcomes of collective action, including the Late Neolithic of central and northern Henan, China (Liu 2004: 249-51). Prepalatial Crete, the earliest phase of state formation in Europe, may also have featured elements of collective political economy (Parkinson and Galaty 2007). Neolutionists have described the earliest states in strongly autocratic terms (e.g., Haas 1982; for example, the idea of early Mesopotamian democracy was denied by Service [1975: 209] and Michael Mann [1986: 86]), but we see their arguments as reflections of theoretical bias more than empirical reality. In response to our first question about the evolution of collective action, we would argue that collective action, rather than being a late invention that ushered in the modern world, has been a significant dimension of human political experience for as long as humans have constructed complex societies.

Do The “Axial Age Civilizations” Represent a Progressive Transitional Phase from the “Pagan” Civilizations to the Modern Democracies?

In several sources stemming from the writings of Karl Jasper and Max Weber (e.g., Eisenstadt, ed., 1986) the argument is made that, beginning in the latter first millennium BCE, a series of revolutionary ideas emerged in diverse civilizations that powerfully impacted on the nature of the state and rulership, ideas that paved the way for the evolution of the modern world. The Axial Age “breakthroughs”

involved the development of new cultural codes that conceived of and institutionalized a “basic tension between the transcendental and mundane orders,” with the transcendental domain occupying a higher moral plain than the mundane. “Breakthrough” cosmologies specified that rulers and the state were placed within mundane categories and thus were subject to the higher precepts of the transmundane order (e.g., Eisenstadt 1986: 1). This redirected political evolution away from the traditional and sacred legitimation of rulers of earlier “pagan” civilizations (“King-Gods”), and paved the way toward the open recruitment of political elites and toward modes of government similar to Weber’s rational-legal bureaucracy (ibid. 2-6), and, hence, collective action.

While Eisenstadt (1986: 21) mentions that some of the features of the Axial Age might develop occasionally in non-axial polities, he makes the argument that they were far more developed in the Axial Age civilizations. If true, then it is possible to evaluate Axial Age theory by predicting from it that Axial Age societies should be more consistent with collective action process, particularly in terms of our bureaucratization and principal control variables. The hypothesis can be evaluated by comparing the degree of expression of collective action in Axial Age and non-Axial societies in our sample. Several societies in the sample reflect the “breakthrough” cosmologies of the Axial Age civilizations of Islam, Hinduism, Buddhism, Confucianism, ancient Greece, and Christianity; our focal-period Roman Empire apparently is considered “pagan,” or non-Axial in this literature (e.g., Stroumsa 1986). Excluding those societies where the impact of Axial Age cognitive codes was barely apparent, we included in the “Axial” group the following: Nupe, Lamu, Thailand, Burma, Bali, Java, Aceh, Perak, Vijayanagara, Pudukkottai, Mughal, China, Tibet, Athens, Venice, England, and Ottoman. We evaluate the hypothesis by comparing the values of the bivariate correlation coefficients of our collective action measures by revenue emphasis (resource) for all Axial and all non-(or weakly) Axial (Table 12-1) and by a comparison of mean values of the collective action measures split by resource (Table 12-2).

The results of this analysis do not support Axial Age evolutionist theory. The positive correlation values in all cells of Table 12-1 point to the fact that collective action process is found in both Axial and non-Axial societies. In fact, nearly the opposite of the evolutionist contention is evident in Table 12-1 since there is a weaker correlation of principal control by resource in the Axial Societies than there is for the non-Axial cases. The latter is due, in part, to the low scores for principal control in some Axial Age societies, especially Tibet and Pudukkottai. From Table 12-2, the mean values for the collective action measures, and their ratios (‘R’) for both sub-populations are similar to values we have seen in other tables and are not statistically significantly different from each other, except for public goods, where the mean value Axial Age societies with external revenues is significantly lower than the non-Axial (based on a t-test of difference of means).

We conclude that the Axial Age “breakthroughs,” important-sounding as they have been made to appear in sources like Eisenstadt (ed., 1986), are not apparent in our statistical analysis, at least not as measured by our collective action variables. This is not to deny that in Axial Age societies new cultural codes were envisioned

Table 12-1 Bivariate correlation coefficients (r) for public goods by resource, bureaucratization by resource, and principal control by resource, split by Axial Age (n=17) and non-Axial Age societies (n=13)

	Public Goods by Resource	Bureaucratization by Resource	Principal Control by Resource
Axial Age	.89*** (n=17)	.55* (n=17)	.26 (n=17)
Non-Axial Age	.71** (n=13)	.76** (n=13)	.71** (n=13)

*p < .05, **p < .01, ***p < .0001 (two-tailed)

Table 12-2 Mean values of the collective action measures, split by revenue source and by Axial Age (n=17) and non-Axial Age (n=13) societies. R is 'other' revenue divided by 'external' revenue

	Public Goods			Bureaucratization			Principal Control		
	Ext.	Other	R	Ext.	Other	R	Ext.	Other	R
Axial Age	11.9	19.8	1.7	7.8	11	1.4	9.2	11	1.2
Non-Axial Age	14.5	20.5	1.4	8.2	11.2	1.4	8.1	12.3	1.5

that had an influence in recent history and, in some cases, have been carried forward to some degree into the modern world. But those theorists who have proposed the Axial Age as a significant transitional phase that presaged the modern world can be faulted for making progressive evolutionist assumptions. They have searched for signs of a stage-like transformation from an imagined "pagan" evolutionary stage to an Axial stage to explain the origins of the modern world and its modern legal-rational approach to government.

We think a more powerful approach would be to identify those social processes that result in broadly similar strategies of state-building. Collective action process may be expressed in diverse cultural settings and time periods, and is especially sensitive to local conditions that have an impact on revenue streams, while cultural code may be a less influential causal force, or may be more of a dependent variable. Some Axial Age societies, for example, have among the lowest values for bureaucratization (e.g., the Hinduized states) and ruler control (e.g., Tibet), while some non-Axial polities scored moderately high on measures that should indicate "Axiality." In previous sections describing the coded societies we documented what could be interpreted as a tension between the transcendental and mundane orders in several non-Axial societies. While these cultural systems may not have been codified in elaborate theosophical literatures as we find in Buddhism or in China, we see many similar ideas expressed, particularly in the more collective societies where rulers were not "King-Gods." Here we would include Lozi, where a dual-capital system separated the more sacred dimensions of world order from the ruler, who was associated with the northern, more secular capital. In Yoruba, rulers were not considered divine, and in Asante, the major ritual and religious sites were located some distance from the political capital. Similarly, in Buganda, the ruler was largely a secular figure. And, recall the incident we described in which an

Aztec ruler—also not a “King-God”—was called before deities to explain his actions. While some early states did strongly sacralize their rulers (e.g., Inca, ancient Egypt), we conclude that the Axial Age theorists have erred in assuming that societies that did have King-Gods, such as ancient Egypt and Inca, are typical of all “pagan” civilizations.

Was There an Evolutionary Transformation from the Autocracy of the Pre-modern Polities to the Modern Democracies?

While we cannot claim to have reached theoretical closure, or come even close to it, we think this project’s results make a contribution to the theoretical understanding of state formation, and does so even though the data were limited to pre-modern states. Western Colonial regimes and modern democracies heavily influenced by Europe and North America were not included in the sample in order to maximize social and cultural variation, but, unfortunately, in narrowing the sample we appear to endorse a perceived distinction between pre-modern and modern polities. Most schemes of political transformation claim that accountable rulers and democracy are products of modernity, while the political systems of the past, described variously in terms of traditional authority, patrimonialism, absolutism, despotism, sultanism, oligarchy, or autocracy, all featured governments largely free from restraint. The great divide between early autocracies and modern democracies is widely recognized in the political science and other historical social science literatures, and presented in introductory textbooks (e.g., in Hague and Harrop 2001). It reflects the self-congratulatory Eurocentric opinion that the advent of Western democracy and its diffusion outward has been a major social force overcoming oppressive traditional autocratic governments and an evolutionary leap forward in the history of human modes of governance. Lenski (1966: 317), for example, traces what he sees as broad social evolutionary changes leading to the modern world, and concludes that the relative egalitarianism of modern industrial societies “... marks the first significant reversal of the age-old evolutionary trend toward ever increasing inequality.” He attributes the egalitarian impetus, in part, to a new democratic ideology that can be traced to the 17th and 18th centuries in Western Europe and the United States. But was there an evolutionary trend toward increasing inequality before democracy?

The Eurocentric perspective on long-term political evolution is misleading in some respects. The data and results we report on in this volume suggest that social forces favoring political egalitarianism were present prior to the advent of modern Western-influenced democracies. The polities we identified as more collective look, in some respects, “modern,” for example, in developing institutions to make authorities more accountable. In this chapter we revisit the great divide between the modern and pre-modern by placing political modernization in the comparative light of collective action.

The Transition to Modernity

Tilly (1975: 608-9) and Rokkan (1969: 63-8), based on some suggestions of Lucien Pye and Gabriel Almond, summarize the elements of the political transition to modernity that have “moved from the West to the rest of the world” (Tilly *ibid.*: 608). We agree that two elements of political transformation they point to, protecting the rights of organized opposition, and the extension of suffrage, did not develop frequently outside the Western experience. The extension of suffrage implies the institutionalization of contested elections, obviously key for how officials are made accountable and how taxpayers express voice in modern democracies. Yet, elections are not the only possible mechanism allowing for voice and accountability. The strong statistical support we found for the rational choice theory of collective action suggests that the interests of both taxpayers and rulers played a role in the process of collective regime-building, even when elections were not part of the regime-building strategy. The coding scheme allowed us to assess the degree to which institutional arrangements allowed for taxpayer voice, including voting (rarely) but more frequently involving precise appeal hierarchy, representation on governing councils, and the potential to present petitions and complaints to authorities.

Developing workable institutions able to accommodate voice is problematic in any state, pre-modern or modern, and was particularly difficult to overcome in pre-modern states lacking advanced communication technologies. As we have pointed to from our coded data, we judged many of the institutional arrangements for voice to be well meaning but probably ineffectual in practice. Yet, it is also the case that the quality of democratic institutions is also highly variable, and contested elections are subject to distortion even in democracies such as the United States. Institutionalized protection of the rights of organized opposition is also a largely Western development, although, like electoral systems, often remains problematic in application even in modern democratic polities.

Other features in Tilly’s and Rokkan’s summaries, termed penetration, integration, identity, legitimacy, and distribution, are not exclusively products of the West or of modernization, and, in fact, variants of these features were included in the coded variables used to identify and measure differences and similarities in collective action in our sample of pre-modern states.

Indicators of Modernity

Penetration

This process involves the establishment of a rational field administration for tax collection, to establish public order and to distribute other public goods. As we have amply demonstrated in prior chapters, our indicators of these features, subsumed within the bureaucratization construct, are highly variable across pre-modern polities

and we found them to correlate positively with measures of collective action viewed more broadly.

Integration

This process involves the establishment of allocation rules that equalize access to offices and other benefits across different sectors of society. We measured equalization of benefits through some of the bureaucratization variables, especially, competitive recruitment for government offices, as well as in some of our public goods measures. The idea that allocation rules have their origins in the West is a clear example of the Eurocentrism that pervades modernization schemes. Decades ago, Herrlee Creel pointed to the significant contributions to world political culture made by the accumulated experience of more than 2,000 years of Chinese statecraft. In regards to allocation rules, we would point to the steps Chinese state-builders took to develop an examination system that made positions in the civil administration more widely available (Creel 1964: 155-7, 1970: 7). Rather than a West-to-Rest diffusion of features of “Integration,” this system of allocation was borrowed from the Chinese by European state-builders in the early modern period (Creel 1970: 15-27). During the focal period, the examination system was made even more allocative than it had been during prior Chinese dynasties. The Ming dynasty founder, realizing that some wealthy provinces were producing an inordinate number of persons able to pass the civil service exams, set regional pass quotas to give poorer regions equal access to the valued positions (Hucker 1978: 49-50).

Identity

Identity refers to the symbols, rituals, schools, and other institutions and media employed by the architects of nation-states. Is it possible to assume qualitative differences between pre-modern and modern state-building efforts in this regard? Social action aiming to enhance cultural integration certainly is found in pre-modern states, so it is at least possible that this is another dimension of modernity theory in which empirical comparative research might challenge the predominant alterist West-Rest logic. The “imagined community” thesis of Anderson (1991; cf. Geertz 1973: chapter 10) typifies the Eurocentrism found in this stream of identity theory. Pre-modern cultures, in these schemes, were primordial, natural, and timeless, while European nation-state cultures are “imagined,” i.e. consciously constructed by social agents. This is not a topic we coded for in great detail, but we point to one well-described example to make the point that in pre-modern states active construction of political identity took place in a manner perhaps not qualitatively different from modern nationalist movements. Our example is Osei Tutu, the central architect of the Asante state, who engaged in flurry of cultural and social construction around CE 1700. His principal strategies included the founding of a new national capital at Kumasi (Wilks 1975: 111) and the establishment of the Golden Stool, the

key symbol of royal status, which also served as a symbolic representation of the Asante people (Rattray 1923: 289). At this same time, Osei Tutu, perhaps with the aid of a renowned priest, Komfo Anotche, introduced the *Odwira* or annual yam harvest festival in which political officials as well as tens of thousands of others from all over the polity gathered in the capital to participate in a visually and emotionally powerful ritual of social and cultural renewal (Rattray 1929: 279; McCaskie 1995: 145, 201-27).

Legitimacy

Strategies aiming to promote a sense of loyalty to the government and principals are found in several of our coded variables that assess the degree to which principals aimed to build trust among taxpayers. These variables include institutions that exposed principals to public scrutiny, allowed for them to be judged and impeached, and restricted their control of material and cognitive resources. Self-abnegation was also recorded. Variables that measure the degree to which principals used revenues for public goods distributions, and that assured taxpayers that agency and free riding could be detected and punished also go to the question of the legitimacy of a state and how principals established trust among taxpayers. All of the variables we used that pertain to trust and legitimacy display considerable cross-polity variation, and in a number of societies we found strategies to promote legitimacy.

Distribution

Distribution describes the degree to which the state provides social services and income equalization through measures such as redistribution and progressive taxation. Redistribution is one component of the overall measure of public goods that, again, displays considerable cross-societal variation in the sample. Redistributive systems, such as the “ever-normal granary” in Ming China (Bray 1984: 419-23), had considerable institutional complexity and social impact. We noted progressive taxation in some of the more collective of the coded societies, but, in general, this kind of social technology presented inherent difficulties in pre-modern polities owing to the logistical problems of monitoring wealth or income differences between households, but some strategies of this sort were encountered in the sample. The inheritance tax on personal property that was a major source of revenue for the Asante state (Rattray 1929: 107-9) could be construed as a progressive tax since surviving household members inherited little (McCaskie 1995: 48-9). In Athens, wealthy households paid most of the taxes (Hansen 1999: 100; Sinclair 1988: 63), and wealthy citizens were also expected to perform public duties (*leitourgiaia*) which often entailed expenses, sometimes quite substantial ones (Hansen 1999: 110, 111). The Mughal and Ming Dynasty states took more encompassing distributive measures based on vast surveys of land, population, and production in order to equalize the burden of taxes in light of variation in potential household

production. The Mughal surveys, carried out over some 750,000sq. km of the state's core zone in northern South Asia, involved a tax on production derived by calculating multi-year averages (the *zabt* system) (Habib 1963: chapter 6, 1982a: 235-6; Sarkar 1963: 67). The massive Ming Dynasty registration program to record land and population was begun late in the 14th century (Wiens 1988: 20). One goal of this effort was to "equalize land-tax burdens ... taking into account the great variations in quality and productivity of soil from one locality to another" (Hucker 1978: 58). But migration of households away from their registration land, and other managerial difficulties, plagued the registration and tax system, making truly progressive taxation "far beyond the administrative capacity of the government and the technical ability of seventeenth-century administration" (Huang 1998: 171).

Conclusion

The Tilly and Rokkan scheme is useful in that it has allowed us to demonstrate the considerable degree of overlap between collective action and the features that are usually taken to constitute modernization. However, the modernization scheme is incomplete in that it omits key elements pertinent to understanding how collective polities are constructed, including mechanisms to restrict the power of principals and the monitoring and punishment of agency and free riding. Further, the Tilly and Rokkan scheme would have more ability to explain, rather than simply describe, change, if it were restated so as to address the basic question of collective action theory: Under what conditions do taxpayers and rulers face a collective action problem, and how do they attempt to solve it?

Final Thoughts

Although collective action, political modernization, and electoral democracy are not identical processes, all imply, at least to some degree, that the state and its officials should serve the public good. Contested elections are at the heart of modern political transformations that make this possible, and it is true that elections are rarely an important institution in pre-modern states. But in other respects there are similarities between modern democracies and the more collective pre-modern polities, and these similarities bring into question the idea that we can properly conceptualize a great evolutionary divide between pre-modern and modern political transformations. In many different times and places, and in diverse ways, humans have struggled to build more egalitarian and collective political regimes that provided public goods and channels for commoner voice, and that could make principals, agents, and taxpayers more accountable. We suggest that, for as long as they have built complex societies, humans have found ways to overcome autocracy, although with varying degrees of success, as remains true today. The history of the

collective political impetus in state-building is a long and complex one that we are just beginning to appreciate and understand. For example researchers only recently have perceived that in some civilizations there was cycling between more collective and more autocratic forms of governance that occurred over long phases hundreds of years in duration, for example, as we are beginning to identify in aboriginal Mesoamerican civilization (Blanton et al. 1996) and South Asia. In the latter case, we pointed to phases of enhanced collectivity during Indus civilization, during the Asokan empire, and during the Vijayanagara and Mughal periods, to which we could add the contemporary emergence of democracy in India. Western thinking about political evolution and modernization has not properly acknowledged this kind of complex and richly textured human past. A broader comparison across time, space, and cultures is needed in order for the world community to arrive at a more realistic and less Eurocentric appreciation of how past social systems cast their shadows on the political transformations that define the contemporary world.

Appendix 1

Variables and Coded Data

for the Exit Opportunity Variables

Coded values are in the table, with column headings corresponding to the letters following each variable name. Column 'd' is the exit opportunity total.

External Environment (a)

- 1=geographical barriers to exit are severe (e.g., an island setting), or adjacent territories are decidedly environmentally marginal compared with most areas of the state, would not permit replication of existing agricultural practices, and those that could be used are of lower productivity
- 2=adjacent territories are somewhat more marginal than home territories, in general, and would probably restrict agricultural production somewhat
- 3=adjacent territories would permit the replication of most accustomed agricultural practices.

Alternative Public Goods (b)

- 1=adjacent territories lack socially complex societies where equivalent public goods are produced
- 2=complex societies are found in adjacent territories, but cannot provide equivalent public goods
- 3=potential emigration sites include comparable states that would provide similar levels of public goods

Agricultural Practices (c)

- 1=most households make use of extensive capitalization of agricultural facilities, orchards, or vines
- 2=some households make use of extensive capitalization of agricultural facilities, orchards, or vines, but many do not
- 3=most households engage in rainfall agriculture, horticulture, or other agricultural practices that could be easily and quickly replicated elsewhere

Appendix 1 Values of the exit opportunity cost variables.

	(a)	(b)	(c)	(d)
Nupe	3	3	3	9
Yoruba	3	3	3	9
Asante	2	3	3	8
Bagirmi	3	3	3	9
Kuba	2	1	3	6
Tio	3	3	3	9
Buganda	2	2.5	3	7.5
Bakitara	3	3	3	9
Lozi	1	1	2	4
Swahili Lamu	3	3	3	9
Thailand	3	3	1	7
Burma	3	3	2	8
Bali	3	3	1	7
Aceh	3	3	3	9
Perak	3	3	3	9
Java	1	1	1	3
Vijayanagara	2	3	1	6
Pudukkottai	3	3	2	8
Mughal	1.5	2	2	5.5
China	1	1	1	3
Japan	1	3	1	5
Tibet	3	3	2	8
Egypt	2	2	1	5
Athens	3	3	2	8
Rome	2	2	2	6
Venice	3	2.5	2	7.5
England	1	2	2	5
Ottoman	3	3	2	8
Aztec	3	2.5	2	7.5
Inca	1	1	2	4

Appendix 2

Material and Social Background to the Coded Societies

Nupe (Figure A2-1)

Environment, Agriculture, and Area (14,100 sq. km)

The Nupe state developed in a primarily tropical savannah with marsh zones, mixed with some patches of thick forest. Annual rainfall measures just under 1700 mm and comes mostly from June through September. The main crops and farming techniques are summarized in Nadel (1942: 205-8). The main agricultural system was based on dry farming, using hoes and knives, of millet, sorghum, yam, greens, vegetables, cassava, ground-nuts, and maize. The preferred staples were millet, sorghum, yam, and rice, while cotton and hemp were also cultivated. In the marshlands farmers used flood-water recession irrigation for commercial rice production, along with sugar-cane and bananas. Around the capital, Bida, continuous dry farming to supply the large urban population had depleted soil fertility and animal manuring was used to increase fertility. Livestock keeping included cattle herding, to a minor degree, and sheep and goat (Nadel 1942: 201-3).

Rural Society and Culture

Villages were the basal unit of governance in society, and the village authority structure included a village chief and council of elders (Nadel 1942: 45). The village chief had a number of responsibilities including: appointing of village elders (who aid the chief in all matters of governance); distributing communal lands for hunting, finishing, collecting, and farming; organizing and supporting religious rites; acting as a judge for certain cases; and organizing large-scale work parties for public needs (Nadel 1942: 56).

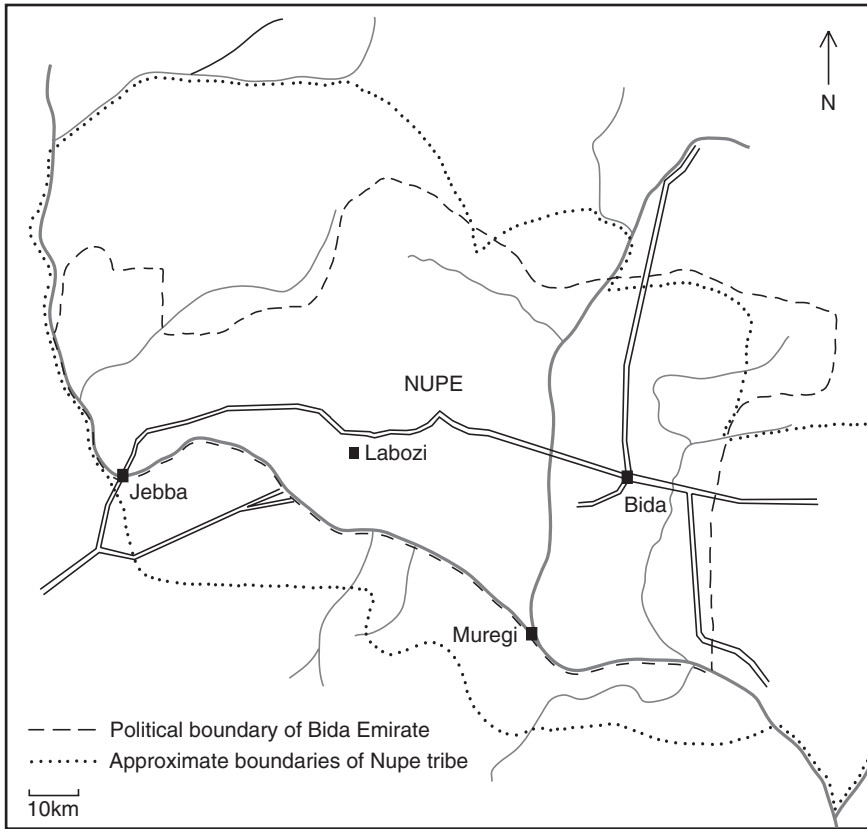


Figure A2-1 Territorial boundaries of the Nupe polity (“Bida Emirate”). Main rivers are shaded

Market System

Our information on the market system is summarized from Nadel (1942: 320-327). Pre-colonial Nupe had a highly developed regional marketing system that was connected with international marketing networks. Nearly every village had a market and a market day, and two systems of periodic markets appear to have operated. In the capital, Bida, there were three large daily markets, one in each section of the city. Furthermore, there were two smaller daily markets and a night market that focused on kola-nuts and prostitution. Much of the market system seems to have focused on the supply of the urban center of Bida, and the system may have been organized around a series of feeder markets and relay stations situated to efficiently funnel commodities into the city. These market places also had permanent stalls and professional sellers or brokers (Nadel 1942: 330), indicating a comparatively high degree of commercialization.

Geography

Nupe can be divided into four territorial subdivisions (Nadel 1094: 115). At the center of the system is the capital, Bida, which was a separate administrative district. In addition to the capital, the regions of Beni and Kyedye formed the core of the Nupe state. Beyond the core was a ring of more autonomous districts with their respective centers and villages, and outside the boundaries of the state were conquered tributary domains. These vassals included the Gbari, Gbira, Kamberi, Kakanda, Yagba, Bunu, and other Nupe peoples (Dibo and Ebe). Located to the south was the independent Yoruba state.

The primary central places appear to have been Bida the capital city and several secondary centers (towns) ranging from 800 to 3,000 inhabitants. These settlements, in turn, were surrounded by villages and village satellites. Nadel (1942) does not report in detail on the organization of towns or Bida. The population estimate for the Nupe capital, Bida, at the time of British conquest was 60,000 people. The city covered approximately 30 square kilometers and was encircled by a city wall and included a large Nupe majority and a number of minority ethnic enclaves. Secondary officials and fief lords resided in the capital, Bida, and used slaves or serfs who lived in their territory to conduct their affairs in that territory, including the collection of taxes (Nadel 1942: 117).

Population

The population estimate for the Nupe state just after the British took over is 172,000 (Nadel 1942: 10), however emigration to the south was common during the colonial era and many individuals may have migrated before the British census (*ibid.*: 10). Based on this population estimate, the population density of Nupe is about 12/ sq. km.

World-Economy Linkages

Nupe acted as an intermediary state in the pre-colonial slave trade. Slaves were acquired by raids to the north and sold in the markets of Bida and in markets located to the south of Nupe (Nadel 1942: 103).

Yoruba (Figure A2-2)

Environment, Agriculture, and Area (46,500 sq. km)

This is a tropical area with ca. 1800mm of annual precipitation along the low swampy coastal margin, but decreasing to 800mm in the northern savanna area. The Oyo polity spanned the ecotone between the Guinea forest to the south and the

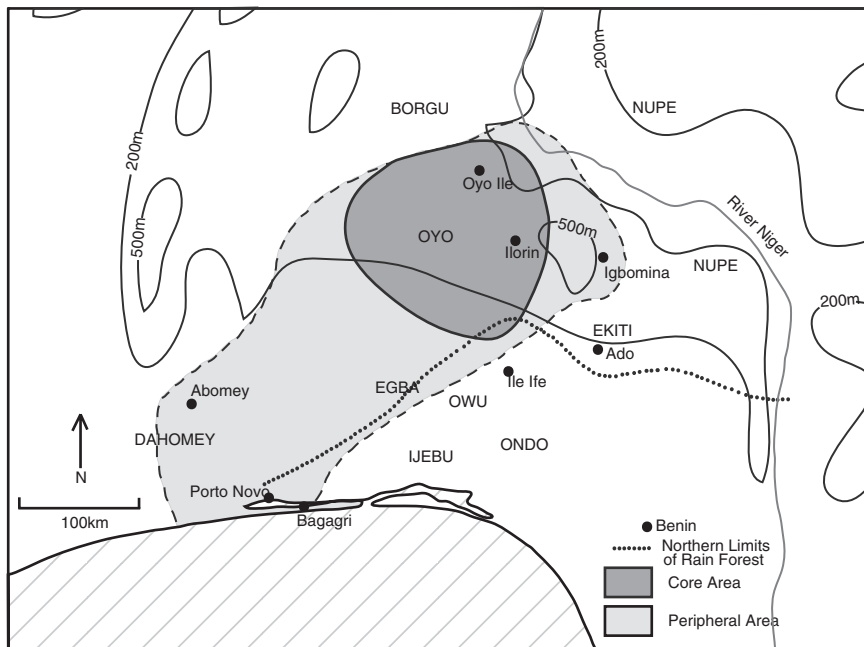


Figure A2-2 Approximate core and periphery limits of the Yoruba polity (Oyo Empire)

savanna to the north, although the capital was well north of the rain forest and most of the state’s territories and its highest population densities were in the savanna, a zone of plains and low ranges between 300 and 600m asl. In the savanna, millet and maize were basic crops, while, more to the south, root crops, including yams and cassava were cultivated, along with oil palm, kola nut, pepper, cotton, and plantain. Multicropping was combined with a long field rotation (Ojo 1966: 61-2), a farming method that was somewhat more intensive than most swidden systems, but this is still not intensive agriculture. Irrigation and slope terracing were not done (ibid.: 65-67). The iron hoe was used, but not the plow. Animal keeping was limited owing to the tsetse fly, but there was some trade of food products for animal products with Fulani groups in the north (Law 1977: 203).

Rural Society and Culture

The settlement pattern was probably more dispersed before the wars of the 19th century (Law 1977: 10), but even during the earlier period many rural settlements may have served primarily for temporary agricultural use, while households lived most of the time in towns. Households and lineages provided most of the organizational fabric for rural communities, but some inter-lineage cooperative activities are

mentioned (Law 1977: 203). But formal leadership positions seem contingent on lineage strength, and communal architectural features do not seem to be present. Rural standard of living might have improved during the focal period owing to a kind of trickle-down from the successful slave trade and other long-distance trading of the palace and the wealthy merchants and chiefs (e.g., Law 1977: 228), but meat was in short supply owing to local environmental factors (Kochakova 1978: 497).

Market System

Overall, the economy appears to have been somewhat commercialized, especially in areas along the major slave-trade routes (Hodder 1969: 26-31), where European goods were widely available (*ibid.*) All towns had market places (Law 1977: 207) usually located in the center of town opposite the palace. Important market towns are mentioned, in addition to what appears to be a major market at Oyo (Krapf-Askari 1969: 100), such as Ogodo, at the Nupe-Yoruba boundary, which was important in the slave trade (Law 1977: 121, 211). Pottery and iron-working displayed household specialization or part-specialization, as did cotton cloth, and Oyo Ile was an important center of cloth production and bead-making (Law 1977: 204, 205), but there was a comparatively minor degree of household dependence on purchased commodities, overall, and there were attached craft specialists (e.g., *ibid.*: 206; Peel 2000: 516) implying a weakly-developed commercial economy apart from the international trade.

Geography

The heart of the polity was the capital Oyo Ile. An additional group of adjacent towns formed a “metropolitan” core area (or “Yoruba proper”). The residents of these towns spoke the Oyo dialect and owed “direct allegiance” to the *Alafin* (ruler). Polities in this metropolitan region all claimed descent from Ile Ife and recognized Oduduwa’s, and hence, Oyo’s, primacy. Yoruba-speaking (and some non-Yoruba) conquered tributary groups were located north, south, west, and east of the core zone, such as Egba. These towns recognized the authority of the *Alafin* to a lesser degree or were non-Yoruba peoples such as the Ewe-speaking Dahomey or some Nupe south of the Niger River (from Law 1977: chapter 8). They formed a periphery (from Law 1977: 85-90 and chapter 8). Benin and other Yoruba polities south-east of the empire were independent.

Urbanism was a key feature of Yoruba culture and has a deep history; most people identify with a town rather than region or village (Ojo 1966: chapter 5; Peel 2000). Based on an early description, Oyo Ile (“Old Oyo” or Katanga) was surrounded by an earthen wall 24 km in circumference and 6 m high (Ojo 1966: 108). This 1826 description would imply a settlement of 35-40 sq. km (Peel 2000: 512), of which the palace occupied 26 ha. Even at a low estimate of 15/ha, this would

imply a population of 55,000 (at 50/ha 185,000!), and it was estimated at 50,000 just after the focal period (Lloyd 1971: 13). Important chiefs and their followers lived in compounds averaging about 50 persons (Law 1977: 63), grouped together into wards under the authority of an important chief (*ibid.*: 64). The city had three zones, the king's palace, wards occupied by members of the royal lineage, and a zone of lineages of free Oyo of non-royal lineage (Law 1977: 64). The usual Yoruba pattern was a central area composed of palace and market with main roads radiating out from this center (Krapf-Askari 1969: 50, *passim*). Tollbooths for tax collection were found at the intersection of the roads and the city walls. Secondary towns may have had between 8,000 to 10,000, with the largest secondary center at 20,000; smaller towns had populations of ca. 1000 (Law 1977: 10-11).

Population

Lloyd (1971: 2) indicates that this was (and is) a densely-populated region. He points to a population of 5 million in the area previously constituting the Oyo empire, which would be approximately 100 per sq. km. This figure appears too high, but might actually be lower than the population density prior to the upheavals of the early 19th century, which resulted in the abandonment of the capital at Oyo and other northern centers.

World-Economy Linkages

This was an important zone of world-economy exchange at various scales:

- (1) World-Economy Circuit. Slaves were sold from the Hausa area and elsewhere internally to Yoruba slave owners and then to the Atlantic slaving system, peaking in volume in the late 18th century (although the Portuguese were trading on the coast as early as the 16th century). Intervention in coastal slave trading by expansionist Dahomey in the early 18th century threatened Oyo access to the coast and brought Oyo invasions and military control of Dahomey and the establishment of Yoruba colonies at Porto Novo and other southern areas (Law 1977: 221, 223). Imported European goods included iron bars, cloth, cowry shells, rum, and tobacco, and, mostly later than the focal period, firearms and gunpowder (*ibid.*: 203).
- (2) Macroregional Exchange Circuit. Kola nuts traded north into North Africa from forested zones represent one important good in a more localized African world economy, as did the trade of horses and horse accoutrements from areas north into Yorubaland, where the tsetse fly made it difficult to maintain successful breeding in some areas (Law 1977: 184). Hides, and cotton cloth, silk, and copper were also imported from the north, and salt was moved from coastal sites into the interior, along with European goods (*ibid.*: 208-17).

- (3) Interregional Exchange Circuit. Exchange between adjacent Yoruba polities (e.g., Benin) seems not to have been highly developed. Trade to northern groups was important and involved the re-export of imported European goods for slaves, most of which, in turn, were sold to Europeans (Law 1977: 218, 228). It appears that the larger-scale world system exchanges were more important than local exchanges, overall. Slaves were the only Yoruba good that Europeans wanted (*ibid.*: 224).

Asante (Figure A2-3)

Environment, Agriculture, and Area (161,000 sq. km)

This estimate for area is from Wilks (1975: 80), and includes the marginally-incorporated outer peripheries. The more directly-controlled area was 96,000sq. km including a metropolitan region (16,000sq. km), a southern inner periphery

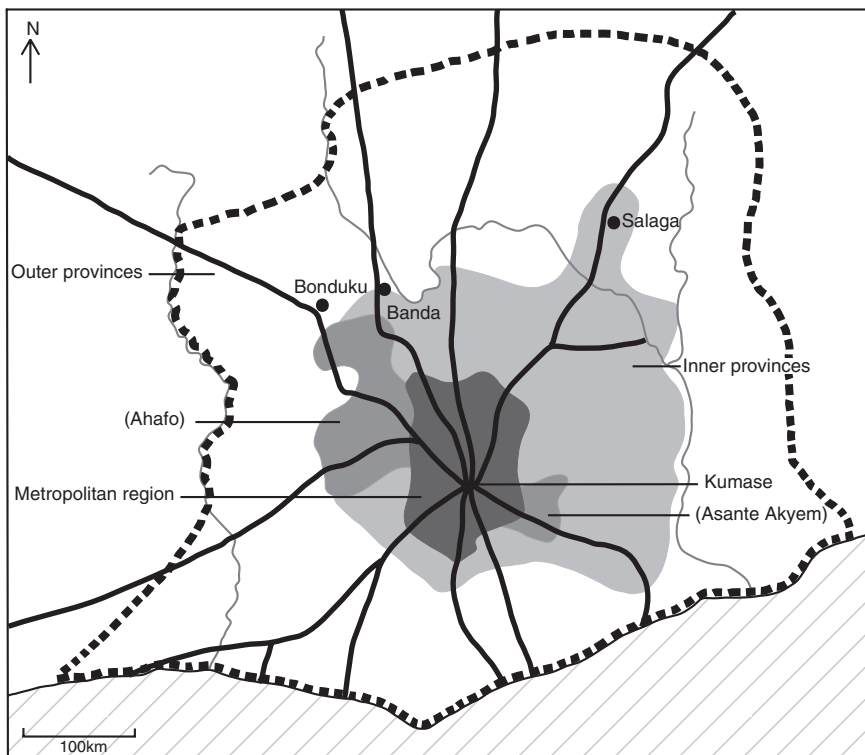


Figure A2-3 Greater Asante in the early 19th century. Modified from Wilks (1975: Figure 5). Dark lines are major roads from Kumase.

(32,000 sq. km), and a northern inner periphery (48,000 sq. km). The larger figure includes all loosely-affiliated tributary provinces that were highly autonomous but paid tribute. Most of the territory of the Asante state is a dissected, heavily forested plain with some low hills usually ranging from 150 m to 650 m asl. This is a tropical area with annual rainfall of 1300 mm to 1800 mm.

Agriculture involved a horticultural intercropping of vegetable domesticates, especially yam, plantain, cocoyam, and cassava; grain crops, including corn, millet, and rice, were less important (McCaskie 1995: 27; Wilks 1993: Table 3). An allusion to long fallow cycles (McCaskie 1995: 31; Wilks 1993: 46) suggests a production system similar to slash and burn horticulture, but there is evidence for production intensification in the vicinity of the capital Kumase, including pig “nurseries” and continuous (two crop per year) cultivation of root crops and corn (McCaskie 1995: 31; Wilks 1993: 47). The technology of agricultural production remained simple through the 19th century, including the hoe for cultivation (McCaskie 1995:26). Sheep, fowl, pigs and goats were kept but were not of great nutritional importance (ibid.) McCaskie (1995: 29-30) and Wilks (1993: 54-5) indicate a population density well below carrying capacity for the 19th century, and a food production system that provided adequate food except during the civil wars of the 1880s. The state had little involvement in agricultural production (Wilks 1975: 668).

Rural Society and Culture

Rural settlement was in villages, but matrilineages played a role in rural social organization, for example, land was inherited through one’s mother, or use was granted by lineage heads (Arhin 1983: 472). Villages were governed by a council of matrilineage heads, one of which (*odekuro*) was the village head and village representative to higher officials (Wilks 1975: 666-7). Originally, rural houses were single-room, free-standing, but these were gradually replaced later in the 19th century by houses consisted of rooms arranged around a square or oblong courtyard (in the more prestigious style of the capital) (Wilks 1975: 96), which we take to indicate an increased rural standard of living.

Market System

McCaskie (1995: 35) describes a system in the capital in which the main food goods circuit involved the provisioning of the offices of the *asantehene* and other state operatives (and their guests), that operated largely as a system of tribute combined with the production of rural estates owned by elite families that supplied much of their food needs. Hence, market exchange was of lesser importance in the capital’s economy. The main Kumase market place, the *dwaberem*, located on the west end of town, across

town from the palace, “had no permanent stalls or fixtures, because the space itself was often commandeered for other purposes by the state ... its principal attractions were imported luxury goods” (McCaskie 1995: 35). Rattray (1929: 130) mentions weekly markets in a secondary political centers, and the following places are identified as important market towns in several sources: Bonduku, Salaga, Banda, and Ankase.

Geography

A well-developed core-periphery structure is evident. Wilks (1975: 46, *passim*) distinguishes between metropolitan region, inner provinces, and outer provinces (altogether, “Greater Asante”), and we add to this the area immediately around Kumase (here called the inner core), with a roughly 8 km radius from the capital, or 200 sq. km, containing numerous large villages and intensive agriculture distinct from other rural areas (McCaskie 1995: 33). The capital and inner core were the heart of a metropolitan region that extended up to 98 km from Kumasi (6 to 12 travel days), and included the new districts of Ahafo and Asante-Akyem, colonized under state sponsorship by “unfree” persons (slaves), with a large portion of the production going to the chief (Wilks 1975: 52). An inner periphery of subject provinces extended up to 300 km from Kumasi (1 month travel), and the outer provinces (tributary provinces, ruled indirectly) were 5 to 7 weeks travel from the capital (we get these figures from Wilks 1975: Table 3, p. 61). The acephalous societies of the savannah, beyond state limits to the north, were a source of slaves (McCaskie 1995: 96). The Gold Coast states were only weakly integrated and were ceded to the British in 1831 (Wilks 1975: 53, 61).

By the early 19th century the capital (Kumase) had a population of 15,000 to 25,000 (Wilks 1975: 93), and 40,000 by 1860 (*ibid.*: 374), with nearly 80 wards (*ibid.*: 378). The larger houses of officials, with a *dampan* or open space for doing state business in the front, had up to 30 to 40 rooms and housed 50 to 250 persons (Wilks 1975: 381). Kumase had undergone considerable urban renewal and planning of a street system (*ibid.*: 375). Its function was almost entirely the provision of government (Wilks 1975: 379), in fact, the main reason to move to the city was to obtain a government office (McCaskie 1995: 35; Wilks 1975: 374). The palace was on the east edge of town, while the main market/assembly ground (*dwaberem*) was on the west. Another assembly ground was adjacent to the palace. The latter brought ruler, officials, and people together for various formal and informal occasions (Wilks 1975: 383). Raised earthen platforms also provided places for ruler appearances at festive occasions (*ibid.*: 384).

Population

Total population is estimated (from Wilks 1975: 93, 127, 243) at approximately 1.6 million, although the population size of the northern tributary areas is difficult

to estimate. This gives an overall estimate of about 10 per sq. km. The Metropolitan zone had an estimated 500,000 people and a density of 31 per sq. km.

World-Economy Linkages

By the 19th century, even though the slave trade had declined, long-distance commerce continued to be an important means for the accumulation of wealth, including the northern trade, exporting kola nuts, and a southern trade in cloth and European goods (McCaskie 1995: 51-2). The trade north, which grew substantially during the early 19th century, exported kola in exchange for slaves, cloth, livestock, and butter, while gold and slaves were exported south, in exchange for European imports and salt (Rattray 1929: 109). Asante's location between the coast and the savannah polities to the north provided advantages for the control of trade, as well as for political reasons, namely the control of the flow of guns from the coast to northern groups such as the Gonja (Wilks 1975: 20).

Bagirmi (Figure A2-4)

Environment, Agriculture, and Area (the core is 40,000 sq. km, and the tributary zone is another ca. 70,000 sq. km)

Bagirmi is located in the east-central Sudan, a region that extends from the southern reaches of the Sahara desert, north of the coded polity, to more moist climates to the south. Hence, it exhibits a range of climate types from subdesert to Sahel, dry Sudan, moist Sudan, and Sudano-Guinean, and this variation is reflected in the diversity of human adaptations, ranging from camel pastoralists north to cereal cultivators in the south. Bagirmi was one polity in a region, the Chad Basin (around Lake Chad), covering some ca. 2.5 million sq. km, and representing the dry Sudan to sub-desert portion of the east-central Sudan climate zone. Here, a brief rainy period (July-August) punctuates an otherwise dry and hot climate, with the driest and hottest period (over 100F) during April and May.

The Bagirmi polity was located southeast of Lake Chad in the area between the Shari and Batha Laiti Rivers. Here annual rainfall averaged from 450 mm in the north to 900 mm south, with a high degree of year-to-year variation (Reyna 1990: 80). The Bagirmi core zone was surrounded by a zone of allied polities, and these were surrounded by a zone of predation where slaves were taken. The core zone is a largely flat plain surrounded by low mountains north and east. This was a dusty dry area largely devoid of vegetation in the dry season, but coming alive with vegetation during the wet season.

The primarily rainfall-based agriculture was highly risky owing to unpredictable precipitation (Reyna 1990: 80), compounded by the near absence of any intensification

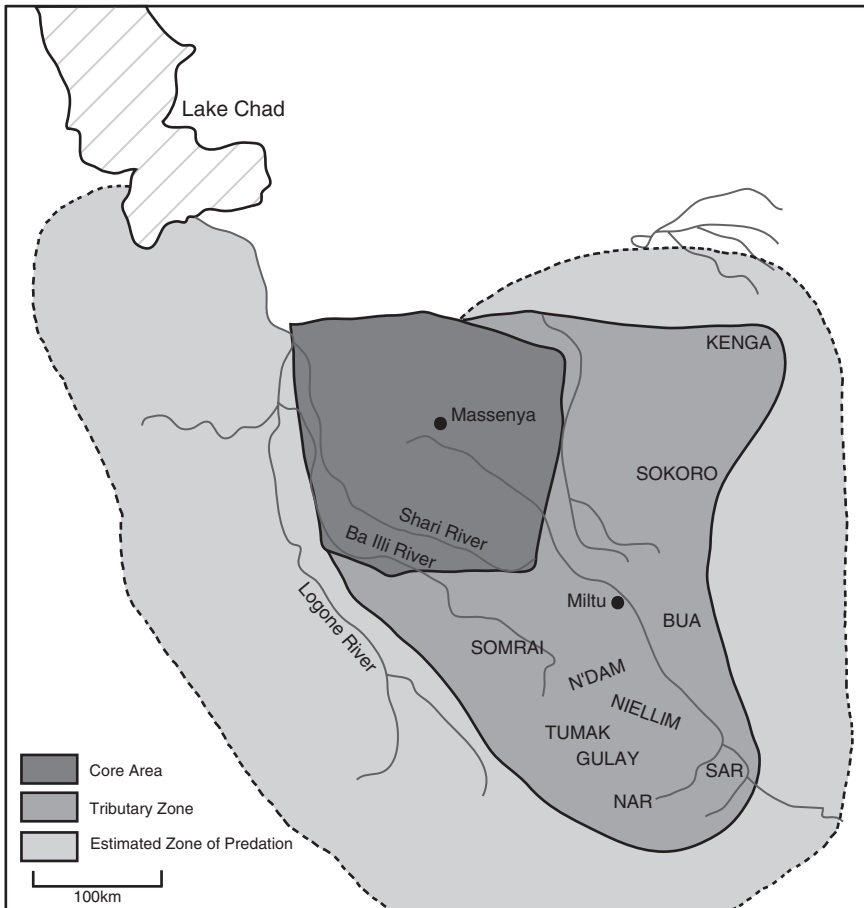


Figure A2-4 Approximate core and boundary zones of Bagirmi. Modified from Reyna (1990: Map 3.1).

strategies such as landscape modification to retard erosion and retain moisture (Reyna 1990: 81, *passim*). However, households did cultivate drought-resistant millets and sorghums in multicropped combinations that helped mitigate unpredictable rainfall amounts, and some flood-recession irrigation was practiced (Reyna 1990: 83).

Rural Society and Culture

Villages of several hundred people were basic units of rural settlement (Reyna 1990: 62), usually made up of patrilocal extended households (*be*) headed by males who inherited rights to land (*ibid.*: 61). Groups of agnatically related males comprised

village subdivisions, and each such group, as well as the village as a whole, had a village official (*ngar*). Descent appears to provide the major organizational fabric of villages, but otherwise there appears to have been little in the way of social capital in the village communities. Villages, in turn, were included as estates given to high officials; hence each household had a “patron” in the form of this official (*ibid.*: 97). This implies a strong vertical emphasis of organization from household to officials rather than an extensive horizontal integration of households in communities.

There were also temporary farming hamlets, some of which were composed of slaves working the land of important officials and thus were something like plantations (Reyna 1990: 63). Arabs and Fulani were seasonal transhumants who lived part of the year in villages and part in camps located near Barma (ethnically Bagirmi) towns or villages, and emphasized animal keeping while Barma emphasized grain production (*ibid.*: 64-6). Rural farming peoples evidently were quite poor (e.g., *ibid.*: 119).

Market System

Reyna (1990: 38-9) points to the weak development of regional-scale markets and a pervasive pattern of mixed-economy households that did some grain production, some animal herding, and some craft production, although it sounds like some finished craft or industrial products were coming in from long-distance circuits, and what appears to be semi-specialized cotton production was found in many households (*ibid.*: 38, 58). Taxation in kind meant that state officials didn’t have to depend on market purchases, which depressed the growth of a commercial economy (*ibid.*: 133). However, Barma towns and some large villages had periodic (weekly) markets between which merchants traveled; the major commodities exchanged were pastoral for agricultural products (*ibid.*: 67).

Geography

Bagirmi was located just south of the desert zone and its Teda and Daza camel pastoralists. To the south, in the wetter grain-producing areas, there were small largely acephalous polities lacking states. The Bagirmi polity is described as having a core zone where the state had authority, an inner periphery of indirectly-ruled vassal polities (“tributary regions”), and an outer periphery described as a “predation zone” for slave capture, but this area was not directly controlled from the capital Massenya (Reyna 1990: 67-8). Cities and towns functioned largely as administrative centers (Reyna 1990: 61). Massenya was the major 19th century city, with a population of 25,000 in the 1850s (*ibid.*: 61). The ruler’s palace was a prominent feature, surrounded by a high wall of fired brick (*ibid.*: 61), and each secondary city

also had a ruler's palace (*gur*) each facing a mosque. Between the palace and the mosque was an open space used as a market (*ibid.*: 62).

Population

Reyna (1990: 128) estimates a population of between 40,000 to 60,000 persons for the core zone, indicating a very low population density of around 1.5 per sq. km (*ibid.*: 79).

World-Economy Linkages

A persistent slave-trade circuit dating from at least CE 800 involved a succession of states around Lake Chad and in other parts of east-central Sudan. Slaves were captured principally from adjacent small polities and the acephalous (and non-Muslim) farming groups to the south, and while some were kept for agricultural production or other purposes in the polity, most were sold into the trans-Saharan trade (e.g. Reyna 1990: 28-30, 39). The trade had a north-south segment and an east-west segment and was carried out by "desert specialists" who could move products across desert expanses (*ibid.*: 39). In addition to slaves, the trade involved kola nuts traded to the north from forested areas south, while salt, dates, and animals came from the desert. Cloth, leather, and metal also moved through the east-west circuit (*ibid.*: 38), and Bagirmi households were a source of indigo-dyed cotton cloth that was exported (*ibid.*: 53).

Kuba (Figures A2-5 and A2-6)

Environment, Agriculture, and Area (ca. 17,800 sq. km)

The Kuba polity was located in the southern extension of the Great Equatorial Forest, and the region was mostly forested except for large intercalary savannas. Large rivers (the Kasai and Sankuru) border the territory west and north, and other smaller rivers flow through the territory. This is a tropical area with only a brief (June and July) dry season and two wetter periods. Traditional agriculture included two field systems, one a swidden cut into high forest, where plantains, beans, and yams were cultivated, the other in savanna fields where sorghum or millet were rotated with beans and voandzeia (Vansina 1978a: 92). Oil and raffia palms were also planted; the latter were an important source for weaving, palm wine, building materials, and grubs (*ibid.*: 173). A third type of field is an infield near the dwelling where yams, gourds, and medicinal plants were cultivated (*ibid.*: 93). Chickens, hogs, and goats were also kept, but not carefully herded. Land was plentiful while population density was low (*ibid.*: 94).

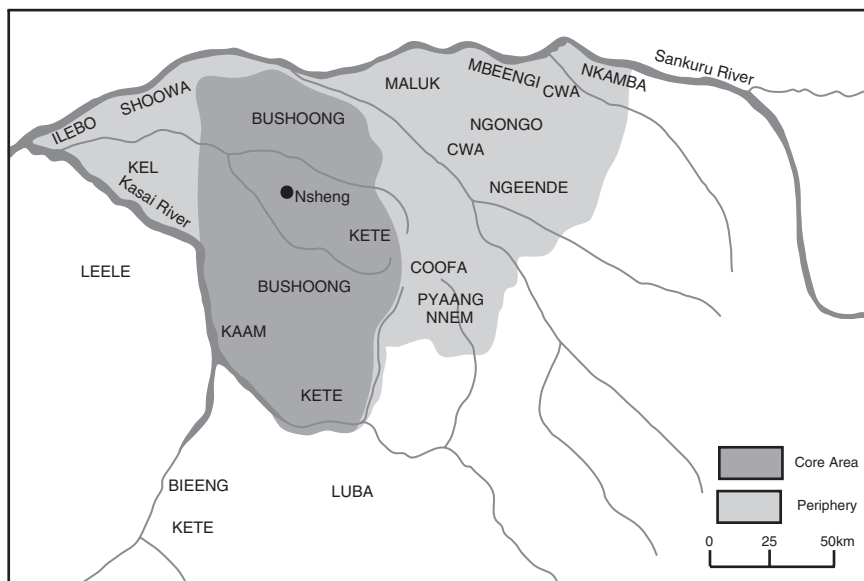


Figure A2-5 The Kuba capital (Nsheng) and selected ethnic groups making up the Kuba kingdom. Modified from Vansina (1978a: Map 2).

During the period of the prominent state-innovator Shyaam, and after him, an agricultural revolution of sorts is detectable, based, in part, on the adoption (beginning well before 1680) of high-yielding Native American cultigens (Vansina 1978a: 175). This included sweet potato, tobacco and chili peppers, but especially maize (which could be double or triple cropped or placed in rotation with nitrogen-supplying beans, possibly also introduced), peanuts, and cassava (*ibid.*); correspondingly, the native plantains and millet declined. Only the Kuba, of peoples in this area, adopted double or triple cropping, and Vansina (*ibid.*: 176) estimates a doubling of agricultural output from the period of state formation up to the focal period.

Rural Society and Culture

The major units of rural production appear to have been nuclear families or some kind of extended household, although some activities involved cooperation at the village level; matrilineages had little role in community life since male heirs dispersed after marrying (Vansina 1978a: 174). Leadership of villages was provided by councils of elder males and two spokesmen (one from each half of the village, a moiety system) who served as village administrators side by side with the council (*ibid.*: 94). The village council (*malaang*) and senior headmen gave the village a primarily corporate identity (rather than one based on descent), and with the moiety system of governance, villages appear to have had a considerable degree of social capital, including

village granaries (*ibid.*: 179). As such, the village became “the cornerstone of sociopolitical organization” (Vansina 1978a: 111, fn 14). Vansina (*ibid.*: 169) argues that the standard of living of ordinary persons increased after state formation.

Market System

Local-level occupational specialization and exchange appear to have been minimal, excepting for some partly-specialized fishing, iron smelting and smithing, pottery-making, salt making, woodcarving, bark cloth making, and raffia weaving (Vansina 1978a: 93, 95). Iron working required some specialized knowledge, but the other crafts were widespread in the population, although, at the highest levels of competence, crafts producers supplied primarily the capital and palace and many of them lived in the capital and were full-time specialists (*ibid.*: 183). Weaving was done even by some residents of the palace (*ibid.*: 183). Kuba sculpture and raffia cloth were elaborately developed and widely known beyond its boundaries and are recognized by modern art historians (*ibid.*: chapter 12). Markets “existed everywhere” and appear to have illustrated “central place theory” in their distributions and market days (Vansina 1978b: 363); market periodicities ranged from 3 to 6 days (Vansina 1978a: chapter 10, fn 86). Food for the capital center came, in part, as market produce (*ibid.*: 138, 169). Cowries were the main currency, and even commoners had cowries because “the effects of [international] trade had reached every village” (*ibid.*: 186).

Geography

A core zone included the territory of the dominant Kuba chiefdom of Bushoong and five closely-related ethnic groups (“central Kuba”), in an area of ca. 8,000sq. km; a periphery composed of ten other Kuba groups and other incorporated ethnic groups extended over an additional 9,800sq. km (measured from Vansina 1978a: map 2).

Population

Vansina estimates a total population of ca. 140,000 (1978a: 3) (including 70,000 in the core [*ibid.*: 137]), implying around 8 per sq. km for the polity as a whole. At least six percent of the population were slaves (Vansina 1978b: 369). Kuba means “people of the king,” and is not an ethnic reference. Instead, the polity was made up of many distinct ethnic groups. The central Kuba (made up of 5 ethnic groups) share a migration legend, while 10 peripheral Kuba groups have separate origin traditions. Other groups were part of the polity, Kete, Coofa, Cwa, and Mbeengi

(Vansina 1978a: Table 1). Ethnic groups, in turn, formed chiefdoms, some of which were multi-ethnic. The most important chiefdom was the Bushoong, and it formed the nucleus of the polity (ibid.: 6).

Rulers benefited from population growth, from slave imports, and rulers promoted family formation, including early marriage and monogamy, and these seemed to reduce bride wealth costs; all of these measures assured a supply of married males working in the fields alongside their wives (Vansina 1978a: 180-1). The importance of labor rather than land was emphasized by rulers, and their concern is reflected in the annual census required by headmen of the core zone villages (ibid.: 181).

World-Economy Linkages

Probably since as early as the late 16th century, international markets connected the Kongo kingdom with interior groups to the west, with Kicongo serving as a major trading language in this westward area (Vansina 1978a: 187-8). The Bushoong probably were involved in the trade beginning in the 16th century (ibid.: 189). At this time, the Kuba had little to export, and apparently did not export slaves—in fact, they imported them along with a few prestige goods and salt (ibid.: 191). By the 18th century, cowries, beads, and copper were coming in from the international trade (ibid.: 192). Trade increased substantially in the 19th century along a southern route to Luanda, including an influx of slaves and commodities such as cloth, while the major Kuba export may have been ivory as well as some Bushoong luxury goods (ibid.: 192, 194). Ivory was produced in the kingdom and the Kuba also were able to serve as intermediaries in the international ivory trade (ibid.: chapter 10: fn 91). Pottery was also a major import; by the 1880s the Kuba had stopped making any (ibid.: 193) (perhaps reflecting the growing intensity of agricultural production?) Craft specialization was not a major feature of this primarily agricultural economy, although an association of elephant hunters developed as the export of ivory grew in the 19th century (ibid.: 194).

Tio (Figure A2-6)

Environment, Agriculture, and Area (77,602 sq.km)

This is a wet tropical area with annual precipitation that varies from a low of 1250 mm per year in the south to as much as 2000 mm per year in the central section of the territory. The kingdom's territory is dominated by flat elevated grasslands, with a few forested areas, and incised by a number of small rivers and the Congo (now Zaire) River. The major geographic feature on the Congo River in the Tio kingdom is the Pool, an area where the river widens and becomes shallow before

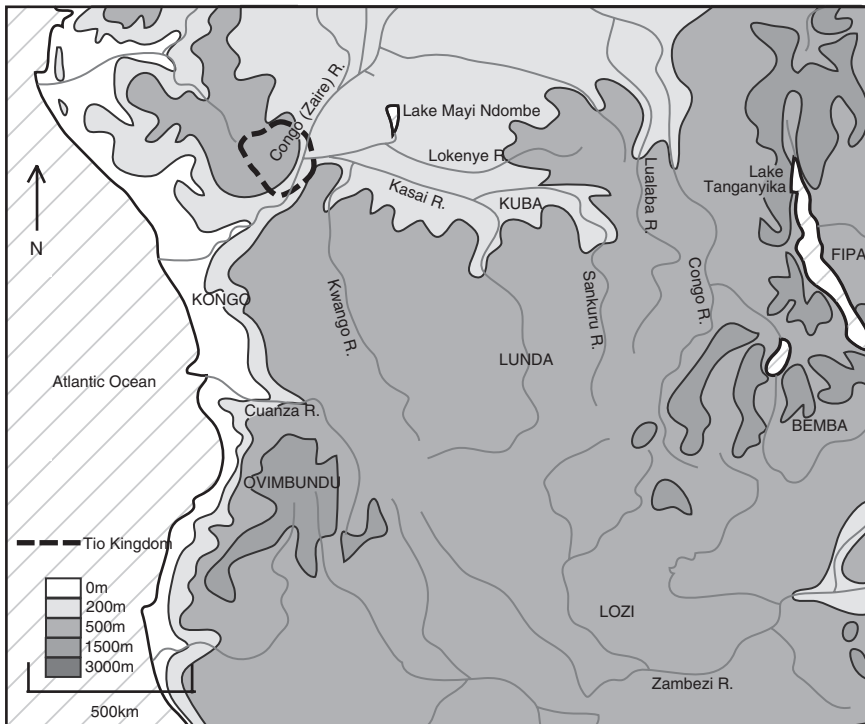


Figure A2-6 Location of the Tio and Kuba polities.

continuing its trip down to the coast. Agriculture in the Tio kingdom consisted mostly of dry farming with the addition of very simple irrigation techniques (Vansina 1973: 5). The only animals raised were chickens, goats, and dogs, while, at the Pool, pigs, pigeons, and ducks were also kept (Vansina 1973: 119). Despite the presence of some domesticated animals, hunting and fishing remained important in the Tio diet (*ibid.*: 121, 128).

Rural Society and Culture

Villages in Tio ranged in size from ten to a hundred houses (Vansina 1973: 72), spatially organized around a central courtyard located in front of the village headman's house (*ibid.*:73), while houses were one room structures constructed of wood and grass. "Each village had a headman, *wookuru* 'the elder'" (*ibid.*: 75). The village headman was responsible for the protection of the people and he led these people in feuds with other villages (*ibid.*: 75), but, generally there is not much evidence of social capital at the local level.

Market System

Overall, it seems that regional marketing was poorly developed, and, while there was some occupational specialization or semi-specialization (in smithing, potting, woodworking, basket-making, tattooing and weaving [Vansina 1973:139-140]), most trade focused on international exchange carried out at a few trading locations. The largest market was the Ntsei market where two markets were held side by side, one a food market and the other presented all other commodities (ibid: 255). The Pool was the hub of the exchange system with several regional markets, and Tio controlled all this trade as middlemen (ibid: 255). The only indication of a periodic market structure is the rotation between the four big markets of the Pool throughout the week (ibid: 265). Most of the trade in these markets was in manufactured and/or non-local commodities. Local foodstuffs were not important commodities and there were few food markets (ibid: 268-269, 304).

Geography

The Tio state did not have a well-developed core-periphery structure. The Pool could be considered a kind of core, with higher populations and stronger connections to international trade. Late in the pre-colonial period, the Pool began to emerge as the economic center within the Tio state and may have gained political dominance if the French had not taken political control in 1899. The capital center (Mbe) was much like ordinary villages, and was not the largest settlement in the polity (Vansina 1973: 74). The largest settlements of the 1880s were Kinshasa (with 2,500-5,000 people), Kintamo, Mpila, Mswata, and Ngampourou (ibid.:74).

Population

The focal period population is not known, but from somewhat later counts, we estimate 10,000 in the pool area plus a seasonal population numbering 4,000 to 5,000 (Vansina 1973: 256). This would imply a population density of about .5-.75 per sq. km (ibid: 14).

World-Economy Linkages

The Tio polity was in a peripheral position relative to the world-economy of the 19th century. They supplied slaves and ivory to European traders in exchange for manufactured goods, especially guns and gun powder (Vansina 1973: 447-50).

Buganda (Figure A2-7)

Environment, Agriculture, and Area (30,000 sq. km)

This is a wet tropical environment (average rainfall ranging from 600 mm to 1800 mm/year), with a topography of rolling plains and low hills, dissected by gallery forests, and averaging 1200 m asl. During the focal period the area was largely anthropogenic grassland with garden areas (Wrigley 1996: 60), with Lake Nalubaale (Victoria) as a southern boundary. Food production was largely horticultural, involving a few annual crops such as maize and beans in an early phase of a garden’s development (Roscoe 1965: 428), but the main crop was the banana (plantain), a perennial that reproduces itself by suckering. Bananas were the staple food and the source of a fermented drink. It was grown in groves that, according to Wrigley (1996: 60) required few labor inputs for production or food preparation (but cf. Robertshaw 1999a: 55-6). Further, plantain cannot be stored, but produces all year. Since most agricultural labor was female (including elite and commoner females) (Roscoe 1965: 426), males could be away from their households for long periods (for example, doing state labor or fighting in wars) without substantial reductions in food production (Kottak 1972: 356).

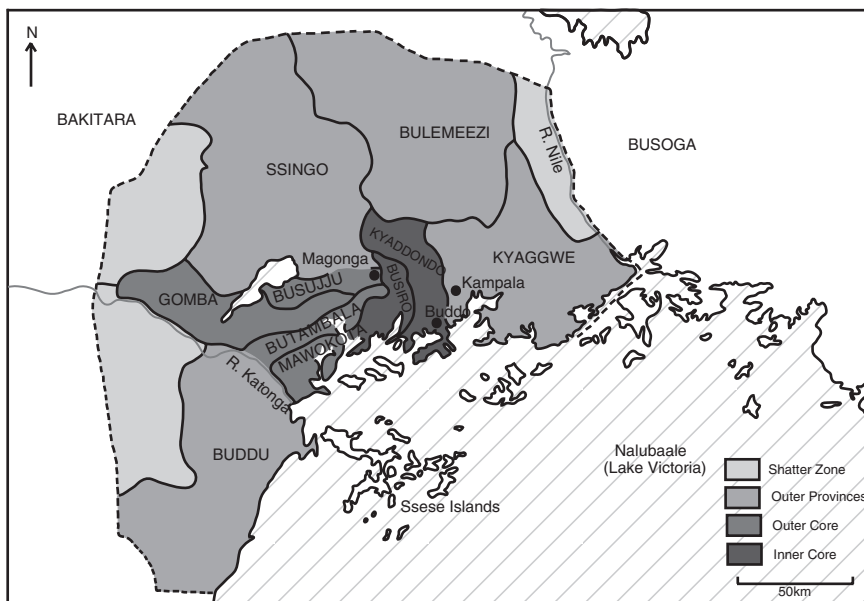


Figure A2-7 Zones of the Buganda polity. Modified from Wrigley (1996: Map 2).

Sweet potatoes served as a reserve for poor banana production years; yams were also grown, along with finger-millet, sorghum, maize, sugar-cane, and cocoyam (taro) (only finger-millet, one kind of yam, and sorghum are African domesticates [Wrigley 1996: 61]). Famines were rare and land shortage was not a problem (Wrigley 1996: *ibid.*: 62), but the food complex is low in protein (Kottak 1972: 356), and was supplemented by beans and groundnuts (peanuts) (a domesticate imported from the New World), goats and chickens. Livestock do poorly here owing to tropical diseases (Robertshaw 1999a: 53), so cattle had to be brought from drier areas, and dried fish could be purchased in the market (Roscoe 1965: 439), but commoners might go “several months without any meat at all” (*ibid.*: 439). There is no evidence of agricultural intensification or innovation accompanying state formation in the late 18th and 19th centuries (Wrigley 1996: 252).

Rural Society and Culture

Commoners (*ba-kopi*) lived in scattered house compounds in conical-shaped round houses covered with a thatch roof (Roscoe 1965: Figure 1; Wrigley 1996: 62). Basic house layout and materials were shared in common by commoners and high officials, including the king, elite houses differing primarily in size (*ibid.*: 376-7). Local chiefs (*mwami*) lived in larger houses, often with slaves (Wrigley 1996: 62), usually with 20-30 commoner households attached to them (Kottak 1972: 358) forming a kind of village community. Feasting served to bind dependent households in a local area to a chief, but dependent households could attach themselves as clients to any chief they chose, as could lower-level chiefs attach themselves to any superior they wished to (Wrigley 1964: 63). Agriculture was highly individualistic, and within communities there was little sharing, cooperation, or institutional structure (*ibid.*: 22).

Market System

The capital was a thriving market (Kottak 1972: 360; cf. Roscoe 1965: 453-4), but, judging from the range of goods offered (Roscoe 1965: 452-7), even the main capital market was like a standard (low-order) market, offering mostly ordinary domestic goods with only a few more costly goods (including cotton). Other market places are mentioned (*ibid.*: 382, 402), but could only be established with permission of the district chiefs (*ibid.*: 456). Markets were found along the border with the Bakitara polity and along the shores of the lake (*ibid.*: 456). Cattle were the standard exchange values, while cowrie shells were often used for the actual transactions (*ibid.*: 456). There is some evidence for occupational specialization

(Wrigley 1996: 61), including *bahima* cattle herders living in edge areas of the polity (Roscoe 1965: 415; Wrigley 1996: 73), and some island groups produced fish distributed throughout the polity (Roscoe 1965: 391). Some iron smiths worked as attached specialists for kings or chiefs, but also sold iron goods in the markets to commoners (ibid.: 382). Potters were specialists who lived in communities apart from others, and the king had his own attached potters (ibid.: 399). The most sophisticated ivory workers were also attached to the king's palace (ibid.: 412).

Geography

Buganda had a history of raids into adjacent polities, including Bakitara (Wrigley 1996: 66), sometimes eventuating in tribute payments to Buganda, including from Ankole, Koki (southwest of the Bugandan province of Buddu), Kiziba (south of Buddu), and Basoga (east of the province of Kyaggwe), who gave cattle and other goods to the Buganda king and chiefs as peace-gifts or tributes (Roscoe 1965: 3-4, 234). We counted as part of the polity, per se, as a periphery, other previously outer "marcher" provinces that were more directly integrated as state districts, including Buddu, Ssinga, Bulemeezi, and Kyaggwe, while an outer core consisted of Mawokota, Butambala, Gomba, and Busujju provinces. Busiro and Kyaddondo (as well as the Ssesse Island fisheries) were an inner core governed directly by high officials and member of the royal family, and presided over by the sacred office holders *mugema* and *kaggo* (Wrigley 1996: 63-4).

In the 1860s, the capital was a well laid-out city (Wrigley 1996: 59), but made of impermanent thatched structures so that kings could move their headquarters every 2 or 3 years for sanitary reasons (Wrigley 1996: 229). The population of the capital in 1862 is estimated at 77,000 (in Kottak 1972: 359). Roscoe (1965: 200) describes the palace enclosure as oval shaped, 1 by 1.5 miles, with the residential part of the capital extending in front of it for 5 or 6 miles and 2 miles on its sides. Between the capital and the lake, the king's wives had gardens. Kottak (ibid.) estimates that secondary (chiefly) centers had populations of around 1,000.

Population

Wrigley (1996: 35) estimates a 19th century population of 750,000 people (or 25 per sq. km).

World-Economy Linkages

This area was relatively isolated from long-distance trade that traversed the Indian Ocean (and that was mediated by port cities on the Swahili Coast), until about 1850,

when Muslim merchants from the east coast arrived, interested in ivory and slave trading (Wrigley 1996: 3). For example, most people wore bark-cloth clothes, and the state was instrumental in encouraging people to produce and wear bark-cloth clothing (Roscoe 1965: 403) so that cotton was rare and was not an important imported prestige good until very late in the focal period (*ibid.*: 60, 233). But a persistent and important process of long-distance interaction of some form is evident in the diffusion to Buganda and other East African areas of several New World and Southeast Asian domesticates that were in extensive use by the focal period, including the key crop, banana from Southeast Asia perhaps 5,000 years ago (Robertshaw 2006). That ancient networks of long-distance interactions have considerable antiquity is also evident in the diffusion of African millets to South Asia by the late 3rd and early 2nd millennium BCE (Possehl 1997). However, Buganda's intensive involvement in the emerging capitalist world system was evidently late and in some ways minimized. The slave trade, for example, was not important here because the kingdom's labor was too valuable and the state was strong enough to keep out slave raiders from the coast (Wrigley 1996: 66-7). In fact, the rapid phase of state formation of the period around 1800 was accompanied by a "massive influx of captured women" (slaves) from adjacent areas (Wrigley 1996: 236), suggesting a labor shortage, as women did most of the agricultural work (offspring of slaves could be incorporated into clans) (e.g., Robertshaw 1999a).

A growing interregional exchange among the Great Lakes populations themselves (e.g., Kottak 1972) may have been more relevant to understanding state formation. Karagwe appears to have been a macroregional port-of-trade mediating water-borne Lake Nalubaale (Victoria) commerce (e.g., Wrigley 1996: 3, 57). Goods exported from Buganda into the Lake area and other interregional trade circuits included bananas, bark-cloth and coffee (Roscoe 1965: 456; Wrigley 1996: 234), while Buganda imported cattle, salt, iron, and hoes (Kottak 1972; cf. Roscoe 1965: 5). The dietary importance of cattle for a largely horticultural banana-based, and therefore protein-deficient, food system (Kottak 1972:356; Roscoe 1965: 439), suggests the possibility for the development of a core-periphery form of interaction with cattle-rich Bakitara (northwest) and Ankole (southwest), but exchange appears not to have involved the kind of intercultural division of labor implied by the world-system concept, as there is little mention of regularized commodity exchanges of cattle between Buganda and Bakitara or Ankole. Ssingoo had markets where cattle, salt, iron, and hoes were obtained in exchange for barkcloth and bananas (Kottak 1972; cf. Roscoe 1965: 5, 456), but the Bakitara often raided here (Roscoe 1965: 249), disrupting trade (*ibid.*: 251), and wars between Buganda and Bakitara were frequent (*ibid.*: 346). In fact, Wrigley (1996: 66) indicates that cattle were more likely obtained by raiding rather than trading (e.g., Wrigley 1964: 18), and the Ankole, Koki (southwest of Buddu), Kiziba (south of Buddu), and Basoga (east of Kyaggwe) gave cattle as gifts to the Buganda king and chiefs as peace-gifts or tributes (Roscoe 1965:3-4, 234), so it is not clear to what degree cattle may have been exchanged through commodity circuits. Slaves were obtained by raiding and warfare (Roscoe 1965: 14). If the 18th and 19th centuries Great Lakes regions was a world-system, it was clearly an emerging one, not highly institutionally developed. Wrigley (1964: 18) suggests that one factor impeding exchange was the paucity of suitable Bugandan export goods.

Bakitara (the polity's location is indicated in Figure A2-7)

Environment, Agriculture, and Area (12,264sq. km)

The polity is a tropical upland located between the western rift valley (with Lake Albert the western boundary) and extending east and south toward lower-lying areas (especially Buganda), at an average elevation of between about 900 and 1200m asl. Annual rainfall is ca. 1000mm coming in two lengthy rainy seasons. The area includes some of the highest volcanic mountains in the Great Lakes region, but most of the area is grass-covered plain, drained by two large rivers, the Kifumba and the Kafu (Roscoe 1923: 3). The politically dominant *Bahuma* (and the royal dynasty) emphasized cattle pastoralism (Roscoe 1923: 1, 117), while farmers (*Baheru*) (called “serfs” by Roscoe) cultivated some coffee and cotton, but the main subsistence crops were plantains (bananas) and millet with a few vegetables (Roscoe 1923: 4). A “serf” could cultivate as much of a chief’s land as he wished and could accumulate large herds of sheep and goats, and even some cattle (Roscoe 1923: 10).

Rural Society and Culture

Rural settlements consisted of agricultural people (*Baheru*) who were the clients of a *Bahuma* family, implying little in the way of any corporate community structure. *Bahuma* were to some degree mobile, frequently moving their herds and *kraals* (cattle enclosures), but the agricultural families were settled and their pastoral overlords tended to keep their *kraals* fairly close by them (Roscoe 1923: 174). House construction was pole and frame with thatch roof (ibid.: 211-214), with houses in a village spaced some distance from one another. No public buildings are mentioned at the community level other than the overlord’s *kraal*, which had some ritual significance (ibid.: 181-6).

Market System

Pastoral peoples bartered animal products for salt, pots, and other needed items (Roscoe 1923: 177), but market places are not mentioned other than a single salt-market on the edge of Lake Albert in a village of specialized salt-producing households (ibid.: 234). *Baheru* did the agricultural production and craft production, including iron-working, wood, pottery, bark-cloth, basketry and salt production (ibid.: 10, 217-38).

Geography

The state's territory was evidently not contiguous, as some small autonomous or semi-autonomous polities were found interstitial to the Bakitara territory. No core-periphery structure is evident. The royal enclosure was moved at the ascension of a new ruler, and at other times, probably limiting any tendency toward core development. The "capitals," consisting of the royal enclosure and enclosures of high-ranking officials surrounding the main enclosure, were moved frequently, and a new capital had to be built for each new ruler. It is not clear what the total population of the capital would have been, but with the diverse officials, palace functionaries, religious figures, wives, and servants of various sorts (Roscoe 1923: chapter 5), the population was perhaps 5,000 (e.g., Kottak 1972: 360).

Population

Roscoe (1923: 2; cf. Beattie 1971: 13) indicates a 1919 population of 102,500, but this followed a period of major disruption of the population just prior to and following British conquest around the 1890s, although it is not clear to what degree the disruption extended to the agricultural population. Roscoe (1923: 2) suggests a pre-conquest population for the polity at its height of 2 million, but this is not a reliable number. We use the 102,500 value, giving an estimated population density of approximately 8 per sq. km.

World-Economy Linkages

Roscoe (1923: 62) mentions the influence of Swahili slave-traders, but it is not clear whether a well-developed intercultural exchange had developed linking Bakitara to the world-economy, or, even to the protein-deficient and more populous banana-cultivators of Buganda, who would have benefited from cattle imports from the cattle-rich Bakitara area.

Lozi (Figure A2-8)

Environment, Agriculture, and Area (ca. 475,000 sq. km)

The core region of the Lozi polity was the flood plain of the Upper Zambezi River at an elevation of 1100 m asl. Rainfall ranges from 500 mm in the southern reaches of the polity to over 1000 mm in the upper drainage of the Zambezi River (Turner

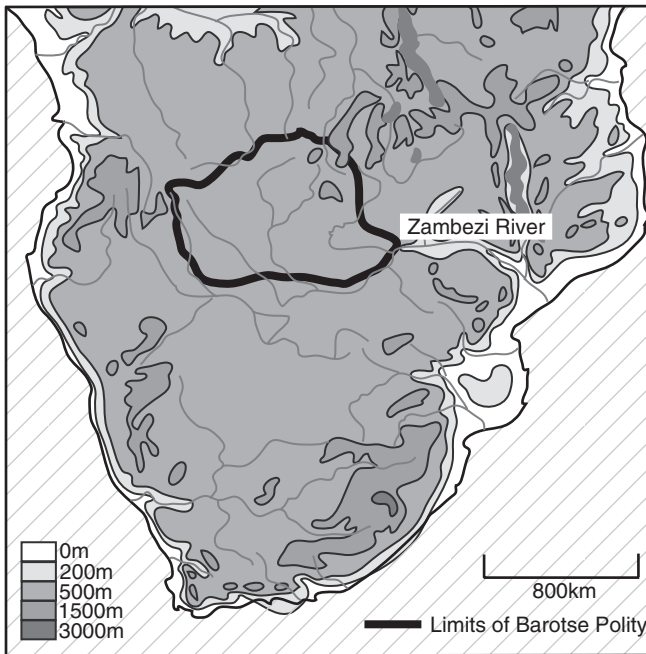


Figure A2-8 Approximate limits of the Lozi (Barotse) polity.

1952: 16), but the key variable influencing agriculture is the annual flooding of the flood plain, an area 195 km by 41 km at its widest, or ca. 7000sq. km. This is a treeless plain that offers possibilities for flood recession and rainfall agriculture and for cattle herding free from the tsetse fly (Prins 1980: 20). The plain floods almost completely (except for a few mounded village sites) beginning in December, and most residents move to temporary residences on the plain margin or in the surrounding forest.

The flood plain is an unusual type of environment in this general region. It floods beginning with the rainy season in December until February-March, fertilizing the garden sites, followed by flood recession agriculture. Hence, Lozi villages were built on mounds in the flood plain, many of which are abandoned for margin locations during the wet season. The plain was also a major fishing site and cattle were herded here seasonally, although cattle were not of sufficient importance to classify Lozi as a “cattle culture” (Gluckman 1941: 21). In some cases, wet-season cattle herding was practiced away from the flood plain, while some plain occupants cultivated gardens in the flood plain’s wet margins (Gluckman 1961: 9). The latter involved the construction of drainage canals. Closer to the flood plain, more continuous cultivation was practiced, but outward into the surrounding forest a swidden system was used (Gluckman 1961: 9). Altogether, given the variety of water and drainage conditions across seasons, 8 different garden types were in use,

and many Lozi cultivated different kinds of gardens in different seasons and in different locations, sometimes involving year-around work especially when fishing, hunting, and cattle herding are figured into household time allocation (Gluckman 1941: Diagram 3; Gluckman 1961: 10).

Rural Society and Culture

Villages, built on mounds in the flood plain, formed a key building block of Lozi social structure (Gluckman 1961: 8-9, 68-70). Rights of ownership of land were carefully defined through (usually) male descent at the village level (Gluckman 1961: 10, 64-5), and villages had headmen charged by the state with allocating land and they served as intermediaries between ruler and land holders (Gluckman 1961: 66). There were village communal ritual practices, work cooperation, and food sharing, even though people were absent during part of the year (Gluckman 1961: 69, 70; Prins 1980: 89-92). Houses were daub and brush walls and thatch roofed (Prins 1980: 47-8). Little is known about changing living standards, although meat and milk were highly regarded and common foods (Prins 1980: 55).

Market System

The flood plain and adjacent drier areas featured exchanges between partially-specialized households, with the flood plain producing cattle, fish, sorghum, maize, and root-crops, while the adjoining woodland populations produced a variety of products, including tobacco, cassava and millet, as well as forest-based craft products such as carved wood (Gluckman 1961: 11). Some part-time craft or other specializations were present, including fishing, hunting, woodcarving, iron working, and pottery (Gluckman 1941: 71), but overall, there is not much evidence for a well-developed market system. Some minor bartering is described, using skins and calico as media of exchange, although these media came into use late (Prins 1980: 108). There was a “limited system of trade” (Gluckman 1941: 23) that does not appear to have involved a market system per se. Exchange of part-time specializations and core-periphery exchange took place by way of reciprocity, barter, trade partners, and through tribute and government distributions (Gluckman 1941: 72-3; Gluckman 1943: 76), all, seemingly, on a more-or-less ad hoc basis.

Geography

From the flood plain core zone, the Lozi expanded into a periphery extending south into the Zambezi Valley beyond the Victoria Falls, north to Balovale, and south of the Kwito River and elsewhere (Prins 1980: Figure 2). This periphery of tributary

groups extended over an area of some 468,000 sq. km. Periphery political organization was minimal until the advent of attacks from outsiders during the 19th century (Gluckman 1943: 13). In the core, the polity had two capitals, one in the north where the ruler resided seasonally, and a secondary capital in the south, reflecting a symbolic north-south division (Gluckman 1961: 23). The northern capital at Lealui was established by Sipopa in 1866; before that, each king established his own capital (*ibid.*: 23). Even though men usually occupied the southern capital's ruling office, it was referred to as "she" while the northern capital was masculine, reflecting one dimension of the symbolic opposition of north and south (Gluckman 1961: 24). A capital's main mounded area was probably about 16ha (implying 3200 people at 200 per ha), but capitals included adjacent mounded areas that were residences of important council members, and Gluckman (1941: 36) estimates the capitals had ca. 10,000 persons total. Construction was primarily thatch and daub. There doesn't appear to be a central-place hierarchy except for the dual-capital system and secondary capitals established in periphery areas such as Sesheke and Libonda, and in other locations guarding the periphery marches (Gluckman 1961: 25).

Population

The estimated population of the total polity, called Barotseland, according to an early Colonial Period census, was 295,741, with a population density estimated at 2.3 per sq. km. The core region's density is estimated at 6 per sq. km, with a population of 73,400 (estimates from Gluckman 1941: Chart 1). Immigration fueled population growth in the core. Rulers brought in "followers" from distant provinces who became "loyal dependents" (*ibid.*: 32), especially in areas newly developed through state-sponsored drainage canals (Prins 1980: 58-70). The growth of the flood plain economy was based in part on the importation of labor, by ruler, and also by ordinary households, especially young women and children brought in to serve as household servants (Gluckman 1941: 91; 1961: 13). Colson (1969: 30) refers to refugee groups that came into Barotseland after 1864 to seek safety, making Barotseland a "melting pot."

World-Economy Linkages

Portuguese, Arabs, and other slavers from the east and west coasts were in the area early in the 19th century (Gluckman 1961: 5). The polity evidently was far more isolated before that time, although some external ties are evident, for example, New World cultigens were in use, including maize, cassava, tobacco, and sweet potatoes. Just after the focal period, during the early 20th century, the region was even more connected to the world system with the growth in exports of minerals and timber (Gluckman 1941: 1-2). During the latter 19th century, rulers did have increased involvement in interregional trading of cattle, ivory, and slaves for European and

other trade goods (including cloth), and this benefited rulers, who held a near-monopoly on such transactions (Gluckman 1941: 21, 79). However, unlike other African areas, international trade, including the slave trade, never was very important here (ibid.: 23, 75). The relative isolation of Lozi from the world-economy is indicated, we think, by the fact that until the 19th century the periphery tributary areas had little political organization emanating from the capital because such organization was not necessary. It was elaborated on in the 19th century because of growing external military threats and an increased trade volume (Gluckman 1943: 13).

Swahili Lamu (Figure A2-9)

Environment, Agriculture, and Area (360sq. km)

Only roughly 360sq. km of island territory and adjacent mainland was directly controlled by Lamu, but the larger loosely-integrated area, or “conurbation,” in Horton and Middleton’s terminology (2000: 136-7, Map 6.1), included the main town, its mainland farms, and the territories of adjacent economically involved but politically independent groups such as Pokomo and Oromo, and this nodal area may have totaled some 6,000sq. km, although this is not an accurate figure and includes areas at times controlled by Pate. As in the rest of the Swahili area, this is a coastal belt with offshore islands. The Lamu archipelago is made up of three main islands close

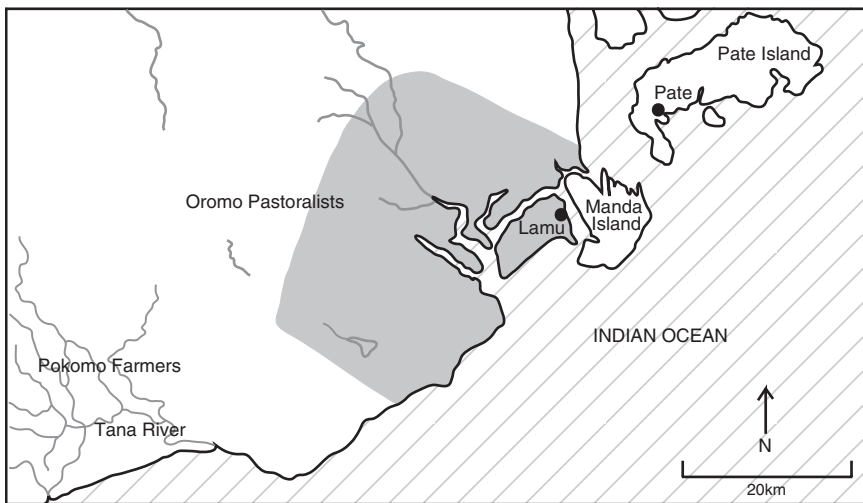


Figure A2-9 Approximate limits of the Swahili Lamu polity. Modified from Horton and Middleton (2000: Map 6.1).

by the mainland, Lamu, Manda, and Pate, although only Lamu and Pate had significant polities, and only Lamu has a sheltered port accessible at all tides by deep-draft boats. The hinterlands of the archipelago polities extended from the delta of the lower Tana River to the south, then north some 100 km. The Tana River is the main navigable waterway to the interior, and is the only source of fresh water in arid years. Otherwise, the region is somewhat isolated from other mainland areas by a band of difficult dry vegetation (“dry wilderness”) (Ylvisaker 1979: 2).

Lamu Island consists of sand over coral, with a deep harbor protected by Manda island. Only a few crops, including tree crops, are grown on the island, but it does have a plentiful supply of fresh water (Ylvisaker 1979: 3). The adjacent mainland is water-logged for six months of the year owing to Tana River flooding, while areas north of that depend on seasonal rainfall which is variable, resulting in water shortages (Ylvisaker 1979: 9). But areas of the Lamu hinterland were cultivated during the 19th century primarily as slave-worked plantations owned by island proprietors (ibid.: 11).

Average rainfall for the Lamu area is 850 mm, most of which falls April through June. Lamu Island is not well suited to cultivation other than a few tree crops (coconut and date palms), so it was necessary for island residents to control an adjacent block of land for production of grain crops, including sorghum and rice, but also fruit and *simsim* [for cooking oil]), and for grazing (Ylvisaker 1979: 36). Shifting cultivation was practiced on the mainland, and especially in the richer Tana Delta area, but on plantation land somewhat more intensive methods were used (ibid.: 13), although this can’t be described as a very intensive system of production. Food crops were interplanted with export crops such as sesame or cotton, followed by a long fallow averaging 10 years (Prins 1967: 60-1). Rice was grown around the edges of lakes and ponds. Agricultural implements were simple and a rotating field system was used (Ylvisaker 1979: 47).

Rural Society and Culture

Rural settlements varied in form and function, including agricultural estates of Lamu families, villages of local agricultural populations along the Tana River (Pokomo), while others were the fortified settlements of dissident Swahili or escaped slaves (e.g. Ylvisaker 1979: 125).

Market System

Oromo (or Galla) were specialized nomadic pastoralists whose products were traded for manufactured goods (Ylvisaker 1979: 106), while local Pokomo and some Swahili, as well as slaves, did agricultural production. Small-scale farmers sold their produce in coastal markets adjacent to navigable sea creeks, but might also market

directly in the island towns (Ylvisaker 1979: 102). These markets fed grain up into the coastal towns, in exchange for imported goods such as cloth and hardware, mostly using grain as a standard of value rather than money. Island merchants also loaned money to inland free farmers (*ibid.*: 104). Foragers sold ivory and honey in mainland markets in exchange for manufactured goods, but some Lamu traders, if they could avoid the Oromo, traveled upstream to have more direct access to ivory traders and avoid trading in the island market (Ylvisaker 1979:106). Ylvisaker (1979: 4) describes the “imposing” stone houses of the 19th century settlements like Lamu. These elaborately decorated houses, that made use of coral block construction, were costly symbols of successful merchant families (Kusimba 1999: 145-6).

Geography

The core area directly controlled by Lamu was one of many semi-autonomous city-state polities along the Swahili coast, with each polity competing with others for influence or control over long-distance trade (Nicholls 1971: 23, *passim*). Sinclair and Hakansson (2000: 479) refer to the Swahili coastal polities as “micro-states” and the coastal area as having a Swahili city-state culture (*ibid.*: 463). Political fragmentation of the Swahili zone during the focal period was partially a result of weak Omani control, although their efforts to make Zanzibar the main Omani port resulted in it having a degree of commercial dominance of the area (Nicholls 1971: 81). Lamu was a walled city (in *ibid.*: 472) of about 5,000, territorially subdivided into wards that had clan and political functions (Prins 1967: 90).

Population

The total estimated population of Lamu and adjacent groups (including Pokomo and Oromo) was at least 31,000 (not a secure estimate), in roughly 6,000sq. km (5 per sq. km) (also a rough estimate). In the 1860s the Oromo population of the area adjacent to Lamu was probably 20,000 (Ylvisaker 1979: 25), the foragers 6,000 (*ibid.*: 31), Pokomo (pop. unknown), and Lamu’s population was about 5,000 (*ibid.*: 109).

World-Economy Linkages

The main economic activity stemmed from participation in the early modern world-economy, although a long-distance trade focus here long predates the evolution of this world system. In this and earlier periods, Lamu’s population served as a trade entrepot connecting interior African regions with the Indian Ocean commerce, and it also produced some goods for export. Major exports from the coastal ports were ivory, gold, amber, tortoise-shell, cowry shells, and slaves (Nicholls 1971: 20).

Cloth from South Asia was a valuable import that was used as an exchange good in parts of East Africa, and South Asians were extensively involved in the Swahili trade (Nicholls 1971: 78). Other imports included beads, sugar, rice, dates, coffee, and iron bars (Nicholls 1971: 82; Ylvisaker 1979: 111). Lamu was also known as an exporter of hides and simsim oil (*ibid.*: 111).

Thailand (Figure A2-10)

Environment, Agriculture, and Area (518,000 sq. km)

The state's territory is a generally rugged forested area, with uplands in the north, including the Korat plateau to the northeast and east, and low mountain ranges in the vicinity of Chiangmai. The western boundary is a chain of low mountains dividing Burma and Thailand. The major river drainage relevant to agricultural production is the Chao Phraya, that passes through the Central Plain. The region has a tropical monsoon climate, but precipitation, at 1250 mm or less, is limited so that irrigation is beneficial for rice cultivation. Wet rice was the dominant crop system (Rabibhadana 1969: 9), and the lower basin of the Chao Phraya was heavily irrigated for wet-rice production.

Rural Society and Culture

Little detailed information was available on rural communities (*ban*) for the focal period, however, there is some evidence for rural social and cultural complexity (e.g., Rabibhadana 1969: chapter 4). Each rural community had a locally-elected head man, although they appear to have had few official functions, and each village had a *wat* (a temple/monastery). Villages pooled labor for "construction and repair of local waterways, roads, and temples. Villagers also cooperated among themselves in planting and harvesting operations" (Vella 1957: 15). Given this, we see limited state involvement in agricultural development except in the immediate vicinity of Bangkok. Commoner standard of living was higher "compared with that of most Asians," according to Vella (1957: 25).

Market System

Not much information is available in the focal sources, but other 19th and 20th century sources suggests there was little official interest in regional-scale commercial activities, some of which were left to foreigners, especially Chinese (Kirsch 1975). From sources like Sharp and Hanks (1978: 45, 57-8, *passim*), however, it is clear that there was substantial market participation and a hierarchy of market towns during the focal period.

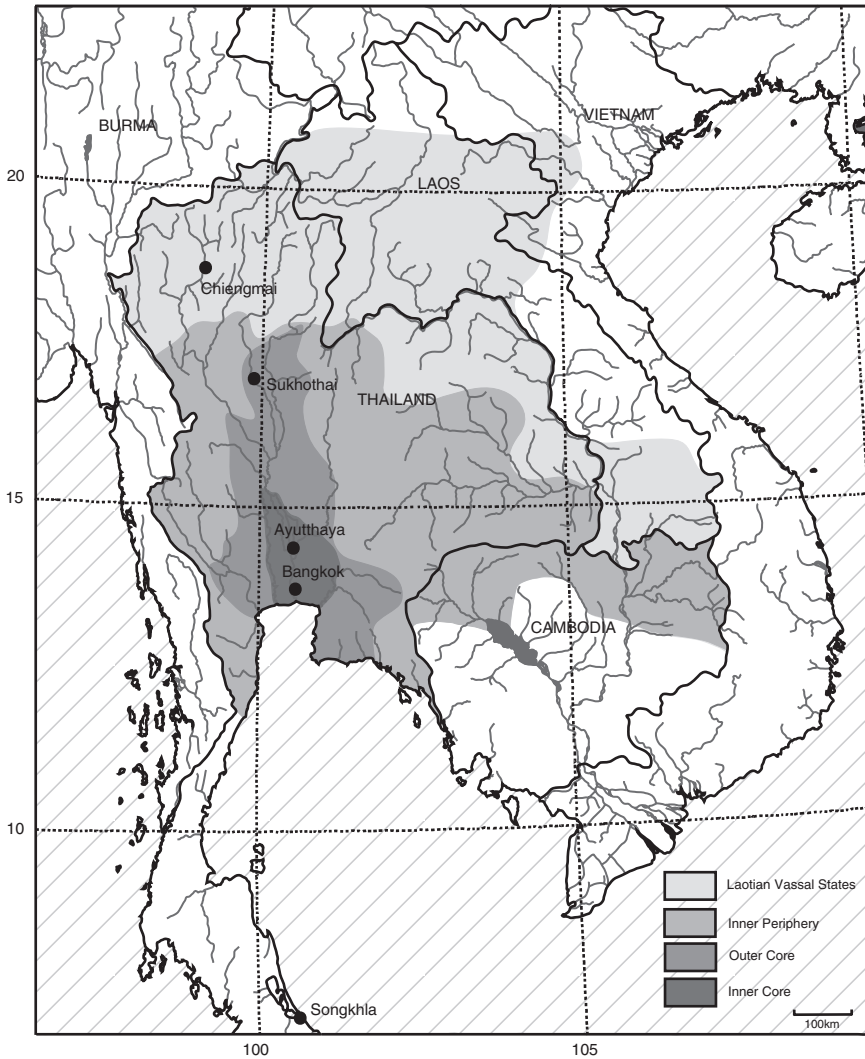


Figure A2-10 Approximate zones and limits of the Thai polity. Modified from Vella (1957: Map 2).

Geography

There was a well-developed core-periphery structure anchored demographically by an inner core centered around the heavily-irrigated lower basin of the Chao Phraya, where, in the vicinity of Bangkok, there were canals and other water works that were the result of state action. Bangkok, with a population of ca. 300,000, was the center of this densely populated metropolitan zone (Sternstein 1966: 69). In and beyond the core there were approximately 100 much smaller administrative centers, most serving as provincial capitals, with only a few exceeding 5,000 (ibid.) We

identify a less-densely populated area of rice cultivation extending beyond the metropolitan zone that we call an outer core. A periphery, just beyond this zone, consisted of areas of adjacent vassal states, including the Malay Peninsula states to the south (Vella 1957: Map 1). An outer or “vassal periphery” includes areas of intermittent control, including Laotian states to the north and east, and Cambodia to the southeast (Vella 1957: 95). The Malay, Laotian, and Cambodian peripheries produced little revenue except for some military labor (Vella 1957: chapters 5 and 6).

Population

The total population was ca. 5 million during the 19th century (Rabibhadana 1969: 17) (from which we estimate roughly 10 per sq. km) (cf. Reid 1988: Table 2, who gives 3.5 million for 1800 and 7 per sq. km). Lack of manpower was a persistent problem for Thai rulers (Rabibhadana 1969: 16). War was carried out for the purpose of gaining captives, and rulers encouraged immigration (ibid., also Vella 1957: 26). War captives—Burmese, Mon, Annamese, Malays, Cambodians, and Laotians—were mostly settled in rice-farming communities in the metropolitan inner core zone near the capital, but were “treated as free men” (Vella 1957: 26).

World-Economy Linkages

Early kings were engaged in foreign trade (Rabibhadana 1969: 141), and had “royal cargo ships” (ibid.: 67) and royal commercial monopolies in some reigns (ibid.: 141). But, increasingly, during the focal period, long-distance trade was diminished as a royal source of income (Lysa 1983), because principals made the decision to place more emphasis on sources of internal taxation especially commoner production (cf. Cushman 1981). Following this, Chinese immigrants “controlled all the international trade” (Rabibhadana 1969: 10; Cushman 1981). Thai exports included rice surpluses, textile fibers, and peppers to China (Rabibhadana 1969: 9).

Burma (Figure A2-11)

Environment, Agriculture, and Area (181,000 sq. km)

The highland (north) region, north of the capital area receives less than 1000 mm of rain per year, and was the site of some paddy (wet rice), irrigated by stored flood water or post-flood planting, but there was also some shifting cultivation,

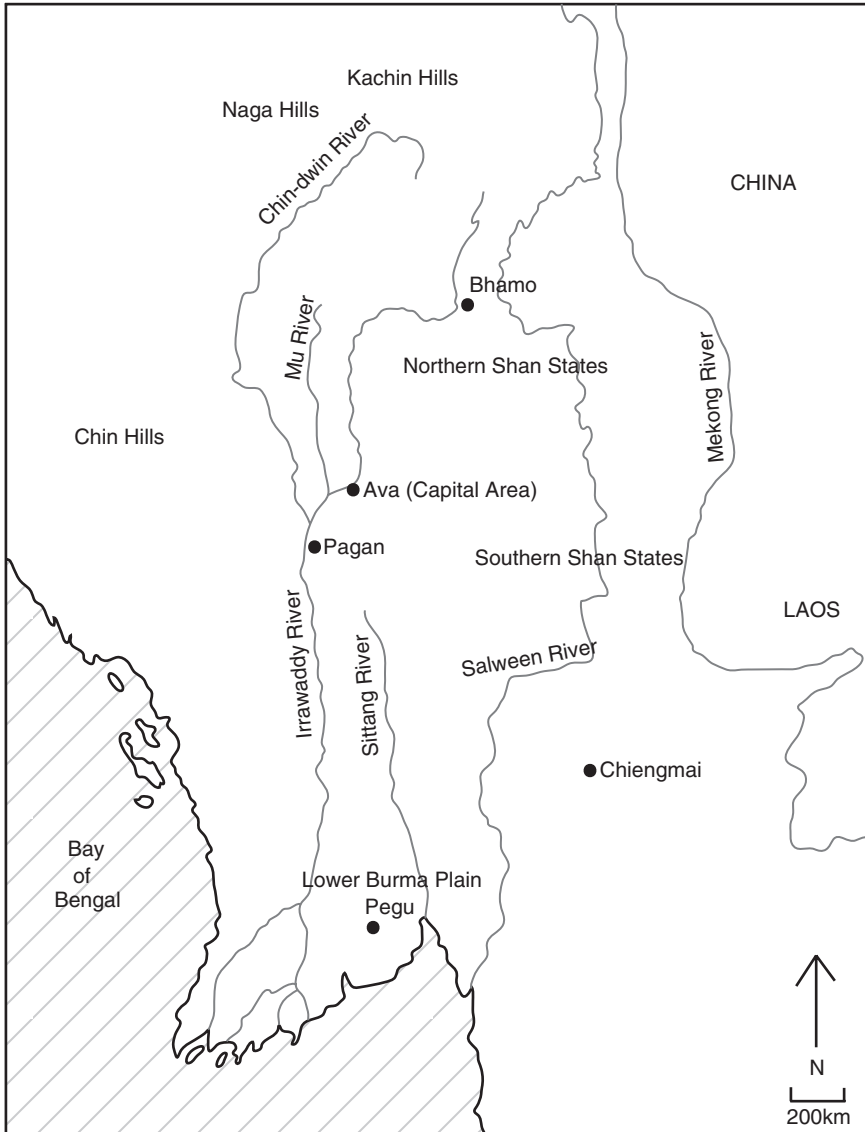


Figure A2-11 Geography of Burma

including millet (Koenig 1990: 54). The core zone closer to the capital was environmentally intermediate, a “dry zone,” located in upland valleys and plains north of the Irrawaddy River delta, but in a zone of weakened monsoon rainfall (1000mm per year); this was a major rice-producing zone, based on flow-management rice agriculture (Koenig 1990: 55; Lieberman 1991: 8) using water from perennial tributaries of the Irrawaddy, an agricultural regime not very

susceptible to drought (Aung-Thwin 1990: 12). Cultivating as many as three rice crops per year was often possible (Aung-Thwin 1990: 10).

To the south of the core is the lower Burma plain, as the deltas of the Irrawaddy and Sittang Rivers are called. This is a much wetter and more forested and swampy area (2600 to 5000 mm of rain per year). The delta is malarial in some areas, and subject to seasonal flooding, so it was difficult to develop for agriculture until later in the 19th century. The early Kon-baung polity emphasized the colonization and agricultural development of the Irrawaddy delta lowlands (Koenig 1990: 32), but cultivation continued to be based on rainfall (broadcast seeding) or “small dams or bunds” (Koenig 1990: 55; Lieberman 1984: 17, 1991: 9).

Rural Society and Culture

Little detailed information is available on rural communities. A key issue pertaining to rural social life, addressed by some authorities, is the role of the state in irrigation management. While Aung-Thwin (1990: 15) mentions the importance of central authority in maintaining the main systems of weirs and canals in the core zone, Richard O'Connor (1995: 975) indicates considerable local community management of irrigation. Stargardt (1992) questions the Wittfogelian and Asiatic Mode of Production assumptions often displayed in works on Asian irrigation, and points to the long history of autonomous local management at local levels of complex and long-enduring water-control systems in Burma, some of which persisted through the 19th and 20th centuries, or even to the present. There is some evidence for a relatively high rural stand of living: “... apparel fashioned from imported silk had become common among all classes” by the Kon-baung period (Lieberman 1991: 16).

Market System

There was no wealthy mercantile class (Koenig 1990: 37), and a “lack of market opportunities” was endemic owing to the state’s drain on agricultural surpluses, a sumptuary system, the necessity to give gifts in exchange for official positions, and the use of surpluses for merit-making donations to religious institutions (Koenig 1990: 57-8). In spite of these inhibiting factors, regional-scale commercial activity was somewhat developed by the focal period (Lieberman 1991: 6). By 1803, 188 local markets had developed (1 per 12,000 people), and at least 5 provincial markets had developed; Ava was the main market (Lieberman 1991: 18). A three-tiered market system is evident by the focal period, consisting of periodic local markets, permanent provincial markets, and a capital market at Ava (Lieberman 1991: 13).

Geography

The agricultural core area described previously (the “Upper Burmese Lowlands,” following Lehman [1991: 103-4]) included the “administrative home territories surrounding the capital center area (Ava and the adjacent communities of Amara-pu-ra, Mandalay, and Sagaing) and in and around the heavily irrigated dry zone generally. This was an especially productive region in which the “Crown’s best manpower...was advantageously settled” (ibid.: 104). Some of the government service units in this area were formed from forced population transfers from conquered vassal states (Lieberman 1991: 5). Just outside this core zone there were administrative regions “in central and lower Burma, a sort of outer ring around the “hubs”” (ibid.: 104). We assume Lieberman is referring to parts of the central area too dry for *padi*, and the lower Irrawaddy delta region. Beyond the administered region there were Shan statelets at the north-east and east edge of Burma proper; these were usually incorporated into the polity, but at times could ally with Thailand. An outer periphery (“marches” in Lehman 1991: 104) included mountainous areas west (including Chittagong) where there were tribal Chin peoples (west), in the Naga hills (northwest), and north (Kachin Hills).

Population

The total population was 2 to 2.5 million (Lieberman 1984: 21) (12 per sq. km), although Aung-Thwin (1990: 54) provides a high estimate of 4 million including all hill areas and coastal regions. The dry (north) region is the arid central plateau, where Burman peoples established their most important early capital at Pagan. It was here that the Theravada Buddhism was adopted that influenced notions of kingship during the focal period. By the 19th century, the population of the central plateau was roughly 1,500,000 (Lieberman 1984: 21), or 75% of the total. To the south is the lower Burma plain, the delta areas, originally the home of Mon peoples who established Pegu and other centers. Over centuries, Burmans migrated south, so this southern area became mixed Mon/Burman, and some Karen were also in this area. By the 19th century, only 10% of the total population resided here (Lieberman 1984: 21).

World-Economy Linkages

Overland and maritime trade was carried out with China (Yünnan) and India (a large fair for the Chinese trade was located at Bhamo/Kaung-ton). Major imports

were cloth (silk), hardware, silver, and glass; main exports were teak (Koenig 1990: 56) and cotton to China and Bengal (Lieberman 1991: 10). During this period Burma was the primary supplier to the Indian Ocean of teak and teak-built ships (Lieberman 1991: 15). Imported goods filtered down to ordinary households: "... apparel fashioned from imported silk had become common among all classes" by the Kon-baung period (Lieberman 1991: 16).

Bali (Figure A2-12)

Environment, Agriculture, and Area

The Balinese "southern heartland," the "core" area of wet-rice cultivation, extended over 3500sq. km along the south slopes of the mountains forming the central spine of the island, while the island as a whole is 5800sq. km. We estimate the area of the Mengwi polity at 240sq. km. The island as a whole consists of higher uplands to the north of the main agricultural zone, with the high wooded slopes (as high as 900m) dropping to sea level in less than 50km. The upper slopes are well watered, but lower parts of the island are drier. Water is in short supply due to the intensive

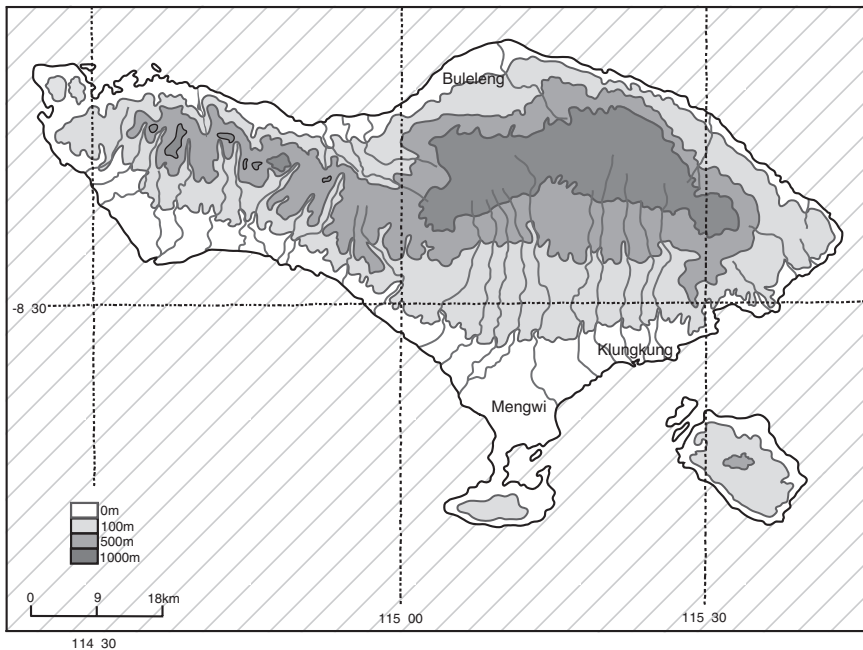


Figure A2-12 Bali.

irrigation, mostly of rice and some vegetables even though the “southern heartland” has rain all year totaling 1,500-2,000mm. This region is where some 80 % of the rice paddy was found (Geertz 1980a: 192, fn 81-15), forming an agricultural core, with the rest of the island making up a less-populated periphery. In Mengwi, water is drawn off of the Sungi, Penet, and Ayung rivers, using upstream dams and canals (Schulte Nordholt 1996: 55). *Padi* rice was the basic crop (e.g., Lansing 1987), but some “dry” crops (vegetables grown in fallowing fields) were also cultivated.

Rural Society and Culture

By the early 18th century there were roughly 70 peasant villages (*desa*) in Mengwi, varying in population from 100 to 2,500 (Schulte Nordholt 1996: 56). They were partially autonomous political systems where the governance of community life was carried out. Irrigation organizations (*subak*) partially overlapped community organizations, and there were also organizations that sponsored popular rituals (Geertz 1980a: 47-53). Ninety percent of the population were commoners or rural people (*sudra*) participating in these rural organizations. The local village or hamlet was not a bounded unit of governance, but a “field of variously organized, variously focused, and variously interrelated social groups” (“pluralistic collectivism”) (Geertz 1980a: 48). Rural community governance involved decisions about roads, meeting houses, market places, cemeteries, security, apprehension of criminals, the judging and punishment of thieves, suppression of violence, settlement of civil disputes, control of access to corporate land, marriages, sumptuary rules, public ritual, and temple maintenance (Geertz 1980a: 48-9), leaving one to wonder what the state was required to do. In fact, Geertz (*ibid.*: 49) comments that “... perhaps the bulk...of Balinese government...was carried out by the hamlet, leaving the state free to dramatize power rather than to administer it.” The *krama banjar* (composed of adult household heads) was a citizen council meeting held usually once a month to decide community matters. Schulte Nordholt (1996: 57) suggests that village organization in Mengwi was late developing (since the 18th century), impeding the organization of large irrigation projects at the local level. This would give the state a greater role in irrigation matters in the past than in more recent times, but his evidence is not very good. Based on inscriptions, Christie (1992: 16) suggests that institutions ancestral to the *subak* go back at least 900 years as a “non-political” means of building and maintaining irrigation systems.

Market System

Daily staples were bought and sold in small “morning markets” (Geertz 1980a: 38), but major long-distance trading was done by non-Balinese minorities (Chinese and

Arabs mostly) (*ibid.*), so there was no indigenous “bazaar class.” Markets met on a 3-day market cycle (Geertz 1980a: 199-200, fn 87-12).

Geography

There were no cities or even a clear central-place hierarchy. The royal center was one of many *desas* that was little more than a large village called “*desa Mengwi*.” It was surrounded by four other *desas* of key Mengwi secondary lords, and surrounding this weakly-defined “core” zone there were lesser noble houses (*dadia*) unrelated to *dadia* Mengwi but who recognized royal authority. Their settlements comprised an outer core zone of about 23 more *desa* (Schulte Nordholt 1996: 145, Map 8). In Bali, the main temple hierarchy was spatially separate from these governing centers (e.g., Geertz 1980a: 40), but the Mengwi ruler Agung Mayun built some new temples, including a new mountain temple and a new sea temple (Schulte Nordholt 1996: 134-5).

Population

The overall population of Bali estimated for 1900 is 750,000 (almost all in the south) (Geertz 1980a: 147, fn 20-4). From this figure, we estimate an overall population density of 129 per sq. km, somewhat higher than the 80 per sq. km estimated for CE 1600 by Reid (1992: 463). Bali’s estimated population density is the highest in Reid’s Southeast Asia data, with Java a distant second at 30 per sq. km. Negara Mengwi probably had 85,000 during the focal period (Schulte Nordholt 1996: 142), which in an estimated 300 sq. km is 283 per sq. km. This is a high figure, but probably reasonable for the intensively irrigated southern part of the island.

World-Economy Linkages

Overall, long-distance trade was not very important in Balinese social evolution (e.g., Geertz 1980a: 87-8, 201, fn 88-5, Geertz 1980b: 110), but was growing in the 19th century (Geertz 1980a: 89, 212). A north coast harbor on the Java Sea in the Balinese state of Buleleng was the major port city for Bali (Geertz 1980b), although it was of little significance in the Java Sea trade. Exports were rice, coffee tobacco, and other agricultural commodities, while opium was by far the main import, along with cotton (*ibid.*: 112). Mengwi controlled a harbor in the north at Blambangan that would have provided access to the Java Sea trade (Schulte Nordholt 1996: 41-4), and this author emphasizes the importance of slave exporting for the Mengwi royal economy (although few specific data are available on income from this trade).

Aceh (Figure A2-13)

Environment, Agriculture, and Area (estimated at 3,250sq. km)

Aceh, located at the northern tip of the island of Sumatra, has a tropical monsoon climate. Most of the area is forested uplands, except for a small zone of alluvium near the capital, Aceh Besar, along the lower alluvium of the Aceh River. The economic system was strongly oriented to export rather than local food-production, so Hurgronje observed “Vast tracts of uncultivated ground” (Hurgronje 1906: 22), especially in upland and coastal regions where pepper production was common. This comparative lack of interest in basic food production necessitated food imports in many cases, although some food crops were grown, including rice, sugar, peppers planting, and fruit trees. Aceh’s rice import strategy was changed when a policy of local agricultural intensification was adopted after the 17th century (Reid 1975: 54). By the 19th century large areas of the lowlands of the lower Aceh River had been “reclaimed” for rice cultivation (Hurgronje 1906: 258) but this appears to be based

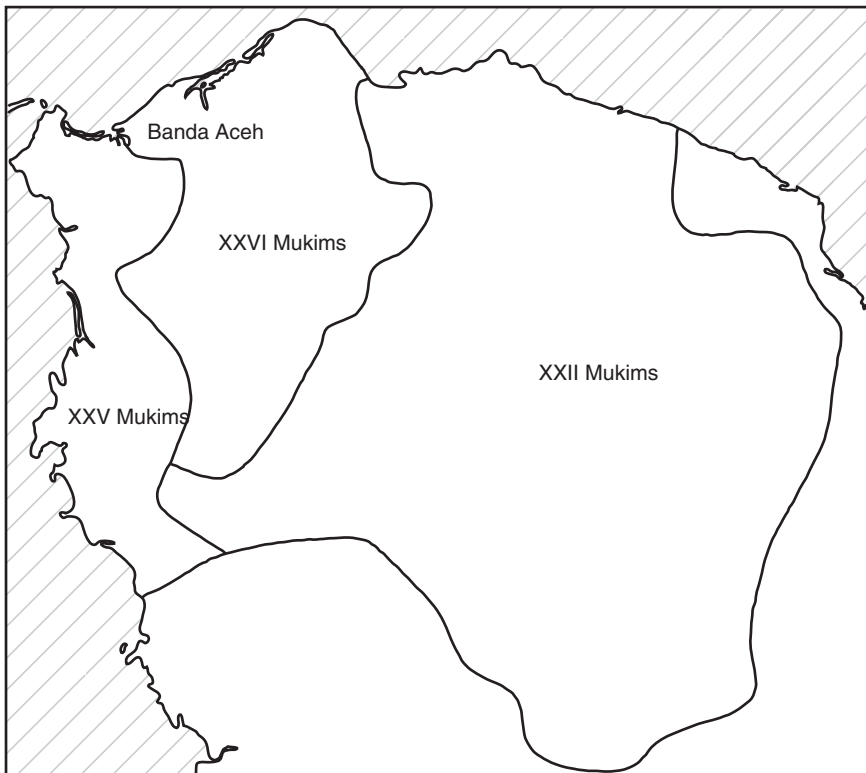


Figure A2-13 Greater Aceh. Modified from the figure titled “Great Aceh” in Hurgronje (1906).

on rainfall or annual flooding (*ibid.*: 261) rather than canal irrigation. Seed was mostly broadcast—hot bedding was practiced only in some swampy areas—indicating minimal intensification. Most export agricultural goods and other export products were grown or mined in adjacent areas away from the Aceh Besar: pepper and betelnut (north coast), and pepper, camphor, and gold (west coast). Aceh's policy was to control these goods-producing areas to channel foreign trade through the capital's port (Reid 1975: 46).

Rural Society and Culture

Little information on rural community organization is provided in Hurgronje's ethnography, although he does mention community ritual cycles pertinent to agriculture (Hurgronje 1906: 254-7). Each village (*gampong*) was headed by a head man, and had a men's-house that doubled as a prayer site and civic building where village assemblies were held (*ibid.*: 61-4) including the village head man and a council of elders (*ibid.*: 75-7).

Market System

Although the economy was highly commercialized for the export trade, there is little indication of an internal market system. Given the completeness of Hurgronje's massive ethnographic report, we think this indicates that there was little regional-scale commercial development.

Geography

The "Aceh Besar" core region was a lowland area governed directly by the sultan, but it included only 24 villages (Hurgronje 1906: 120). A variable (over time) number of dependent port cities and their adjacent territories outside Aceh Besar formed the polity's periphery, and was the main area for the production of spices and other export goods. By the focal period, this periphery was limited to northern Sumatra (earlier, more distant polities had been dependencies, for example, Perak). West coast state limits were near Baros, which marks the boundary between Aceh and the Menangkabau princes (Hurgronje 1906: 1). Semi-autonomous local chiefdom-scale polities or districts (*mukims*) formed three alliance groups called *sagis* (the three "corners" of Aceh Besar) (Hurgronje 1906: 58-151). The *ulëëbalang* (territorial rulers) of the 22 *mukims* of the highland part of the Aceh River valley were especially important and often could threaten the sultan and play an important role in successional politics (Reid 1975: 55). Figure A2-13 indicates

only the approximate boundaries of the *sagis*, and no estimate of their territorial sizes can be given from the information we had (hence, no scale is provided for the figure).

Population

Reid (1969: 2) suggests a nineteenth-century population for Aceh Besar of 300,000.

World-Economy Linkages

The peak period of Aceh influence was the 16th century, when it was a major player in the “Muslim spice trade” that “...was carrying as much as the Portuguese route” (Reid 1975: 46). By the early 19th century, Aceh was still a major pepper producer, providing half the world’s output (Reid 1969: 14), and cultivated mostly in various coastal or riverine areas in the periphery that were at times difficult to control from the capital. Environmental feedbacks and fluctuating market conditions kept the pepper production system in flux, with new areas being brought into production, using labor migration from Aceh Besar and other settled areas (Reid 1969: 15).

Perak (Figure A2-14)

Environment, Agriculture, and Area (20,700 sq. km)

This is a wet tropical monsoon area with rain every month, totaling 1900 mm to as high as 4500 mm per year, with little seasonality. Rainfall-based rice *padi* (rice) was the basic crop, but coffee, tobacco, sago, bananas, and others were cultivated, including some tree crops such as sugar palm and betel (Gullick 1958: 29). There was some interest by state officials in establishing standardized planting schedules to increase productivity, but generally there seems to have been little state control over, or interest in, agriculture (Gullick 1958: 30-1).

Negri Perak referred to the territory under the control of the ruler. It included a small coastal strip near Larut, but was, for the most part, the drainage of the Perak River, which empties into the Straits of Melacca. In this area west of the central spine of hills dividing the east and west watersheds of the Malay Peninsula, several small states like Perak developed, including Selangor and Negri Sembilan. The upper elevations of the mountain ranges, covered by dense tropical forest, were only lightly populated; most settlement was lower, along the

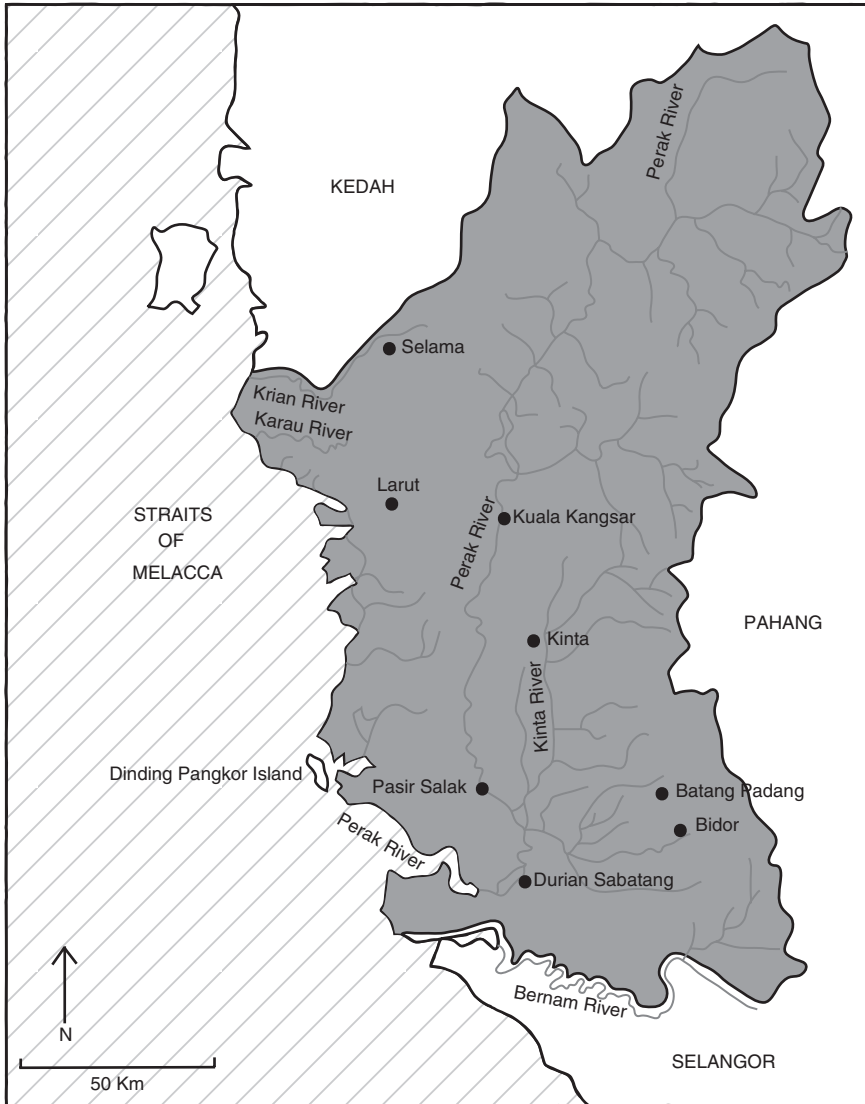


Figure A2-14 Limits of the Perak polity (shaded area).

river edges and the coastal plain. Tin (cassiterite) mining was done in two major locations in Perak (and other smaller locations), of which Larut was a major producer during the focal period. The relative shallowness of off-shore waters here precluded the development of an important trade port at Perak, and it was not recognized by outsiders until the 15th century, already as a tin-providing dependent of Melacca (Andaya 1979: 16).

Rural Society and Culture

Central villages (*kampong*) and their adjacent smaller villages and hamlets had few functions, although there was a head man in each, and central villages would have a market or shops, a palisade, and a mosque, and mosque officials (*imam*). The village political unit usually had about 1,000 people (total) dispersed in nuclear family houses arrayed along the banks of a river, each component settlement consisting of 30 to 50 houses. Rice cultivation depended on rainwater for irrigation (Gullick 1958: 28), and there is not much evidence of community cooperation in rice or other agricultural production (*ibid.*: 30). That settlements were nucleated is attributed to the advantages of shared earthworks and a stockade, local shopping, and ease of administration (*ibid.*: 29). Rural houses were “flimsy structures of jungle poles and split bamboo matting with palm hatch. Household goods were few and portable (Gullick 1958: 30).

Market System

Gullick (1958: 30) mentions frequent confiscations of peasant surpluses by the sultan, which was a disincentive to produce substantial surpluses. Sale of surplus cash crops was important for peasant households (*ibid.*: 31), although trade was mostly in the hands of Indonesian and Chinese immigrants (*ibid.*: 31).

Geography

The main center was located near the mouth of the Perak River, located optimally for military defense and the collection of tolls on river traffic (Gullick 1958: 21). High offices of the royal family other than sultan, and the district chiefs, who were members of non-royal, but aristocratic lineages, were charged with local administration, justice, defense, and revenue collection. District chiefs had considerable autonomy and often fought among themselves. They numbered about 8 district chiefs (Gullick 1958: 90-1).

Population

Perak's population grew rapidly due to immigration following the 15th century discovery of tin (Andaya 1979: 23). Total estimated population in 1870 included 30,000 Malays (mostly of Menangkabau descent, although the ruling family was originally from Melacca), and possibly as many as 40,000 Chinese at the tin mines in Larut (Gullick 1958: 23-4). This is 70,000 total, but non-Malay immigrants were an

additional component of the population, perhaps numbering 13,000 (following the discussion in Gullick 1958: 26), giving a roughly estimated total for the polity of 83,000. This population size implies a density of 4 per sq. km, close to the estimate of 3.4 per sq. km estimated for Malaya as a whole in about CE 1600 by Reid (1992: 463).

World-Economy Linkages

The Perak area, is one, among others, where archaeological evidence of early Indianized polities in the Malay Peninsula and Sumatra is found dating to the early centuries CE (Coedes 1968: 51), along a key trade route linking China, India, and the Mediterranean through the Straits of Melacca. During subsequent centuries, various commercially-oriented polities had exerted control over trade in the Straits of Melacca, including Srivijaya, Java, and Melacca, but Perak remained small until after it received a ruler during the 1500s, and tin exports increased. By the 19th century, Perak's major tie into the maritime commerce was still through its export of tin (Gullick 1958: 5-6).

Java (Figure A2-15)

Environment, Agriculture, and Area (133,000 sq. km)

This is a wet tropical monsoon area in which rice agriculture was a basic production system, but there was also production of maize, fruits and vegetables, tobacco, indigo, and cotton (Carey 1986: 91). Not much is described in detail about agriculture during the focal period, but a core region in the central regions, of unknown extent, appears to have had more intensive wet-rice production while the peripheral regions may have been less intensively cultivated (Moertono 1981: 27).

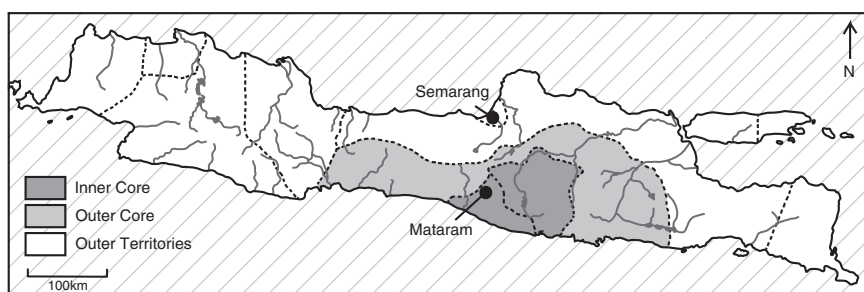


Figure A2-15 Approximate limits of territorial divisions of Java. Modified from Moertono (1981: Map 1).

Rural Society and Culture

Villages (*desa*) appear to have been highly self-sufficient (Moertono 1981: 92; cf. Carey 1986: 90), and had some social capital. Villages were linked into groups of 4 and 5 by cosmic imagery (“four square arrangement” with a *desa* at the center) (Moertono 1981: 27), had some communal land ownership (e.g., *ibid.*: 115; see also Carey 1986: 81, *passim*), and had considerable organizational self-sufficiency, especially in maintaining security (Moertono 1981: 90). Houses and yards were private property, but agricultural land appears to have been communal and use was according to a system of usufruct (e.g., Moertono 1981: 123), but could be reclaimed by the ruler (Carey 1986: 82). *Sikep*, or leading community members contributed to communal taxes and labor levies, while other village resident categories were dependents of *sikep* as laborers (Carey 1986: 81), including that “they also must maintain irrigation ditches” (Moertono 1981: 124). Access to the most productive rice fields was rotated among *sikep* households (Moertono 1981: 126). Moertono (1981 e.g., p. 126) writes about water management in terms of “dikes” which seems to imply flood-management rather than flow management, but this is not clear. There was a “superintendent of water” in each village (*ibid.*: 129).

Christie (1991: 37) refers to archaeological data suggesting that imported Chinese ceramics were “widely dispersed in non-elite sites after the tenth century,” implying not only a comparatively high standard of living, but also extensive rural commercialization and production for export. Carey (1986: 85-6, 105-6) cites evidence of considerable wealth among *sipek* households, but dependent and laborers were probably not so well off (*ibid.*: 100-1).

Market System

The markets (*pasar*) were “let out by the king to Chinese entrepreneurs...” (Moertono 1981: 90). Otherwise, little detailed information was found on markets. Christie (1991: 37) argues for a long tenure for market systems in Java, and a high degree of rural commercialization mediated by a system of periodic markets operating on a 5-day cycle similar to modern Javanese markets (*ibid.*: 38). Small-scale entrepreneurs called *bakul* operated as wholesalers, retailers, and providers of credit. Carey points to data suggesting a considerable expansion of *sawah* (irrigated rice) after 1755, including more production for market sale, especially in the central regions. The core also saw more commercialization, including extensive monetization (Carey 1986: 97).

Geography

Not much information about the environmental or social aspects of core-periphery structure are found in the main sources. The central core region, more directly administered by the state, was referred to as *nagaragung*, while neighboring regions (an “outer core”) are called *mantjanegara* (Moertono 1981: 27, Map 1). A marginal

zone of outer territories extended to the coast (Moertono 1981: 101). Beyond that were tributaries outside of Java (“ring kingdoms”) (ibid.: 101, 112). There is some reference to tribal peoples who in some cases appear to have been forcibly resettled in special villages or were brought to central Java to serve the king (ibid.: 135). Mataram rulers “moved large numbers of the population from the conquered regions to Mataram proper...” (ibid.: 68, 134-5; Schrieke 1957: 146-9). It is not known where they were moved to, or how they were organized, but it is possible they were placed on *narawita* lands (crown domains) that were under direct royal control; some evidently were formed through the establishment of colonies and “settlement by royal subjects” (Moertono 1981: 113). However, it is not known how many people were involved, but the numbers seem to be small. Some were possibly conquered tribal peoples who lived in special villages or were brought to central Java to serve the king.

Java was not highly urbanized (Christie 1991). According to the 1815 census only five towns exceeded 20,000, and probably 90 percent of the population lived in communities of less than 5000 (ibid.: 23). Little information is available about the capital, Mataram. Giri and Tjirebon are described as important centers of Islamic teaching which appear to have had their own armies, and other centers associated with important Islamic figures and tombs also were important towns (Moertono 1981: 31).

Population

Reid (1988: Table 2) estimates 4 million for Java in about 1600 (which is 30 per sq. km), and 5 million for CE 1800 (or 38 per sq. km), while Christie (1991) suggests 4.5 million by 1815 (33.8 per sq. km).

World-Economy Linkages

Siam (Thailand), Ache, and Melacca all were commercial competitors of Java, but during the Mataram Period, Java receded from international involvement to some degree (Schrieke 1957: 228). Rice, tobacco, and cotton cloth were important export goods; cotton cloth from here sold as far away as eastern Indonesia (Carey 1986: 94).

Vijayanagara (Figure A2-16)

Environment, Agriculture, and Area (360,000 sq. km)

The polity extended across diverse environmental and climate zones. The core area population combined herding and farming in an environmentally marginal semi-arid upland (with 400 mm of average annual rainfall), and with an elevation of 300 to 600 m asl. Here, dry-farming predominated, and sorghum and millets were the major food sources for most of the population (Morrison 2001: 263).

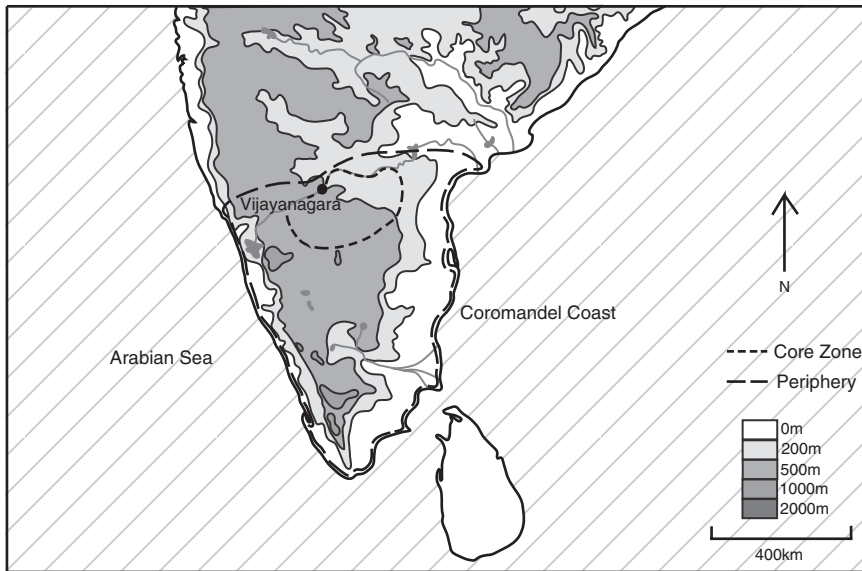


Figure A2-16 Approximate territorial limits and limits of the core area of Vijayanagara polity, Modified from Sinopoli (1994: Figure 1).

But irrigated rice production was also coming into play in this upland zone, alongside dry-farmed grains, cotton, and dyes (Sinopoli 1994: 226). Wet-rice production typically was organized by temple institutions, endowed by donors, which could include the state (Morrison 2001: 265). However, the state was not involved in the construction or maintenance of irrigation facilities (Stein 1989: 100), although tax remissions were given to newly-developed land and for the construction of new water-control features (Saletore 1934, Volume I: 174-5). Irrigation strategies appear to have included both flow and flood management, although tank irrigation appears to have dominated, with “massive” rain-fed tanks and tank systems built throughout the core area, some with royal sponsorship (Sinopoli 1994: 234). One tank had an embankment 5 km long (ibid.) The traditional agricultural core zone of south India, the Tamil-speaking southeast coast, had undergone considerable irrigation development for wet-rice production in pre-Vijayanagara periods, but the Vijayanagara rulers exerted comparatively little control in these areas and received few revenues from them (Sinopoli 1994: 226).

Rural Society and Culture

Vijayanagara rulers chose to preserve many of the customary organizational features of the *nadu* or local community (Saletore 1934, Volume I: 328). Rural communities or other communal institutions, such as lineages or temples, sponsored the

construction of shrines to guardian deities (Stein 1989: 104), and they appear to have featured some communal funds, accountants, police, and other functionaries, paid from the production of communal land (*ibid.*: 206, 336-7, 345-6). Rural communities were usually organized as lineages or as caste groups, or coalesced around religious institutions such as temples (Stein 1989: 95). Some degree of corporate land ownership was found, by descent group, caste group, temple, etc., although land could be bought and sold, even by the associated corporate land-holding entities (Saletore 1934, Volume I: 168). Local constituencies in community political life were represented on assemblies that could mediate demands from higher authorities as well as resolve local disputes between households or other parties, although in the riverine wet-rice areas, governance was more centralized by high-caste *brahmans* and *vellalars* (Stein 1989: 98), who exercised considerable control over a lower stratum of workers about which little is known (*ibid.*: 100). The presence of well-developed communal institutions made it difficult for the state to control some local areas and to increase its revenue stream from them (e.g., Morrison 2001: 269; Stein 1989: 98-9).

Houses ranged from thatched or wattle and daub (including dung-coated) to brick with tile roofs (Saletore 1934, Volume II: 293-7), as is true now. Clothing for ordinary people appears limited, but the wearing of jewelry and other ornaments apparently was common (*ibid.*: 301). Overall, and given the severity of periodic famines (e.g., Mahalingam 1975: 173-5), we rate the rural standard of living comparatively low, although Stein (1982b: 119-21) comments on the presence of commercial developments which would imply an increasing standard of living, at least for some sectors of the population.

Market System

The state apparently endeavored to increase the degree of commercialization in society, and one expression of this was to monetize, based on gold currency, in order to supplant or replace tax payment in kind (e.g., Stein 1989: 52). The capital had numerous merchants, organized into guilds, and four main markets convened in the capital (Stein 1989: 33, 39), but there was also rural market activity in weekly markets (*sante*) (e.g., Ramaswamy 1985: 309). Commercial development, especially an increase in textile task specialization and production intensification, stemmed in part from style changes in cloth and clothing, influenced by court dress, that reflected Muslim style (Muslims in South Asia traditionally wore more clothing than the Hindus) (Ramaswamy 1985: 307). The state itself was a major consumer of cloth, and "Trade in textiles flourished under state patronage" owing to demand resulting from the growth of bureaucracy (Ramaswamy 1985: 301). Long-distance trade appears to have been extensively controlled by wealthy families, trading corporations and corporate groups of artisans, who appear to have been highly self-governed, even endowing temples.

Geography

The polity's territory constituted most of peninsular India south of the Tungabhadra and Krishna Rivers, although the limit of control was variable in space and time. A core-periphery structure is evident, with the core occupying ca. 78,000sq. km of rugged uplands, and a population estimated at 2 million (26 per sq. km), while a periphery of more southerly uplands and coastal regions extended over 282,000sq. km (from Stein 1989: 58) with well over 20 million, based on the estimate of 25 million for the polity as a whole (see below). The usual core-periphery division, reflecting the difference between a more densely populated and agroecologically-significant core, versus a more economically and agriculturally marginal periphery, does not apply easily in this case. While the core, consisting of the polity capital, Vijayanagara, and its surrounding area, was important politically, and was undergoing agricultural intensification, other areas featured more intensive regimes of agricultural production and economic growth, including coastal rice-growing zones and western coastal port cities from which horses were obtained from the Arabian peninsula (e.g., Sinopoli and Morrison 1995: 85; Stein 1989: 29). "Core" in this case refers to the area most directly taxed by the kings (and for which a detailed register of assessments evidently was done, e.g., in Saletore 1934, Volume I: 202), versus a periphery, which tended more often to be under the jurisdiction of temples, local lords or *nayaka* (state-appointed provincial warrior-chiefs), and where taxes were paid according to customary amounts and by customary groups (e.g., temple lands).

The capital, Vijayanagara, was a new city foundation established by the first, Sangama, dynasty in about CE 1340, in an area not previously politically or economically significant (Sinopoli and Morrison 1995: 85). By CE 1500, Vijayanagara had a population estimated at 200,000 (Sinopoli 2005: 24). The main walled area, the "urban core" covered 10sq. km and included the Royal Center, but the densely populated residential area as a whole extended over 25sq. km (Fritz 1986; Sinopoli 1994: 229). A sacred center was located northwest of the main residential zone, close to the river. Beyond the urban core there was a comparatively densely-settled "greater metropolitan region" 650sq. km in area, consisting of residences, temples, workshops, and agricultural fields (Sinopoli 2005: 26). Periphery areas were also becoming more urbanized under the Vijayanagara rulers. Smaller towns grew around the provincial fort complexes of the *nayaka* warrior-chiefs, around ports, and around state-endowed temple complexes that developed commercial functions, with state encouragement, especially textile production (Ramaswamy 1985: 300-1). Other towns were more purely commercial, developing out of weaving villages (ibid.: 303).

Population

The total population is estimated at 25 million (Stein 1989: 44). This is 69 per sq. km, although density was higher along irrigated areas of both coasts while the uplands is estimated at 27 per sq. km (Stein 1989: 44).

World-Economy Linkages

Long-distance trade saw a growth after CE 1000 connecting the Mediterranean, the Middle East, and West Africa with China by way of a series of trade emporia, including some on India's west coast and in Southeast Asia (Stein 1989: 25). The growing demand for warhorses was an important impetus to this trade (Stein 1989: 70).

Pudukkottai (Figure A2-17)

Environment, Agriculture, and Area (3,100 sq. km)

The polity is found along the lower drainage of the Vellar River, although lacking access to the coast. This is an area of tropical monsoon, with an average rainfall of 900 mm per year, with a mix of agricultural strategies that combined some rainfall

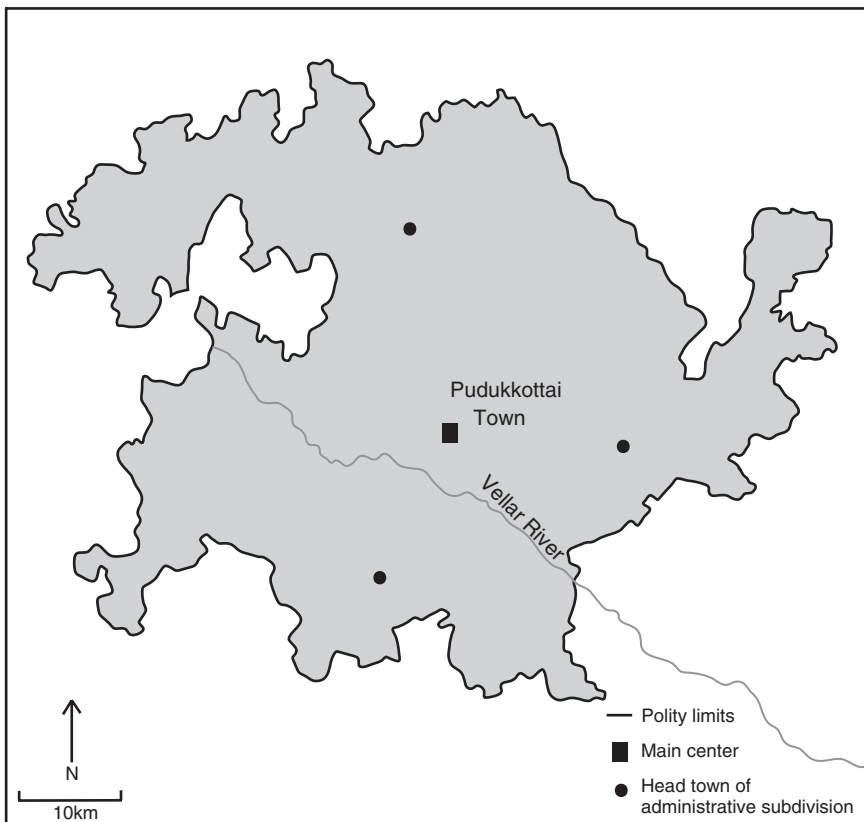


Figure A2-17 Approximate territorial limits of Pudukkottai.

agriculture with some flood-water and well irrigation. The main river, the Vellar, is dry except for the monsoon season. Frequent drought and flooding meant water scarcity was a problem in some years (Dirks 1987: 113). Rice was the basic food crop, and Dirks (*ibid.*: 113) mentions tank-based irrigation of rice, by which we assume he means water-catching features for floodwater farming of paddy (for one crop per year). There was also some well irrigation (the river was not used as a source for canal irrigation). Even by mid-19th century, only 32% of the land was irrigated (*ibid.*: 415). A small proportion of the population consisted of part-time foragers in forested areas and itinerant sheep and cattle herders (*ibid.*: 128).

Rural Society and Culture

Rural populations resided in villages, of which there were some 1,300 (Dirks 1987: 113). Village officials were members of locally dominant castes or lineages, and were supported through *inam* grants (a grant made by the king that diverted some tax revenue in the form of a payment to a local official). Villages had some degree of communal economy (the “village grain heap”), out of which village servants were paid (*ibid.*: 120), and Dirks (*ibid.*: 298) cites a “the village tank.” Village communities also shared a central square (*ampalam*), that served as a meeting place, sometimes marked with a stone platform and sometimes one or more stone pillars (*ibid.*: 207). Villages, or even subcastes, had deity temples, symbolizing lineage deities, but village deities often were goddesses or the protector deity Aiyanar (Dirks 1987: 209, 298).

Other village *inam* grants were given to officials who managed irrigation systems as well as individuals who provided village ritual services (Dirks 1987: 120). Hence, there was a connection between the village, village ritual, and irrigation, on the one hand, and the state, on the other, mediated primarily through ruler bequests (Dirks 1987: 121), as well as occasional direct state involvement in village affairs (*ibid.*: 426).

Market System

The capital was one of the most important periodic markets in the Tamil Nadu region (Dirks 1987: 164), but local subcaste or multi-caste temple centers also were small towns with local markets (*ibid.*: 223).

Geography

Pudukkottai means “new fort,” and was located in an interstitial area between two traditional medieval states, Pantiya and Chola, in an area that usually had been dominated by one or the other (Dirks 1987: 111). With the growth in power of immigrant *Nayaka* rulers in the mid 16th century, “previously marginal areas and

groups rose to new prominence,” and among them were the Tondaiman kings who emerged with royal identities at this time (ibid.: 111-12). No clear core-periphery structure is evident in the polity’s territory, although more *inam* grants were made to warriors along contested margins of the state (ibid.: 176-8), while the greatest density of *inam* grants to communities and to *brahmans* and religious institutions were made in central areas, including areas adjacent to the center containing the best irrigable alluvium (Dirks 1987: 136-7). The main center, Pudukkottai town, was roughly 50km from the nearest other local political centers of independent kingdoms.

Population

Dirks estimates a population near 200,000 for the 18th century (Dirks 1987: 124) (a density of roughly 65 per sq. km).

World-Economy Linkages

There is little on this in the focal source, and we infer that long-distance exchange was a not an important factor in political economy.

Mughal (Figure A2-18)

Environment, Agriculture, and Area (3,175,000sq. km)

The Mughal polity included all but the most southern parts of South Asia, and, correspondingly, it encompassed a variety of environment zones. Although affected by the monsoon seasonal rains over its whole area, precipitation varied greatly from west to east, ranging from semi-arid steppe along the lower drainage of the Indus River to the wet tropical climate of Bengal to the east. There was a broad division between the major crops of wheat/millet in the savanna and semi-arid zones in the western and central areas, to the rice-based food economies to the east, with the agroecotone between them marked by the 1000 to 1300 mm rainfall isohyet (Habib 1963: 36). Although wheat, millet, and rice were central to agricultural production and diet, Habib (1982b: 217) describes a high degree of crop diversity, with cotton and sugar cane the major cash crops, and Bengal emerged as one of the major silk-producing regions of the world (ibid.). Tobacco was introduced during the reign of Akbar and its production and use spread rapidly (Habib 1963: 45). Pineapple was also introduced and expanded in cultivation rapidly (ibid.: 50), and even maize may have been adopted by this time (Habib 1982b: 217).

Wood and iron plows alongside drill-sowing and dibble-stick planting were coupled with at least some fertilizing and crop rotation allowing multiple crops

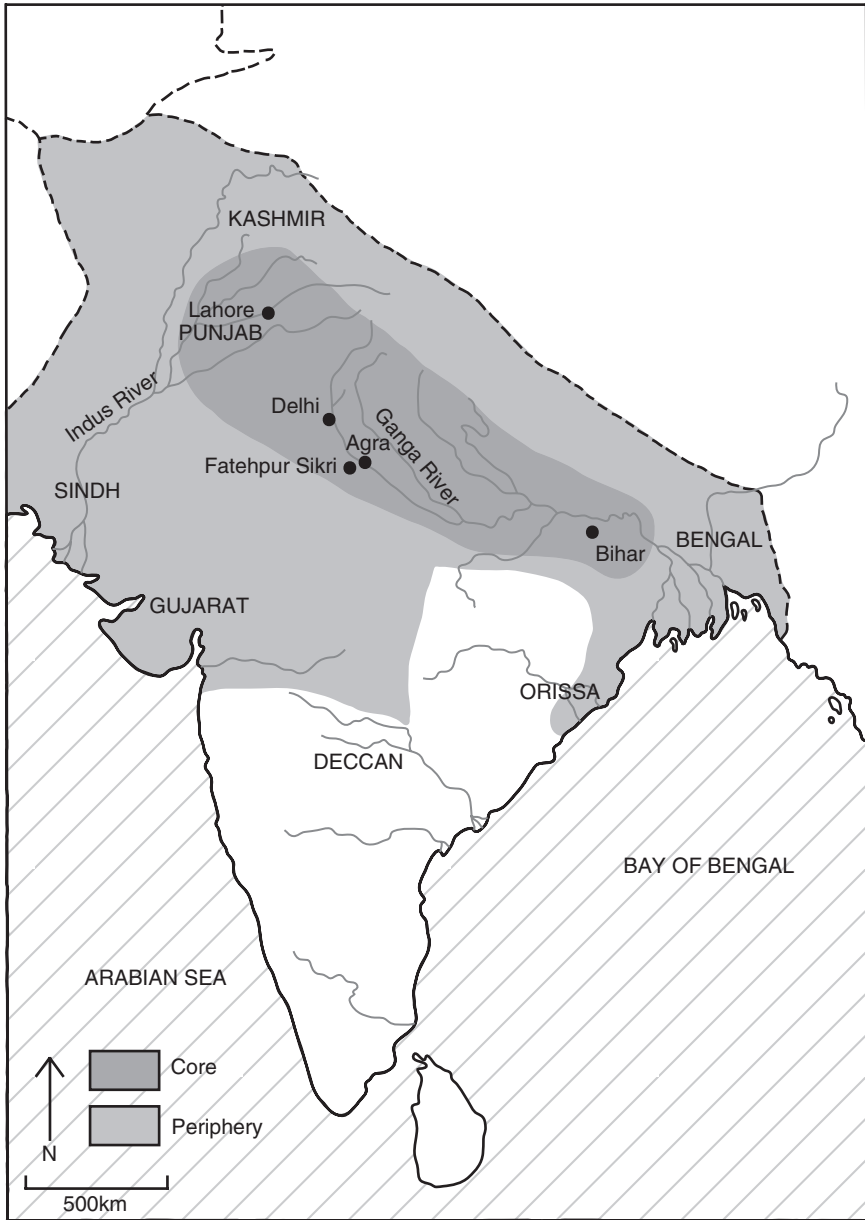


Figure A2-18 Approximate zonal and territorial limits of the Mughal polity.

each year in some areas (Habib 1963: 25-6). What appears to be flood-management irrigation (with “tanks” holding water behind dams) was combined with flood-recession irrigation (e.g., *ibid.*: 35) and more intensive forms of well irrigation and pump irrigation (*ibid.*: 26-7). Generally, the state was not directly involved in the construction of irrigation facilities (Habib 1963: 256; Habib 1982b: 216). However, the state encouraged the “increase of cultivation,” especially by promoting fair taxation and by identifying those who were “abstaining from cultivation” and punishing them, and by granting loans for buying needed implements (Sarkar 1963: 176-7). One record, for example, refers to a loan by Shah Jahan for the purpose of erecting dams for flood irrigation (Habib 1963: 28). Generally, however, rainfall agriculture appears to have been dominant; the Indus, for example, flowed largely “uncontrolled” (Habib 1963: 29-30). In Dakhin, flow management irrigation was well developed, managed by a local co-operative group (Habib 1963: 31) that may have a pre-Mughal history.

Rural Society and Culture

The unit of assessment of revenue was primarily the producer household, not the community (Habib 1963: 119), but, over most of the area, rural settlement took the form of villages, totaling ca. 400,000 (Habib 1963: 4). Mughal administration emphasized urban governance, and seemed to be little concerned with rural areas except as sources of revenue (Sarkar 1963: 47). The Mughals seemed to honor traditional Hindu practice in allowing for the functional autonomy of the rural communities in some respects (Hasan 1936: 309-10; Sarkar 1963: 12, 13). The organizational autonomy of villages is evident in pooled funds for village expenses (Habib 1963: 125-8). A rural community’s policing was done by *chaukidars* who worked for the village community (and its shared pool of collected revenues), not the state; villagers, and sometimes *zamindars* (local traditional chiefs or *rajās*) were responsible for their own safety and that of travelers in their area (Sarkar 1963: 11). Village head man, council of village elders, *chaukidars*, and Brahmans governed at the village level (*ibid.*: 12-3), except that an official (*muqaddam*) collected revenue for the state and was charged with other functions at the village level in some areas (in exchange for a percent of tax collected); in others, *zamindars* were charged with tax collection. Free villages within the centrally governed areas had more autonomy than villages traditionally within *zamindar* domains (Habib 1963: 141-4).

Information on commoner living standards is not easy to come by, and much of the information cited is anecdotal and aimed at making one or another argument concerning whether the Mughal polity was (by British apologists), or was not, exploitative (e.g., Habib 2002: 279-80). But some information seems convincing that there was a considerable degree of economic development and perhaps an overall increase in living standards during the focal period (e.g., Grover 1994: 227), as well as population growth. Hasan (1936: 250) describes the growth of the cloth

industry, and how shawls from Kashmir became more commonly worn by “high and low.” Women’s *saris* were generally made of cotton (Chandra 1982: 460). According to Habib (1963: 53-4) cultivators had more cattle and draft animals during the Mughal Period than is true in India now, and butter was a common dietary item in some areas (*ibid.*), while meat seems to have been rarely consumed in rural diets, partly owing to preferences (*ibid.*: 91). Salt, and even more, spices, were costly but available in villages (*ibid.*: 92-3). Housing, usually comprising one room, was similar to today’s (Chandra 1982: 460-1), with wattle and daub and thatch roof a common mix of materials, while, in Gujarat, brick and tile were more common (Habib 1963: 97). Metal items, including iron hearths and copper vessels, were used alongside pottery vessels (*ibid.*: 98). Women’s items of personal adornment were always present (Chandra 1982: 460), and community ritual expenditures are described as substantial (Habib 1963: 99). Habib (*ibid.*: chapter 9) suggests a general oppression of the peasantry under the Mughals, that evidently increased over time (e.g., *ibid.*: 325-6), leading to extensive anti-Mughal revolts during the reign of Aurangzeb (*ibid.*: 338-51) (after the focal period), but this is difficult to reconcile with the comments of other authors about a growing intensity of commercial life during the focal Mughal period (e.g., Grover 1994: 233), including a growing middle strata of merchants and petty officials, even in rural areas (e.g., Chandra 1982: 465-7). We conclude there may have been an increased standard of living under Mughal rule.

Market System

Market systems were well developed. According Grover 1994) there were several ranks of market places in regional-scale systems:

Rank 1 (*qasba*) These were the main daily market and administrative centers of regional-scale systems. Here, wealthy merchants, brokers, and bankers involved in international trade could be found; lesser merchants dealt in internal commerce. Shops and crafts producers were organized by streets or neighborhoods; Rank 2 *mahals* (or *katras*) Intermediate markets; Rank 3 *mandis* These were standard markets, located in large villages, that had a 7 to 10-day periodicity. In some cases they were associated with occupational castes, including some village specialization in a craft; crafts producers both sold commodities and rendered services to agriculturalists. Below the standard markets were various petty peddlers, and “vagrant and gypsy tribes” who engaged in petty commodity transactions on a sub-market-place level of commerce, and small villages sometimes had a small shop or two.

There was considerable specialization in types of traders (Chandra 1982: 465). Craft and mercantile organizations—some organized as caste groups-recognized by the state, “regulated trade and industry” and had links to the caravan merchants (Grover 1994). All but the most marginally-located villages produced surpluses for sale in local and city markets (*ibid.*). The state itself was also a major manufacturer,

for example, to meet its vast need for garments that were regularly distributed by the ruler to officials and for elite goods consumed by the court (Sarkar 1963: 9-10).

While copper had traditionally served as the major currency metal in India, an expansion of silver as coinage is seen in a vast increase in rupees in circulation in the Mughal polity, especially after the 1590s, reflecting a movement of New World silver to Europe and then to India to finance the India trade (Hasan 1994; Perlin 1998). Subrahmanyam (1998) suggests the growth of currency in circulation reflects an increasing monetization, as early as the 17th century, of commercial transactions beyond the “urban-based nobility and merchants...” (p. 218). Grover (1994: 227) describes commercial growth (both internal and external) in the 16th and 17th centuries as an “extraordinary expansion of trade and commerce...,” stimulated in part by the growth of the state and its expanding need for revenues (which was collected almost entirely as cash rather than in-kind) (Habib 1963: 77-8), as well as growing urban populations, which required an increase in cash crop production (Grover 1994: 233; Habib 1963: 318-9, *passim*). Akbar’s annexation of Gujarat, that increased access to important port towns, also figured into commercial expansion (Farooque 1977: 15).

Geography

We identify a core zone (of roughly 750,000 sq. km) as the area administered in accord with the Mughal bureaucratic system, and in which revenue was collected on the basis of a household-by-household census (*zabt*). What we are calling a periphery (of some 2,425,000 sq. km) comprised the remainder of the polity, where government was provided by *rajās* or *zamindars* who retained some local autonomy but paid a tribute in revenue and military service (e.g., Habib 1963: 184-5, 187-8). The Mughal polity was extensively urbanized. At the time of Akbar, there were 120 large cities and 3,200 smaller cities or towns (*qasba*), each serving from 100 to 1000 villages (Habib 1963: 75). Habib (1982c: 169-70) estimates 15% of the population was urban, totaling between 16 and 17 million people. The largest city in the 17th century was Agra (with 500,000 normally, and 660,000 when it held the court), making it somewhat larger than Delhi (at 500,000); Lahore is estimated at 200,000 by Habib (1963:75-6), but at over 400,000 in Habib (1982c: 171). Shahjahanabad probably held 375,000 to 400,000 persons, of which 250,000 to 300,000 consisted of members of noble, princely, and imperial households (Blake 1991: 67). At any rate, the macroregional structure appears to have had a convex rank-size distribution by city sizes, suggesting a series of partially self-contained local regional systems linked together politically and by trade in primarily high-value goods rather than an integrated market system over the whole of the empire. Although commercial growth overall was a stimulus to city growth, and new town and city foundations, during the focal period, the largest cities were imperial capitals such as Delhi and Agra, that, like

the provincial capitals, emphasized governmental functions. But other, lesser, cities grew up around shrines or temple complexes (e.g., Benares), while other centers emphasized commercial and manufacturing functions (e.g., Patna), some of which were involved in inter-metropolitan commercial exchanges with other world cities (Hambly 1982: 434-6, 448).

Population

We follow the estimate for CE 1600 of 110 million provided by Habib (1982c: 166) (or roughly 35 per sq. km), with growth to probably 200 million by 1800 (ibid.: 167), but these numbers may be conservative (Habib 2002: 271).

World-Economy Linkages

Portuguese ships had reached India by 1497, and during the early decades of the 16th century the Portuguese empire had established a footing at Goa and elsewhere (Chaudhuri 1982: 382-3). But the establishment of the English East India Company and the comparable Dutch organization (VOC) eventually supplanted what had been a largely Portuguese monopoly, owing to a superior organizational structure of the trading companies (Chaudhuri 1982: 404), then followed by growing French involvement by the late 17th century. The Dutch and English were interested in the spice trade, but realized that to get spices from Southeast Asia, they needed South Asian cotton and other goods as a trade commodities. As a result, they gradually increased their direct involvement in South Asian and Southeast Asian trade (Chaudhuri 1982: 387-92). Eventually, both were able to secure agreements with the Mughal polity, but expansionist trade policies eventuated in war by the English Company against the Mughal empire in 1687.

During the focal period (ca. 1550-1650), long-distance trade was only a minor source of state revenues (this had changed by the 18th century), but there was some external trade. Food was exported both internationally and interregionally, including wheat, sugar, and rice (the latter from Bengal and other locations). Indigo (produced in several localities, especially Agra) was an important export, and Indian opium was highly valued in China, Southeast Asia, and elsewhere (see, especially, Grover 1994). Silk and cotton were exported from Bengal to Japan and Europe (Habib 1963: 71; Chaudhuri 1982: 401-2). There was a growth in trade through the Bolan Pass and other continental trade routes; the most important terrestrial cultural interactions and migration/trade routes were from the Safavid Empire located west of the Indus Valley, and the Uzbek Khanate northwest of the Hindu Kush mountains. Sea-borne trade east and west also increased during the focal period (e.g., Sarkar 1963: 231).

Ming Dynasty China (Figure A2-19)

Environment, Agriculture, and Area (3,900,000 sq. km)

The main environmental zones of China were described in chapter 5, so here we emphasize agricultural variation. In northern China, defined as the area from just north of the Yangtze River to the boundary with Central Asia, dryland or rainfall agriculture dominated, although flow-management canal irrigation and well

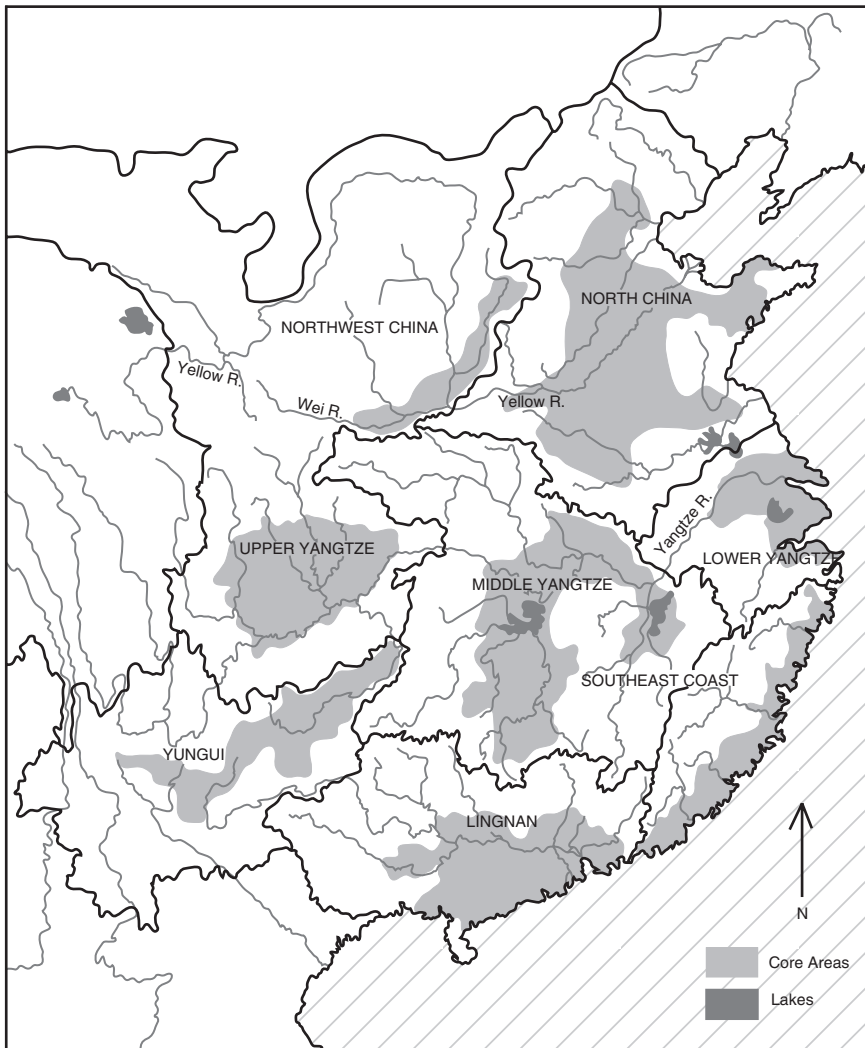


Figure A2-19 Chinese physiographic regions. Modified from Skinner (1977c: Map 1).

irrigation were practiced (Bray 1984: 101, 108-9). Wheat and millet crops were common (Heijdra 1998: 419). This was not, however, the main zone of agricultural production, in part because wheat, even on large “centrally-managed wheat plantations,” appears to have had comparatively little production elasticity under intensification by comparison with rice in the south (Heijdra 1998: 519-20; Bray 1984). South China saw a late (CE 8th to 12th centuries) revolution involving new seed strains and improvements in wet-rice production methods that resulted in a phase of migration into the Yangtze and other wet-rice areas (Elvin 1973: chapter 9). By Ming times, some rice production levels reached as high as 3000 to 6000 kg/ha/year (Bray 1984: Table 13). The main crop in south China was irrigated rice, and often double-cropped (further south), or intercropped with wheat or other crops (further north in south China) (Bray 1984: Figure 4; Rawski 1972: chapter 2).

Irrigated rice cultivation was intensive, involving land reclamation, weeding, fertilizing, transplanting, and water management. In particular, rice production in the south more often required terracing, canal construction, and other facilities to maintain acceptable levels of field inundation at critical times, for example, dike construction to limit flooding in some low-lying fields (*poldered* fields). Southern irrigation techniques included both flow and flood management, although water capture in small farmer-owned tanks was more common than gravity-flow canal distribution systems (Bray 1984: 109-10), and irrigation normally was locally managed by households or small groups (*ibid.*: 109). Ming dynasty improvements in the quality of southeast Asian Champa (double-cropping) rice, and fertilizer use, brought additional production increases (Rawski 1972: 41-46; Heijdra 1998: 520), and some large irrigation works were constructed in south China (Rawski 1972: 12). Cotton production spread into the lower Yangtze, especially in areas not suited to rice, after 1350, and became a major Ming crop in that area (e.g., Walker 1999: 29).

Rural Society and Culture

The basic socioeconomic unit of traditional Chinese society was the household (Myers 1975), and these could participate in a diversity of larger social groupings, including villages, although the degree of village settlement nucleation and community institutionalization varied over time and space (Skinner 1971). Other rural organizations in which households participated included, importantly, the standard market (Skinner 1964: 32-9) and water-control or similar agricultural associations (Elvin 1975). In the Ming Dynasty, rural communities consisted primarily of households that were free and owned their land; peasants not owning land “aspired to eventually do so” (Rawski 1972: 3). However, some households had considerably more land than others, at least in some regions (Heijdra 1998: 474), tenancy was also present (Rawski 1972: 19-24), and large manors with serf-like tenancy (meaning tenants tied to the land) persisted as one form of rural organization in spite of official opposition (Elvin 1973: chapter 15). Elvin (1973: 244-5) suggests that the growth of local markets made it possible for tenant-serfs

to develop alternate sources of income and to become more independent of their overlords, and a tenant-serf uprising was led by Teng Mao-ch'i in 1448 (ibid.).

The Ming Dynasty local-community administrative system, *li-chia*, may have developed out of an earlier local temple system, established by state mandate, that specified god and spirit altars be constructed for local commune-like units of about 100 households, but the Ming dynasty elaborated on the complexity of rural organization. Within these temple/administrative units, wealthier households served as local organizers and tax collectors (Heijdra 1998: 461; Wiens 1988). Prior to this, local communities in the north may have had only 10 to 20 households, and in the south single-lineage villages may also have been quite small. Hence, the *li* units were amalgamations of earlier forms of rural settlement (Heijdra 1998: 466). Local community functions that were augmented early in the Ming Period include communal land for grazing, and temple construction took place alongside new communal rituals such as the "wine-drinking ceremony" intended to inculcate moral values. Also, water-use rights were sometimes vested in villages and land could not be sold before providing the community with first purchase rights. Village functions included cooperation for local construction (including "village halls") and maintenance of roads dikes, schools, etc., and the management of communal funds. Many of these village integrative rituals and other integrative features were mandated by the founding Ming emperor, who was quite interested in augmenting rural institutional complexity (Heijdra 1998: 468-9). Multiple communities, up to 100, could be involved in cooperative water-control projects for irrigation, usually without direct government involvement (Heijdra 1998: 490), although well associations, gardens-guilds, and water-management communities were not always isomorphic with village or other residential communities (Elvin 1975: 88-90).

To the degree it is possible to infer rural standard of living from the quality of houses, Ming Dynasty rural living standards appear relatively high and perhaps increasing, but published sources provide little information on variation or change (Knapp 1986: 19-20), although cotton had become an important cloth for most commoners by the Ming Dynasty (Walker 1999: 31). The ideal house was a courtyard form like those first developed during the Han Dynasty and elaborated on during Sui, T'ang, and Song Dynasties (Knapp 1986: chapter 1). Construction was variable, but wood frame with ceramic roof tiles was common, sometimes using brick and/or mud brick (ibid.). An external circuit formed by walls and rooms enclosed a private courtyard that accentuated the privacy and autonomy of household life. Houses and household practices, including ancestor veneration rites, embodied elements of Confucian cultural ideals of household solidarity built around male authority, wifely devotion, and multi-generational continuity (summarized in Bray 1997: chapters 1-3).

Market System

According to Confucian theory, conspicuous consumption is "deleterious to the moral fiber of the people" and therefore the Confucian *literati* tended to have a negative view of profits, commerce, and merchants, which they associated with this kind

of consumption (Brook 1998: 674; Ho 1962: 259). The dynastic founder's ideal was of an "ancient agrarian ideal," a self-sufficient village economy, but which Brook (1998: 670-3) interprets as a vision of "pleasant bucolic stagnation at the bottom of society." In spite of this official Confucian and Ming state agrarian vision, periodic markets (*shih, chi*) were important institutions linking together rural households, and linking rural and urban populations (Skinner 1964), and, in this highly commercialized society, market conditions influenced agricultural decision-making (Heijdra 1998: 496-516; Rawski 1972: 4). Suzhou, on the Grand Canal, developed as a key Ming Dynasty market center, surpassing Nanjing in commercial importance in spite of the administrative functions of the latter (Brook 1998: 686-7).

For the Late Imperial Period, Skinner identifies four levels of market types (minor, standard, intermediate, and central) and five levels of central places (standard market town, intermediate market town, central market town, local city, and regional city) (Skinner 1964). In rural areas, a six-day market cycle was common, while more marginal markets met only a few times per month and busier markets met every 3 days (Skinner 1964: 10-16). During the Early Ming, the number of market places increased, and large numbers of specialized artisanal "guilds" organized production (Heijdra 1998: 509). There was also an active land market (*ibid.*: 446). Most transport was by water routes, and areas better serviced by riverine transportation, such as the Yangtze Delta, were more highly commercialized. Most interregional trade was in foodstuffs, especially rice, followed by cotton and cotton cloth (*ibid.*: 500-1), illustrating an important agroecological symbiosis between north (cotton) and south (rice), as well as a cloth-for-horses trade along the Inner Asian border. Other important traded commodities included silk, salt, sugar, ceramics, and iron.

The first Ming emperor's ideal was the simple agrarian economy and "other economic activities were not taken seriously" (Huang 1998: 107), and, unlike feudal Europe and Tokugawa Japan, merchants were never enlisted as a source of financial support, so liberalized trade regulations, to promote commerce, were not enacted (*ibid.*: 169). Merchants tended to encourage their sons to pursue official careers rather than entrepreneurial ones (*ibid.*: 170). Artisans, a separate official category of households, in some cases were attached to palace duty while others were free to practice their trades anywhere, although subject to government call for temporary service such as palace construction (Hucker 1998: 63). Copper coinage was eventually supplanted in part by silver (Huang 1998: 115). Paper currency was put in circulation during the latter 14th century, but it was devalued owing to excessive issue and later was worthless (Huang 1998: 139). An endemic shortage of silver and copper currencies, coupled with the failure of paper currency, and the continued resistance to allow foreign trade, resulted in economic depression from the 14th to the 16th centuries (Elvin 1973: chapter 14).

Geographical Organization

In Skinner's (1977c) discussion of market systems and the growth of cities in Late Imperial Period, he describes the structure of the Chinese polity as consisting of eight physiographic macroregions, each a nodal region centered on a major

drainage, and each consisting of a more urbanized and more densely populated core zone surrounded by an environmentally more marginal periphery that was less densely populated (Figure A2-19). Skinner emphasizes the high cost of transport over long distances, and points out that that the great majority of economic transactions, involving bulk goods, were passed through exchange circuits linking rural with urban through hierarchically structured systems of market places and their associated market towns and cities, while the flows across macroregional boundaries were comparatively unimportant.

While Skinner argues that the most productive approach to analyzing Late Imperial Chinese urban development is from the point of view of rural-urban interactions within each of the comparatively economically distinct macroregional systems, other researchers place more emphasis on the importance of “national markets” in China-wide production specializations and exchanges that had increased during the Ming Period (e.g., Heijdra 1998: Map 9.1), including especially interregional flows of cotton, cotton cloth, rice, and silk. Farmer (1976: 7-12) provides another view of Chinese regionalization in which the state’s territories make up different kinds of administrative regions (see also Figure 5-7). The politically most dominant region was the Central Plain, including the northern and southern metropolitan regions close by the two national capitals (Beijing north and Nanjing south), and linked by the Grand Canal. The Central Plain extended from the vicinity of Beijing and the Great Wall along its eastern extension, south to the Yangtze, combining parts of Skinner’s North China and Lower Yangtze macroregions. Overlapping the Central Region in its most eastern extent, the Yangtze region encompassed the lower Yangtze drainage, and included those areas of intensive rice agriculture that were associated with the polity’s highest population densities and greatest concentrations of private wealth. It includes the area around the major commercial center of Suzhou, and south of it into Zhejiang. A southern Coastal Region, including Guangdong, Fujian, and portions of coastal Zhejiang, tended to be comparatively isolated from the state’s major revenue-producing areas, and, militarily, was primarily oriented toward defense from coastal pirates. A western region, populated largely by non-Han peoples, included Sichuan, Yunnan, Guizhou, and adjacent areas, and was partially a tribute-collection area administered through “pacification offices.” This was a zone of active Han expansion and sinification. The Northern Region included the border areas between Shandong, and Shaanxi. This was a zone of comparatively low population density and low productivity wheat-based agriculture, and was populated by many non-Han peoples. This was a zone of some international commerce (including the tea-for-horses markets) side-by-side with major and minor defensive installations. Of the three border areas, the Northern Region was by far the most exposed to the threat of military incursion, while, at the same time, northward Han expansion was limited by environmental constraints on grain farming. Hence, the main strategy here was border defense rather than Han expansion or sinification. Owing to endemic problems with combat readiness of military families in the Northern Region, poor agricultural conditions, and lack of incentives for in-migration, the state often made use of convicts and officials under punishment as sources of manpower here (Farmer 1976: 15). In addition to the

military apparatus, the state used various political strategies to contain the nomadic tribes of the Mongolian plateau, including prestige-goods distributions and political incorporation (Farmer 1976: 15).

The capital was moved from Nanjing to Beijing during the period from CE 1407 to 1421. Although the basic layout of the Imperial Compound, Imperial City, and city walls and gates were established and construction initiated between 1407 and 1421, additional construction using more durable materials was continued during the Cheng-t'ung Period up to 1445 (Farmer 1976: 128). The walled Imperial Compound (Forbidden City) covered an area of .8 sq. km; the surrounding imperial city was a walled compound of 7 sq. km; and the walled area of the Early and Middle Ming Period extended over 38.5 sq. km, with a total of 9 gates (Farmer 1976: 126; Wright 1977: Map 4). Some 300,000 troops were kept in the vicinity of the city, including a special imperial bodyguard (Farmer 1976: 173). Beyond the metropolitan areas under the direct administrative control of the two main capitals, after 1428 the polity was divided into 13 administrative provinces. These and the metropolitan provinces had populations ranging from 125,000 (Yünnan) to 9,298,000 (Nanjing-Southern Metropolitan). In addition, frontier areas were directly administered as “defense areas” (northeast, north, and northwest), of which there were 9 administrative territories (Hucker 1998: 13). The territorial administration of provinces included (in descending order): (1) prefectures (*fu*) (c. 159); (2) sub-prefectures (*chou*) (c. 240); (3) “counties” (*hsien*) (1,144; although Skinner 1977a: 19-20, indicates 1,385). An average prefecture was 600,000 people in 25,900 sq. km; an average county-level *chih-hsien* governed 90,000 in an average area of 3400 sq. km (Hucker 1998: 15).

Population

The total estimated population in 1491 was 56,238,000 according to Hucker (1998: 14), whose estimate is considerably lower than some others. Heijdra (1998: 437-8) provides high estimates of 85 million for 1380 and 175 million (or more) by 1500, but Ho (1959: 264) estimates growth from 65 million in the late 14th century, with growth to 130 million by 1500. We use the latter figure. This implies an overall density of 33.3 per sq. km.

World-Economy Linkages

Mongols, Japan-based coastal “marauders,” and the Vietnamese represented at times military threats to China (Hucker 1998: 67-8; Rossabi 1998), and as a result some military expansion was carried out. Smaller states in Southeast Asia, further Inner Asia, Korea, and Japan (at times) “paid homage ... to the emperor ...” (Hucker 1998: 10). Under the Yung-lo emperor, Vietnam was invaded (but not

successfully for the long run), and the number of tributaries to the Ming court was increased to 60 during his reign (Farmer 1976: 106). The main Ming policy, however, was based on “restricting relations with foreigners, particularly those from across the northern and northwestern borders” (Rossabi 1998: 221), with only a temporary reversal during the Yung-lo emperor’s reign (*ibid.*: 248-50). Foreign policy, especially after the mid 15th century, emphasized the northern regions and defense rather than Southeast Asia (Gungwu 1998).

While the Eurasian trade, as well as seaborne commerce with Japan, Southeast Asia, and South Asia, had increased substantially during the Sung and early Yüan dynasties (CE 960-1320), it declined during the earlier part of the Ming dynasty, in part owing to restrictive trade regulations and in part to economic decline, then was revived (a “second wave” of Chinese trade) during the late Ming of the 16th century (Atwell 1998), after the focal period. Ming goods were highly valued in the Eurasian and other trade circuits, including silk textiles and the porcelain pottery consumed in Europe, India, Africa, and, eventually in the New World (Atwell 1998: 379-80, 400-1). In spite of its closed foreign policy of the focal period, some cross-boundary exchanges were valuable to the Ming state, for example the tea-for-horses trade with Tibet (Rossabi 1998: 243). Defense against Mongols and Turkic peoples was a prime concern, while the Eurasian trade with Central Asia, Persia, the Middle East, and Europe was of “scant significance” to the first Ming emperor (Rossabi 1998: 246).

Japan (Figure A2-20)

Environment, Agriculture, and Area (388,500 sq. km)

Japan has a temperate climate with abundant rainfall in most of its regions ranging from 1000 to 3000 mm annually. The topography is rugged and largely forested, with only an estimated 16% of the land area under cultivation. Rice was the main tax staple collected by the state, while the primary peasant food grains included wheat, millet, and barley (Perez 2002: 73). These grains, and sweet potatoes and beans, were grown in uplands and in rotation with rice. Agricultural production included some labor-intensive forms including wet-rice agriculture, seedling nurseries, double-cropping, and extensive fertilizing using human and animal waste among other fertilizers (Toshio 1991: 507-8, 516). Animal domestication was minimal owing to the high cost of land and the small size of most farms (Perez 2002: 72); one hectare was the minimum required to support a small family for a year (Toshio 1991: 485). Agricultural production is estimated to have increased 60% over a century up to the early 18th century, including an increase in commercial cotton production in many regions. This agricultural growth occurred, evidently, in the absence of very much state involvement. In fact, the state’s revenue flows did not proportionately increase during this time and its financial situation declined, leading to more governmental involvement in economic policy after 1722, during the focal period (Tatsuya 1991: 449; Toshio 1991: 492).

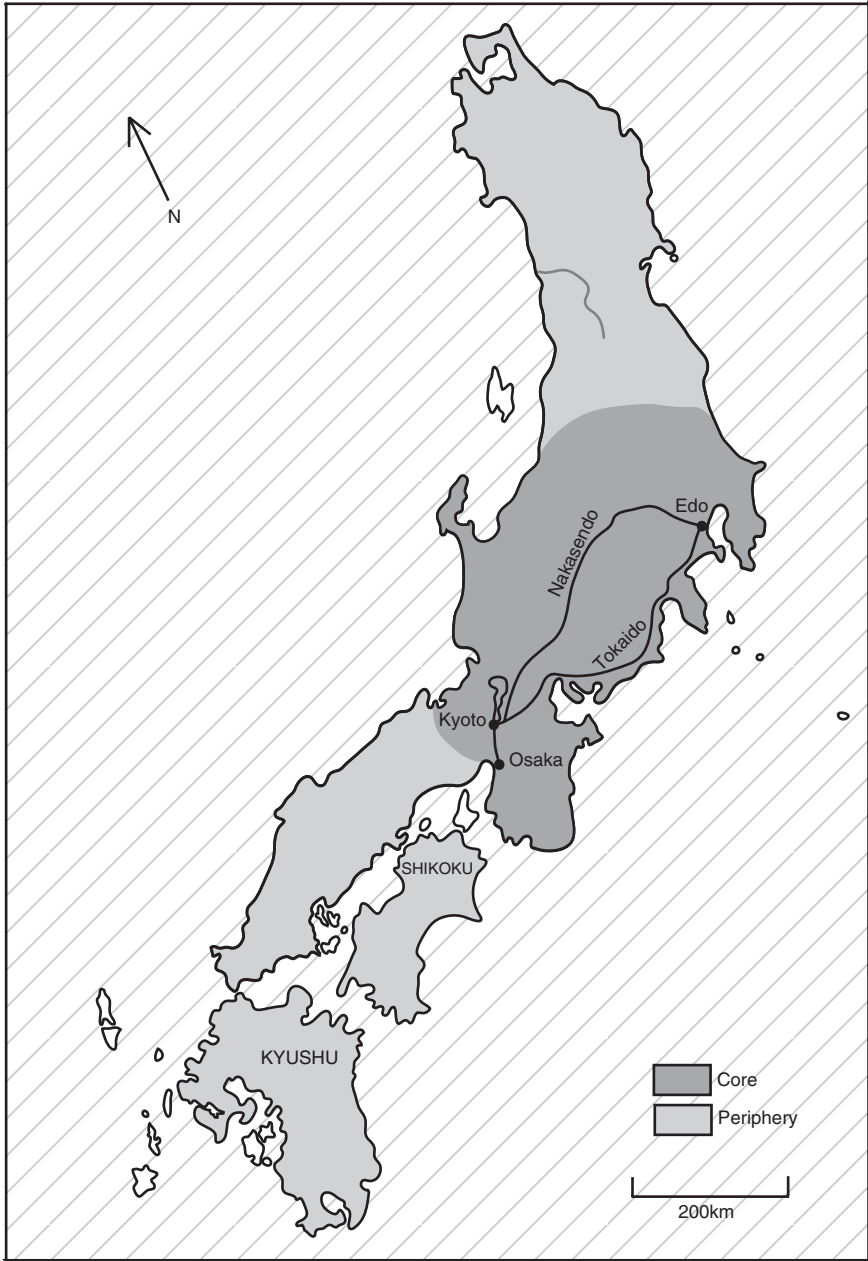


Figure A2-20 Approximate limits of core and periphery zones in Japan.

Rural Society and Culture

There were ca. 63,000 villages (*mura*) during the focal period (Perez 2002: 26). Several policies enacted during the 16th and 17th centuries laid the framework for the rural organization of the 18th century. In part, this reflected a strict cultural code enacting a system of social differentiation consisting of a governing class (*bushi*), a peasant (food-producing) class, and a commercial class below both of these in moral status. Social differentiation typically was upheld by various sumptuary restrictions on clothing, houses, etc. (e.g., Hanley 1991: 673). Rural institutions were changing somewhat during the focal period, but not entirely as a reflection of direct state involvement in them. Instead, as the traditional warrior *samurai* were moved into the governing centers of the *han* (local administrative entities), and away from rural areas, there was less presence of the state or its agents in the rural areas (e.g., Bolitho 1991: 190). This appears to have resulted in a growth in cultivators' rights of land-holding, and the development of self-regulating villages (*mura*) (Hall 1991a: 7) collectively responsible for tax-paying (Naohiro 1991: 51-2) (cf. Osamu 1991). Villages had a considerable degree of organizational and cultural complexity. Ceremonies honoring a village's "protective deities" were carried out by a community's leading families (Toshio 1991: 486-7). There was also a village council, a young men's association, and communal lands (e.g., forests), shared responsibility for irrigation management and other tasks in some cases. Village leaders were responsible to deliver the community tax assessment to officials, although it was up to the village as a whole to agree on each household's contribution (Toshio 1991: 488-95, 15-17). Five-family groups were self-help basal units that aided in the organization of *corvée* labor, water use, and other functions (Perez 2002: 133). By the focal period, a greater degree of egalitarianism had developed, apparently owing to the growing possibilities for commercial agriculture, allowing for lower-class households to participate in community governance (Toshio 1991: 491-2).

Rural living standards are not well understood, but farmers may have suffered in times of drought (Perez 2002: 27). Cash crops proliferated during the focal period, perhaps allowing for higher living standards in spite of high tax rates (Perez 2002: 27; Nobuhiko and McClain 1991: 538), including a growing use of cotton cloth by the focal period (Toshio 1991: 506), and, while rice historically had been restricted to elite diets, it was in increasing use by poorer families during the focal period. Earlier wood-framed rural houses (*minka*) included wattle and daub walls with mud (or sometimes, plank) floors and one room, often 6 or 7 m on a side (Perez 2002: 104). By the 18th century, rural standard of living had improved somewhat (Perez 2002: chapter 9), and perhaps half of the peasant families had houses more elaborate than the dirt-floor houses, elevated on earth platforms (Perez 2002: 107).

Market System

Unlike late European feudalism or the early modern period there, the Edo government "did not nurture an independent and politically powerful commercial class" (Hall 1991a: 3). Towns and cities grew up principally around castles; there were

only a few independent market centers and no significant concept of an “urban citizenship” in the manner of European merchant communes (Eisenstadt 1996: 180). However, the focal period did see the growth of an urban, mostly merchant class, the *chonin* (Hall 1991a: 6) who lived principally in the castle towns, and, some villages increased their market functions, becoming local commercially-oriented towns.

Just prior to the focal period, following the commercial reforms of Oda Nobunaga (late 16th century), there was a revolutionary phase of urbanism, agricultural change, and overall economic growth (Hall 1991a: 25-6), that included abolition of toll barriers, the establishment of “free” markets to counter some guild monopolies, and allowing merchants freedom to travel (Naohiro 1991: 57). The Tokugawa *shogunate* also standardized weights and measures and attempted to unify the currency, even though *han* lords at times issued their own currencies through the focal period (Hall 1991b: 160; Nobuhiko and McClain 1991: 582). By the focal period, systems of commerce involving chartered artisans and merchants, trade associations, specialized wholesalers, and various kinds of credit and financial institutions had developed, for example, to handle state-driven needs such as supplying specialized goods and the marketing of the great volume of tax rice (Nobuhiko and McClain 1991: 561-4).

However, commercial development was not effectively taxed by the state, for example, few attempts were made to carry out new land surveys that could document the extent of land reclamation for commercial agriculture (Perez 2002: 138). The failure to realize new taxes on commercial growth is difficult to understand, since *han* governments, as well as the *shogunate*, attempted to exert considerable control over market transactions (Nobuhiko and McClain 1991: 546). And the growing commercialization presented certain problems to the state, for example, when the merchant class exceeded the *samurai* in wealth, eroding their loyalty (Tatsuya 1991: 426; Nobuhiko and McClain 1991: 569). While rulers and merchants participated to some degree in cross-boundary exchanges, there does not appear to have been a substantial “national” market system until well into the focal period (e.g., Nobuhiko and McClain 1991: 527, 574). However, there was also a growing rural commercialization that was not taxed since the tax base continued to be the traditional rice production tax (Bolitho 1991: 190). Rural households increased production through land reclamation and production intensification as well by increasing their participation in cottage industries such as weaving (Bray 1983-4: 18).

Geographical Organization

A core-periphery structure seems only marginally developed, with the main distinction apparently being that the core was more densely populated, and afforded more opportunity for commercial transactions with the growing cities (Hall 1991a: 10). The core zone was the area of greatest urbanization around Nagoya and Kyoto, Osaka, and adjacent areas bordering the Inland Sea, while by the focal period the population of Edo and adjacent areas of the Kanto region had increased substantially, and was the focus of most Tokugawa and other estate lands (e.g., Eisenstadt 1996: 178; Totman 1967: Map 4). The growth of Edo and the adjacent

Kanto region represented a northward expansion of the core zone. Edo was connected to Kyoto/Osaka by the two main roads, the Nakasendo and the Tokaido.

The focal period was highly urbanized, with four cities exceeding 100,000. By the 18th century, 5 to 7 percent of Japanese lived in large cities exceeding 100,000—a comparatively high percentage exceeding Europe's at the time (Nobuhiko and McClain 1991: 519). With the congregation of the rural *samurai* around the main castles, cities and towns developed around these castles (Nobuhiko and McClain 1991: 520). Three major cities formed a functionally-diverse top level of the central-place hierarchy. Kyoto was the major ancient center of rulership, learning, and aristocratic ritual, and it maintained itself as a center of elite activities, including the production of highly decorated silk cloth and garments which were exported to other cities (Nobuhiko and McClain 1991: 556-7). Osaka was another large city with an ancient heritage, that, under the Tokugawa *shogunate*, emerged as Japan's most important manufacturing and market center, for example, serving as the major rice market for western Japan (Nobuhiko and McClain 1991: 559-60).

Edo was late in developing (it was a village until 1457). It was selected as the location for the Tokugawa castle-headquarters by Ieyasu just after the defeat of the Hojo, who had previously controlled the Kanto region, and after Ieyasu had been ordered to occupy the Kanto by the *shogun* Hideyoshi (Hall 1991b: 137). Although Edo was located comparatively marginally, far to the north and east of the major urbanized regions around Kyoto, Edo, it grew rapidly in the 17th century. By the 18th century, Edo's population exceeded one million (Nobuhiko and McClain 1991: 565).

Population

Japan's population is estimated at 26-30 million for most of the 18th century (Perez 2002: 15; Nobuhiko and McClain 1991: 539). This is roughly 71 per sq. km for the total area, but is 474 per sq. km of arable land. The population stability through the 18th century focal period is attributed to a combination of restricting marriageability to only one son per household, infanticide, birth control, and strong social pressure to restrict family size (Hanley 1991: 699-700), even though the standard of living may have been comparatively high (Perez 2002: 18).

World-Economy Linkages

Going back as far as the Han dynasty, Japan was regarded as having had a tributary relationship with China, but this was not of crucial importance for either polity during their respective focal periods. Japan sent missions and tribute to China in exchange for official commercial access to Chinese products, although Japanese piracy and illegal trade were common as well (Elisonas 1991). After 1639 the country was closed to almost all foreign trade or emigration, foreign travel and foreign diplomacy were limited, and Christianity was banished (Hall 1991a: 5-6). Only a very small number of Chinese, Korean, and Dutch ships were allowed to trade, and only at Nagasaki, and this policy of isolation lasted some 200 years.

Tibet

Environment, Agriculture, and Area (1,217,294sq. km)

The estimated area of Lhasa's territory is from Carrasco (1959: 78), although we found it difficult to identify precise polity boundaries or subregions. Tibet is a high plateau, ringed on three sides by major mountain ranges (Karakorum, Kunlun, and Himalayas), with additional mountain ranges coursing across it east to west. The plateau is scored by river valleys that provide small areas of cultivable land, and, in some cases, somewhat higher rainfall (nearly 500mm near the regional capital Lhasa), but even valley agriculture was risky although irrigation was possible in some localities. Higher elevations are drier (200mm or so) and usually above the range of cultivated crops, and were used as pasture lands. The major grain crop in Tibet was barley, of which there were a number of varieties, and in some areas wheat and buckwheat were cultivated, supplemented with peas, radishes, and mustard. Irrigation agriculture was intensive, with manuring and crop rotation to keep lands in almost continuous production, and in mountainous areas, some slopes were terraced (Carrasco 1959: 5-8). Cattle, and sheep, especially, were the most important domesticated animals, and Yaks were also a domesticate. Goats and pigs are relatively uncommon and the horse complex of the Turks and Mongols was absent (Carrasco 1959: 9). There was a well-developed division of labor and exchange between agriculturalists and pastoralists (*ibid.*: 11).

Rural Society and Culture

Rural communities exhibited dual organization in at least some cases. According to Landon et al. (1906: 111), "The village of Gobshi...like so many other villages in Tibet, is divided into two entirely distinct parts, separated by a waste of common-like land dotted with willow thorn...." These dual divisions may have figured into a process by which officials were elected who represented the state vis-à-vis the commoners (e.g., Carrasco 1959: 50, 71), although the two (or, sometimes, one) official could be elected or hold the post as a hereditary privilege (*ibid.*: 71). Village ownership of land is mentioned (*ibid.*: 72). Our sense, however, is that there was a considerable degree of top-down governance of rural areas by the state, for example, when we see that mountains were assigned to villages "in which villages were allowed to cut wood, collect dung, and pasture their animals..." (Carrasco 1959: 52).

According to Bell (1992: 49-50), "The houses of the peasantry are, as a rule, solid and substantial by comparison with the lightly built structures of the Indian cultivators. The walls are usually of stone or sun-dried bricks...[and they]...are

two, and sometimes three, stories in height.” We could detect no change in rural living standards during the focal period.

Market System

Bell (1992: 112) states that the centers of trade in central Tibet are Lhasa and Shigatze, but little information is given on the nature of market systems, and we suspect that rural commercial institutions were not well developed. According to Carrasco (1959: 213), most crafts were “home industries in which every household engages”. Other crafts such as textile production were managed by the government and labor was supplied by the agricultural population. Monk artisans carried out painting and printing. As Bell (1992) points out, “The manufactures of Tibet are but few... It may suffice to say here that the people produce the ordinary needs of life in a primitive fashion. The Tibetan household, whether of nobleman or peasant, produces nearly all its own requirements, garnering its grain, weaving its clothes. It needs only to buy salt, perhaps some meat, and a few other things.”

Geographical Organization

Core zones of the polity were limited to the more intensively cultivated valleys around Lhasa and Gyantse, with high plateau areas incorporated into the state system as peripheries. In some upland zones, the “lands of insolence,” pastoral nomads were not directly governed (Carrasco 1959: 221). The polity’s main kingdom of Lhasa is made up of two central provinces dBus, which includes the capital city of Lhasa with a population of about 20,000, and gTsang, with two cities Shigatze (population of about 9,000) and Gyantse.

Population

The population estimate for the kingdom, dated 1915, is about 3,900,000 people distributed in 130,000 towns and villages (Carrasco 1959: 78).

World-Economy Links

Tibet was located at the boundary between India and China (Bell 1992: 9-18; 112-113; Carrasco 1959), and was the scene of some commercial traffic between them. While China often dominated political relations with Tibet, India appears to have been an important destination for international trade. The major international trade items were tea, wool, and rice (Carrasco 1959: 213).

New Kingdom Egypt (Figure A2-21)

Environment, Agriculture, and Area (622,000 sq. km)

The environment of the core zone of the polity is desert with little to no rainfall (Butzer 1976: 39). Occupation of this area was made possible by the annual Nile River floods, which made farming possible in a narrow band along the river margins and the river's delta. Most agricultural production was based on flood recession (Montet 1981: 108) supplemented by irrigation from basins or retained water and by water-lifts (Kitchen 1985: 183-184; cf. James 1984: 115). The main crops were barley, emmer wheat, flax, vegetables, grapes, olives, and dates (Haring 1998: 76). Much of the vegetable and fruit production occurred in the delta region along with animal herding (*ibid.*: 76). Cattle formed the primary meat source (Montet 1981: 75); other domesticated animals included donkeys, sheep, and later pigs (David 1998: 69).

Rural Society and Culture

Rural settlements are not well described. Deir el-Medina, a state-sponsored community of tomb artisans, is often used as a model for rural community life even though it is not a typical rural site (McDowell 1999: 9). The populations of many rural communities worked for the state as tenants or laborers (O'Connor 1990: 17), however, some households were more independent of the state (*ibid.*: 17).

Market System

Several texts or scenes found in tombs allude to market transactions, for example, sailors engaged in private bartering transactions as their ships moved up and down the Nile, and a portrayal of a market scene (James 1984: 251, 254, 256). Local market transactions evidently made use of a system of commodity values keyed to the values of silver, copper/bronze, grain, and sesame oil, so prices varied over time in reaction to supply and demand forces (*ibid.*:248-250), but currency was not used (Kemp 1989: 248). Market places are not mentioned in state documents, indicating either that they were absent or that the state took no interest in controlling and monitoring market transactions. Moreover, the clumpy distribution of population, with large empty areas between clusters of rural communities, may have inhibited the growth of interlocking regional market systems during the New Kingdom (Butzer 1976: 80). We infer a strongly state-controlled economy. Craft specialization was highly developed, including artists, sculptors, jewelers, glaze-makers, metal-works, carpenters, leatherworkers, weavers, and potters (Kitchen 1982: 183), but Brier and

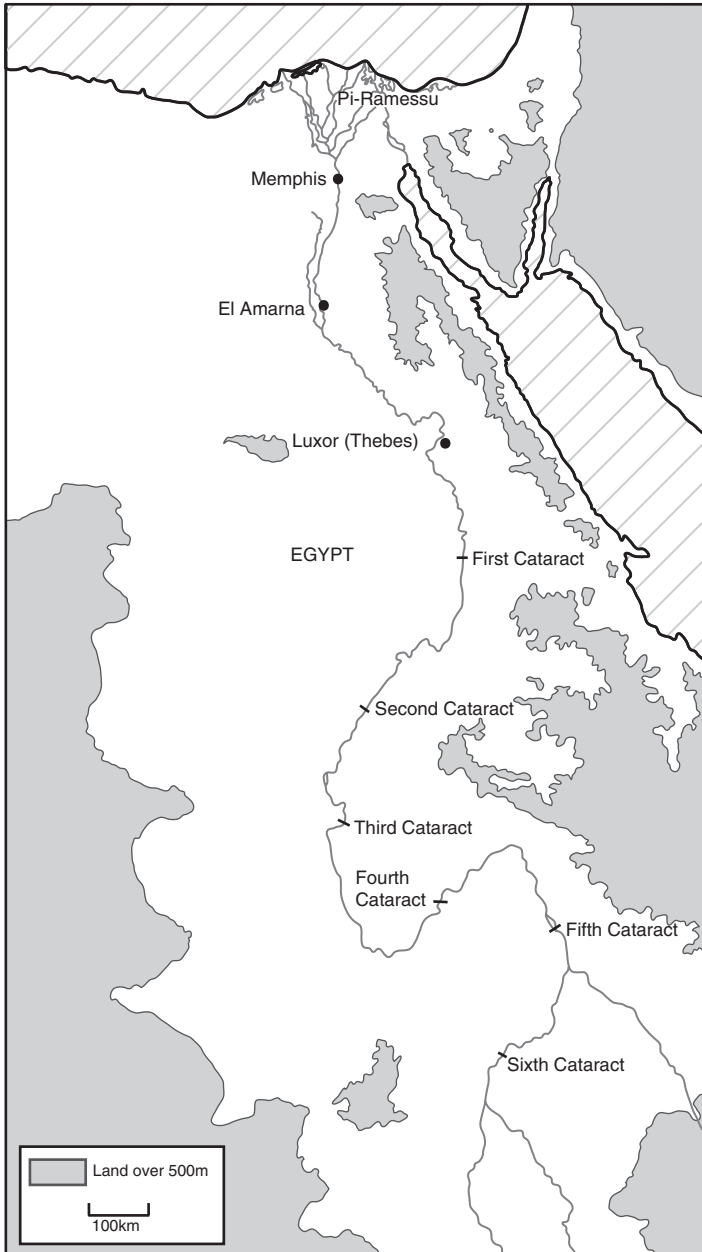


Figure A2-21 Major topographic features and sites of focal-period Egypt.

Hobbs (1999: 85) indicate that most crafts producers were attached to the government or large estates, indicating little production for commodity transactions.

Geography

Following O'Connor (1983: Figure 3.5) and Butzer (1976: Table 4), we identify a core-periphery structure with the following elements: (a) An inner core consisted of the cultivable lowlands of the Nile Basin and its delta (ca. 22,000 sq. km); (b) An outer core zone of direct administrative control that extended beyond the alluvium and delta, including the Sinai, the southern Levant, and Nubia (ca. 300,000 sq. km); (c) A "zone of domination" extending into the deserts east and west of the Nile (ca. 300,000 sq. km); and (d) A "zone of contact" extending south of the Nubian portion of the empire, that extended Egypt's influence, but was not counted as part of the polity's territory.

The inner core was divided into two administrative divisions, Upper Egypt and Lower Egypt (Montet 1964: 72). Upper and Lower Egypt were, in turn, subdivided into administrative units or provinces, later called *nomes* by the Greeks. Upper Egypt consisted of 22 *nomes* and Lower Egypt was probably divided into 22 *nomes* by the later New Kingdom. Lower Egypt consisted primarily of the Delta region and Upper Egypt of the Nile Valley between the Delta and First Cataract. Little settlement pattern data are available concerning the nature or distribution of political centers (Wenke 1997). The best-studied capital, el-Amarna (O'Connor 1989: 83), is outside the focal period. Ramesses II situated his capital at Pi-Ramessu (also called Tell el-Daba'a, Hat Waret, or Avaris). Montet (1981: 14-15) describes the capital as a populous central place with an elaborately decorated palace, with the main settlement and surrounding residential districts encircled by brick walls. Secondary and lower order centers are poorly documented. Each *nome* is believed to have had a capital, constituting a secondary center, where the *nomarch* resided (David 1998: 96). Below the level of the *nome*, each village appears to have had local officials that were connected to the larger political system (Brier and Hobbs 1999: 67).

Population

Population estimates for ancient Egypt are problematic, but Haring (1998: 76) estimated New Kingdom population at between 3 and 4.5 million. Butzer (1976: Table 4) does not provide an estimate for the focal period, but seems to suggest just under 3 million for the inner core. With an estimated 22,400 square kilometers of land under cultivation during the New Kingdom, the average population density would be about 135 per sq. km of cultivated land in the inner core (ibid: 77; cf. Butzer 1976: Table 4), although O'Connor (1990: 1) arrives at the lower estimate of 47 people per sq. km. Given these divergent figures, we provide only a rough figure

of 3 million for the total population, and we will not attempt to calculate the overall population density of the core zone or the polity as a whole.

World-Economy Linkages

World-system interactions probably were key to state formation in Egypt from the beginning, given its ideal location to mediate in long-distance trade through the “fulcrum of Asia and Africa” (Mitchell 2005: 69-73). According to Kohl (1989: 231), the Bronze Age world-economy of the late 4th through the early 2nd millennium BCE was a multi-core system extending from Egypt and the Balkans in the east to Central Asia and the Indus Valley in the west. Cores in this system appear to have manipulated adjacent hinterlands (ibid.: 233). Under this world-economic system, Egypt appears to have been an important core area able to exert control over Nubia, the Levant, and the Sinai (ibid: 233). However, because this system was multi-centric, Egypt competed with Babylonia, Hatti, Mitanni, and Assyria for control of “client states in Syro-Palestine” (Gunder Frank 1993: 397). An important outcome of this competition was the clash between Egypt and the Hittites at Kadesh in 1284 BCE (ibid: 397; van Dijk 2000: 297). The expansion of Egypt into the Levant was geared toward control of important trade centers (Knapp and Cherry 1994: 133) in part because the elitist orientation of the state political economy created a large demand for rich goods that were not locally available in Egypt. The importance of Egypt in international trade is evidenced by the presence of Syrian traders in Egypt and the Aegean-Egyptian trade during the New Kingdom (ibid: 133). Another circuit of long-distance exchange developed between Egypt and the area now within the modern state of Libya which supplied Egypt with cattle and other livestock in exchange for Egyptian products (Leahy 1990: 38, 98, 102). From Nubia, and other conquered areas, tributes collected consisted of prestige goods and appear to have gone directly to the pharaoh (e.g., David 1998: 267).

Athens (Figure A2-22)

Environment, Agriculture, and Area (2500sq. km)

Southern Greece has a Mediterranean climate, with hot dry summers and cooler winters with some rainfall, although it is unpredictable. Wheat, barley, broad-beans, and lentils were the main crops, dry-farmed on the plains, using plows, while sheep and goats were grazed in the hillier areas, which also saw bee-keeping (Whitley 2001: 382). Terraced slopes may have been used for olive and grape production (ibid. 378). It is not likely that agriculture was very labor intensive, as only roughly 195 “ordinary working days” per year were recognized, given time devoted to 80 monthly and 60 annual festival days each year (!), plus ca. 15 taboo days (Hansen 1999: 186). Wheat production was typically less than 650 kilos per ha (Garney 1992), and Athens was not always self-sufficient in grain production

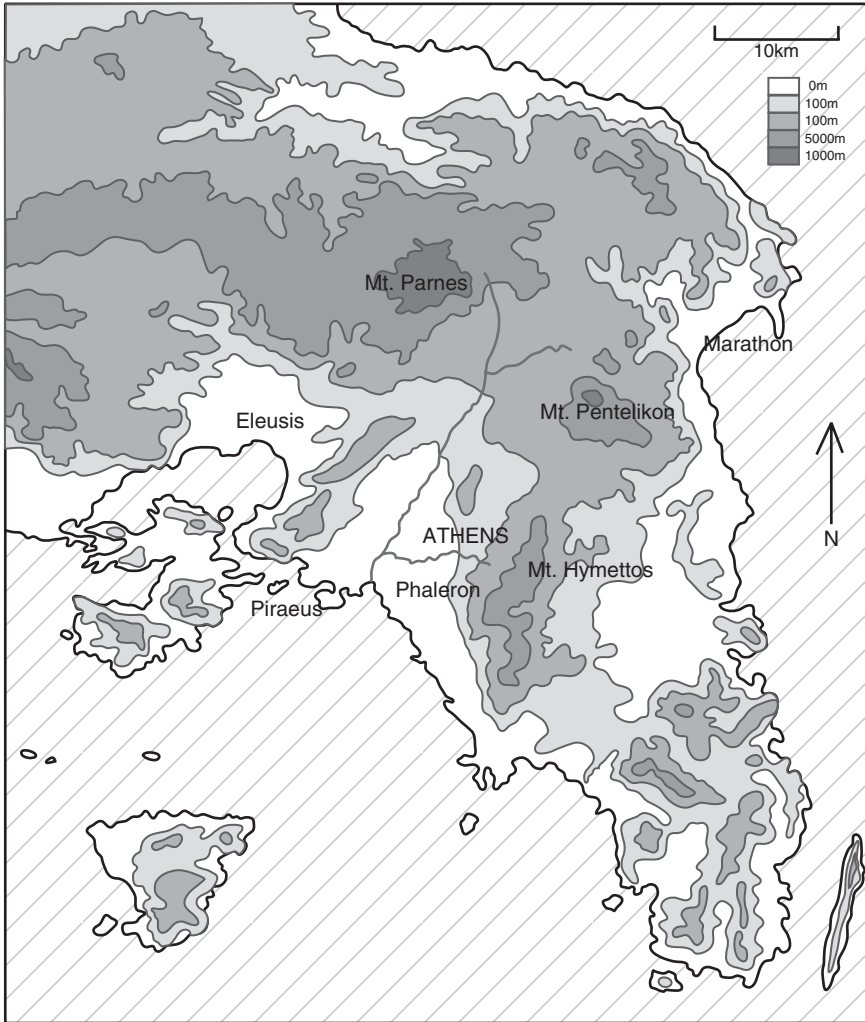


Figure A2-22 Attica.

(Garnsey 1988: 107-19). This is evident in the forceful military response by Athenians during BCE 376 when the Spartans temporarily blocked the passage of grain ships from the Black Sea (Seager 1994: 173).

Rural Society and Culture

Rural settlement seems to have included both village communities and areas of dispersed residences (Whitley 2001: 378), although there is not an abundance of archaeological data. Local communities or *demes*, were constituent elements of the democratic

system of Attica, providing representatives for various offices or governing roles including the *nomothetai*, elected at the *deme* level, and representatives to the Council of Five Hundred. *Demes* had assemblies, and by the end of the focal period, many rural *demes* had theaters that were used also for assembly meetings (Whitley 2001: 340). Morris (2005: 107-10), based on an increase in median house size, suggests an increase in material standard of living for the period from BCE 800-300.

Market System

Trips to Athens to participate in government could include market transactions at the central market (as well as to participate religious festivals there), although secondary markets were found in Pentelikon and Hymettos (Hansen 1999: 60). State policies promoted market transactions, for example, no gates closed off Athens at night (except in wartime), and no tolls were collected on those bringing goods to the Athens market (*ibid.*: 61). Non-citizens prohibited from political participation engaged fully in the commercial life of the city (except for land owning); in fact, foreign craftsmen were encouraged to move to Athens. This suggests to Hansen a strong separation of commercial from political functions in the *polis* (1999: 63).

Geography

Athens was one of about 750 *poleis* making up Classical Greece, with another 300 or more emigrant communities that had been established outside Greece (Hansen 1999: chapter 4). Greece was a city-state system, in which, although there was a broad sense of shared identity found across the Greek world (Thomas 1981: 45), the citizens of each polity exhibited a strong sense of local identity based on a powerful attachment to a territory and its history of gods, heroes, and civic and ritual sites (Thomas 1981: 44). In spite of a broadly shared pan-Hellenistic culture seen in sanctuaries such as Delphi, games, oracles (such as the powerful and influential oracle of Apollo), and shared rules of warfare (Snodgrass 1986: 51-3), modes of government varied across the Greek city-states, ranging from more democratic polities such as Athens (that allowed for political participation by all free male citizens), to oligarchies (such as Sparta) in which some free citizens were excluded from political participation.

Wars between city-states, alliance-building or political incorporation in temporary empires, and competition in the scale of temple-building can be traced back to the 6th century BCE (Snodgrass 1986). Classical Greece was a period of considerable warfare and shifting alliances between small states, and this is reflected in the abundance of fortifications dating to this period, reflecting the increased use of light cavalry and sieges in warfare (Whitley 2001: 391-2). The treacherous military situation of Athens, both *vis-à-vis* other Greek states, especially pro-oligarchic Sparta, as well as Persia, resulted in a complex history of battles, alliances, diplomacy, and intrigue (e.g., Seager 1994).

Most Greek *poleis* (self-governing polities consisting of a city plus its adjacent countryside) were small, less than 1000 sq. km (Morris 1987: 5). Attica (the city plus countryside of Athens) was one of the largest of the Greek *poleis* in area, at 2500 sq. km, and it had the largest population. Gomme (1933: chapter 2) identifies what we would call a core-periphery structure. The core zone, Athens and adjacent *demes*, was more urbanized and had a higher population density of *metics* (foreigners) and industrial slaves than the remaining periphery zone, and had roughly half the total population (an estimated 150,000) in roughly 12% of the area. Athens, the capital, and its port city Piraeus, were the only large urban centers in Attica. In the capital, the *agora* (market) was at the center of the civic and commercial life of the polity (Camp 1986), while the Acropolis, with its massive marble temples and monumental gateway, was its major shrine area (e.g., Whitley 2001: chapter 13).

Population

While the citizen population may have been as large as 300,000 during the fifth century, by the fourth, owing to wars and epidemics, it had been reduced to about 100,000 (including families) (Hansen 1999: 55). In addition to citizens, there was an additional population of 40,000 *metics* although this figure varied because they tended to migrate readily into and out of the polis depending on economic and military conditions (ibid.) The estimate for slave numbers is not exact, but Hansen places it at roughly 150,000 (ibid.) This gives a total population of 290,000 in 2500 sq. km or 116 per sq. km (not to mention other citizens who lived in colonies overseas).

World-Economy Interactions

Following a severe economic retraction in the Eastern Mediterranean and adjacent areas beginning ca. 1200 BCE, post-Mycenaean Greek populations resumed involvement in world-economy interactions with the Levant and Egypt after 1000 BCE, and during the Archaic Period (700 to 500 BCE). State formation followed on this growth of world economy involvement and the period also saw increased wealth and metal use (Runciman 1982: 367). Morris (1999) argues that this growth phase of world-system interaction brought an influx of Near Eastern goods, and precipitated tensions within Greek society over the role of imported “oriental” goods such as bronze and ivory in the construction of their social systems. Exotics symbolized a degree of luxurious cosmopolitanism that was contrasted with a more localized concept of Greek identity that had developed later in the 9th century that emphasized the use of locally-produced iron. As Morris put it: “In coming to terms with the new wealth and sophistication which the expansion of Phoenician activity made available from ca. 925 onward, central Greeks renegotiated their peripherality to the Levant” (Morris 1999: 77).

Rome (Figure A2-23)

Environment, Agriculture, and Area (3,861,000 sq. km)

It would be difficult to characterize environmental and agricultural variability in such a large and diverse empire that contained “hundreds if not thousands” of different cultures and societies (Shaw 2000: 361). The administrative and economic impact of empire-building on core and peripheries typically was far-reaching, even in distant provinces, for example, as we have documented in the case of England where Britons were provided with substantial public goods (Hunter Blair 1963: 92, 97, 120), or in North Africa, where whole regions were agronomically transformed for oil-product exporting (Mattingly 1988). Perhaps the greatest agronomic impact of empire-building was seen in the core zone of the empire, the Italian Peninsula. This is largely mountainous area, with only 25% of the area lying below 300 m and relatively flat (and most of this is in the distant Po Valley), and large areas are above the climatic limit for olives and vines (Morley 1996: 69-70). Environmentally Italy does not seem very promising for agricultural intensification, yet, because Rome’s growth was so rapid, from an estimated 200,000 at the beginning of the 2nd century BCE to one million (Morley 1996: 39; or less, according to Storey [1997]), a substantial increase in agricultural production took place in the Italian peninsula and elsewhere, including an increased use of slave labor (Morley 1996: 52-3). In a *suburbium* zone within a 30 km radius of Rome, production shifted to high-value goods destined for city sale, and often produced on large *villas* based largely on slave labor (e.g., *ibid.*). In this area of more intensive production, there was some use of small-scale irrigation (for example, drawing water from springs), leading to a growing competition between farming needs and urban demand for water in the region adjacent to Rome (e.g., *ibid.*: 104). While there were some technological advances in oil mills and presses, seed selection, and tree and vine grafting and transplanting (Morley 1996: 117), methods of cereal production (including wheat, the major grain as well as minor cereals including barley, millets, oats and rye) changed little, based on a dry-farmed system of two-field fallow (White 1984: 168), although manuring and shorter fallows, for example, intercropping, allowed for intensification to some degree in some production systems (Morley 1996: 120; cf. Halstead 1987). Oxen were used for plowing, but were expensive and not affordable by poorer farm households (White 1970: 273). Swine were the principal domestic food animal.

Rural Society and Culture

There was considerable diversity across the empire in forms of rural organization and settlement pattern, including tenancy and non-tenancy farming, communal production arrangements, and *villas* (e.g., Broughton 1975: 691; de Ligt 1993: 166; Kehoe 1988: 197; Burns and Mattingly 1980-81: 35). In the *suburbium* within 30 km of Rome, the

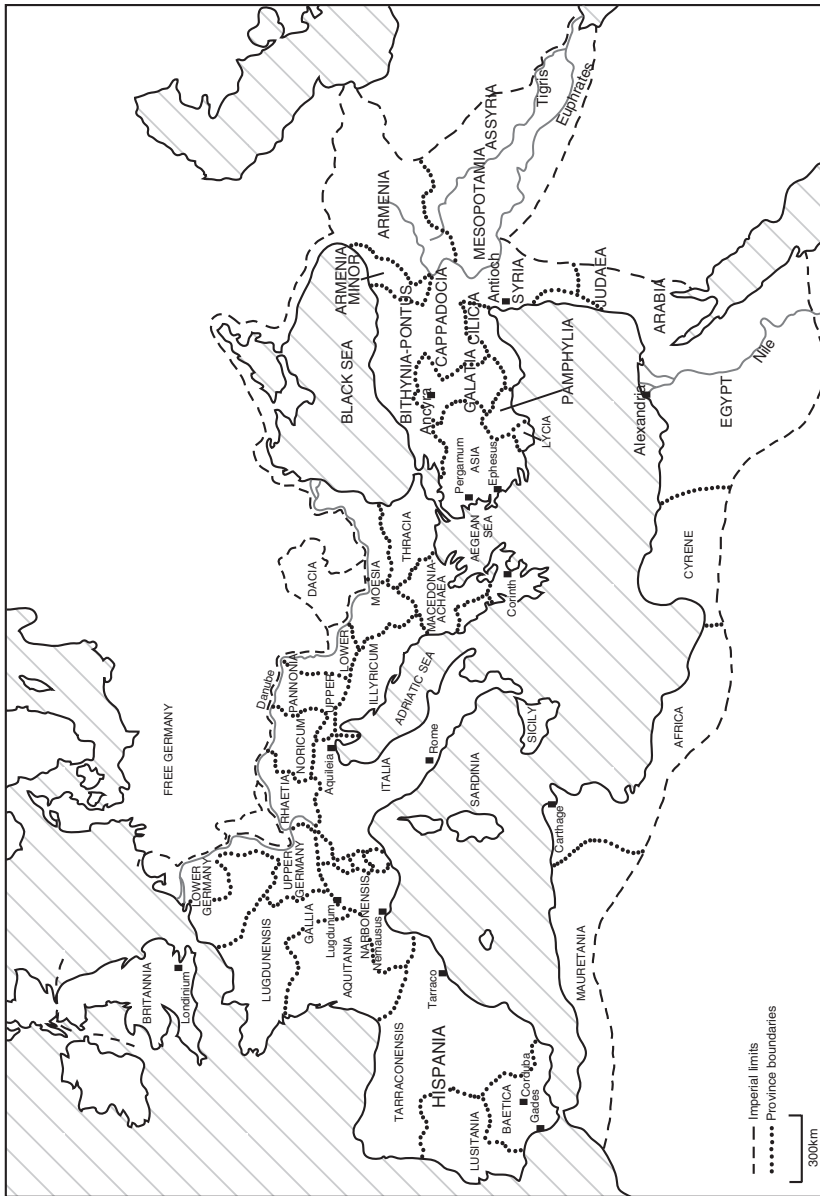


Figure A2-23 The Roman Empire under Trajan (c. CE 117).

period from the 1st century BCE to the 1st century CE was a period of extensive building and rebuilding, and an increase in the quality of construction (Potter 1979: 123); some of this was *villa* construction, but smaller sites (mostly small farms) are also found (Morley 1996: 100-1). But increased material standard of living is evident beyond Italy (Rostovtzeff 1960: chapter 10; cf. Hitchner 2005). For example, apparently there was a partial “great rebuilding” in England after the Roman conquest; while some farm households remained largely unchanged following incorporation (e.g., Hunter Blair 1963: 119), some show evidence of considerable material wealth, including brick, mortar, and flint construction (ibid.: 121-8).

Rural civic institutions were highly standardized across the empire, based on a charter originally established for Italian municipalities that included “popular assemblies, senates, magistrates, and courts” (*lex Iulia municipalis*) (Abbot 1963: 452). Towns were the basal unit of administration (there are some exceptions to this, such as semi-autonomous principalities in the eastern empire). A town administration included a territory, an urban center, a council (albeit with few functions other than the election of magistrates), magistrates (usually 6 in the west, more in the east), plus clerical staffs and municipal slaves, and a temple (Galsterer 2000: 349). Magistrates operated along the lines of the Greek system: election for a short term of office, and they operated in “colleges” (groups). The ex-magistrates formed an influential city council (ibid.: 350, 355). The judicial status of a town included two categories, citizen status (and compliant with Roman law) (*municipia* and *coloniae*—see below), or *peregrini* (foreigner); the latter were tribute-paying communities which maintained their own law codes (*civitates* or *poleis*) (Galsterer 2000: 349) (although Roman codes were often adopted). “Romanization” of community life resulted in similar-looking cities across the empire, each with a forum, basilica, temples, baths, theaters, and circuses (depending on finances) (Galsterer 2000: 249). The civic categories:

- (a) *Municipia* were semi-autonomous and legally recognized towns that “enjoyed greater freedom to run their affairs as they wished” (Birley 2000: 139), although probably required to organize along standard lines (Galsterer 2000: 350). Especially if there were financial problems or irregularities, they could have their expenses and other actions monitored by the provincial governors or by an appointed *legate* or other official from the state.
- (b) *Colonia* were either established through state action (for example, by the settling of retired legionary soldiers) or were existing communities that had been granted this status, which implied Roman citizenship for all residents (and, hence, some tax exemptions) (Shaw 2000: 363). In some cases they were given exemptions from outside examinations and taxes, and were constituted with “standardized institutions” (Birley 2000: 139).
- (c) *Civitates liberae* or *poleis*, were found especially in the eastern provinces. Their relationship to the empire appears to have been based on treaties, and their governance appears to have fallen more directly to the emperor rather than the provincial governor (Eck 2000b: 278).

Market System

Rome was not a significant goods producer or exporter, and was extensively supported through tax revenues and rents paid to wealthy *villa* and estate owners who lived in Rome (Morley 1996: 6). As such, the economy of Rome has contributed to early substantivist arguments about the economic stagnation caused by the “ancient” parasitic “consumer city” that failed to stimulate trade and entrepreneurship (Finley 1973). Morley (1996) disagrees with the consumer city model and points to the impact of the empire and the city of Rome on the economic system of Italy that linked rural producers and markets into the city economy (cf. Hopkins 1980). While some goods came into Rome through private channels and through tax revenues, still, a periodic market system is evident that provided commercial links between rural producers and urban consumers. The periodic markets of Italy (*nundinae*) were held every eight days (de Ligt 1993), and operated side-by-side with full-time commercial establishments (*macellum* [daily retail markets]). Some sources of information suggest an interlocking market system in Italy linking rural farms and pastoral uplands to urban customers and producers, with markets located on roads radiating out from Rome (Morley 1996: chapter 7, especially p. 173).

Agronomic change in Italy was strongly tied to the urban economy of the city that increased demand for high-value goods such as flowers, fruits, eggs, garden produce, fish from fishponds, chickens, and exotic foods for “*collegia* dinners” in Rome (Morley 1996: 88). Portions of the Italian Peninsula, especially near Rome or sufficiently near the coast to allow for efficient marine shipping (Morley 1996: Map 1), or in uplands suitable for pastoral production, constituted an outer part of the core, that, while not able to provide high-value fresh produce, still was unlike other provinces in that it was tax exempt and relatively well connected to the Roman economy (Morley 1996: Chapter 3).

Geography

By the focal period, the empire had a well-developed core-periphery structure, as follows (summarized from Hopkins 1980: 101):

- (1) An outer ring of frontier provinces with defensive armies was a net consumer of tax revenues;
- (2) An inner ring of “tax-exporting” provinces included Spain, southern Gaul, northern Africa, Asia Minor, and Egypt;
- (3) A core zone, consisting of Italy and, especially, the city of Rome, was also a zone that “consumed a large volume of taxes.”

Across core and peripheries, the empire was made coherent through the military presence of the state, combined with a sense of *patria communis* or common membership that is reflected especially by the extension of citizenship to non-Italians, economic exchanges between provinces, and the payment of imperial taxes

(e.g., Shaw 2000: 362-3). Lastly, Rome itself and its architectural and other “wonders” that so impressed people made the city “one of the symbolic structures of empire” (Purcell 2000: 405). The establishment of colonies was another integrative element, but this practice had largely ended by the focal period. The demand for goods by Rome and its provincial garrisons, coupled with taxation (outside Italy, as Italy was exempt from the production tax) brought about changes in many regional economies, including production intensification, infrastructure development, and increased trade (Hopkins 1980; cf., Garnsey 2000: 682; Morley 1996: 7).

Italy as a whole was highly urbanized, with some 450 cities (Purcell 2000: 423), and included important secondary centers that developed to serve as commercial nodes or sites of production, for example, Ostia, Puteoli, Pompeii, Capua, and Beneventum (Morley 1996: 177-8, 182, Table 1). Italy was both a comparatively urbanized region and also strongly primate in its rank-size structure given the vast population of Rome. At the imperial scale, however, the rank-size relationships were less primate, with at least two cities (Alexandria and Carthage) approaching 600,000 and Ephesus and Antioch probably in the several hundred thousand category (Harris 2000: 712).

Population

Shaw (2000: 361) estimates 80 million for the entire empire, while Frier (2000: 811, Table 5) gives a figure of 61.4 million in CE 164 (of which an estimated 15% were slaves); this is closer to Hopkins’s (1980) estimate of 54 million. Using the Frier estimate gives an overall density of 15.9 per sq. km. Of course, in such a large and environmentally diverse empire, average values mean little. In addition, these estimates are less than population density estimates based on archaeological surveys summarized in Blanton (2004: Appendix 1). Here, nine selected surveys ranged from 8 per sq. km to 225 per sq. km, with an average value for nine cases of 77 per sq. km. Of course, surveys have not been done in highly marginal landscapes.

Migration figured importantly into the empire’s population distribution, in line with a more general Mediterranean process evident since the Bronze Age (e.g., Horden and Purcell 2000: 279). While prior to the focal period the eastern empire was much more densely populated (20.9 per sq. km in the east, and 10.6 per sq. km in the west), by the focal period considerable growth in the west had occurred, in large part representing east to west migration on a large scale (Frier 2000: 814).

World-Economy Linkages

The Roman empire was a world-empire (i.e., a politically integrated world-economy) in the sense of Wallerstein (1974), although a large proportion of the exchange transactions, including cereals coming into Rome, involved private entrepreneurs (Harris 2000: 717). Hopkins (1980) argues that the imposition of taxes was a stimulus to production intensification, local commerce, and long-distance exchange across the empire, but other strategies also promoted economic integration. While

regional coinage was still struck, the values of all coinages were consistent with the Roman standard currency, and the degree of monetization was similar across the empire; Hopkins argues that the widespread distribution of coins served as one institution of imperial economic integration (Hopkins 1980: 112-13). Beyond the empire, the northern and eastern boundaries were highly permeable, with trade extending to the east coast of India and beyond (ibid.: 713).

Venice (Figure A2-24)

Environment, Agriculture, and Area (32,000 sq. km)

The Venetian territory generally features a warm temperature rainy climate with considerable potential for irrigation in adjacent alluvial plains. With the growth of Venice in the fifteenth and sixteenth centuries, mainland producers increasingly converted pasture land to arable land to supply the city with grain (Pullan 1971: 28), with production focusing on wheat, rye, beans, millet, sorghum, buckwheat, vegetables, and grapes, with the later addition of rice (ibid.: 27-28). Animal husbandry focused on the production of cattle, goats, and sheep (Braudel 1972: 85-91). According to Braudel (ibid.: 60-85), the digging of drainage canals and the construction of irrigation facilities were key to successful agriculture on the plains of northern Italy. Drainage and irrigation canals were constructed in the territory of Venice, at least in both Brescia and the Dogado. In some cases the state was involved in the construction of these facilities, but many were constructed by private capitalists.

Rural Society and Culture

Since most researchers emphasize Venice itself, we could find little information about the nature of rural communities. The Venetian state was active in establishing new forms of governance in conquered areas, modeled after the capital's system, and staffed by a combination of locally-elected citizens and Venetian officials (Lane 1973: 266; Norwich 1982: 208-9)

Market Systems

Again, little information is available, but the capital and secondary cities did serve as regional market places (Pullan 1971: 27). A regional-scale economic system integrated Istria, Aquileia, Trieste, and the Marches with the Venetian economy (Lane 1973: 60). Istria sent timber (which was vital to ship building), charcoal, and stone. Aquileia supplied Venice with pigs and wheat. Trieste exported skins, hides, and meat. The Marches supplied Venice with wine. In exchange, Venice supplied these areas with salt, woodwork, leather, pottery, glass, and metalwork.

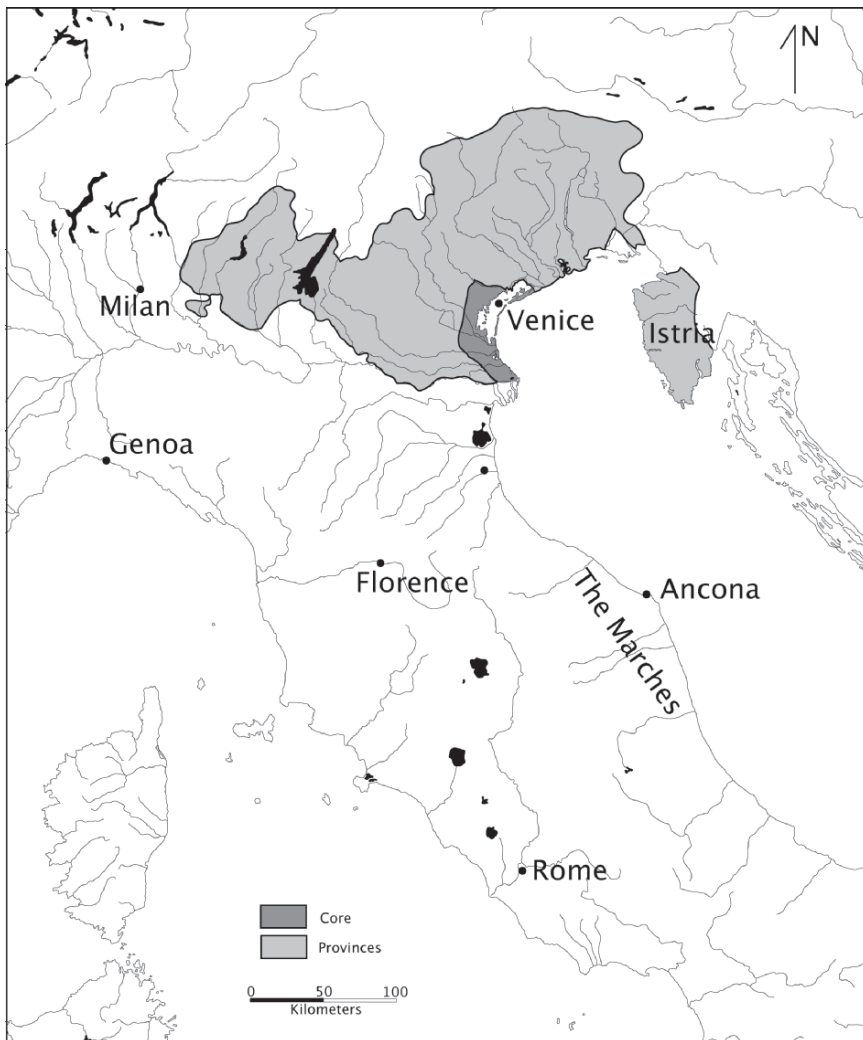


Figure A2-24 Approximate core zone limits and limits of the Venetian polity.

Geography

The core area of state encompassed the city of Venice, built at considerable expense on a marshy lagoon, and the adjacent land it directly controlled, called the Dogado. This core area probably covered about 1200sq. km, while the more peripheral zones on *terra firma* probably covered about 30,800sq. km. In addition, the Venetians controlled cities along the coast of Dalmatia, the coast of southeast Italy, in Peloponnesian, and on Crete and Cyprus at the peak of its power (Chambers 1970: Figure 30). One estimate places the area of Venice at ten sq. km in 1493

(Chambers and Pullan 2001:4), with a population of some 120,000 (Lane 1973: 19). The mainland population was spread across the area of Veneto and Friuli in a number of cities. In 1548, one-fifth of the population lived in centers with more than 10,000 inhabitants (Pullan 1971: 27).

Population

The total estimated population of Venice and its mainland provinces is 1.6 million in the mid-sixteenth century (Pullan 1971: 27).

World-Economy Linkages

During the focal period, Venice was one of the many city-states that dominated politics in northern Italy, including Milan, Genoa, Florence, and Rome (Norwich 1982). Located to the north were Germanic states unified into the Holy Roman Empire (*ibid.*), while, to the east, the Venetians faced the empire of Hungary and later the Ottoman Empire in the Balkans (*ibid.*). Venice was also an important node in the world-economy of the focal period. Abu-Lughod (1989, 1990) demonstrates that by the 13th century a world-economy was well developed with core areas in the Middle East, Central Asia and China, and the Indian Ocean. She also notes a possible fourth core in Western Europe, although, at that time, much of Europe constituted a periphery vis-à-vis the larger exchange network, and Venice emerged as a key semi-periphery linking the eastern cores to their European peripheries. The Venetian state actively used military strategies to dominate the Adriatic Sea so as to channel, by force, the flow of goods between Europe and the Orient through the market at Rialto (Lane 1973; Norwich 1982). For a time, the Venetians emerged as the sole middlemen in the movement of goods from Europe to Asia across the Mediterranean, and, as the world-system expanded and trade intensified, Venice became increasingly wealthy and powerful. The major trade items coming out of the Orient were pepper, cinnamon, cloves, nutmeg, incense, and ginger (Lane 1973: 61, 70). In exchange Europeans sent silver, copper, iron, and fine woolen cloth to the east (*ibid.*: 70). The Venetians brought grain, salt, fish, furs, alum, kermes, wax, honey, cotton, and slaves from the Black Sea; silk and silk fabrics from Romania and Constantinople; and sweet wines from the Greek Islands (*ibid.*: 69). Germans supplied eastern markets with linen, silver, copper, iron, and gold, but were forbidden to transport their wares beyond Venice, where they were purchased and shipped eastward by Venetians (*ibid.*: 61). Moreover, the Venetians financed mining in Nuremberg and Augsburg to increase production (*ibid.*: 61). Although Venice's primary function was as an international market, the city also produced salt and glass (and later textiles) for export (Lane 1973: 58, 157-160; Zorzi 1999: 206-207).

England (Figure A2-25)

Environment, Agriculture, and Area (England 130,400 sq. km, Wales, 20,800 sq. km, and half of Ireland at 42,200 sq. km, or 193,400 sq. km total)

The polity featured two major environmental zones influencing the distribution of farming activities and agricultural specializations. The north and west is “dominated by mountains and moors, where soils are poor and thin, the valleys and plains few and far between, where the whole countryside lies athwart the path of rain-carrying winds, affording a cool, wet climate” (Thirsk 1967: 2). The inhabitants thus tended to specialize in animal production (ibid: 2). The south and east core zone is characterized by “undulating lowland, with smaller hills, gentler slopes, a richer deeper soil, and a drier climate” (ibid: 2). This is the region of mixed grain, especially wheat, barley, and oats, and animal production, where animals served as working beasts and sources of fertilizer for grain production (ibid: 2-3). During the twelfth and thirteen centuries, farming was intensified with the expansion of the arable at the expense of grazing and meadowlands, and the construction of terraces (ibid: 35). After 1300, the intensification trend continued with the spread of enclosed fields in some areas (ibid: 38-39). At least by the later middle ages, specialized sheep husbandry had emerged in northern England (Holmes 1962: 23; Miller 1988: 410). Sheep herds numbered in the thousands, ranging from 4,000 to more than 10,000 adult animals in a single manor’s herd (Miller 1988: 409).

Rural Society and Culture

In the thirteenth century, most people lived in villages consisting of a church, a manor-house, a mill, and peasant houses (Holmes 1962: 11). The church and manor-house were usually constructed of stone, while rural houses were generally one or two rooms constructed of mud and clay, timber, or a combination of timber and mud, all with thatched roofs (ibid.). Historians divide rural settlement into two general categories, hamlets with less than 50 residents, and villages with between 50 and 200 residents (Russell 1948: 307). Two hundred to 300 residents seem to be the minimum population for market towns (Dyer 1996: 21; Russell 1948: 307). In addition to village communities, rural social complexity was built around the county (or shire), which was subdivided into hundreds (Morris 1947: 74). During the reign of Edward III there were 38 counties including London (ibid: 76-77). The royal officials in the shires and hundreds included the sheriff and his assistants (the constable and bailiff), the hundred bailiff and some lesser officials, the official of the liberties, the coroner, the keeper of the peace, and the justice of the peace (Cam 1950; Haven Putnam 1950). The Sheriff was part of the Department of the Exchequer and was appointed by the central administration (Morris 1947: 45).



Figure A2-25 Approximate core and periphery zones of England.

In contrast, the coroner was selected and removed locally and the central government had no control over the selection of this official (Cam 1950: 153).

The other pattern of rural administration was based on the feudal manor and its lord. These lords controlled a unit of land and had jurisdiction over the tenants on it (Holmes 1962: 13). In this system, which predominated throughout the 13th century, the manorial lord had supreme power over his tenants (ibid: 17-18). But, by 1300, these lords had lost some power to the state, and all major civil and criminal cases

had been taken over by the royal courts and were heard by professional judges (Swanson 1999: 81-82). Most of these cases involved felonies and murders, while lesser civil cases involving tenants' lands were still heard by lords or town justices (ibid: 82). The richest and most powerful of these lords built castles, while the lesser lords, who were tenants of the magnates, built stone manor-houses as their administrative headquarters (Platt 1982: 90-107). The crown also controlled many castles and estates that were dispersed throughout the kingdom. According to Mathieu (2001: Fig 4.17), the crown controlled a variable number of buildings during the focal period, averaging around 125. These buildings were used as residences, forts, castles (with both residential and military functions), and county castles (with military, residential, and county administrative functions) (ibid: 123-124).

Market System

The literature on the market system of Medieval England is poorly developed. Various references to weekly markets seem to indicate that the system operated on a seven-day market periodicity and displayed a market hierarchy (Biddick 1985: 826; Dyer 1996: 19; Swanson 1999: 23). At the top of this system stood London, the largest population center in early 14th century England, with nearly 200 crafts, and a number of markets (Nightingale 1996: 98, 100-102; Swanson 1999: 24). In the countryside, the marketing landscape exhibited a relatively low level of commercialization with median market radius ranging from about 8 to 12.5 km, though many villagers could choose between two, three, or more marketing destinations, indicating the presence of an interlocking market system (Dyer 1996: 23, Figures 2 and 3). The primary non-agricultural specializations of Medieval England were stone quarrying, coal mining, salt production, pottery manufacture, glassmaking, ironworking, lead mining, tin mining, weaving and fulling (Hurst 1988: 920-30; Swanson 1999: 24).

Geography

The core area of the English state consisted of the flat lands located on the south central to southeastern section of the island. The wetter, colder, and hillier areas in the north and the west formed a more peripheral zone where political control was more limited and where nobles retained judicial powers independent of the crown (Holmes 1962: 61). Beyond these incorporated peripheries were Wales, Scotland, and Ireland. In the north, Edward I made forays into southern Scotland, gaining some territory, which was subsequently lost by his son, Edward II (ibid: 98). Border skirmishes continued under Edward III until the Truce of Newcastle in 1323, which effectively established the independence of Scotland during the focal period (ibid: 99). During the focal period Wales was a conquered territory

effectively under the control of the English crown (ibid: 100). Edward I conquered the eastern portion of Ireland, which was then ruled by English lords (ibid: 100). After a rebellion during Edward II's reign, Roger Mortimer re-established nominal control (ibid: 101).

Early 14th century England was marked by a well-developed central place hierarchy. At the top of this system was London, with a pre-Black Death population peak of about 55,000 to 60,000 *ca.* CE 1300, but had fallen to 45,000 during the 1320s (Nightingale 1996: 98). London in the early 14th century was a walled city, with numerous gates, narrow streets and a tower in the southeast corner (Baker 1970). Most of the population of London during the Medieval period lived within the old Roman walls of the city, which had been slightly modified during the intervening years (ibid.: 50). However, the city also included suburban areas (ibid: 51-52). After coming to power, Edward III guaranteed Londoners their right to self-government (ibid: 113) based on the commune model of northern France and included the election of their own mayor, their own sheriffs, and they paid their taxes in a lump sum (ibid: 104). Outside the walls and to the west of the city along the riverside road was located the administrative center of England, Westminster Hall and Palace, and the adjacent Westminster Abby (ibid.: 53, 67-81). Westminster acted as the seat of administration and housed parliaments (ibid: 111; Johnson 1940: 236). However, its rise to the center of the political arena was slow since parliaments could be summoned anywhere by the king as he moved throughout his kingdom (Baker 1970: 111). Other large centers (towns and cities) also were partially autonomous of the central government (Swanson 1999: 75-6, 79-83). By 1300, there were more than 500 towns in England (ibid: 14). Fifty of these towns exceed 2000 inhabitants and possibly 20 towns had populations greater than 5000 (ibid: 14). The most important towns, apart from London, were the regional centers of York, Winchester, Norwich, Newcastle upon Tyne, and Boston (ibid: 14).

Population

The population of the English polity in the early 14th century is estimated at about 3.7 million (Russell 1948: 246).

World-Economy Linkages

During the 13th century, England was peripheral to a world-economy with three or four core areas in the Middle East, Central Asia and China, the Indian Ocean, and possibly a fourth core in Western Europe in what had been a periphery (Flanders, France, and Italy) (Abu-Lughod 1990: 275). The major export of

England during this period was raw fine quality wool (ibid: 276). As a result, wool production expanded significantly and became the “chief basis of large-scale commerce” (Holmes 1962: 31). The annual export of raw wool reached 5,800 tons under Edward I and continued at this level until the middle of the fourteenth century (ibid: 32).

Ottoman Empire (Figure A2-26)

Environment, Agriculture, and Area (excluding vassal states, the area under direct government control was 2,279,200 sq. km [Pitcher 1972: 134])

This is an environmentally diverse area that is difficult to characterize. In semi-arid areas, the main crops were wheat and barley, although rice-growing was also encouraged (Inalcik 1994: 7, 143). State policies favored the cultivation of *miri* fields (state land) for dry-farmed grain only, and restricted its conversion to pasture or other uses (ibid.: 155), but “Vineyards, orchards, and vegetable gardens” (as well as the villages themselves) were considered freehold property, not state land (Inalcik 1994: 155). Villages formed the main rural settlement pattern, although large areas of Anatolia remained devoted to nomadic animal production to supply cities with animal products, especially Istanbul (Inalcik 1994: 161). Nomadic Turkoman pastoralists produced food, wool, and hides for urban industries as well as finished dyed carpets (Inalcik 1994: 39).

Rural Society and Culture

The basic unit of rural production was the “family farm unit, cultivated and managed by “free” peasant households” (*caput, oike, hane*), using yoked oxen for plowing (Inalcik 1994: 143). Free in this case implies that the organization of production is based on household decisions and “no one could use ...[household]...labor arbitrarily” (ibid.: 145). The perpetual tenancy of the peasant family was assured through the state’s periodic surveys that determined that peasant land was not being confiscated or sold by *sipahis* (soldiers who had been granted *timars*, a prebendal form of compensation for government service) or others to create larger consolidated holdings (ibid.: 146). Villages generally were “agglomerations of independent peasant households” with little in the way of communal organization other than shared pasture for draft animals, threshing floor, a collectively-maintained watchman, and water sources (ibid.: 174). No mention is made of a village head man (the *sipahi*, or local official is the sultan’s representative to the village) or council, and dispute resolution seems to be a non-village matter in the hands of a state court (ibid.: 176-7). Some villages had saint’s tombs or a cemetery that could constitute proof of continuity of settlement

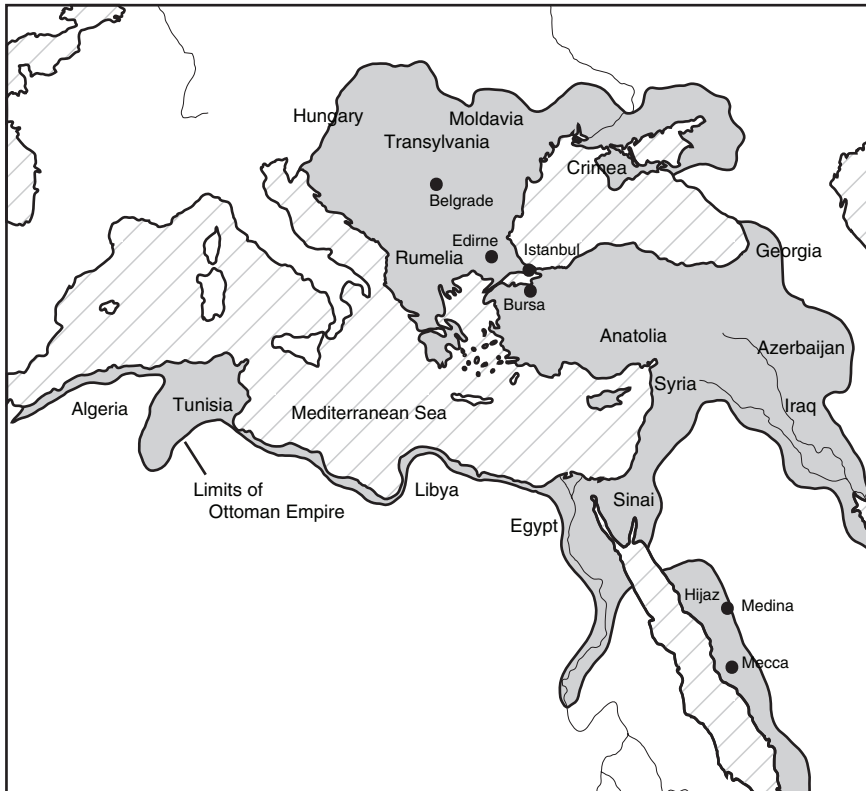


Figure A2-26 The Ottoman Empire during the reign of Süleyman I (1520–1566). Modified from Necipoglu (1991: Map II).

(*ibid.*: 174), but other forms of architectural spaces or buildings are not mentioned. Names of villages (in many cases still in use today) often reflected the Ottoman labor obligations required of them, for example butter-making village (*ibid.*), indicating, perhaps, that prior to Ottoman times villages lacked names. Rural living standards are not well described for the focal period, but by the late 16th and later, foreign writers commented on the poverty of rural areas (Lybyer 1966: 144-5).

Market System

Since peasants paid approximately half of their local “customary” taxes owed their *sipahi* in kind, periodic markets sprang up in many parts of Anatolia where peasants could exchange goods for currency (Inalcik 1994: 71). The state accounted for much of the total economy and commercial transactions were comparatively unimportant (*ibid.*: 48). The basic concept of Ottoman state economics was that producers should

produce surpluses that “feed the treasury” (ibid.: 49). Hence, market regulation was present, to protect consumers from price fluctuations, but also were aimed to restrict luxury consumption, for example, by forbidding the production of cheaper silk cloth for commoners (ibid.: 53).

Geography

The core zone of the empire consisted of Rumelia (in the Balkans south of the Danube) and adjacent regions where land had been confiscated through military expansion, and hence, where *sipahis* could be granted prebends. This included parts of Asia Minor and Europe where Islamic conquest was considered legitimate (i.e. did not result in the confiscation of Muslim land). Egypt, Damascus, Aleppo, Yemen, and Baghdad were self-governing provinces that produced a tax surplus, and could be considered a kind of periphery, but the core-periphery system includes some additional complexities. In Lybyer (1966: 28-32) we also see frontier zones of military raiding, and “tithe” lands (because in Islamic theory, Muslims paid only religious tithes, not taxes, per se), such as parts of Arabia where Muslims had been given land in fee simple. The marginal frontier zone where military raiding was conducted included an area across Austria-Hungary, from the Adriatic extending in a northeast direction, with another band extending east across southern Poland and Russia. There was also a frontier in Persia but it was not suitable for raiding (because of rugged terrain) or slaving (because Muslims could not be taken as slaves) (Lybyer 1966: 29-30). Lastly, the empire’s geography included “vassal territories” such as Georgia, Mingrelia, and parts of Arabia, that paid no regular tribute, while Cyprus, parts of Hungary, Ragusa, Transylvania, Moldavia, and Wallachia, gave gifts but maintained local autonomy (ibid.).

Mehmed II initiated the transformation of Istanbul into a metropolis that would rival its earlier glories under the Roman emperors, in part based on the forced immigration of Turkish, Greek, Armenian, and Jewish colonies; by 1600 it had a population of 400,000 and was the largest city in Europe and the Middle East (Inalcik 1994: 18). While Istanbul was the imperial capital, large secondary capitals developed at Bursa (an important emporium for Iranian silk bound for Venice and the European market), and at Edirne (Adrianople), which was a secondary political capital (ibid.: 19, 256). The rapid growth of population in the Balkans, along with agricultural intensification, supported the urban development of Istanbul and Edirne (ibid.: 256).

Population

Tax surveys and poll-tax registers for non-Muslims provide data on population. This provides an estimate of 4 million non-Muslims in the Balkans (1490s) and 32,000 in Anatolia, while the Islamic population of Anatolia was roughly 4,600,000;

but rapid growth (as well as some annexation of new territories) resulted in a total population of the empire by 1520-35 of 12 to 12.5 million (Inalcik 1994: 26-9). This is an overall population density of only 5 per sq. km, probably because the empire included so many marginal lands and because much of the territory of Anatolia was used primarily for animal grazing.

World-Economy Linkages

According to Inalcik (1994: 218), the motto “commerce is the wheel of the economy” should be “fashion is the wheel of the economy.” This is evident in the growing popularity of silk cloth in Europe from the 13th to the 18th centuries, which had an impact on world-economy development, including a growing Chinese trade after 1257. Disruptions in Chinese supplies and the decline of the Pax Mongolica in 1345 brought a change in trade routes away from Tabriz and the Black Sea ports, but, eventually, Ottoman expansion provided for the growth of Bursa during the 15th century (Inalcik 1994: 316-17), and following this, the trade in Iranian silk and other goods, including Indian spices, became an important source of Ottoman revenues, especially benefiting their silver stocks (ibid.: 219). The key *entrepot* for the silk and other “world market” goods traded between Asia, the Middle East, and Europe developed just south of Istanbul at Bursa (ibid.: chapter 10). The history of late Medieval and early modern Asia-European trade is replete with wars over profitable trade routes and control of trade *entrepot*, and the shift of trade away from Timur-supported Tabriz was a key building block of Ottoman power; in Inalcik’s words, “along with Constantinople and Pera, the rise of Bursa as a world market in the second half of the fourteenth century became the economic foundation of Ottoman power” (ibid.: 223).

Hence, in spite of religious and other cultural differences, trade with Europe was important and made possible through providing “amnesty” to selected groups of European traders. European imports included some raw materials and other utilitarian commodities (tin, lead, and steel, gunpowder, chemicals, and silver and gold), as well as elite goods including fine wool, jewelry, crystal and mirrors, and watches (Inalcik 1994: 189). In some widely-traded commodities, Venice and Istanbul were in competition, for example, they competed for “the grain supplies of the Levant” (ibid.: 182, 184). To supply Istanbul “transformed the steppe between Dnieper and Varna into a vast region of commercial agriculture and livestock breeding,” based in part on immigration of Tatars and Turcoman into what had been “a no-man’s land” (ibid.: 186). The northern Black Sea region was a key acquisition for its supplies of wheat, meat, and salt, making possible the “spectacular growth of the imperial capital of Istanbul” (ibid.: 273). Anatolia provided mainly fibers to Istanbul, including wool, silk, wool, hides, and leather (ibid.: Figure 10).

Nomadic Turcoman in western Anatolia produced some products for export into the European and Indian trade (and even to China), most notably wool carpets

(Inalcik 1994: 38). Aleppo was an important emporium for Indian and other eastern goods, as it was the center of exchange between Europe, Asia Minor, the Balkans, and the Black Sea in relation to Syria, Egypt, Arabia, India, and Iran (ibid.: 57). Imports included spices, textiles, dyes, and Iranian silks were traded here (ibid.). Competition over silver and gold mines in Serbia and Bosnia led to wars between the Ottomans and Hungary and the Italian states (ibid.: 58). Maintaining a peaceful Indian Ocean trade required considerable expenditures for a strong military presence and prestige goods such as the “robes of honor given to the native notables or captains navigating the Indian Ocean;” these costs of world-system maintenance were borne in large part through surpluses transferred from Egyptian tax revenues (ibid.: 85).

Aztec (Figure A2-27)

Environment, Agriculture, and Area (the core area of the Aztec empire was a closed hydrographic basin measuring about 7000 sq. km [Sanders et al. 1979: 81], while the total area of the empire was 279,000 sq. km, from Barlow [1949]; Berdan [1980]; Berdan et al. [1996: 109-113; Figure II-1])

The core zone of the empire was the Basin of Mexico, which sits at the southern end of the central Mexican plateau and is ringed on three sides by high mountains and a series of low hills to the north (Sanders et al. 1979: 81). The basin ranges in elevation from 2235 m asl to about 2700 m asl (ibid.: 84-8), so high that frost can damage crops. The climate is semi-arid with rainfall that ranges from a minimum of about 500 mm in the northeast section to a maximum of about 1000 mm at the southern limit (ibid.: 83). The dominant feature of this region during the pre-Hispanic era was a system of large lakes (Lakes Xaltocan, Zumpango, Texcoco, Xochimilco, and Chalco) that filled the center of the basin. Four of the lakes drained into Lake Texcoco, which sat at the lowest elevation and was the most saline due to the closed hydrological character of the basin. Both lakes Xochimilco and Chalco were relatively fresh and were highly productive regions of agricultural production. The rest of the empire, outside the basin, was situated in lands that ranged from highland valleys to wet tropical regions at low elevation.

The main production system was based on agriculture involving both annual and perennial crops. The main annual crops were maize, beans, squash, tomato, *chia*, amaranth, and *chile* (Smith 2003: 62). The perennial crops were tree crops, such as avocado, cacao (grown in tropical lowland regions), and various fruits, and succulents, such as maguey (*agave*) and *nopal* (ibid.: 62). Animal foods included domesticated dog, domesticated turkey, domesticated Muscovy duck, fish, wild game, ants, grasshoppers, maguey worms, and *jumil* bugs (ibid.: 63). The Aztec Period in the

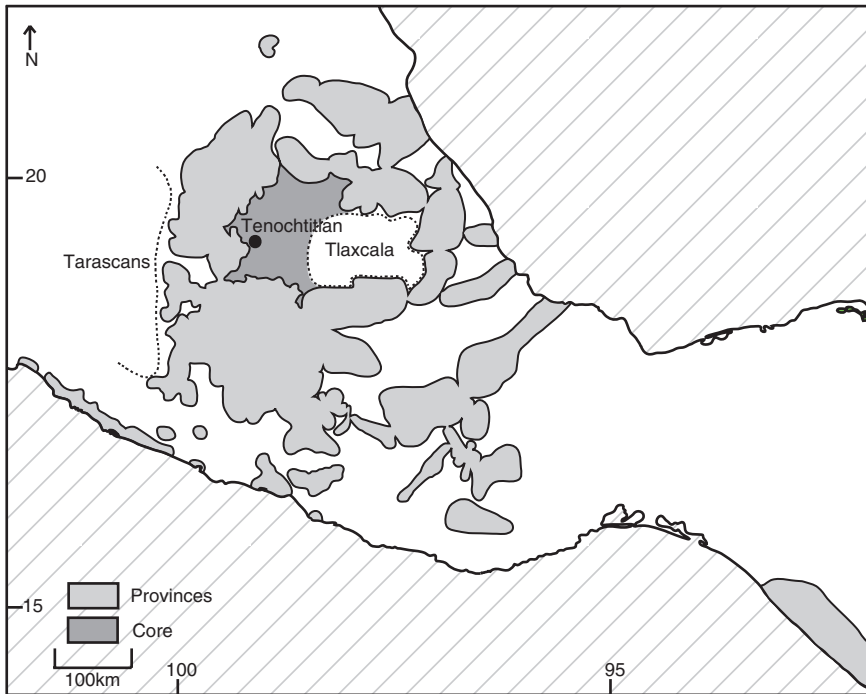


Figure A2-27 Core zone and provinces of the Aztec Empire. Modified from Berdan et al. (1996: Figure II-1).

Basin of Mexico is marked by a high degree of occupational specialization, including craft specialization but also in irrigated agriculture (Blanton 1996). In key locations, farmers capitalized agricultural production, including the famous *chinampas* (which could produce 2 to 3 crops per year every year with minimal or no fallowing), irrigation canals, agricultural terraces, and dams (Smith 2003: 67-71).

Rural Society and Culture

Sanders et al. (1979: 56), based on archaeological surveys and early Spanish censuses describe rural settlements that include isolated residences, hamlets, small villages (nucleated and dispersed), with populations of 100 to 500, and large villages (nucleated and dispersed) with 500 to 1000 residents. The *calpulli* (pl. *calpultin*) was a major form of rural social organization of free taxpayers, and was often a community. A *calpulli* was a corporate landholding entity (Offner 1983: 168), each with a head official who represented the group vis-à-vis the state (ibid. 1983: 169). These officials appear to have been selected locally from among the *calpulli* elders

and this was not a hereditary position (ibid. 1983:170). Below the head there were a number of other officers who acted as labor draft leaders, tax-collectors, and policemen (ibid.: 169). No mention is made of the role of the *calpulli* in irrigation management. In addition to the free communities, there was a small percentage of rural communities whose populations worked, as tenants, on land appropriated by ruling families as a result of military conquest, or on lands that were newly developed through state efforts (e.g., Hicks 1984: Table 7.1; Parsons 1991); these *mayeque* represent a social category somewhat distinct from the free tax payers of the rural *calpultin* (e.g., Carrasco 1971: 355-356; Hicks 1984: 150), although it is not clear that they were substantially materially worse off than the *calpultin* populations (Brumfiel 1991). Population grew rapidly during the focal period (Blanton et al. 1993: 153), in part fueled by migration. Given the rapid growth of a regional-scale economy in the Basin of Mexico (Blanton 1996) and the evidence for growing consumer demand for valuable goods at the same time (Blanton et al. 2005), there is a possibility that the material living standards of at least the Basin population increased during the focal period. Smith's (2003: 90) data from an imperial province suggests a high standard of living for commoners, but one that was in decline toward the end of the sequence, perhaps owing to increases in tribute burdens.

Market System

By the time of the focal period, the Basin of Mexico market system was a vast and complex social institution with a well-developed hierarchy of market places (Blanton 1996). The most important marketplace, Tlatelolco, served an estimated 20,000 to 25,000 people daily and as many as 50,000 people every fifth day or market day (Berdan 1975: 197 citing the Anonymous Conqueror [1971: 392]). From the summary in Berdan (1975: 197-230), we infer a high degree of commercialization with the market cycle based on a 5-day periodicity but with major markets that were held daily. In most markets a variety of utilitarian and luxury goods were available. Some markets specialized in certain goods, for example Acolman specialized in dogs, Texcoco in cloth, ceramics, and gourds, Cholula in jewels, precious stones, and feathers. Overall, the goods available ranged from raw food (grains, wild animals, fruits, vegetables) to prepared foods and drinks, from wood, building materials, and mats to pottery, feathers, cotton, and metal, to name just a few. There was also a labor market populated by barbers, porters, craftsmen, and prostitutes selling their services. Professional merchants called *pochteca* and *oztomeca*, engaged in long-distance exchange and sold mostly luxury goods. These merchants belonged to formal guilds that regulated their activities. Marketplaces were highly regulated and managed to ensure fair sales and quality merchandise by *pochteca* market judges and many supervisors.

The primary utilitarian crafts were obsidian-tool production, pottery manufacture, cotton-textile production, maguery industries, basket making, and salt making

(Sahagún 1961: Book 10; Smith 2003: 79-90). Utilitarian craft production was carried out in both rural and urban contexts, while luxury goods were generally produced in urban areas (Brumfiel 1987). Luxury crafts included featherworking, goldsmithing, and lapidary production (Smith 2003: 92-98). Much of this production was probably organized by skilled artisans for noble patrons, although they also sold their wares in the market (*ibid.*: 99-101). Many of the most skilled artisans were probably concentrated in Tenochtitlan-Tlatelolco where the highest density of high status nobility and wealthy commoners were located (Blanton 1996: 48; Brumfiel 1987; Monzón Estrada 1949: 50-51).

Geography

The core area of the empire was relatively well defined by the geographic limits of the Basin of Mexico. This area was governed directly by the Triple Alliance and its officers along with local nobility (Hodge 1996: 37). The geographic extent of the outer provinces or the tributary and strategic provinces was poorly defined and often based on individual towns and cities and not territorial units (Berdan 1996: 116-17), although the state did extend its tax-collection bureaucracy (*calpixque*) into conquered tribute-paying areas (*ibid.*: 122, *passim*). In contrast to the core, local rulers were usually left in power in the provinces and a tribute collection structure was imposed by the Triple Alliance in each tributary province (*ibid.*: 112).

The major political capital and commercial city of the Basin of Mexico and the empire was Tenochtitlan-Tlatelolco, the largest city in Mesoamerica during the focal period with a population of 150,000 to 200,000 (Calnek 1976: 288). Around the capital there was a metropolitan zone that covered about 600 sq. km and contained another 200,000 to 250,000 people (Sanders et al. 1979: 163). According to Calnek (1976), the internal organization of the city was based on a four-part division marked by central north-south and east-west avenues, with a large walled civic-ceremonial precinct located near their intersection (e.g., Calnek 1976: Map 20) containing the main temple, a dual pyramid dedicated to the gods of rain (Tlaloc) and sun (Huitzilopochtli). Outside this walled precinct was located the ruler's palace. The second largest city in the Basin of Mexico in 1519 was Texcoco with an estimated population of 30,000 (Sanders et al. 1979: 154). Other cities in the Basin of Mexico ranged in size from about 10,000 to 30,000 (Hodge 1984: *passim*, Sanders et al. 1979: 154).

Population

The population of the Basin of Mexico, at the time of contact in 1519 is estimated at 1.16 million, with a density of 115 people per sq. km based on archaeological

survey data (Blanton 2004: 226). When the Spanish arrived in CE 1519, the Triple Alliance's empire ruled some 5 to 6 million people (Sanders 1970; Sanders and Price 1968: 208; Smith 2003: 58).

World-Economy Linkages

The Basin of Mexico was the major core zone of a multicentric world-economy that featured a second core zone in the Tarascan area to the west (Pollard 1993). This vast system incorporated, all of Mesoamerica from West Mexico to sections of Central America (Smith and Berdan, eds. 2003). Major trade commodities were obsidian, *cacao* (chocolate), cotton, and salt, with *cochineal* (red dye), pottery, and bronze goods playing important yet less significant roles in international trade (Blanton et al. 2005; Kepecs 1999). A major factor driving the expansion of the world-economy at this time was a growing domestic demand for "bulk luxuries," valuable international goods that were readily available in the market places in the Basin of Mexico and elsewhere, especially cotton cloth, green obsidian, fine salt, and *cacao*. The expansion of the world-economy brought in its wake major agro-environmental changes in the cotton, cacao, and cochineal producing regions, and a growing emphasis on the management of commercialized inter-regional exchanges in some regional economies (Blanton et al. 2005).

Inca (Figure A2-28)

Environment, Agriculture, and Area (984,000 sq. km)

The following description of the environment is based on D'Altroy's very useful summary (2002: 29-32). The central Andes is characterized by extreme differences between environmental zones based on elevation and precipitation. Starting from the west, the entire length of the Pacific coast from north Peru to central Chile is desert, but crosscut by rivers that carry runoff from the Andes uplands. Irrigation is possible in some locations, drawing water off of the rivers, but some high water-table irrigation is also possible in some near-coastal locations (Parsons and Psuty 1975). The main crops are maize, cucurbits, gourd, and cotton, but shellfish and fish also form an important part of the diet in this region. Traveling east, one ascends to a series of very high plateaus incised by river valleys that form a temperate band (3,100-3,500 m asl). This is the most productive highland ecozone. Maize, beans, garden vegetables, *quinoa* (a local grain) and tubers can be cultivated on the valley bottoms. Located above this zone is the *suní* zone (3,500-4,000 m asl). This area is cold and dry, but tubers and *quinoa* flourish in this zone. Still higher lies the *puna* (up to 5,000 m asl), this zone is the natural environment of both domesticated



Figure A2-28 Limits of the Inca Empire.

and wild camelids and deer. Finally, further to the east the traveler descends into the Amazonian jungle, where the upper jungle is referred to as the *montaña*, and the lower section as the *selva*. Maize, coca, fruit, pepper, and other warm-weather crops were planted in the *montaña*. The primary indigenous food crops in Andean

South America were *quinoa* and potatoes (Smith 1995: 170-81), and domesticated animals included llamas, alpacas, and guinea pigs (*ibid.*: 175-178). Maize, for food and *chicha* (an alcoholic beverage), and coca, were also grown in many parts of the region (Murra 1980: 6, 8, 49). Both irrigation facilities and terraces were constructed in certain areas of the Andes to increase both the size of the productive area under cultivation and to intensify agricultural production (*ibid.*: 15, 19-20).

Rural Society and Culture

Rural settlement pattern was variable, but village communities often housed one or more *ayllu*, which, according to D'Altroy (2002: 32-33), was a corporate group sharing a common ancestor and place of origin. These groups held resources collectively and allocated them based on size and status of individual families. Little is known about variation in rural housing, but, overall, there is some evidence indicating an increase in commoner living standards under Inca domination, as seen in an increase in maize-based diets, and the replacement of copper by tin-bronze in virtually all metal production (Costin and Earle 1989: Costin et al. 1989: 128; Hastorf 2001).

Market System

In most areas of the empire, according to D'Altroy and Earle (1992: 37), "The apparent ideal was to integrate the distinctive economic zones within a single community through autonomous production and reciprocal exchange, an organization that circumvented the need for extensive market exchange." Some limited specialized production of utilitarian craft items was organized by corporate groups in certain parts of the empire (D'Altroy and Earle 1992: 38), but most specialization involved the production of prestige items, including fine textiles, elaborate imperial pottery, and metal ornaments, and was accomplished by specialists attached to the state (D'Altroy 2002: 291-310). In contrast, along the north and central coasts of Peru and the highlands of Ecuador, production specialization and market exchange were much more developed (*ibid.*: 37-38).

Geography

The empire did not have a well-developed core-periphery structure owing to the fact that it was organized primarily as an administrative system imposed from a highly specialized administrative capital, Cuzco, which was not the commercial or demographic center of the polity. Rather than a core-periphery system, the empire

was divided into four administrative districts, *suyus* (quarters), called Chinchaysuyu (north), Collasuyu (south), Antisuyu (east), and Cuntisuyu (west) (Malpass 1996: 34). At the head of each *suyu* was an official called an *apos*. Each one of these divisions was further sub-divided into provinces (ibid: 34). Provinces varied in size, but the ideal was 20,000 tributaries (households) in each. There were approximately 80 provinces in the empire at the time of Spanish conquest, each headed by a governor, and each province, in turn, was divided into two or three political units called *saya* (ibid: 34).

Cuzco, the imperial capital, was architecturally elaborate and symbolically expressive, but did not house a very large population. D'Altroy (2002: 109, 114) reports that an estimated 15,000 to 20,000 people inhabited its 40ha center. The center served as a highly specialized governing city and home to the elite Inca households, and it was a repository of symbols, for example, its cityscape design mirrored puma imagery (D'Altroy 2002: 114). Below Cuzco, a system of administrative centers, in four levels (from provincial capitals to administrative way-stations along major roads), served as nodes in the imperial administration. As Morris (1982) points out, this system of administrative centers constituted an "artificial urbanism" that quickly fell into disuse after the Inca collapse. These centers were usually founded in administratively strategic locations without significant prior occupation, and they lacked independent craft, residential, or market functions; during most of the year "no more than about a quarter of the housing may have been used" (D'Altroy 2002: 238). These centers, with their vast stores of state goods, were placed at key locations along the road system related to administrative and military operations (e.g., Morris 1992).

Population

The Inca empire incorporated an ethnically diverse population that numbered an estimated 10 million people (D'Altroy 2002: 266).

World-Economy Linkages

The empire formed the core of a world-empire as opposed to a world-economy, since commercial transactions were minimal and most exchange transactions were imbedded in the official functions of the state. As part of state economic strategies, development of markets was not encouraged, and in some conquered regions markets were dismantled (D'Altroy and Earle 1992; Salomon 1987). Exchanges across the frontiers of the empire were limited and dominated by the Inca state (Salomon 1987). These exchanges focused on prestige goods consumed by the ruler and high-ranking officials and were distributed to lower level officials for service (D'Altroy and Earle 1992: 52, 55).

Appendix 3

Description of Coded Variables and the Coded Values. Letter Designators refer to Column Heads for the Coded Variables

Levels of Administrative Hierarchy (a)

The hierarchy values refer to whichever government bureau had the greatest hierarchical depth. The value includes local community-level administrative institutions only in cases where the state has developed governing institutions at this scale, or has made such institutions a part of the official structure of the state.

Log of Population (b)

The values for total population size and the sources are presented in Appendix 2.

Levels of Central-Place Hierarchy (c)

These measures are estimates of the number of levels of the central place hierarchy based on the size and relative functional importance of administrative and commercial centers in the state's territories.

Territory Size in sq. km (d)

Evidence for Population Growth During the Focal Period (e)

A value of zero indicates no evidence for growth, while one signifies evidence for growth (from the data summaries in Appendix 2).

Evidence for Increased Standard of Living During the Focal Period (f)

To code this variable, we looked particularly for evidence of widespread change in the quality of rural as well as urban housing, as well as increased consumption of desired foods and valuable cloth. Positive evidence for these kinds of changes is signified by '2,' while evidence for no change, or no evidence at all, is signified with '1.'

Degree of Rural Commercialization (g)

Here, '1' indicates that few rural households participated regularly in commercial networks. A value of '2' signifies the presence of rural market networks, but that not all households regularly participated. A value of '3' signifies that most rural households participated in markets, and they were an important component of household economy in most cases.

Degree of Rural Community Social Capital (h)

The coding method was based on sources such as Katz (2000) and Blanton (1994: 129-36). We looked for evidence of well-developed practices for local governance

and recruitment of officials, for common property management, for communal ritual cycles that would promote community social cohesion, and whether community life was symbolized and objectified in public spaces, community temples or monuments, or other physical facilities that provide a formal material setting for social action. A value of '1' indicates little evidence for rural social capital, while '2' and '3' indicate considerable evidence for social capital.

Degree of State Involvement in the Construction of Rural Social Institutions (i)

Values of '1' signify that local institutions, even those co-opted to serve some state functions such as tax collection, were not strongly impacted by state action, and, so far as we can tell, probably existed prior to the focal period. A value of '2' signifies that many rural institutions were untouched by direct state involvement, while in some respects state actions did bring rural change, for example, when particular regions were reorganized while many traditional communities were left intact. A value of '3' signifies that extensive restructuring of rural institutions took place in conjunction with state formation.

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Nupe	5	12.0552498	3	14100	0	1	3	2	1
Yoruba	6	15.4249485	3	46500	1	2	2	1	1.5
Asante	8	13.9978321	3	96000	1	2	2	2	2
Bagirmi	6	12.0137008	2	110000	0	1	2	1	1
Kuba	5	11.695247	2	17800	1	2	2	3	1
Tio	5	11.3144745	2	77600	0	1	2	1	1
Buganda	6	13.5278285	2	30000	1	1	2	1	2.5
Bakitara	4	11.5327281	2	12264	0	1	1	1	2
Lozi	7	12.5981147	3	475000	1	1	1	2	2.5
Swahili Lamu	5	10.3417425	1	6000	0	1	3	1	2.5
Thailand	6	15.4249485	4	518000	1	1	3	3	2
Burma	5	14.7318013	-	181000	1	2	3	3	2
Bali	4	11.3504065	3	300	0	1	2	3	1
Aceh	5	12.6115378	3	3250	0	-	1	-	1
Perak	4	11.3265959	4	20700	1	1	1	2	1.5
Java	5	15.4249485	-	133000	1	2	3	3	2
Vijayanagara	5	17.0343864	5	360000	1	2	3	3	2
Pudukkottai	5	12.2060726	3	3100	0	1	3	3	2
Mughal	8	18.5159909	6	3175000	1	2	3	3	2.5
China	10	18.683045	8	3900000	1	1	3	3	3
Japan	5	17.1477151	3	388500	0	2	3	3	2
Tibet	5	15.1764871	4	217300	0	1	1	2	2.5
Egypt	5	14.9141228	3	622000	0	1	1	-	2
Athens	7	12.5776362	5	12500	0	1	3	3	3
Rome	6	17.9263844	8	3861000	0	2	3	3	3
Venice	7	14.2855142	4	32000	0	1	3	3	3
England	5	15.1238434	5	193422	0	1	2	1	1
Ottoman	8	16.3412392	-	2279200	1	1	2	2	2
Aztec	6	15.4249485	5	200000	1	2	3	3	2
Inca	6	16.1180957	5	984000	1	2	1	3	3

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