

Supplementary Materials for
The distribution of power and inclusiveness across deep time

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Supplementary Text
Figs. S1 to S9
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Tables S1 to S3

Supplementary Text: Summaries of 40 Cases Used in the Analysis

(References for the case studies are listed in Table S3)

Altar de Sacrificios 1 (300 BCE–300 CE) (Jessica Munson)

Altar de Sacrificios (hereafter, Altar) is a small urban center located along the uppermost reach of the Usumacinta River, which is the longest river in Central America and forms the modern border between Guatemala and Mexico. For the ancient Maya, this was an important region of early settlement and long-distance trade as the Usumacinta connects multiple major watersheds between the Guatemala Highlands, the Gulf Coast, and the interior lowlands, providing access to concentrated resources and important transportation corridors. Recent investigations indicate human occupation in the region based on large-scale platform construction at Ceibal by 1000 BCE, although Altar wasn't settled until at least a century later.

Excavations in Altar's central precinct were conducted by a team from Harvard University between 1958 and 1963. In addition to deep excavations in several of the largest buildings in the site core, these investigations included documentation of the hieroglyphic monuments, mapping 2 km² of the surrounding settlement, and systematic test pits in all 41 residential mounds that were originally recorded. More recently, an international team led by Jessica Munson has returned to the region to conduct airborne settlement survey and household excavations in multiple outlying groups beyond the site core. Geoarchaeological surveys along the riverbanks and soil coring have aided in reconstructing river channel migration and its impact on the landscape and settlement over the last 5000 years. Although regional population estimates are relatively low in comparison to other remote sensing surveys in the Maya lowlands, the settlement is very dispersed and mostly aligned to relic waterways indicating that access was important to these river corridors for transportation, trade, and resource procurement.

Occupied continuously from about 850 BCE to 950 CE, Altar's political history can roughly be divided into two main phases based on monumental architecture, ritual activities, and written records from hieroglyphic monuments. For the purpose of governance coding, Altar 1 refers to its incipient development during the Preclassic period (c. 300 BCE–300 CE).

Altar's dynastic foundation probably dates to the Late Preclassic period based on retrospective texts and the establishment of Group B as the center of ceremonial activity by 300 BCE. Construction of stone-faced temples, earthen platforms, and public rituals during the Late and Terminal Preclassic (c. 300 BCE–300 CE) coincide with population expansion and the establishment of Group B as the center of ceremonial activity at Altar. During this initial dynastic phase, Altar seems to be a largely independent polity governed by local rulers and traditions. Access to lavish nonlocal ceramic wares recovered in commoner residential contexts points to the wider population's participation in regional exchange networks during this time and continuing through the Early Classic period. By the end of the fifth century CE several carved monuments were dedicated in front of these public buildings which included figural representations of early rulers and the earliest inscription of Altar's place name glyph. Group B continued to be the center of ceremonial activity throughout the Early Classic period until construction and ritual activities shifted to Group A at the beginning of the seventh century CE.

References for Altar de Sacrificios 1 (99–112).

Altar de Sacrificios 2 (635–900 CE) (Jessica Munson)

Altar de Sacrificios is a small urban center located along the uppermost reach of the Usumacinta River, which is the longest river in Central America and forms the modern border between Guatemala and Mexico. For the ancient Maya, this was an important region of early settlement and long-distance trade as the Usumacinta connects multiple major watersheds between the Guatemala highlands, the Gulf Coast, and the interior lowlands, providing access to concentrated resources and important transportation corridors. Classic Maya exchange networks, involving the movement of prestige goods such as polychrome painted pottery, textiles, and cacao as well as other commodities like salt and obsidian, were controlled by the elite and the source of major competition and conflict especially during the Late Classic period (c. 600–900 CE). Altar figures prominently in the movement and access to these resources as it is situated at the junction of three major waterways.

Excavations in Altar's central precinct were conducted by a team from Harvard University between 1958 and 1963. In addition to deep excavations in several of the largest buildings in the site core, these investigations included documentation of the hieroglyphic monuments, mapping 2 km² of the surrounding settlement, and systematic test pits in all 41 residential mounds that were originally recorded. More recently, an international team led by Jessica Munson has returned to the region to conduct airborne settlement survey and household excavations in multiple outlying groups beyond the site core. Geoarchaeological surveys along the riverbanks and soil coring have aided in reconstructing river channel migration and its impact on the landscape and settlement over the last 5000 years. Although regional population estimates are relatively low in comparison to other remote sensing surveys in the Maya lowlands, the settlement is very dispersed and mostly aligned to relic waterways indicating that access was important to these river corridors for transportation, trade, and resource procurement.

For the purpose of governance coding, Altar 2 refers to its peak population and architectural expansion during the Late Classic (c. 635–900 CE). By the beginning of the seventh century, major change was underway at Altar. The onset of the Late Classic marks a significant break in local ceremonial traditions and construction activities. At this time, attention shifted to Group A where a new palace and temples were built from imported limestone. Hieroglyphic monuments carved in a new style and dedicated with a new emblem glyph indicate a re-alignment of political power and alliance during Altar's later period. The introduction of this new place name glyph and kinship ties to Tikal inscribed on the monumental texts signal the establishment of a new dynastic line at Altar by 628 CE. Populations continued to grow throughout the Classic period, although they probably never exceeded 3000 people. A decline in luxury goods from nonelite domestic contexts points to decreased participation in regional exchange with greater elite control and access to wealth based on burial goods. Warfare and conflict swept across the Petexbatun–Pasión region during the mid-eighth century leading to the erosion of political and economic stability in the region and abandonment of several major centers, but occupation persisted at Altar into the Terminal Classic period until it too eventually declined by the end of the tenth century.

References for Altar de Sacrificios 2 (99–115).

Alto Magdalena (Gary M. Feinman and Linda M. Nicholas)

Elaborate tombs and monumental sculpture near the modern town of San Agustín in the Andes of southwestern Columbia drew attention to the Alto Magdalena a century ago. The tombs pertain mostly to the Regional Classic period (1–900 CE) and consist of earthen mounds up to 4 m high and 40 m across that cover a number of burials, but each mound is focused on a single individual. Monumental stone statues that mix human and animal features were buried in front of the tombs, seeming to express a relationship between the buried individual and religious or mythical beings. The principal individuals accompanied by these statues are thought to have been shamans, priests, or more secular leaders whose authority was backed by supernatural power. The plaza areas around the tombs were suitable for ritual assembly of moderate numbers of spectators and/or participants.

Most of our information on the Alto Magdalena comes from archaeological investigations of the tombs, burials, and associated representational art and later regional surveys that found dispersed population sprawled across broad areas of the landscape during the Regional Classic. Settlement distribution was not uniform, and the concentration of settlements was denser in some zones. These concentrations have been interpreted as small regional polities, each focused around a ritual center with monumental tombs and sculpture. The separation of these zones from each other suggests more competition between them than integration, and they may have been at least partially autonomous. One of the largest concentrations was in the San Agustín area, focused on Las Mesitas, with as many 5000–6000 people.

The general pattern was communities of households clustered around groups of monumental burial mounds. The largest funerary center is Las Mesitas, where there are four groups of burial mounds. There are no permanent monumental remains of temples, plazas, palaces, or other public structures associated with these settlements. Instead, labor was invested in the funerary monuments created to commemorate specific individuals. The creation of these ceremonial spaces required a collective labor investment that presumably came from the community of people who used the spaces.

Agriculture was productive throughout the region, and some houses in local and regional centers were involved in craft production, including goldwork, and in obsidian exchange. But there seems to have been little opportunity for aspiring elites to enrich themselves or mobilize resources by controlling or otherwise taking advantage of patterns of regional-scale economic interdependence. Excavations of houses dating to the Regional Classic period show some signs of economic differentiation and variation in standard of living, but the houses of greatest status do not appear to have benefited much from those activities. Although gold objects have been found in burials, the famous Alto Magdalena funerary monuments were heavily looted, limiting our understanding of the full nature of inequality.

The iconographic themes of supernatural power in the sculpture are what most reveals whatever authority the emerging leaders of the small polities were able to project. The funerary monuments were designed to awe and impress, and subsequent leaders likely were aware of the possibilities inherent in manipulating their own descent from or other connections to these highly memorialized ancient figures. This dynamic, or what we would call relational wealth, sums up

the principal forces behind the emergence and development of the small regional polities of the Regional Classic in the Alto Magdalena. The economic privileges of high-ranking people and the degree to which they possessed economic power or control over others seems limited. Their prestige derived from their ability to communicate with the supernatural world and to mediate and negotiate with, and within, the mundane world, on both the intrapolity and interpolity levels

References for Alto Magdalena (116–125).

Angkor 1, 900–1150 CE (Sarah Klassen)

Angkor, in present-day Cambodia, served as the epicenter of the Khmer Empire, often referred to as the Angkorian world. The empire's origins trace back to 802 CE, when inscriptions indicate that Jayavarman II consolidated numerous smaller polities into a unified political entity. This unification initiated a period of intensified urban development, which was characterized by peaceful expansion and extensive building projects with an economic basis of agriculture and trade.

Angkor's growth was sustained by a sophisticated hydraulic system designed to manage seasonal water flows, facilitate rice cultivation, and protect against flooding. Typically, kings granted land to elites and local communities to establish new agricultural zones across the landscape. As Angkor developed, these temple-based local communities organized labor across communally managed agricultural lands and broader landscape systems. Supported by state-sponsored infrastructure, these communities were able to generate agricultural surpluses that sustained the city's expanding population of non-agriculturally producing urban residents.

Inscriptional and landscape evidence indicate that this pattern of local land ownership began to gradually give way to greater centralization, with ownership shifting from community-based holders to higher-ranking individuals during the 10th and 11th centuries. Despite increasing centralization, regional elites continued to control significant portions of land, and most inscriptions produced before 1150 CE were authored by influential non-royal families, indicating more decentralized political power during this period.

References for Angkor 1 (126–131).

Angkor J7, 1150–1250 CE (Sarah Klassen)

By the mid-12th century CE, Angkor, in present-day Cambodia, had established itself and was the dominant power in mainland Southeast Asia. Angkor functioned as the political, religious, and economic heart of the Khmer Empire, with a population estimated between 700,000 and 900,000.

Land tenure patterns began shifting in the 10th and 11th centuries, as communal and family-held lands were fragmented and absorbed by elite landholders and the state. By the 12th century, high-ranking free men (*loñ*) appear in inscriptions primarily as temple personnel rather than landowners, signaling a broader centralization of land ownership under royal authority. Lustig and Lustig link these developments to the limited availability of land for new foundations and the erosion of privileges once granted to elites managing large temple estates, as power consolidated around the king.

These changes in land control mirrored broader political transformations and administrative centralization, as most inscriptions written during this period are from royal sources. The most notable ruler during this period was Jayavarman VII (r. 1181–1218 CE), who is celebrated for his extensive architectural programs and for expanding and upgrading the empire's vast road network. Jayavarman VII conquered the Chams and expanded the reach of the empire from present-day Thailand into Laos and Burma. This period is often viewed as Angkor's golden age; however, the scale of Jayavarman VII's building campaigns may have overextended resources, potentially contributing to the empire's later instability.

While traditional accounts attribute Angkor's decline to a 1431 CE invasion by the Ayutthaya Kingdom, the accuracy of these narratives is debated. Archaeological evidence points to a more gradual decline, marked by significant depopulation and the deterioration of Angkor's complex water management system, well before the supposed sacking of the city.

References for Angkor J7 (126, 128, 131–137).

Anglo Saxon Kingdom (David Stasavage)

The unified Anglo Saxon kingdom emerged in the centuries after Rome's withdrawal from the island of Britannia in 410 CE as a result of the conquest of several other kingdoms composed largely of invaders from the European continent. There is much archaeological evidence on the Anglo Saxons as well as some written historical evidence, in particular from the *Anglo Saxon Chronicle*. The *Chronicle* makes clear that this was a very violent era. The majority of its entries involve various episodes of collective and violent bad behavior that needed to be dealt with by resorting to additional violent behavior. This was a polity that by the standards of contemporary weak European states had a sophisticated form of governance and administration. For all of Western Europe circa 1000 CE (excepting Muslim Spain), the Anglo Saxons were the sole kingdom that raised substantial revenue from the direct taxation of agriculture. This went to pay the notorious *danegeld* that had been imposed by Norse invaders. There was a system of participatory governance both at the local level, via the *hundred*, which in some regions was called the *wapentake*, as well as with a national level council known as the *witan*, which literally meant "the wise men." Though the *witan* was important, there was no explicit premise that the king required its consent to take actions. It was instead the case that the *witan* provided counsel.

References for Anglo Saxon Kingdom (138–147).

Anyang (Gary Feinman and Linda Nicholas)

The Shang dynasty, centered in Henan Province, dominated China's Central Plain from 1600 to 1050 BCE, during which time the capital was moved several times. Toward the end of the dynasty, during Late Shang (1250–1050 BCE), the capital was moved to Anyang. Most of our information about Anyang comes from archaeological excavations, which go back almost 100 years, and from ancient texts and divinations. Anyang is especially known for some of the earliest body of writing found in East Asia.

Like its predecessor (Zhengzhou), Anyang was a large ceremonial and administrative center with monumental architecture surrounded by craft areas, including bronze foundries, stone and bone

workshops, and pottery kilns. Beyond the center, around which there were walls and a moated enclosure, were residential hamlets, a royal cemetery (Hsi-pei-kang), and more workshops. At its peak, it was an enormous center, extending over 30 km² and greatly overshadowed any contemporary or prior site within the area of modern China in its size, the scale of its bronze production, the wealth of its tombs, and the magnitude of its sacrificial practices.

The palace-temple district of the capital city is known as Yinxu; it consists of three well-planned groups of buildings with a total of 53 rectangular structures built on top of rammed-earth platforms. The largest structure, delimited by stone pillars and measuring 60 m long, is the royal palace. There were storage and servant quarters near the palace.

Between two of the building groups in the palatial center is a square earthen foundation thought to be a ceremonial altar. Shang religious rituals featured divination and sacrifice. Inscriptions on oracle bones (inscribed turtle shells) from Anyang and elsewhere relate closely to the political, military, and ritual activities of the king, recording the sacrifices made to previous kings and the ancestors of the current king. The king was the head of ancestor worship rituals; the inscriptions had little to do with mercantile matters.

Late Shang society was highly stratified. Kings were considered divine, with power flowing from the king to the nobility to the court and finally to the commoners. Succession was lineal, from father to son, with gods and ancestors incorporated into the hierarchy of authority. There were 11 large tombs in the royal cemetery at Anyang, with each Shang king buried with sacrificed retainers, horse-drawn chariots, and large quantities of luxury items, including bronze vessels, weapons, oracle bones, and jade. For each of these tombs, moving the earth alone would have required thousands of working days. Most of the smaller and simpler graves surrounding the tombs lacked any grave goods. Commoners also suffered poorer health than the elite.

The king appointed officials or constructed transactional ties with kin to rule over specified regions. Other retainers managed select activities including overseeing royal estates, conducting civic-ceremonial affairs, and selecting military guards. There was virtually no hierarchy among offices. Shang officialdom was a transactional network, solidified by tribute, gift exchanges, and marriage alliances. Many centuries passed before the beginning of more formal Chinese bureaucracy.

The Shang had an agricultural economy, but the king and royal family did not directly draw resources from local production. Inscriptions indicate limited direct royal participation in managing agriculture, levying laborers, participating personally, or ordering officials to manage planting and harvesting. The royal household was funded in part by these royally administered fields, either farmers who were subject to a labor tax on the king's or their local lord's fields, or in some cases the labor was undertaken by attached dependents such as slaves rather than free farmers. Members of the royal family also were assigned personal estates. These estates belonged ultimately to the king, and they paid tribute to the king as well as reporting to him about conquered lands.

References for Anyang (*148–160*).

Athens (David Stasavage)

Scholars commonly say that Athens had a democratic system of government from 508 BCE thanks to a set of reforms—equal laws for all—introduced by an aristocrat named Cleisthenes. Democracy persisted in Athens, albeit with interruptions, until Macedon conquered the city in 322 BCE.

The first background condition to Athenian democracy was the collapse, sometime around 1200 BCE, of a prior autocratic political order in the Bronze Age, when Grecian kings lived in large palaces and ruled with a military elite. In the new Greek states that emerged after the Bronze Age collapse, rulers governed through consultation. Written to describe events of the Bronze Age, some argue that the *Iliad* and the *Odyssey* bear traces of the society in which they were composed as it existed around 700 BCE, describing how the Greeks thought the Cyclopes were uncivilized because they held no meetings or councils. In another instance elders in a meeting propose judgments, and ordinary people express their opinions.

Athens became a polis occupying the entire Attic peninsula, larger in area (about 2500 km²) and population (300,000 at its peak in 431 BCE), which was large compared to most other city-states in Greece. Within the early Athenian polis, aristocrats who held their positions by birth were the ones to exercise control. There was an executive, elected from among the aristocracy, of nine archons who served one-year terms, as well as a council composed of those who had previously served as archons.

By 594 BCE Athens faced a severe economic crisis combined with class antagonism. According to tradition, the Athenian elite appointed Solon to propose reforms. Solon abolished the system of debt bondage and created a new council—the *boule*, known as the council of four hundred. The council prepared the agenda for a larger assembly of citizens known as the *ekklesia*. After Solon's reforms, all adult male citizens could participate in the *ekklesia*, but membership in the *boule* was still only open to the wealthy.

The subsequent reforms of Cleisthenes represented not just a political change but also a deep reorganization of Athenian society itself. Cleisthenes reorganized Athens into 139 demes—units of 150 to 250 individuals. In addition to belonging to a deme, citizens were associated with one of ten new artificially created 'tribes' that each sent 50 individuals, selected by lot, to a council of 500 that would administer the day-to-day affairs of the city. By intent, the demes comprising a given tribe did not come from the same geographic region, creating what political scientists call a 'cross-cutting cleavage,' a strategy to bind a society together, similar to the clan structure of the Huron and the Iroquois.

One way in which Athens fits with some early democracies is that women were completely absent from formal politics, even at the level of the deme.

The final critical evolution of Athenian democracy took place several decades after the reforms of Cleisthenes. In 462 BCE a new set of reforms gave the Athenian lower classes greater influence within the *ekklesia*. Prior to this date, the *thetes*, as they were known, could participate passively in the assembly, but they could not hold office. Now their participation became much more direct as they could both speak and hold office.

The reforms of 462 BCE happened at a time when the elite of Athens needed their people. The logic behind giving the *thetes* greater political voice was laid out by an Athenian observer known to posterity as the 'Old Oligarch.' No champion of democracy, he saw it as necessary for the following reason:

It is right that the poor and the ordinary people there [in Athens] should have more power than the noble and rich, because it is the ordinary people who man the fleet and bring the city her power; they provide the helmsmen, the boatswains, the junior officers, the look-outs and the shipwrights; it is [all] these people who make the city powerful much more than the hoplites and the noble and respectable citizens. This being so, it seems just that all should share in public office by lot and by election, and that any citizen who wishes should be able to speak in the assembly (translation from *161*, p. 123).

References for Athens (*1*, 8, *161–169*).

Cahokia (Jacob Holland-Lulewicz)

Occupied between c. 1000 and 1400 CE, Cahokia represents the largest Indigenous settlement to ever exist north of Mexico prior to European arrival. With a potential estimated population of up to 50,000 people, Cahokia's urban landscape spread from its core "downtown" area, just east of the Mississippi River in what is today Illinois, south and east across the river into the area of what is today the city of St. Louis. While the central core of the settlement was spread across c. 9 km², its total sprawling expanse was much wider.

At its center was a massive complex of hundreds of mounds, earthen constructions, plazas and open spaces, and neighborhoods. The largest of these landscape features was Monks Mounds, the largest earthen construction to ever be built by Indigenous communities north of Mexico. Monks Mound was the center of an urban core around with four main plazas and mound groups were constructing, mirroring the cardinal directions. The largest of these, the Grand Plaza, covered c. 20 ha.

Across the urban core, there is archaeological evidence for performative, exotic ceremony including ritual sacrifices, marking Cahokia's status as the core of a regionally sprawling religious movement. The results of both the aggregation and coalescence of both local and far away communities, Cahokia's influence, innovations, and development have often been noted as the initial birth of so-called "Mississippian" practices across eastern North America, including religious traditions, artistic practices, architectural and ceramic technologies, and political organizational forms.

While the nature of Cahokia's sociopolitical organization remains debated, marked inequality between a ruling, elite/ceremonial class and a broader populace is likely, with power displayed through a centralized control of religious ceremonies, agricultural production, and craft production alongside the maintenance of elite macroregional networks. Surrounding the urban core, which included the four main plazas and central mound complexes, was a 2-mile long, formidable wooden palisade that dissected the city into a central core and its surrounding neighborhoods. Rural communities were likely sociopolitically and socioeconomically linked to Cahokia through politico-ritual means, adopting state-sponsored religious practices. Evidence for

Cahokia's widespread connections exist across North America by such threads as marine resources (shell and the *Ilex vomitoria* plant) from the Atlantic and Gulf Coasts and even cacao, potentially from further west.

References for Cahokia (170–182).

Calusa (Jacob Holland-Lulewicz)

The Calusa were an Indigenous group living across southwestern Florida until the 17th century CE. The maximum political unit considered here can be referred to as the Calusa polity (in the past also called the Calusa Kingdom), which spread across the entire lower third of peninsular Florida. With over c. 50–60 towns and a potential population of c. 20,000 people, the Calusa polity has been traditionally described as a weak tributary state or complex chiefdom. Whatever it is called in neoevolutionary terms, both the historical and archaeological records indicate the tributary flow of goods and materials across southern Florida and controlled by the hereditary political elites living at the capital of Mound Key.

Calusa communities engaged in widespread, large-scale landscape modifications across southern Florida. These include canals, mounds, and even entire anthropogenic islands. One of these islands, Mound Key, located in Estero Bay on the Gulf Coast of southwestern Florida, served as the social, political, and economic capital of the Calusa polity. Mound Key is a 51-ha anthropogenic island made entirely of discarded shellfish with a history of occupation from c. 400–1700 CE. The island includes a 'grand canal' that bisects the settlement into two parts. Each side consists of a large mound, areas for settlement, and a series of watercourts (anthropogenic ponds) to keep live surplus fish. With a population of c. 4000 people, and considering variables related to connective infrastructure, formal public spaces, city planning, palaces, social functions, temples, civic architecture, craft production, social diversity, neighborhoods, and imports, it has been argued to be a clear example of an urban settlement.

Known from both historical and archaeological records, one of the mounds was topped with the 'king's house,' a large, round structure that could hold up to 2000 people at a time. Common houses were multi-family longhouses, likely housing multiple families of single, large lineages. While headed by hereditary elites, and exacting tribute from across the MPU (maximum political unit), the Calusa political system has been described as a blend of both top-down and bottom-up collective action processes.

References for Calusa (78, 183–193).

Capetian France (David Stasavage)

The Capetians were the long-lived dynasty that solidified the conception of a French kingdom, even if the territory they controlled, either directly or indirectly, was substantially smaller than France today. I coded Capetian France at its height during the reign of Phillip the Fair, known in French as *Phillipe le Bel*, circa 1300 CE. There is some archaeological evidence for this era and much more substantial historical documentation. The key thing to recognize about French governance at this time is that there were appearances and then there was reality. In terms of appearance, Philip the Fair, while not saying his role was absolute, as one of his descendants would say centuries later, nonetheless claimed very substantial royal prerogative. He accepted

few legal limits on his rule and periodically engaged in arbitrary persecution of both friends and enemies. A good example here is how Philip had members of the Knights Templar, who had been serving as his bankers, be accused of heresy and then burned at the stake while he confiscated their assets. But the reality for Philip was that his actual power over French society was considerably weaker than this one episode would suggest. To illustrate this, consider the assembly of French nobles, bishops, and other prominent people that Phillip convened in Notre Dame cathedral in the year 1302. This would later be thought of as the first meeting of what would come to be called France's *Estates General*. This was a stage-managed affair where there was no real deliberation or open discussion, and the pre-programmed result was that all gave general consent to allow Philip to collect what he wanted in terms of taxes. There was just one problem. Phillip had no means of actually collecting these revenues. With a central bureaucracy that would have been limited to a few dozen individuals, Phillip was obliged to engage in lengthy transactions with the many localities in his kingdom who were the only ones that had the administrative capacity to collect taxes. In practice, a monarch that wanted to appear as a model of strength was actually quite weak.

References for Capetian France (8, 194–197).

Chaco (Keith W. Kintigh)

The Chaco regional system covered at least 65,000 km² and dates to 850–1140 CE. Population estimates for the system range to about 100,000 individuals. The signature archaeological features of the Chaco system are massive stone 'great houses,' 'great kivas,' and 'Chaco roads.' Chaco Canyon, in what is now northwestern New Mexico, was the political/religious center of the system. It had an impressive concentration of great houses, and numerous Chaco roads radiate from them. More than 150 'Chaco outliers,' characterized by great houses and great kivas, were widely distributed across the surrounding landscape. Many outliers had associated residential communities, and some were linked by roads to Chaco Canyon. However, typical settlements dating to this period, numbering in the thousands, had fewer than a dozen rooms.

There have been extensive archaeological excavations of some Chaco Canyon great houses, some of the outliers, and many of the small settlements. In addition, contemporary Pueblo people, descendants of those at Chaco, maintain traditional histories including events that occurred at Chaco Canyon during this time.

Enormous amounts of timber for construction, ceramics, other materials, and corn were brought into the canyon from substantial distances (50–100+ km). Notable amounts of exotic materials including copper bells, parrots, and cacao beans were transported 1000–2000 km to the canyon. It appears the movement of these goods was unidirectional. We don't have substantial evidence of any goods leaving the canyon.

There were undoubtedly groups of powerful and privileged leaders in the Canyon. In Pueblo Bonito, the best-known Chaco Canyon great house, two sets of rooms were converted to elaborate tombs for these leaders. DNA analyses of individuals from one of these tombs demonstrates the existence of an elite matriline over about 300 years. It seems reasonable to conclude that these elite individuals were at the apex of the political and religious hierarchies, but the degree and nature of control these individuals were able to exercise is hotly debated. In

particular, we do not understand the political or economic relationships of the Chaco elites with other residents of the Canyon or with the individuals at the outlying great houses, or between the those at the outlier great houses with their local communities or with residents of the small, dispersed communities within the Chacoan sphere.

References for Chaco (198–207).

Chiapa de Corzo 1–Middle Formative (Sarah B. Barber)

Chiapa de Corzo is in the Chiapas Central Depression in the mountainous interior east of Mexico's Isthmus of Tehuantepec. The site was founded at or just after 1000 cal BCE and had a continuous history of occupation until the seventh century of the Common Era. Despite the long occupation, earlier structures were modified rather than razed, leaving its early urban plan largely intact. Early construction at Chiapa de Corzo consisted of earthen pyramids and platforms clustered around large, north–south oriented plazas. The layout of the Middle Formative (1000–300 cal BCE, Dili through Francesca phases) iteration of the site is characteristic of a broad pattern seen in contemporary ceremonial centers from the Gulf Coast to the western Maya region near the Usumacinta River and south into central Chiapas, Mexico. The similarity in urban plans over this area has been interpreted as evidence of an interaction sphere that included shared cosmology and trade networks. There are no written records from the Middle Formative period at Chiapa de Corzo, and the few examples of early writing from elsewhere in Mesoamerica at that time are limited to dates and individuals' names without narrative elements. Information about the site thus derives entirely from archaeological data and comparison with contemporary and later urban centers in neighboring regions like the Gulf Coast, Soconusco Coast, and Maya area of Mexico and Guatemala.

Chiapa de Corzo is notable for having the earliest rulers' tombs in Mesoamerica. Two of the site's largest earthen pyramids were the location of intergenerational burial of males and females of one or more ruling lines. Tomb 1, dating to about 600 cal BCE, contained at least two human sacrifices interred along with primary male and female occupants. These individuals wore elaborate clothing adorned with valuable items such as beads made from greenstone, marine shell, and amber and objects made of iron ore and alabaster. There is no monumental stone art from this period. Little is known about residential architecture in the Middle Formative period, however, and while palace locations have been proposed, none has yet been excavated. Spaces for public assembly at Chiapa de Corzo are large, with extensive plazas separating groupings of ceremonial buildings. The plazas are at the geographic center of the site and would have been widely accessible. Maize agriculture was widely established in Mesoamerica by the time the site was occupied, but there is no evidence for granaries or other state control of bulk resources. Chiapa de Corzo is located on important trade routes between mountain and coastal regions, and it is likely that rulers and elites controlled the exchange of valuable goods such as those found in the site's tombs. It has been proposed that the site's rulers controlled access to amber, which was mined in antiquity north of the site. No workshops for amber or other raw materials have been reported.

References for Chiapa de Corzo 1 (208–216).

Chiapa de Corzo 2–Late Formative and Early Classic (Sarah B. Barber)

Chiapa de Corzo is in the Chiapas Central Depression in the mountainous interior east of Mexico's Isthmus of Tehuantepec. The site was founded at or just after 1000 cal BCE and had a continuous history of occupation until the seventh century of the Common Era. Around 300 BCE, there was a change in governance at Chiapa de Corzo. Current evidence suggests this change was a result of local, internal processes. Writing was in use by this time, although written documents for the period include only two examples: part of a calendrical date and a fragment of writing on a single piece of pottery. The writing style indicates that the site's elite used a writing system similar to that of the Mexican Gulf Coast rather than that of Maya groups living to the east. The information from this case derives from the Late Formative (300 BCE–300 CE, Guanacaste through Istmo phases). As with the Middle Formative period case, information about the site derives from archaeological research.

While the earlier pyramids that formed the Middle Formative urban plan remained and in some instances were modified after 300 BCE, the center of governing activity shifted south to a smaller plaza. This plaza, while still large, was not as accessible as those from earlier centuries. It was bordered by a palace and a mortuary shrine containing the tombs of seven rulers. At least three other elaborate residences were located nearby. The Late Formative also saw the use of carved stone stelae, one of which likely depicts a ruler engaged in the practice of divinity impersonation. The one translated text from this period is the earliest known date in the Mesoamerican long count calendar (December 6, 36 BCE), a reckoning system employed by and for elites in later periods. Public buildings constructed during this period are smaller than those from the Middle Formative period but have greater elaboration, with increased use of masonry and lime plaster on facades. Little has been published on the Late Formative period economy, although access to and possibly control of valuable items like amber, greenstone, and marine shell from distant regions is evidenced by the contents of burials and ritual deposits.

References for Chiapa de Corzo 2 (208–216).

Copan (Jessica Munson)

Copan is a major Classic Maya city located in the southwestern periphery of the Maya Lowlands, in present-day western Honduras. Situated in a fertile river valley along the Copan River, inhabitants benefited from rich alluvial soils and access to varied environmental resources, including hardwood forests, obsidian and jadeite from nearby outcrops, and agricultural land suitable for intensive cultivation. Though it lies at the edge of the Maya cultural sphere, Copan was a political and artistic hub that played a critical role in connecting the central Maya heartland with the southeastern frontier. The site's occupation history spans the Early Preclassic period (c. 1400 BCE) through the Terminal Classic (c. 900 CE), though its most substantial urban development occurred between the fifth and ninth centuries CE. During its peak in the eighth century, Copan is estimated to have supported a population of 15,000 to 20,000 people within a settlement zone of 24 km². This urban core was densely populated and included elite residential compounds, civic-ceremonial architecture, and administrative buildings, while the surrounding hinterlands were marked by terracing, agricultural intensification, and were more sparsely occupied. For the purpose of governance coding, we focus on Copan's well-documented Classic period occupation.

Systematic architectural investigation at Copan began in the 19th century with early visits by explorers such as John Lloyd Stephens and Frederick Catherwood, who documented its monumental architecture and carved stelae. Major scientific excavations were initiated in the 1930s by the Carnegie Institution and later expanded under the Copan Acropolis Archaeological Project and the Instituto Hondureño de Antropología e Historia. Among the site's most prominent features are the Acropolis, the Hieroglyphic Stairway, the Great Plaza, and numerous stelae commemorating royal achievements. The Acropolis contains a sequence of superimposed temple-pyramids and elite residences, constructed with remarkable architectural skill and requiring vast labor investment over multiple generations. The Hieroglyphic Stairway, dedicated to the ruler K'ak' Yipyaj Chan K'awiil (Ruler 15), is especially notable as the longest known Maya hieroglyphic text, bearing over 2000 glyphs that record dynastic history and ritual narratives. Monumental architecture, along with elite tombs and residential segregation, attests to a highly stratified society. Artistic and epigraphic styles at Copan also reflect intense interaction with central Petén polities, while maintaining unique local expressions, suggesting a complex sociopolitical role for Copan as both a frontier and integrative center.

Copan was ruled by a dynasty of 16 known kings, beginning with the founder K'inich Yax K'uk' Mo', who ascended the throne in 425 CE with apparent support from Tikal. This connection is well documented in texts and iconography that portray Copan's early kings with foreign regalia and symbols of legitimacy drawn from central lowland traditions. Copan's rulers commissioned elaborate monuments and inscriptions to record their lineages, ritual performances, and divine authority. These texts, many of which survive on stelae and temple facades, are a principal source for reconstructing the city's political history. The aforementioned Hieroglyphic Stairway and Altar Q, which was dedicated by Copan's 16th king Yax Pasaj Chan Yopaat, provide especially detailed records of dynastic succession. Administrative activities at Copan likely occurred within palace compounds and other elite structures in the Acropolis, where evidence of scribal activity, calendrical knowledge, and bureaucratic control has been documented. The city's ability to marshal labor, construct large-scale monuments, and maintain regional alliances illustrates a centralized governance structure deeply embedded in ritual ideology and elite lineage. The decline of Copan in the late ninth century appears to reflect both internal pressures and broader regional transformations, marking the end of a dynastic tradition that spanned over four centuries.

References for Copan (43, 217–225).

Dholavira (Adam Green)

Dholavira was a Bronze Age city belonging to the urban phase (c. 2600–1900 BCE) of the Indus civilization (also known as the “Harappa,” or “Indus Valley” civilization). It emerged on a small island just off the coast of the Kutch District of the state of Gujarat in western India. The site extends over about 50 ha and shares many elements of material culture with its larger neighbor, Mohenjo-daro, to the north and east. These include stamp seals, standardized weights and measures, and pottery styles. During the Bronze Age, there appears to have been considerable cultural diversity in Gujarat. At least two subgroups of ‘Harappans’ emerged in the region: those with all the ‘classical’ trappings of Indus material culture found at Mohenjo-daro, and local communities that relied more on pastoralism and eschewed key technologies, like seals and sealings. While the nature of the relationship between different Bronze Age communities in arid

Gujarat is hotly debated, there are notable differences between classical Indus settlements and those in the hinterland of the larger cities in the Indus River basin. Lacking clear access to a source of freshwater, the occupants of Dholavira also cut a series of monumental reservoirs into the bedrock around the city, an enormous project that would have helped compensate for the region's drier conditions. Perhaps as a result, Dholavira was less extensive and much more fortified than its counterparts to the north and east, with elaborate gates enclosing a central district. R. S. Bisht, the site's lead excavator, identified the central district as a 'castle,' and noted its efficacy at controlling access to the residential parts of the city. Indeed, most classical Indus settlements in Gujarat sport very high walls around very small areas. For example, Kanmer is less than 1 ha in extent, with walls 10 m thick in places. A cluster of mortuary tumuli have also been identified to the south and west of the site. While excavators found that the tumuli had been robbed in antiquity, it is not unreasonable to interpret these tumuli as experiments with stratification. Dholavira's governance likely restricted decision making to a smaller community than is evident at Mohenjo-daro. Dholavira's political economy may also have differed from its alluvial counterparts. Classical Harappan sites in Gujarat produced huge quantities of craft goods for export. At the small site of Bagasara, hoards of shell bangles have been uncovered, and at Shikarpur, carnelian and other precious raw materials are abundant. Gujarati sites were also well positioned to export goods beyond the Indus. Lothal appears to have included a port for exporting goods to Mesopotamia. Finally, at Dholavira itself, a spectacular sign board was reported by excavators, which could have provided guidance for participants in long-distance exchange through the site.

References for Dholavira (24, 95, 226–237).

Ebla (Dan Lawrence)

Ebla, modern Tell Mardikh, was a large city in northern Mesopotamia during the second half of the Early Bronze Age and Middle Bronze Age, from around 2600 BCE to 1600 BCE. First occupied in the Late Chalcolithic, the city became capital of a substantial polity from around 2600 to 2300 BCE before being destroyed and rebuilt, with political power passing to a new dynasty. The second city was itself destroyed around 2000 BCE. During the third iteration of the settlement, Ebla's power declined and it became a vassal of the city of Yamhad, based in modern Aleppo. A final destruction, around 1600 BCE, ended substantial occupation at the site. In coding this case we focused on the first city, dating to the Early Bronze Age. Although the archaeological evidence is more substantial for the last Middle Bronze Age city, the Early Bronze Age phase has the advantage of the preservation of the Royal Archive, a substantial corpus of texts relating to state administration found in situ during excavations of destruction layers in Palace G.

Excavations at Ebla have been conducted by an Italian team led by Paolo Matthiae since 1964. During the period coded, labelled Ebla I and dated to the Early Bronze Age IVa, the city was approximately 56 ha with a central acropolis and a substantial city wall. Much of the acropolis was taken up by a massive royal palace (known as Palace G), estimated to be between 20,000 and 30,000 m². Unfortunately, the remains of this palace were heavily truncated by later occupation, but it seems to have included administrative areas as well as the royal residence, and it housed the archive from which the texts are derived. Prestige goods such as lapis lazuli, gold, and steatite have been recovered, both in raw form and as finished artifacts, suggesting the

palace was a center of production, as well as consumption of high-value goods. The acropolis also houses the Red Temple, a monumental religious structure. An additional temple, known as the Temple of the Rock, was located in the lower town. During this period, kings and queens of Ebla were buried in royal mausolea away from the city, at two locations that have not been excavated but are known from the textual sources. Making offerings to the dead kings, as well as participating in longer pilgrimages and associated rituals, were a central aspect of kingly authority.

The Royal Archives consist of 4000–5000 separate texts, of which 2000 are complete, and provide a unique snapshot of administrative organization during a period of around 50 years, prior to the destruction of the palace, which preserved the archive. The texts show that the state was heavily involved in the economy, controlling both land and very substantial herds, as well as managing flows of commodities including textiles, wood, copper, silver, and lapis lazuli. This was managed through a tiered system of administration, with client kings based in major urban centers and local administrators based in rural settlements. Ebla itself housed a substantial administration, overseen by an officeholder normally translated as a vizier, who was in turn responsible to the king. There was also some form of council or representation composed of elite families, who are referred to as ‘abba,’ literally fathers, but the degree to which this group wielded genuine power is not clear.

References for Ebla (238–250).

Etowah (Jacob Holland-Lulewicz)

Etowah refers to both an Indigenous town and to the political entity centered around this town. An Ancestral Muskogean town, Etowah is located in the Southern Appalachian region of eastern North America, in the northeastern portion of what is today the state of Georgia. The town itself is c. 23 ha, enclosed on one side by the Etowah River and on its other sides by a formidable wooden palisade and ditch. Occupied between c. 1000 and 1350 CE, the area enclosed by the palisade includes at least six earthen mounds of differing functions and a plaza covering an area of at least 1 ha. Mound A, the largest of the earthen mounds, is a large platform mound that was topped with a complex of structures, likely both administrative and religious in function. Mound C is a platform burial mound that includes over 350 interred ancestors likely used between c. 1200 and 1350 CE. The population likely ranged between c. 1000 and 1500 people.

The maximum political unit referred to as Etowah includes the capital town of Etowah and at least seven single-mound towns throughout the Etowah River valley, covering a c. 100 km span east–west along the Etowah River and its tributaries. Traditionally referred to as a chiefdom, these would have been satellite towns incorporated into a kin-based political network centered at the capital town of Etowah. The societies represented by the Etowah communities were intensive agriculturalists. Lavish and exotic burials suggest ranked lineages, the highest of which were networked with other elite lineages and rulers across eastern North America. Despite this socioeconomic inequality, extensive studies of social networks reveal that these political systems were underlain by robust, enduring kinships networks across Southern Appalachia. Additionally, the presence of large, round, likely deliberative spaces, as well as information from the ethnohistoric record that posits the importance of town sovereignty, suggests an integrative

balance between this sociopolitical hierarchy and bottom-up processes of deliberative and collective decision making.

References for Etowah (251–264).

Imperial Rome (27 BCE–476 CE) (Francesca Fulminante)

Three years after the battle of Actium, in 27 BCE, Octavianus was granted the title of Augustus, and until his death in 14 CE he was engaged in a monumental and architectural program in Rome to consolidate power and present himself as the restorer of the greatness of Rome of the Republican period and the creator of an age of wealth and well-being. This was personalized by the Pax Romana, restored by Augustus, and celebrated in the reliefs of the Ara Pacis, the altar offered to the emperor by the Senate in Campus Martius in 13 BCE.

Public buildings in the city (baths, stadiums, theatres, the Rostra, the Comitium, the Curia) in the Republican period had served for administration, political functions, religious purposes, or amenities; in the Principate they served mainly to commemorate and worship the emperors and Rome's victories (temples, triumphal arches, Ara Pacis). Svetonius tells us that Octavianus praised himself for finding a city of bricks and mortar and leaving a city of marble. Undoubtedly Octavianus' changes resulted in the greatest city-planning development since the Great Rome of the Tarquins. He restored or rebuilt more than 80 buildings, including temples, aqueducts, city gates, roads, and the banks of the Tiber River. But the greatest and most successful political propaganda by Augustus to empower himself was the restoration of the old Forum and the creation of his own new Forum.

What is fascinating about his treatment of the Forum is the way Augustus made it a museum of the past (with the Umbilicus Urbis, the Volcanal/Lapis Niger, and other small shrines) and at the same time converted it into a massive dynastic monument to his own family. Augustus removed the Republican Rostra, the Comitium, and the Curia and replaced them with the Curia Julia, begun by Caesar and completed by Augustus in 29 BCE. At the bottom end of the Forum, the Temple of Divus Julius (29 BCE) dominated its central axis and acted as a permanent reminder of the god to whom the ruling family referred its immediate origin. In front of the temple was a speaker's platform, dedicated with the bronze beaks of Anthony's ships at Actium.

On either side of the Forum stood the two largest public administrative buildings, both of which were appropriated in the name of the imperial household. Caesar's Basilica Julia was completely rebuilt after a fire and renamed after Augustus' adopted sons Gaius and Lucius. On the other side of the Forum, the Basilica Aemilia was masked by a portico also named after Gaius and Lucius. The two grandsons of Augustus were being presented as the next generation of the family and were being groomed for leadership. The Forum Romanum, which had been an open space at the crossing of important regional and interregional routes, was now a closed theatrical space for celebrating Augustus and his family. The later Fora of Nerva and Trajan also are fully enclosed spaces with celebratory temples and celebratory statues.

Another series of monuments linked with the origin of Rome—possibly correlated with Archaic monuments built atop Iron Age vestiges and described by literary sources—were rebuilt at the top and southwestern slope of Palatine Hill. They were close to the house chosen by Augustus as

his own also because it was struck by lightning. At the center of the complex was the temple of Apollo, initiated in 36 BCE and dedicated in 28 BCE. The most important imperial palaces were built in and around this complex, from the Domus Tiberiana, built by Tiberius, Claudius, and Nero, to the Domus Augustiana, started by Nero before the great fire, to the Domus Domitiana, built by the architect Rabirius between 81 and 90–92 CE. All subsequent emperors lived in this area until 191 BCE, when a fire destroyed many of the buildings and Septimius Severus and Elagabalus started the creation of the sanctuary to Iuppiter Victor. After that we have less information, but some of the Christian and late emperors likely still resided at the Palatium, at least temporarily.

The Pax Augusta had assured favorable conditions for trade and commerce, with the different parts of the empire integrated into a flourishing and prosperous network of trade: grain from Egypt, wine and oil from Italy and other Mediterranean regions, wood, slaves and furs from central Europe and the UK. Rome was a great and prosperous city, already extending to the area later encircled by the Aurelian Walls (270–275 CE), with a population of ~1,000,000 inhabitants. This was at the expense of the democratic and collective principles and values that had dominated the Republic. Now leaders and bureaucrats were no longer elected but were assigned to office by recommendation and closeness to emperors and the imperial family. How far or close people were from the emperor and power was reflected literally by their position at imperial banquets, gladiatorial spectacles, and other religious festivals, which were no longer participatory as they had been in the Republic. They were now passive spectacles in which all eyes were on the central figure of the emperor.

However, a growing economy also brings the risk of collapse, and already by the time of Diocletian, the Roman economy was affected by severe inflation that he tried to fix with devaluation of the currency and the fixation of prices for most common commodities (Diocletian Edict, 301 CE). It did not work and combined with the pressures imposed by the external invasion of the Vandals, internal weakness and corruption of the elites, and an episode of drier weather in Italy that impacted productivity, contributed to the collapse of the Roman system, whose end is generally dated to 476 CE, the date of deposition of the last Roman emperor, ironically named Romulus Augustulus.

References for Imperial Rome (41, 265–269).

Iroquoia–Northern (Jacob Holland-Lulewicz)

The maximum political units considered here for the ‘Northern Iroquoia’ area are the confederacy-based political units of the Iroquoian speaking communities around Lake Erie and Lake Ontario, on either side of the US–Canada border. The political units considered here include the generalized political forms of the Wendat (Huron) confederacy of Ontario as well as the Haudenosaunee (Iroquois) confederacy of northern New York. While there are long histories of social, political, and ecological change across these regions, the confederacy dynamics considered here likely developed and emerged sometime in the 16th and 17th centuries.

Across the 15th and 16th centuries, small, palisaded villages of a handful of longhouses began to coalesce into larger settlements of dozens of longhouses, reaching potential populations of c. 1500 inhabitants each for some of the larger villages. These new coalescent communities were

dense, compact, palisaded settlements with little to no open space (e.g., plazas). At this time, so-called Nations began to emerge that were made up of allied communities sharing common territories and sociopolitical ties. The allyship of multiple of these Nations is what gave form to independent confederacies (e.g., the Wendat and Haudenosaunee confederacies).

As Birch describes, confederacy dynamic and political systematics were based around coalition, consensus, and persuasion, and the accumulation of social capital was a key mechanism of political success. Indeed, the nested networks of the confederacy were highly complex, relying on differing kin, clan, and affiliative relationships to give form to sociopolitical institutions. Leadership could be found at scales of lineages, clans, villages/nations, and at the confederacy level. Leadership and decision-making power were dispersed through these broad networks and through councils established at multiple socio-spatial scales. Indeed, different scales of council and decision making would have been associated with different kinds and categories of decisions to be made. While certain positions may have been heritable through matrilineal affiliation, other positions (even those heritable ones) would have required ascent through achievement, with a variety of checks and balances built into these networks to ensure the maintenance of participatory decision making and the dispersion of power.

References for Iroquoia–Northern (270–283).

Late Antique Rome (476–700/800 CE) (Francesca Fulminante)

While the official end of the Roman Empire is generally considered the deposition of Romulus Augustulus in 476 CE, already under Constantine's reign (306–337 CE) important changes had occurred that presaged new and different but also perilous times. Constantine was the first emperor to open the way to Christianity. He played a pivotal role in elevating the status of Christianity in Rome by decriminalizing it. This was a turning point in the Christianization of the Roman Empire. He founded the city of Constantinople (modern-day Istanbul) and made it the capital of the empire, which it remained for over a millennium.

Upon his ascension, Constantine enacted numerous reforms to strengthen the empire. He restructured the government, separating civil and military authorities. To combat inflation, he introduced the *solidus*, a new gold coin that became the standard for Byzantine and European currencies for more than 1000 years. However probably it was already too late. A rapidly declining population and the many other changes to the wider Roman world, the Vandals' invasion, agricultural crisis induced by worsening weather conditions, impacted the architectural appearance of Rome itself. In 402 CE, Emperor Honorius, son of Theodosius 1st, moved with all his court to Ravenna, which became the new capital of the empire, with the prefect and the Praetorian Guards.

While the urban area was still the same size as Augustan Rome, corresponding roughly to the area enclosed by the Aurelian Walls, built probably for the incipient risk of the invasions from the Vandals, in the fifth and sixth centuries Rome was reduced back to about 30,000 inhabitants. The local aristocracy, reduced in numbers, started to move off the hills to the low ground, asserting their power and authority by building new houses in, on, and around the Roman and Imperial Fora and other major public spaces, even taking over public streets.

Their old properties on the hilltops within the walls, when not simply abandoned, were supplanted by monasteries and monastic farms, shepherds, and their sheep, a situation that persisted throughout the long Middle Ages until the ecclesiastical elite of Renaissance Rome, inspired by the study of classical antiquity to a revival of the aqueduct system of water supply, started to lay claim to the hills once again.

References for Late Antique Rome (41, 265, 266, 268, 284).

Mohenjo-daro (Adam Green)

Mohenjo-daro was a Bronze Age city in South Asia, dating from around 2600 BCE, adjacent to the Indus River in a region that is now Pakistan's Sindh Province. The site belonged to the Indus civilization (also known as the 'Harappa,' or 'Indus Valley' civilization), which was home to some of the world's first cities. It includes a high western mound and a series of lower eastern mounds, extending over at least 80 ha, and has been subject to fieldwork since early in the 20th century CE. Archaeological investigations at the site have produced a rich dataset, but the Indus script is undeciphered, so there are no direct historical records for the period of its urbanization. Much of the evidence is architectural. Mohenjo-daro featured large-scale rectilinear public buildings, small-scale public structured urban amenities like private bathing platforms and drainage. Importantly, Mohenjo-daro lacks a palace, and the city's large public spaces were accessible to the city's population. At the same time, glyptic technologies, like seals and sealings, and standardized weights and measures nonetheless were strictly regulated, with clear standardization. Wealth was relatively evenly distributed among households, and Mohenjo-daro lacks exclusionary temples, ostentatious tombs, and aggrandizing art. In other words, the city was conspicuously egalitarian. There are no reliable burial data from Mohenjo-daro itself, but cemeteries in other parts of the Indus civilization include the interments of relatively healthy individuals, and there are no great discrepancies in grave goods. Mohenjo-daro's urbanization coincided with that of at least four other Indus cities. They shared pottery styles, a system of weights and measures, and a script. However, there was also a preponderance of local styles and differences in forms of representation found in the urban assemblages. Its representational art is largely found on stamp seals, and animals are the primary subjects. Thousands of small-scale settlements have been reported in the hinterlands of Indus cities, but the political relationships that bound these communities are not well understood. The prevailing view is that each Indus city was to at least some extent politically independent of the others. We adopt the view that each Indus city probably belonged to a maximal political unit (MPU) with a degree of control over a large surrounding hinterland but did not likely subordinate other Indus cities.

References for Mohenjo-daro (25, 236, 285–304).

Monte Albán (Gary M. Feinman and Linda M. Nicholas)

Monte Albán was founded c. 500 BCE on a steep hilltop at the hub of the three arms of the mountain-ringed Valley of Oaxaca, the largest expanse of flat agricultural land in Mexico's Southern Highlands. Institutional shifts that occurred with the foundation of Monte Albán attracted residents and fostered growth, up to 5000 people within a few hundred years. The settlement's hilltop location provided an element of security, and defensive walls were erected early in the site's history. Rapid growth at Monte Albán led to greater intraregional flows of food and other goods that were transferred through a new economic institution, marketplace exchange,

which increased the city's interdependence with other parts of the valley. Marketplace exchange provided a mechanism for farmers to trade surplus crops to meet the growing city's ready demand for food.

The population grew rapidly at the new center, which became the largest (with at least 30,000 people at its height) and most monumental city in the valley's prehispanic history. This dramatic episode of change required the coordination of huge expenditures of labor to build the new city. The allocation of the hill's apex for civic-ceremonial space and the lower slopes for commoner residences afforded a broad social accord. The rocky hilltop was flattened into a large Main Plaza with flat-topped monumental buildings constructed along its edges; defining and creating this large open space entailed planning, coordination, and cooperation. Residences for the city's burgeoning population were constructed on the steep slopes of the hill by creating flattened spaces, or terraces, shored up by stone and earthen retaining walls, each of which sustained a domestic unit. The construction, sharing, and maintenance of front retaining walls and drainage channels to divert rainwater from living spaces involved high degrees of interhousehold cooperation between neighbors. At that time, small-scale irrigation features were constructed on the lower slopes of the hill.

Monte Albán has been characterized as a collectively organized city based on a series of indicators that include political economy, governance, and architecture. There are numerous indicators that Monte Albán was not a highly unequal city: there are no great caches of household riches or other evidence of extreme wealth differences, and no large, ornate palace that is clearly the ruler's residence. Elaborate residences and substantial masonry tombs were present at the site, but no singular tomb or structure stands out from all others. From early in the site's history, the city's core was centered on a large plaza that could have accommodated a significant proportion of the site's population. Until very late in the city's history (c. 800 CE), material representations of rulers were relatively rare, and there is an overall lack of ruler aggrandizement. During the city's first four centuries (500–100 BCE), there is only one depiction of a seemingly important individual or leader—a carved stone that portrays a masked individual leading a ritual while impersonating Cocijo, a principal deity. Rule was largely faceless. Important figures were represented as jaguars but rarely personalized by name until late in the site's history when political institutions began to shift toward more personalized and autocratic rule.

Monte Albán's footprint with a large, relatively open central space and a dearth of ostentatious displays of leader aggrandizement does not evince exclusionary (concentrated) power. It is hard to see the early processes of community foundation as driven simply by coercion or aggrandizing behavior since the commoner occupants of the city moved there from different places (at least some from beyond the valley), opted to invest their labor in creating a new built environment, and were able to enhance their standard of living, for example, adopting construction techniques and basic ceramic wares that previously were the domain of high-status families. This level of cooperation and coordination, a social charter and norms, reveals that Monte Albán was collectively governed from its founding. It remained the largest and most monumental center in the valley for 1300 years.

References for Monte Albán (24, 61, 305–332).

Naco (coded by John Douglass, summary by Gary M. Feinman and Linda M. Nicholas)

The Naco Valley in northwestern Honduras has a long sequence of occupation stretching from the Middle Preclassic (1000–400 BCE) to the Spanish conquest in the 16th century. The most marked period of population growth and settlement nucleation occurred during the Late Classic (600–950 CE), when the entire valley and surrounding zones were incorporated into a polity centered at the large center of La Sierra. A settlement hierarchy dominated by La Sierra, which was much larger than any other community, developed across the region.

The Late Classic monumental core of La Sierra consists of dozens of massive stone-faced, flat-topped platforms, some of which are thought to be elaborate residences. Platforms delimit three sides of a central plaza—two open passageways into the semi-restricted plaza on the fourth side. There is no central palace at La Sierra, but within the plaza are five temples, and just outside one entrance to the plaza is a ballcourt. Other more dispersed platforms form another, more open plaza nearby. The only sculpture depicting a likely ruler was found in this monumental core. This sculpted tenon head is of an individual wearing a turban that resembles those worn by the divine lords of Copan, a large Classic Maya site located approximately 120 km to the southwest. Rulers were central figures in rituals, which may have formed part of their base of power; such rituals were centralized in La Sierra during the Late Classic. By the end of the Classic period, power was more distributed, shared among the leaders of 13 political centers, including La Sierra.

Naco was strategically located on potential communication routes connecting to numerous Maya polities, including Copan, and other areas in Honduras that experienced sociopolitical florescence in the Late Classic. Rulers exerted some control over long-distance trade, and the connection to Copan may have been important to aspiring elites who drew on and tried to monopolize exotic assets in their rise to power; some of these objects could be sources of gifts to attract and hold followers. The Late Classic capital, La Sierra, also was surrounded by numerous production loci that processed a diverse array of goods from both locally available (clay) and imported raw materials (obsidian and shell). Some of the producers may have been attached specialists, but most patio groups had evidence for manufacturing activities of goods that were widely traded, possibly through markets.

References for Naco (333–337).

Panchala (Adam Green)

After a long period of social and cultural change following the de-urbanization of the Indus civilization around 1900 BCE, many polities arose in regions adjacent to those that had formed the hinterlands of the Indus civilization. These *janapadas* or *mahajanapadas*, known through historical texts, are regularly identified as ‘great republics’ that emerged by about 600 BCE. Archaeologically, they are associated with the Early Historic period in South Asian deep history, a phase characterized by distinctive pottery styles, like the Northern Black Polished Ware, and is associated with South Asia’s re-urbanization. These polities are notable because according to charters, deeds, and epigraphs, many operated as republics that brought together representatives of merchant and artisan guilds, religious organizations, and a stratified elite of hereditary nobles. Traces of the practices that characterized them are attested in ancient texts, like the *Arthashastra*;

these notes are useful, but they are difficult to align to a specific historical period. While around a dozen *mahajanapadas* have been identified by researchers, few have been aligned with archaeological data. *Panchala* refers to a polity located in the Ganges-Yamuna Doab, far beyond the ancient margins of the Indus civilization. Its capital was Achichhatra, once an extensive city that has become an archaeological site covering an area of at least 187 ha. While the city is often referred to as a capital, it likely traded this role at intervals with Hastinapura. The site has been subject only to preliminary excavations; massive fortifications are evident, as is an enclosed central district. This topographic evidence, in combination with the king lists associated with the *mahajanapadas*, suggests that some governance occurred within a palace, though rights attested to representative bodies indicates that this was not the only context of governance.

References for Panchala (235, 288, 338–345).

Pre-Urban Rome–Bronze Age (c. 1700–950/925 BCE) (Francesca Fulminante)

The primary information on early Rome comes from archaeological excavations under later buildings and historical accounts from later periods. The first permanent settlement of Rome dates from the Middle to Late Bronze Age (c. 1700–950/925 BCE). The initial settlement of Rome was located on Capitoline Hill, on the banks of the Tiber River near a ford to Tiber Island where the river could be crossed. This location later became an important fluvial port but was in use at least from the Recent Bronze Age (c. 1300–1200 BCE) if not earlier. Permanent settlement in high defensible locations was a common trend in the region since the Middle Bronze Age, in contrast to the open sites of the prior period in this region of Italy. By the end of the Bronze Age, settlement had expanded down the slopes of Capitoline Hill to the ford on the river and another community was settled on Palatine Hill. These two early communities were between 9 and 12 ha in size, and the total population has been estimated at a few thousand people. These two communities did not agglomerate into one larger ‘city’ until the Iron Age.

Rome had an agricultural economy in the Bronze Age. Miniatures of large ceramic vessels that are thought to have been used to store grain and staple foods have been found in cremation burials of the Final Bronze Age and beginning of the early Iron Age, potentially indicating that inhabitants of the region had the capacity to produce and store agricultural surpluses. Such surplus from the local populace could have supported labor drafts to build the terraces and other defensive earthworks that mark the Recent Bronze Age settlement. Excavations also have revealed evidence of domestic and other productive activities, including several areas of bronze production on Capitoline Hill that date to the end of the Bronze Age. By the end of the Recent Bronze Age there is evidence in northern Italy of a period of drought that coincided with the collapse of the so-called Terremare culture. In central Italy there is no evidence of more arid weather, or we have to consider that the local population had some resources to be more resilient.

Differentiation in burials is evident by the end of the Bronze Age, when a set of individuals were buried in more formal contexts. Some of these were adult males who were interred with military equipment, including weapons (double shields) that later became symbols of power. Literary sources have attributed the double shields to the *Salii*, the warrior priests of the Regal period (750–509 BCE), and some scholars speculate that these individuals were early leaders of Rome and the surrounding region. A sword found in the Tiber River at Ponte dei Fiorentini reflects a religious practice of depositing weapons in watery environments that was common in Italy and

elsewhere in Europe during the Bronze and Iron Ages. This activity, whether linked to single households or the wider community, points to ritual of a participatory nature.

Rome's location on the navigable Tiber River and close to the sea connected it to long-distance trade networks that brought goods from afar to Capitoline Hill (for example Italo-Mycenean pottery). The growing importance of regional and interregional routes that connected Rome to southern and northern Italy and ultimately Europe during the subsequent Iron Age and Orientalizing period were important factors in the rise of Rome into a major city. Nevertheless, there is no evidence that these trade corridors were tightly or directly controlled by the early leaders of Rome.

References for Pre-Urban Rome–Bronze Age (265, 346–356).

Proto-Urban Rome–Iron Age (c. 950/925–750/725 BCE) (Francesca Fulminante)

With the beginning of the Iron Age and the Latial period IIA (950–900 BCE), evidence for early Rome is much more abundant. The two Bronze Age communities of Rome grew gradually in parallel, each with its own cemetery (the Forum Caesaris and the Temple of Antoninus and Faustina), until the Latial period IIB (900–850/825 BCE ca) when they coalesced into the unified large proto-urban center of Rome, similar in size to major Etruscan centers to the north of the Tiber (Caere, Tarquinia, Veio, Vulci). The new center is archaeologically indicated by the abandonment of the small cemeteries in central Rome and the creation of the large cemeteries at Castro Pretorio and on Esquiline and Quirinal Hills. The proto-urban settlement of Rome reached approximately 234 ha, with a population between 17,000 and 40,000 inhabitants.

Based on the location of settlements and terrestrial and fluvial transportation routes in the region, terrestrial routes increased in importance during the Iron Age compared to the fluvial routes that had been more relevant during the previous Bronze Age. Also, the location of primary and secondary settlements appears to correspond to the emergence of a market economy, as predicted by central place theory. There is evidence of terracing and land management, and pollen analyses indicate the presence of intensified and specialized polyculture, including the typical Mediterranean diet based on olive oil and wine, which was favored by the warmer climate at the end of the so-called little Iron Ice Age, in the first half of the first millennium BCE.

Whereas adult burials were placed in cemeteries outside the inhabited area, infant burials are known from within settlement areas; their interment has been interpreted as either part of foundational rituals for important public buildings or indicators of family rights on certain plots of land, according to a practice common in Latium Vetus in the Iron Age. Analysis of funerary evidence from Rome (cemetery of Antonino and Faustina and Esquiline cemetery) and Osteria dell'Osa, one of the contemporary competitors of Rome, shows different practicing ideologies in the earlier and later early Iron Age.

In Latial period IIA and IIB, which corresponds to the first proto-urban phase of the settlement of Rome, there are no clear burials of individuals who held both political and religious power. Different status symbols, such as weapons for men, ornaments for women, special human figurines, and special urns in the shape of a hut, are distributed among different individuals, which seems to point to an egalitarian ideology in which the members of the newly formed

unified center emphasized similarities among themselves and not differences. Religious practice was at that time still of a domestic and participatory nature and controlled by household heads.

Later in Latial period III, especially around mid-eighth century BCE, distinctive burials of male warriors appeared, such as Osteria dell'Osa Tomb 600 and Esquiline Tomb 94. These individuals were interred with inhumation ritual and full-size objects instead of miniatures, with their offensive and defensive weapons and incense burners reflecting the ideology of the early leaders of Rome and Latium Vetus. Similarly, some rich female burials contained many precious ornaments, including gold, silver, amber, and bronze *cistae* (jewelry or textile tools boxes). These changes presage a shift to a different sociopolitical organization with the concentration of power in the hands of a single individual and the creation of the monarchy and the urban city-state in the subsequent Orientalizing period.

References for Proto-Urban Rome–Iron Age (265, 347, 349–355, 357, 358).

Republican Rome (c. 509 BCE–14 CE) (Francesca Fulminante)

According to tradition, the last monarch of Rome, Tarquinius Superbus (king from 535 BCE), was expelled from the city in 509 BCE because his son, Sextus Tarquinius, raped a noblewoman, Lucretia. The monarchy was abolished in a revolution led by the semi-mythical Lucius Junius Brutus, and the king's powers were transferred to two separate consuls elected to office for one - year terms; each was able to check his colleague by veto. Most modern scholarship describes these accounts as the quasi-mythological detailing of an aristocratic coup within Tarquin's own family or a consequence of an Etruscan occupation of Rome rather than a popular revolution. Indeed, during the early Republican period, Rome, architecturally, was only a consolidation and confirmation of the monumental wave that had changed the city from perishable huts to large monuments and houses in tuff during the second Regal period (c. 580–509 BCE), and especially under the Tarquins.

The oldest standing monuments in Rome, temples A and C of Largo Argentina in Campus Martius (dedicated to Mars), likely date to around 300 BC and were built on top of tuff structures of the prior Archaic period. In the early fifth century, the Forum's surface was raised, and it took more or less the shape that we see today. The open space was resurfaced several times during the next four centuries, until the final paving, in travertine, in the Augustan period (27 BCE–12 CE). Two large temples were built in quick succession at each end of the new Forum, the Temple of Castor in 484 BCE and the Temple of Saturn in 476 BCE, near the Senate House. New stone buildings nearby are probably atrium houses that were built by the consular aristocracy of the new age. Like the aristocratic houses along the Sacra Via, they lasted for at least the next couple of centuries. The old and new wealthy families competed not only in houses but also in public buildings, and they restored or erected new temples. On Quirinal Hill alone 15 temples are known before the Augustan period.

A large temple of the late fourth century was built on a terrace at the western corner of Palatine Hill, adjoining a small sixth century temple and looking out across the valley to Aventine Hill (one of the seven hills of ancient Rome). It was subsequently razed, though its place continued to be marked by an altar or shrine dedicated to the goddess of Victory. There is not much evidence of a conquest in Rome in the fifth century, but the supposed conquest and destruction by fire of

the Gauls in 390 BCE is attested in excavations in the Forum Caesaris. In the fourth century BCE new city walls were built that, according to some scholars, were completely aligned with the previous Servian Wall. The population of Rome at this time was between 500,000 and 750,000 inhabitants.

From the fourth century on temples proliferated on the plain of the Forum Boarium (cattle market) around the port. The twin temples at S. Omobono were among the first; the temple for the harbor god Portunus followed around 300 BCE. The Forum Boarium and the associated cult of Hercules are likely to have been monumentalized at the same time. The cult of Hercules was made public by the censor Appius Claudius Caecus in 312 BCE, at the same time that he completed Rome's first public aqueduct, the aqua Appia, which was followed by three more public aqueducts in the third and second centuries BCE. The aqueducts entered the city underground and hugely increased the supply of water to the lower city. Much of the land on the plain of the Campus Martius was owned by the city by the later fifth century BCE, if not before. It was farmed as a *villa publica* (state farm).

In the early Republic, wealthy aristocratic families still dominated the political and economic agenda of the novel state by controlling all political and religious magistratures. However, quite soon another political player emerged from the commoners, the so-called Plebeians, who acquired electoral rights in 494 BCE, with the secession of the Plebeians on Aventine Hill that led to the creation of the tribunes. A series of struggles and conflicts followed between the two parties until, in 300 BCE, the two tribunes of the plebs Gnaeus and Quintus Ogulnius passed the *Lex Ogulnia*, which created four plebeian pontiffs, equaling the number of patrician pontiffs, and five plebeian augurs, outnumbering the four patricians in the college. As a result of the end of the patrician monopoly on senior magistracies, many small patrician *gentes* (families claiming descent from a common ancestor) faded into history during the fourth and third centuries BCE due to the lack of available positions. About a dozen remaining patrician *gentes* and 20 plebeian ones thus formed a new elite, called the Nobiles, or Nobilitas.

The Republican period saw the expansion of Rome in Italy and increasing intensified agricultural production, organized in large estates, or *villae*. The fall of Veii in 496 BCE initiated the collapse and annexation of Etruria and central Italy, while the Samnites Wars (c. 350 and 300 BCE) allowed the expansion of Rome in southern Italy. After the three Punic Wars (c. 264–146 BCE), Rome had conquered both Carthage and Corinth in Greece and was clearly projected onto the wider Mediterranean arena. Imperialism and infrastructure clearly helped a market-driven economy, yet local responses and stimuli often allowed for the adoption of a complex and dynamic set of resources to provide resilience against an episode of wetter conditions toward the final century of the first millennium BCE, followed by increasingly more arid conditions.

The last century of the Republic saw the final conquest of northern Italy and Sicily, the crisis of the aristocratic forces that had abandoned core traditional Roman values in favor of luxurious tastes acquired through contacts with lavish Greek culture, the social war with the rebellion of various allies within Italy (the *socii*), the Gracchan reforms (c. 133–121 BCE) that reallocated public land to poor plebeians, and finally the civil war with the first Triumvirate, composed by Gnaeus Pompeius Magnus (Pompey), Marcus Licinius Crassus, and Gaius Julius Caesar, and then the second Triumvirate, formed by Octavian (later Augustus), Mark Antony, and Marcus

Aemilius Lepidus. At the battle of Actium in 31 BCE Octavian finally defeated Mark Antony—and his ally and companion Cleopatra, who had previously married Caesar—and posed the foundation for the dominance of Rome on the Mediterranean and the creation of a new order: the Principate, the basis of a wide and long-lasting empire.

References for Republican Rome (41, 265, 266, 268, 359, 360).

San Lorenzo (Sarah B. Barber)

San Lorenzo was the earliest urban center in Mesoamerica. Located on a low hill rising as an island within a now-abandoned channel of the Coatzacoalcos River in the southern Gulf Coast region, the site was founded between 1780 and 1600 cal. BCE and reached its greatest population (conservatively 10,000–12,000 people) between 1400 and 1000 cal. BCE (San Lorenzo phase). The hill was extensively modified to create space for ceremonial and governance facilities near the summit and wide terraces for residences descending the slopes. The site was largely abandoned from 1000 BCE until 800 CE, when much of the site's urban spaces were remodeled. There is disagreement about the plan of the initial urban space because early architecture was mostly earthen, and the later occupation reshaped or buried much of the oldest settlement. Current understanding of much of the urban layout is derived from the stratigraphy of 2602 auger tests made by Cyphers and Arieta Baizabal over most of the hill's surface area. Writing was not invented in Mesoamerica until after San Lorenzo's abandonment, although a corpus of nearly 200 carved stone monuments from the site and surrounding areas has provided important detail on governance and ideology. The stone monuments generated initial archaeological interest in the site nearly a century ago, and San Lorenzo has been the subject of extensive excavation, mapping, and regional surface survey projects since the 1960s.

While no ruler's tombs have been identified at the site, a set of massive stone portraits known as Colossal Heads depict 11 individuals presumed to have been rulers. Excavations by Cyphers and colleagues also identified a massive palace complex covering 13,500 m². This facility included more than 14 rammed-earth structures adorned with monumental carved stone roof-support columns and bench or stair covers. The structures had a variety of uses, including as a workshop for recycling the carved stone monuments for which the site is famous, indicating rulers' control over some artistic production. San Lorenzo also has four basalt thrones, one of which was located next to a plaza covering at least 2500 m². This space, known as Group E, was a partially restricted open area that would have enabled large numbers of people to witness or participate in collective events. Cyphers has interpreted Group E as the primary space at which acts of governance took place. There is disagreement on the geographic extent and organization of political authority although the distribution of basalt sculptures at other sites has been used to identify an administrative hierarchy that includes seven possible administrative centers beneath the authority of San Lorenzo's rulers. The presence of small thrones at some of these centers indicates that members of noble families likely held administrative posts outside San Lorenzo itself. Inequality is evident in the location and size of residences, with the largest and most architecturally elaborate houses, including the palace, near the summit of the hill and smaller house groups on the lower slopes and floodplain. It is not clear to what extent San Lorenzo's populace relied on agriculture, and it has been proposed that widely available aquatic resources like fish and turtle may have constituted a large proportion of the diet. There is no evidence to date for a market or for elite control over staple production, although elites or rulers probably

controlled production and exchange of highly valued items like greenstone and iron ore.

References for San Lorenzo (361–374).

Siena Under the Rule of the Nine (David Stasavage)

Siena was a prominent Italian autonomous city located in Tuscany to the south of Florence. We know a great deal about its history thanks in particular to the historian William Bowsky who made the study of this city his life's work. As many of the medieval structures of this city, such as the *palazzo pubblico*, are still standing, we also in a sense are able to consider archaeological evidence without having to do archaeology. I considered Siena at the height of its power during a period known as the Rule of the Nine or *Noveschi* (1287–1355 CE). As was common for northern Italian communes at this time, Siena had both a sophisticated bureaucratic administration and a system of collective governance. Initially, governance occurred through two separate bodies, a council of 'the people' (at first *populus* in Latin and later *popolo* in Italian) and a second council of neighborhood representatives commonly known as the Council of the Bell. It held this name because the council would be summoned by ringing the bell of the church where it met. This illustrates one of the essential elements of geographic compactness. No larger European polity could hope to summon a council simply by ringing a bell. While early governance in Siena involved broad participation, over time there was a shift to a more oligarchic form of rule under the Nine. While the Council of the People and the Council of the Bell still met and retained ultimate sovereignty, the Nine were the group of individuals chosen to govern Siena on a daily basis. They governed from the *palazzo pubblico*, an impressively large structure that was meant for the public, but which had no large rooms for assemblies or councils. The oligarchic character of this regime derived from the fact that by statute the Nine were selected exclusively from among the members of the city's merchants guild, composed of those individuals engaged in long-distance trade. During this era members of the craft guilds, those producing items for local consumption, had no access to executive power.

References Siena under the Rule of the Nine (194, 375–378).

Tenochtitlan (David M. Carballo)

Mexico-Tenochtitlan, in central Mexico, may be the best historically documented settlement of the sixteenth century Americas. It was the largest city of the Western Hemisphere at the time of the Spanish invasion, the lead city of the Triple Alliance federation or 'Aztec empire,' and became the capital of colonial New Spain. This layered settlement history, mostly buried under contemporary Mexico City, makes archaeology much more difficult and research has targeted the sacred precincts of Tenochtitlan and its sister city of Tlatelolco, while other excavations have been related to salvage work for constructing the Metro and other projects. Houses are therefore poorly understood, and indices based on them, such as Gini, are problematic. The case therefore draws on a mix of colonial period texts, select windows into the archaeology of the city, iconography, and some epigraphy of prehispanic monuments.

The coding here applies primarily to the late, imperial stage of Tenochtitlan (c. 1450–1521 CE), not its earlier (1325–1450 CE) history as first a vassal to the Tepanec empire and later as a more collective polity, but some of these vestiges of earlier organization remained. In her recent book on the Aztecs, Susan Kellog (2024, 119) notes: "The Aztec era was one marked by political

transformations away from more collective forms of governance toward a more powerful dynastic, ruler-centered form of governance, although elements of that more representative system persisted through and beyond the era of violent contact with Europeans.” This transformation occurred particularly with the mid-15th century builders Itzcoatl, who is said to have burned previous histories, and Moctezuma I; the city became more centralized under the conquest-era ruler Moctezuma II. By the time of this last ruler, the formerly more autonomous council chambers had been moved into the palace, and he depicted himself in art as divinely sanctioned to a greater degree than any of his predecessors (some 10 times, which by comparative standards is still not too much). In theory, rulership was supposed to be shared between a great speaker (Huey Tlatoani) and an internal affairs ruler (Cihuacoatl), but the first increasingly consolidated power at the expense of the latter. These positions were elected by a governing council and did not follow primogeniture, but they were passed among the males of intermarrying noble lineages. Blanton and Fargher coded the Aztec empire as one of their more collective premodern cases based on internal finance streams, checks on rulers, and allocation of public goods (aqueducts, ports, markets, grain allocation in time of famine). Yet it also had significant disparities in wealth and power and featured the highest militarism and human sacrifice/ritual violence of any precolonial Mesoamerican polity.

References for Tenochtitlan (4, 24, 38, 310, 379–397).

Teotihuacan (David M. Carballo)

Teotihuacan, in central Mexico, was the largest city in the Western Hemisphere during its apogee c. 1–600 CE. When the polity it controlled collapsed and the city’s population declined, later settlements (Toltec, Aztec, colonial) were concentrated in a ring around the former city center, leaving much of the urban footprint of the Classic period city to be mapped. The Teotihuacan Mapping Project, directed by Millon and colleagues, thereby provides one of the best archaeological maps of an early city of this size, also aided by the visibility of lower domestic architecture permitted by the city’s semiarid setting. Teotihuacan has also seen over a century of archaeological investigations and iconographic analyses. Teotihuacanos developed a writing system, still under decipherment, but it was used more sparingly than was the case for the contemporary Classic Maya and primarily records dates, individual names or offices, place names, and mythical narratives. Archaeologists therefore often extrapolate from later periods in central Mexican history if Teotihuacan’s material record seems congruent with historically documented social institutions.

In over a century of excavations, no clear royal burial has ever been discovered at Teotihuacan, and no depictions of single paramount rulers have been identified in the city’s mural painting and other art. The art does convey social hierarchy, however, though humans are depicted as subordinated in scale and posture to deities. No humans are depicted as dominating another, though art does convey symbols relating to warfare and human sacrifice, and human sacrifices have been discovered within the three major pyramid complexes. There is no scholarly consensus on what large central complexes may have served as a palace, but there are at least four candidates—the Ciudadela, Street of the Dead Complex, Plaza of the Columns, and Xalla—that appear to have served administrative functions. Xalla is the most clearly designed as deliberative space, with several internal complexes organized around open patios, but the largest formal open spaces are the plazas of the Ciudadela and of the larger Great Compound, which has

been hypothesized to have served as a central marketplace but requires further investigations. The most unique feature of Teotihuacan is not the large pyramids, administrative complexes, or city-wide grid orientation, rather the fact that sometime in the middle of the city's history (c. 300 CE) over 2000 multifamily apartment complexes were constructed that housed approximately 90% of the urban population. Though these vary in size and architectural elaboration, they are generally spacious and nicely made accommodations and the labor involved in their construction was approximately twice that of all the central pyramids, plazas, and administrative complexes combined. They also likely served as units for the state to tax in goods and labor, representing internal forms of fiscal finance.

References for Teotihuacan (24, 38, 50, 310, 398–420).

Tikal (Jessica Munson)

Tikal, one of the largest and most prominent ancient Maya cities, is located in the lowland tropical forests of present-day central Petén in northern Guatemala, which was home to an estimated 7–11 million people during the Classic period. It lies approximately 30 km north of Late Petén Itzá and was the capital of one of the most powerful kingdoms in the Maya Lowlands, forming part of a complex network of competing and allied polities whose influence extended all the way to Teotihuacan in central Mexico. Archaeological evidence indicates that the site was occupied as early as the Middle Preclassic (c. 800 BCE), but Tikal rose to prominence during the Early Classic period (c. 200–550 CE) and reached its apogee with peak population and architectural complexity in the Late Classic period (c. 550–800 CE). At its height, Tikal likely supported a population of 45,000 to 62,000 with an extensive and dispersed settlement pattern that included dense occupation around the monumental core with variable patterns of occupational density in the broader hinterlands. Here we focus on Tikal's epicenter and primary residential zone during the Late Classic period for the purpose of coding governance and related variables.

The archaeological history of Tikal is distinguished by a long trajectory of investigation, beginning with early visits by explorers and travelers in the 19th century and culminating in major excavations in the epicenter during the mid-20th century. The most significant of these was the Tikal Project, directed by the University of Pennsylvania from 1956 to 1970, which included intensive mapping, excavation, and conservation efforts. Tikal's epicenter contains a vast ceremonial and administrative complex composed of towering pyramidal temples, elite palaces, ballcourts, causeways, and large plaza areas. Among the most iconic structures are Temples I through VI, built primarily during the Late Classic period, with Temple I serving as the funerary monument for the ruler Jasaw Chan K'awiil I who held the epithet *k'alamte'* denoting his supreme authority. The scale and complexity of these buildings, many of which stand over 40 m tall, demonstrate a high degree of architectural planning, labor organization, and social stratification. Hierarchical differentiation is further evidenced in residential architecture, burial goods, and epigraphic records. Tikal's prominence as a political and ceremonial center is underscored by its frequent appearance in Maya inscriptions (denoted as *Mutal*), as well as its military and diplomatic entanglements with other powerful centers, notably Calakmul, Caracol, and Copan.

Like other polities in the Maya Lowlands, Tikal's governance was centered on a lineage of divine kingship documented in a sequence of over 30 dynastic rulers along with a supporting cast of dozens of titled royal officials. The city's political history is reconstructed in part from hieroglyphic texts carved on stelae, altars, lintels, and temple interiors, many of which commemorate major events such as royal accessions, military victories, and ritual performances. These texts reveal that Tikal was engaged in a series of protracted conflicts and shifting alliances, most notably with its primary rival Calakmul, which shaped regional geopolitics throughout the Classic period. Rulers such as Yax Ehb' Xook, considered the dynastic founder in the first century CE, and later figures, like Jasaw Chan K'awiil I and his successor Yik'in Chan K'awiil, played crucial roles in consolidating and restoring Tikal's power following an extended period of political eclipse during the so-called hiatus period. Administrative functions likely took place within palace complexes and other elite compounds within the site core, where craft production, calendrical knowledge, and political decision making were concentrated. Though the mechanisms of administration are only partially understood, the evidence points to a centralized form of governance embedded in ritual, lineage, and control of economic resources. Tikal's enduring importance to our understanding of ancient Maya civilization lies in its architectural grandeur, textual legacy, and pivotal role in Classic period political dynamics.

References for Tikal (43, 221, 421–427).

Tlaxcallan (Tlaxcala) (David M. Carballo)

As the primary Native allies to Cortes and the invading Spaniards, we have a relatively rich documentary record for Tlaxcallan (c. 1200–1521 CE), in central Mexico, which this conquistador characterized as a 'republic' along the lines of late Renaissance republics in northern Italy. Because of their role in the Spanish–Mexican war, the Tlaxcaltecs were given semi-autonomy from the crown for most of the 16th century, when only members of the Spanish clergy could live within the 'Indian Republic.' These sources and the records of the *cabildo* (Indigenous council) provide important lines of evidence, though we must keep in mind the sixteenth century filter and strategic use of historical memory on the part of the Tlaxcaltecs to maintain their autonomy or make various claims to land and titles. Although many portions of the precolonial city are covered by modern Tlaxcala, Fargher, Blanton, Garcia Cook, López Corral, and others have created a complete urban map and conducted archaeological excavations at the stronghold of Tepeticpac, the disembedded ritual–administrative complex of Tizatlan, on residential terraces, and elsewhere.

Tizatlan served as the primary deliberative space, away from the confederated but somewhat rivalrous districts of the primary city. The governing council or 'senate' comprised between 100 and 200 representatives and both elites and non-elites served on it. The system was significantly meritocratic, and rulers served on rotating bases. These collective strategies were part of the polity's resistance strategy to the Aztec Triple Alliance empire, who had encircled it on all sides and broken previous confederations with the city-states of Cholollan and Huexotzinco. Tlaxcallan was primarily occupied by Nahuatl speakers, but it was multiethnic and also confederated with several Otomi polities, particularly to the north. The city was polycentric and some variability in household size is apparent but there is no palace or enclosed central ceremonial precinct.

References for Tlaxcallan (24, 38, 92, 428–439).

Ur III (Dan Lawrence)

The settlement of Ur (now known as Tell al-Muqayyar) was a major urban center in southern Mesopotamia for at least 2000 years, occupied continuously from c. 3800 BCE to sometime after 500 BCE. Political organization over much of this period was complex, with different urban centers rising that controlled large areas of southern Mesopotamia and occasionally also parts of dry-farming northern Mesopotamia, punctuated by periods of disintegration. Here we focus on Ur during the so-called third dynasty, or Ur III period, when the city was the center of a polity that encompassed most of the irrigated plains of southern Mesopotamia and was able to extract tribute at least as far up the Euphrates as the site of Mari, in modern-day Syria. Ur was an important center during other periods, such as the Early Dynastic (c. 2900–2350 BCE). The famous Royal Cemetery of Ur dates to around 2600 BCE and included lavish elite burials with contested evidence for human sacrifice. The Ur III dynasty was founded by King Ur-Nammu around 2112 BCE, following the decline of the Akkadian Empire and the so-called Gutian interregnum, conventionally interpreted as a period of significant political and social instability. The dynasty lasted for just over 100 years under five successive kings. Ur-Nammu's son, Shulgi, appears to have been the most effective, expanding the territory of the empire through military campaigns. Ur's regional preeminence ended around 2000 BCE when the Elamite king Kindattu conquered the city. Subsequently, during the Isin-Larsa period, both northern and southern Mesopotamia returned to a more fragmented landscape of individual city-states.

The site of Ur was excavated by several British teams during the 19th and early 20th century. Most of our information comes from the work of Sir Leonard Woolley, who excavated several different areas, including the Royal Cemetery, the central precinct, city walls, and large areas of residential architecture, over 12 years from 1922 to 1934. More recently, an American team led by Elizabeth Stone and Emily Hammer has returned to the site and documented further structures and extensive suburbs. Surveys at the site and in the wider region have found evidence for extensive irrigation networks. Our knowledge of the Ur III state is also supported by cuneiform tablets recovered from sites across southern Mesopotamia, including Ur itself but also Lagash, Girsu, Umma, and other centers. Numbering in the tens of thousands, the vast majority of these are short and relate to state administration. They demonstrate the presence of an elaborate state bureaucracy, at least compared to previous polities in the region. However, the texts also show that administration was not independent of royal or elite households, and scholars such as Garfinkle argue that patrimonial social relations still played a significant role in political and economic organization.

During the Ur III period, the entirety of the main mound at Ur, measuring approximately 1200 by 800 m, was occupied and surrounded by a substantial city wall, with additional extra-mural settlements also present. Domestic houses show differences in size indicative of a range of social classes. There is substantial evidence for elites, relatively restricted political power, and inequality. The central precinct included the famous Ziggurat (a form of stepped temple with a restricted upper platform), as well as temples and administrative buildings and open spaces for congregation. Although there is no clear royal palace, some scholars have interpreted the Ehursag building as a subsidiary palace; others consider it to be a temple or administrative building. The mausolea of two of the five kings of the Ur III dynasty are also located in the

central precinct, evidencing the tight connection between royal and religious power. This is also clear in artistic forms, with kings depicted as deities on cylinder seals. Texts demonstrate a high degree of central government control of labor and resource management, organized through a network of local administrators and transfers known as the *Bala* system. The degree of state control in the overall economy has been debated, and there is a clear bias toward royal and institutional activity in the administrative sources. However, it is generally acknowledged that the degree of centralization and attendant redistributive powers of the Ur III state were unprecedented in the region.

References for Ur III (440–452).

Urban Rome–Archaic Age (c. 580–509 BCE) (Francesca Fulminante)

The period of the last three kings of Rome, Tarquinius Priscus (c. 616–578 BCE), Servius Tullius (c. 578–534 BCE), and Tarquinius Superbus (c. 534–509 BCE), whose existence is attested by literary accounts, has often been named by scholars as the age of the Etruscan kings for the influence of Etruscan culture and style visible on Roman material culture and monuments of the time. If an Etruscan hegemony on the city of Rome is currently an unfashionable theory, a commercial interest of the Etruscans in the region to the south of the Tiber (Latium Vetus) is quite probable. At this time Rome was completely renovated under what is considered the first town planning in the history of the city: the *pomerium* was enlarged and the city was surrounded by stone fortification walls; marshes were drained, streets and drains were built; Romulean buildings were restored, rebuilt, or monumentalized, and the city was adorned with stone-foundation temples, embellished by extensive sculptural decoration.

It is probably not by chance that the attribute ‘*maximus*’ was added to the most representative monuments of this activity: the Temple of Iovis Optimus Maximus, dedicated to ‘Iovis the best and the greatest,’ together with Juno and Minerva, the Circus Maximus and the Cloaca Maxima. Although the last two monuments date archaeologically to the Republican period, they are possibly linked to the Tarquins by literary sources. At the same time, the archaic temple of Mater Matuta in the S. Omobono sanctuary (the most ancient example of a Tuscan order in Rome) was built. Also, several monuments and complexes, whose origin can be traced back archaeologically to the first regal period, were restored or monumentalized during this time, for example, the Forum and the Comitium, the Volcanal, the Domus Regia or House of the Kings, the Atrium Vestae, the area of the Magna Mater temple, among others.

While the earthen wall around Palatine was obliterated and only key points, such as the door gates and a few portions of it, were restored in stone to preserve the memory of the monument, according to literary accounts, the *pomerium* was enlarged and the city was surrounded by stone fortification walls under the reign of Servius Tullius (c. 578–534 BCE in the traditional chronology). Even if doubted, the existence of continuous archaic Servian fortification has recently been supported by Gabriele Cifani. It has been suggested that Rome under the Tarquins could have had an extent of about 300 ha and a population of 30,000–40,000 inhabitants. Other calculations provide an extent of 426 ha for the city within the so-called ‘Servian’ walls. The area of Rome within the archaic walls, measures about 364 ha. Therefore, a figure of about 360–400 ha is reasonable.

Under the Tarquins and at the beginning of the Republic, the lavish presence of grave goods that we had seen in the previous Orientalizing period disappeared and tombs were equipped only with a few vases and personal objects or none at all, even if sometime a great deal of expenditure and labor was still invested in funerary ritual, especially to create elaborate tomb structures in the shape of family-built or excavated chamber tombs. This new funerary costume has been connected by scholars with a populist ideology of the tyrannical regime and a novel egalitarian ideology of the new democratic regime of the following Republican period.

References for Urban Rome–Archaic Age (265, 352, 453–456).

Urban Rome–Orientalizing Age (c. 750/725–580 BCE) (Francesca Fulminante)

When did the city of Rome begin? In the sixth–fifth century BCE with the construction of the first city sanctuary, the massive Capitoline Temple on Capitoline Hill, the aristocratic houses on the northern slopes of Palatine Hill, with atrium plans and with stone foundations, the service of the Cloaca Maxima and the presence of the Circus Maximus for ceremonies and spectacles? All these structures and infrastructure clearly would support the presence of a well-organized city, ruled by a powerful elite and/or a monarch who exerted his influence on the entire region, down to Circei and Terracina in southern Latium.

A number of scholars would argue (though not without a bit of caution) that Rome was already a city at least since the mid-eighth century BCE, when buildings and infrastructure that were still made of wattle and daub already indicate an organized community of people similarly governed by a wealthy elite and/or a monarch chosen on the basis of prestige and ability. At that time there was an earthen fortification wall around Palatine Hill that probably had a more symbolic and ideological function rather than a practical one, since the settlement was already much larger than the area enclosed by the wall. In the area of the Vesta Sanctuary is a rectangular building with benches that probably was a regal residency; several oval huts probably are the original habitation of the Vestals and their original cultic hut. At the same time, there is evidence of a common cult on Capitoline Hill, indicated by a votive deposit, dated to the mid-eighth century BCE, that could be related to the cult of Iovis Feretrius, attributed by literary sources to Romulus.

Geomorphologic and topographic study of the valley between the Palatine and Capitoline Hills has questioned the traditional interpretation of the Velabrum as a swampy area that only was drained by the Tarquins. The first use of the area of Forum, which originally was more triangular in form, could date to 725–700 BCE, or more cautiously 675 BCE. And the first use of the area of the Comitium has been dated to c. 650–630 BC. The valley, which separated the Capitoline and Palatine settlements, was an important open space and a main route from the sea and the mouth of the Tiber toward the interior and the mountains, especially for the salt trade. This connection between the Tiber, Rome, and the salt trade has always been accepted by scholars, but the potential date of this port-of-trade (*emporium*) at the foot of Aventine Hill near the cult place of the Ara Maxima has long been debated. The antiquity of the Ara Maxima port-of-trade is confirmed by its connection with two very old cults related to livestock and the salt trade (Cacus for the pre-urban period and Hercules for the proto-urban and urban period), and by the presence of eighth century BCE Greek pottery in the S. Omobono sacred area.

This summary of the archaeological evidence of early Rome shows how already from the eighth–seventh century BCE the city was equipped with fortification walls, public monuments, a regal residency, and cult places that testify to the presence of a central authority and possibly a community of citizens who limited this central authority and made communal decisions in the Comitium (Forum) and celebrated communal ritual at the sacred space on Capitoline Hill. The funerary evidence from Rome and Latium Vetus at this time also shows the presence of extremely rich burials both for males and females, equipped with hundreds of objects, including drinking and feasting banquet services and tools, gold and silver ornaments and vases, weapons for males, textile tools for women, and sometime chariots and carts. These are the so-called ‘princely burials’ that indicate the existence of a solid aristocracy that competed internally and with the king for ascension to power, which was not yet hereditary alone but also was based on skills and merit.

References for Urban Rome–Orientalizing Age (265, 349, 352, 354,357, 455, 457–459).

Uruk (Dan Lawrence)

Uruk, modern Warka, was the earliest urban center in Mesopotamia and remained preeminent in the region for most of the fourth millennium BCE. This phase of Mesopotamian pre/protohistory is known as the Uruk period, dating from around 4000 to 3200 BCE. It is preceded by the Ubaid period, when the two settlements that merged to create the city of Uruk in the early fourth millennium were founded. Uruk itself continued to be an important cultural, religious, and political center until the Iron Age, but following the Uruk period, the city was part of a network of urban formations of similar size and scale, and it was never the primary capital during periods of unification. The case used here represents Uruk during the Uruk period.

Our evidence for Uruk is primarily archaeological and comes from both the site itself and surrounding regions. Writing emerged close to the end of the Uruk period, meaning there are very few contemporary textual sources. However, the ideological importance of the city is reflected in the many myths and legends associated with it in texts from later periods, such as the epic of Gilgamesh, said to be the king of Uruk. Over the course of the Uruk period, material culture and architectural styles associated with southern Mesopotamia spread into surrounding regions, particularly northern Mesopotamia, southern Anatolia, and western Iran, even reaching parts of Egypt and the Indus Valley. In some areas, notably the Middle Euphrates Valley in Syria, entire settlements of southern Mesopotamian types have been interpreted as enclaves of settlers, while elsewhere, for example at Arslantepe in Turkey, interaction appears to be more akin to cultural hybridity. The scholarship on what this means for the political structure of the Uruk polity itself is not settled, with some arguing that city sat at the center of a powerful empire, and others for more direct economic, but not political, control, and still others that trade and exchange could explain the material culture patterning visible in the record.

The site itself has been excavated and surveyed by a series of German teams since the 19th century. During the Uruk period it grew rapidly and likely exceeded 250 ha in size, at least twice as large as any other center in the wider region. Like Ur, there was a large central precinct, the Eanna district, which housed a series of administrative buildings, temples, and a ziggurat, as well as several open spaces. Also, like Ur, no clear palace structure has been located. Iconography, including seals and high prestige material items, such as the meter-tall Uruk vase, show a degree

of hierarchy, with kings or priests acting as intermediaries between the gods and men. The development of both writing and cylinder seals during the Uruk period has been interpreted as evidence for increasing bureaucratization and administrative control by elites.

References for Uruk (460–471).

Vatsa (Adam Green)

After a long period of social and cultural change following the de-urbanization of the Indus civilization around 1900 BC, many polities arose in regions adjacent to those that had formed the hinterlands of the Indus civilization. These *janapadas* or *mahajanapadas*, known through historical texts, are regularly identified as ‘great republics’ that emerged by about 600 BC. Archaeologically, they are associated with the Early Historic period in South Asian deep history, a phase characterized by distinctive pottery styles, like the Northern Black Polished Ware, and is associated with South Asia’s re-urbanization. These polities are notable because according to charters, deeds, and epigraphs, many operated as republics that brought together representatives of merchant and artisan guilds, religious organizations, and a stratified elite of hereditary nobles. Traces of the practices that characterized them are attested in ancient texts, like the *Arthashastra*; these notes are useful, but they are difficult to align to a specific historical period. They also appear to have been expansive, with one or two *janapadas* sometimes agglomerating into a larger *mahajanapada* after a military conquest. While around a dozen *mahajanapadas* have been identified by researchers, few have been aligned with archaeological data. Many researchers generalize many of the specific patterns evidenced in the historical records from the *mahajanapadas*. *Vatsa* was among the most extensive of the *mahajanapadas*, and archaeological investigations have been carried out at Kausambi, the historical capital of the Vatsa polity. The polity, which has left behind a king list, was located far to the south of Panchala, within a different river drainage. The aim of these early excavations was to establish the site’s chronology and contribute to a better understanding of the region’s pottery assemblages, so they limit our ability to investigate patterns at particular periods. However, it is clear that the settlement was heavily fortified and nucleated.

References for Vatsa (288, 290, 339–345, 472).

Zuni–Protohistoric (Keith W. Kintigh)

The Protohistoric Zuni case, in west-central New Mexico, dates from about 1350 to 1540 CE. Our direct evidence concerning protohistoric Zuni governance comes from the early 20th century excavation of two protohistoric sites, Hawikuh and Kechipawan and subsequent reanalyses of data from them, from 16th century documentation of the Spanish exploration and conquest of what is now the Southwest US, and from studies of the protohistoric settlement patterns. Starting in 1879, Frank Cushing, a Smithsonian Institution ethnographer, spent several years at Zuni, was adopted into the Zuni tribe, and eventually was inducted as a bow priest. Cushing wrote extensively and insightfully on all aspects of Zuni life. Cushing’s and other 19th and early 20th century ethnography is cautiously projected back into the protohistoric and earlier periods.

During the Protohistoric period, Zuni had from six to nine compact towns, or pueblos, with from 200 to 900 rooms and a total population on the order of 3000–5000 individuals. Subsistence, organized at a household level, relied on runoff or small-scale irrigation agriculture

supplemented by kitchen gardens, domestic turkeys, and hunting and gathering near settlements. Household exchange of ceramics over considerable distances (up to ~225 km) was substantial, but there was little long-distance exchange of exotics. Overall, households dominated the economy with little to no institutional economic involvement.

Politics and religion were inseparable, and power was concentrated in a council of priests. Leaders, identified on the basis of mortuary treatments and grave offerings, were selected from a small number of kin groups, suggesting an ascriptive element to leadership selection. Power and prestige were associated with these priestly positions and the priest's attendant control of ritual knowledge, but notably *not* with material wealth. Similarly, there is remarkably little differentiation in household architecture. Rituals occurred both in public plazas and restricted-access kivas, but there were no other special purpose governmental or religious structures. There was a considerable range in the richness of burial accompaniments though it appears to be a continuum associated with the different social positions held, not indicative of class distinctions.

References for Zuni–Protohistoric (473–481).

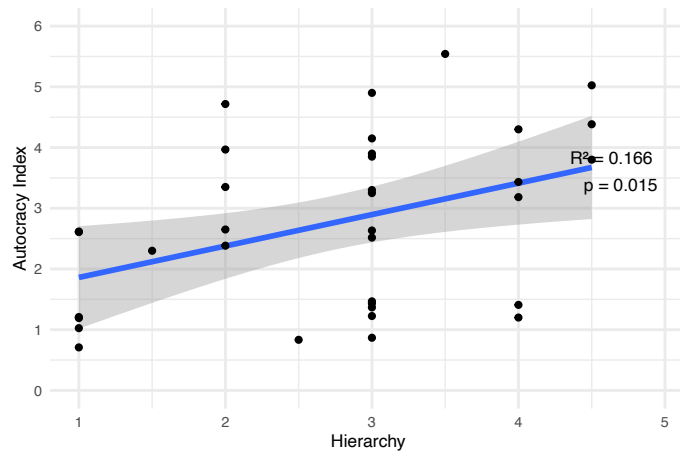


Fig. S1. Correlation between the number of levels in a civic-ceremonial hierarchy and the autocracy index. The correlation between the number of levels in a civic-ceremonial hierarchy and the autocracy index is weak.

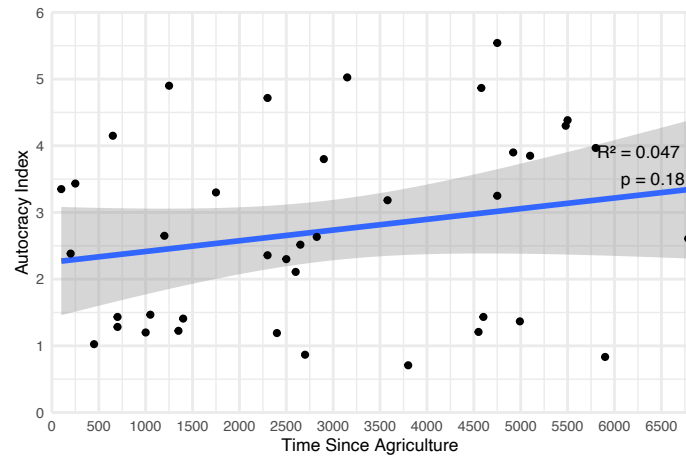


Fig. S2. Correlation between the advent of domestication in each region and the autocracy index. There is almost no correlation between the advent of domestication in each region and the autocracy index.

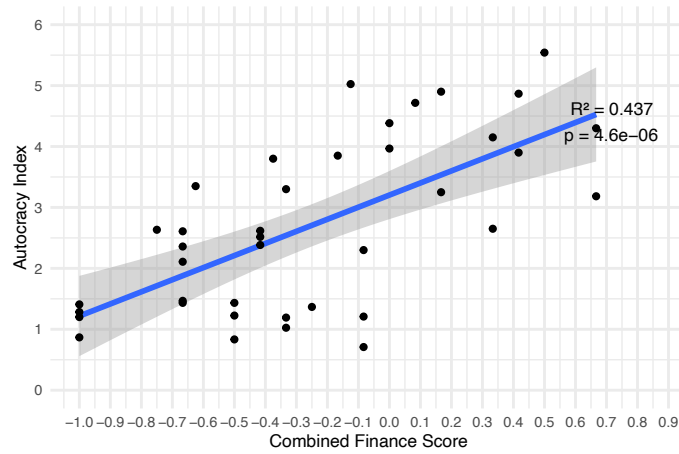


Fig. S3. The correlation of the autocracy index with how governance is financed. In the combined finance score, a higher positive value indicates a greater reliance on external financing, and a higher negative value indicates a greater reliance on internal financing. The autocracy index is correlated with a greater reliance on external financing.

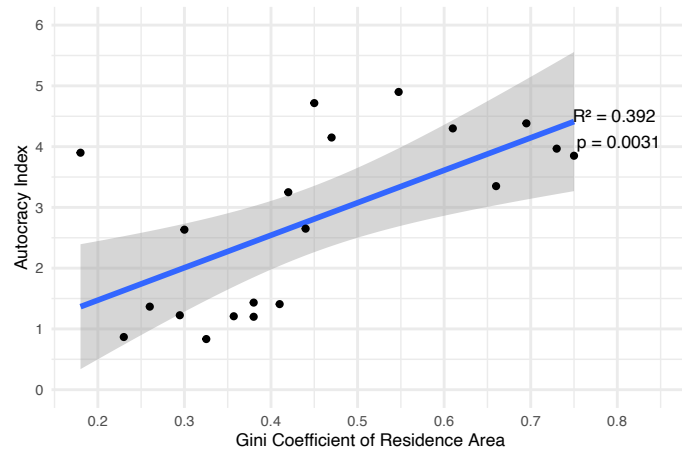


Fig. S4. Correlation between Gini coefficients of differentials in house sizes and the autocracy index. Gini coefficients tend to be higher in more autocratic polities.

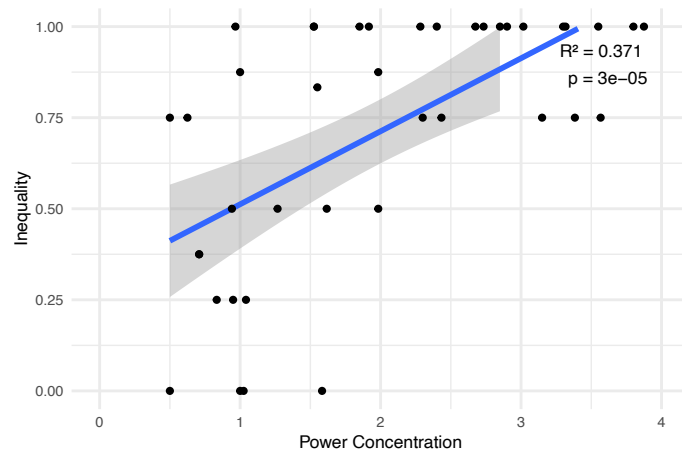


Fig. S5. Correlation between concentration of power and inequality. When power is more concentrated, inequality tends to be greater.

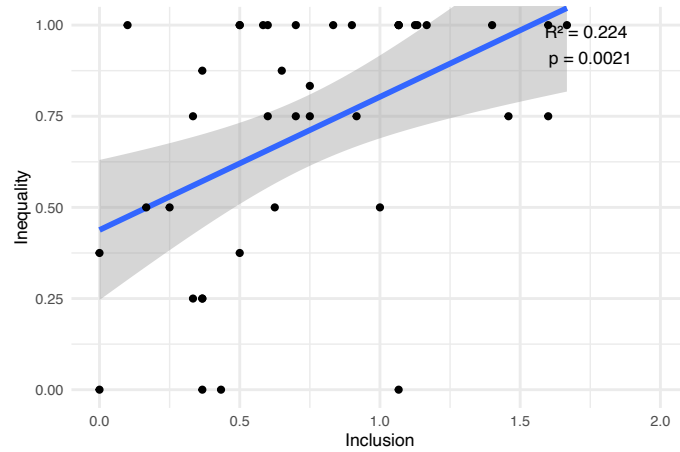


Fig. S6. Correlation between the degree of inclusiveness and inequality. Inequality tends to be higher when citizen inclusiveness is limited (the upper end of the range in our coding is more restrictive, less inclusive).

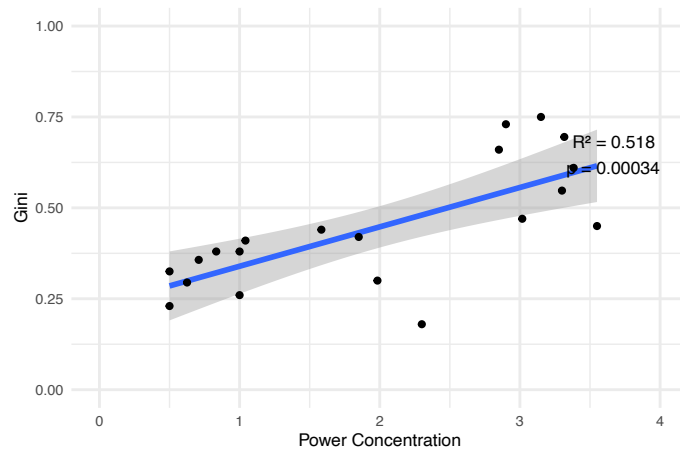


Fig. S7. Correlation between concentration of power and Gini coefficients of differentials in house sizes. Inequality as measured by disparities in residence size correlates with greater concentration of power.

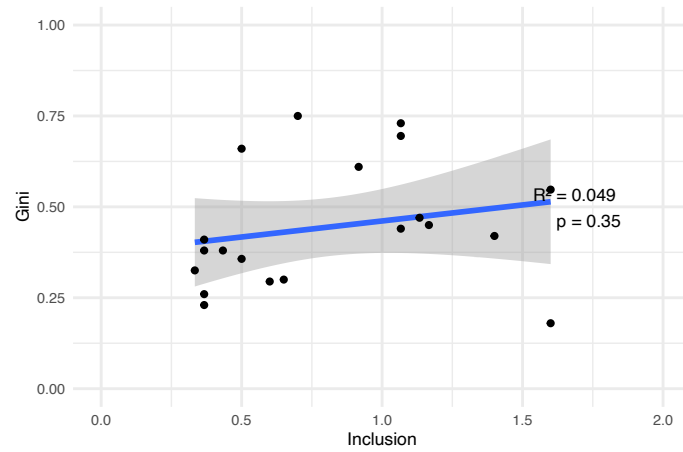


Fig. S8. Correlation between inclusiveness and Gini coefficients of differentials in residence size. The correlation between inclusiveness and Gini coefficients of differentials in residence size is weaker than for the concentration of power.

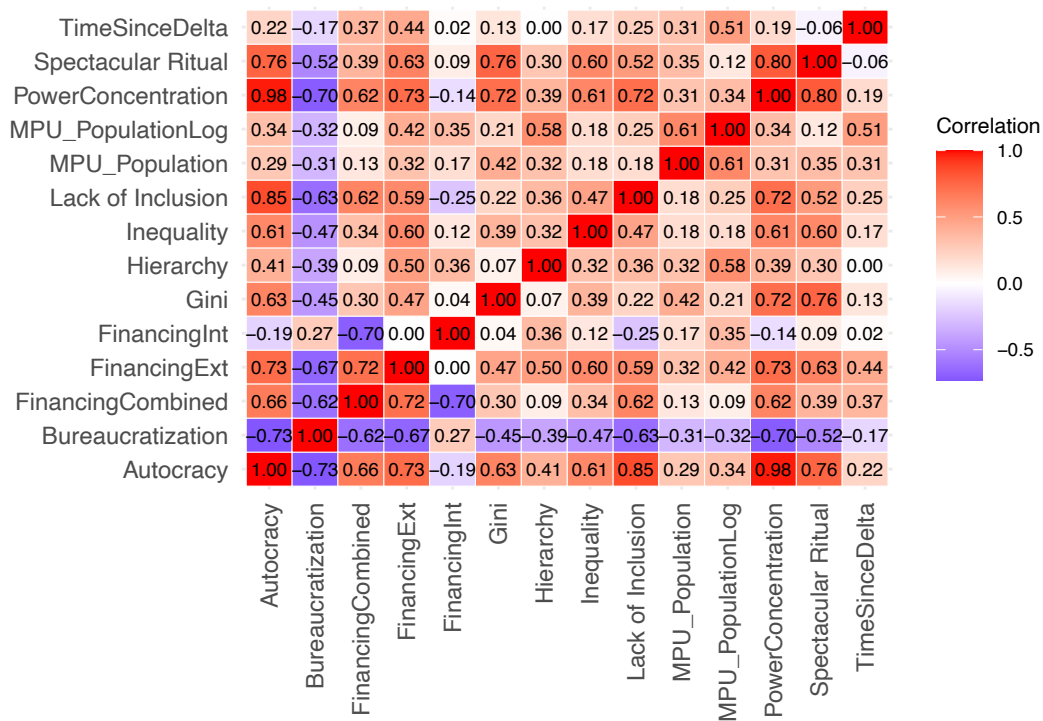


Fig. S9. Pairwise correlation matrix for each of the variables used in the analysis. Deeper red cells reflect higher positive correlations, while deeper violet cells reflect stronger negative relationships.

Table S1. Dataset of the coded values for each proxy for each case. (Separate file)

Table S2. Calculated values for each dimension of governance and other associated variables for each case. (Separate file)

Table S3. References for the case summaries in Supplemental Text. (Separate file)