# ORIGINS, FOUNDATIONS, SUSTAINABILITY AND TRIP LINES OF GOOD GOVERNANCE: ARCHAEOLOGICAL AND HISTORICAL CONSIDERATIONS

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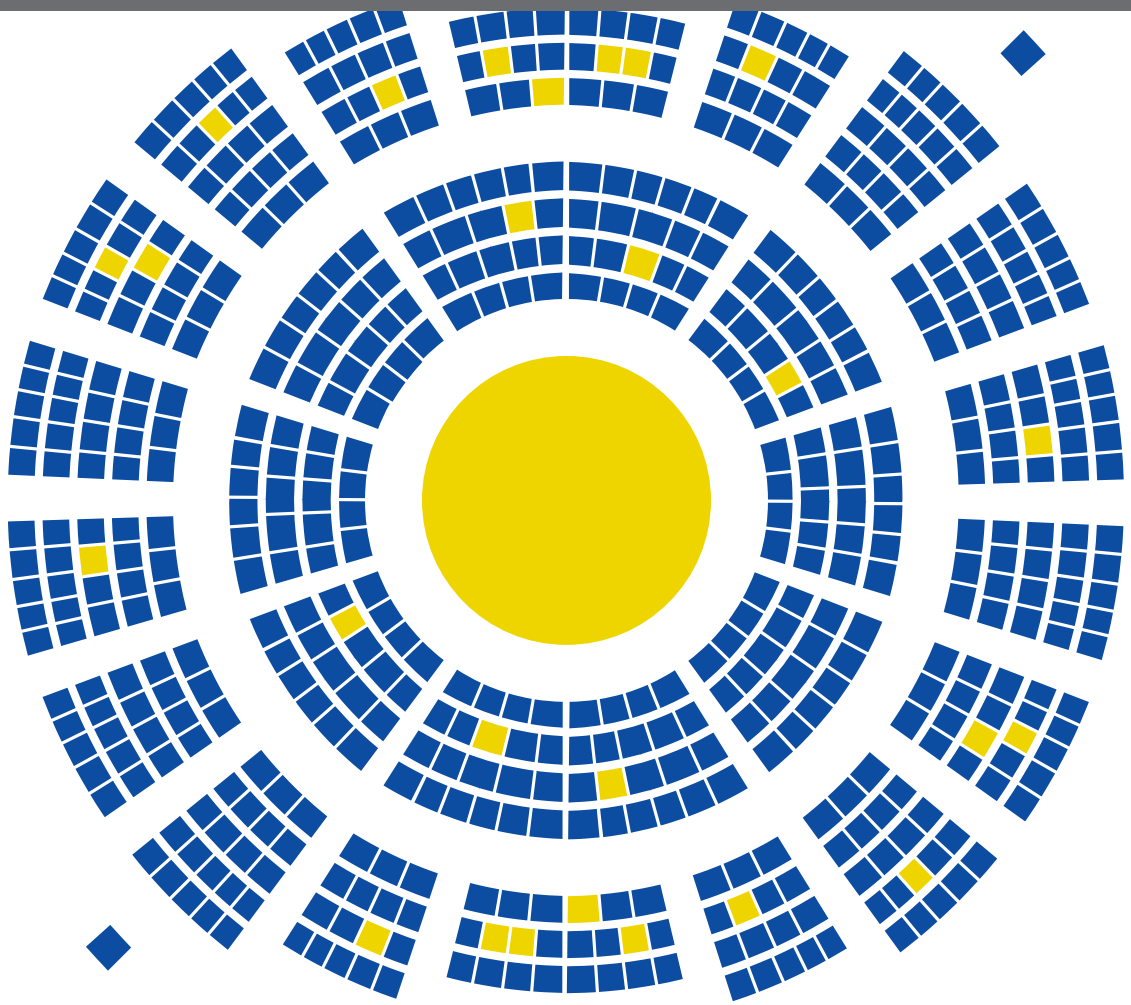

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# ORIGINS, FOUNDATIONS, SUSTAINABILITY AND TRIP LINES OF GOOD GOVERNANCE: ARCHAEOLOGICAL AND HISTORICAL CONSIDERATIONS

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# Editorial: Origins, foundations, sustainability and trip lines of good governance: Archaeological and historical considerations

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Editorial on the Research Topic
Origins, foundations, sustainability and trip lines of good governance: Archaeological and historical considerations

## Introduction

The late 20th century marked the beginning of a period of dissent from prevailing progressivist social evolutionary perspectives on political transformation (e.g., Stein, 1994; Ehrenreich et al., 1995; Feinman, 1995; Blanton et al., 2021). This new direction, that eventually incorporated cooperation and collective action theories and the notion of good government, fleshed out key elements of a processual theory in which it is acknowledged that agency, negotiation, and cooperation could shape political change, past and present. We suggest this vantage better aligns anthropological research with the historical and social science disciplines that focus attention primarily on the rise and demise of Western democracies.

We owe a debt of gratitude to those political scientists whose insights about collective action stimulated new ways of thinking, including Elinor Ostrom's *Governing the Commons* (1990) (analyzing cooperation in small groups), Margaret Levi's approach to state formation as seen in relation to fiscal economy and public goods in *Of Rule and Revenue* (Levi, 1988), and the concept of good government (e.g., Ahlquist and Levi, 2011; Rothstein and Teorell, 2012). Informed by sources such as these, our world-wide comparative study of premodern states identified the same fiscal processes Levi noted in her study of Western historical experience. We confirmed that fiscal systems that emphasized internal financing (i.e., broadly based taxation of citizens)

are associated with policies that expanded governing capacity to include public goods, equitable taxation, wide citizen participation, and checks on the power of governing principals; we also confirmed an association between ruler discretionary control over resources and a relative absence of these good government indicators (Blanton and Fargher, 2008, 2016; Carballo and Feinman, 2016; Fargher and Heredia Espinoza, 2016; Feinman and Carballo, 2018; Blanton et al., 2020, 2021; Feinman et al., 2021). These associations applied to states since the industrial revolution but also to premodern agrarian states, regardless of civilizational tradition, degree of technological development, or scale of urbanization. This research also discovered a causal ("coactive") process in which good government indicators are highly correlated with production intensification, increased marketplace participation, growing urbanism, population growth, and increased prosperity and food security across social sectors (Blanton and Fargher, 2016, p. 245-282; Feinman et al., 2022).

## Critiques of social evolution

Contributors to this volume and those they cite throw a critical light on 20th century neoevolutionists who endeavored to explain how small-scale and egalitarian societies of the Neolithic were transformed into larger and more complex societies. Neoevolutionist theory highlights how an emergent elite abandoned traditional social contracts to build despotic systems of rule capable of mobilizing labor for communal projects, organizing and managing centralized economies, building and managing large-scale water-control systems, and controlling valuable agronomic resources under conditions of scarcity. Mystifyingly, according to top-down theory, the governing elite were seen as powerful change agents while subjugated and exploited subalterns were regarded as poorly organized and easily persuaded by ideologies such as sacred kingship, assumptions that are now under challenge (e.g., Thurston and Fernández-Götz, 2021).

While neoevolutionism is still alive and well in some quarters, its arguments proved empirically untenable and it has also been critiqued for its obvious Cold War ideological posturing, for example in the influential writings of the Cold War warrior Karl Wittfogel (1957) and the socialist ideologue Karl Polanyi (1944). Researchers also recognized the Eurocentrism and progressivism inherent in the work of theorists who uncritically accepted the idea of a sharp divide between despotic Asiatic and democratic Occidental modes of production and government (Blanton and Fargher, 2008, p. 5–11). The neoevolutionist Elman Service (1975) ignored evidence that the theory is misleading in this regard. For example, in his discussions of pre-Colonial African states and chiefdoms he attributed the prevalence of autocratic rule to conquest, theocracy, trade monopoly, and clientship. This conclusion is contradicted by an abundant literature revealing the presence of egalitarian political structures in which "…the political elite represent, to a greater or lesser degree, the interests of the mass of the people" (Lloyd, 1965, p. 76; cf. Fortes and Evans-Pritchard, 1940, p. 11–12; Beattie, 1967).

## Enriching and expanding theories of cooperation, collective action, and good government

The 13 papers contributed to this 2022 FPS Topic solidify the results of prior work while also enriching it by bringing into the discussion cases from a broad temporal spectrum and from a diversity of regions, societies, and cultural traditions. The contributions attest to how the underlying dimensions of good government were created in polities ranging in population scale from Huronia to the vast territory of Indus civilization. Beyond the domain of formally governed chiefdoms and states, evidence is mounting that, in spite of the inevitable cooperator dilemmas (Ostrom, 1990), complex cooperative actions do not necessarily result from centralized and hierarchical leadership as the neoevolutionists had routinely argued (see Holland-Lulewicz et al. and Pluckhahn et al.).

Given that we often lack texts that describe philosophical concepts or systems of rules that shaped past governance, many articles in this collection show ways that archaeologists have refocused their "material lens," as Carballo expressed it, to distinguish between those strategic actions that aimed to solve cooperator problems at the scale of society vs. those that would consolidate the power of an elite few. Good government policies that provide for non-excludable transportation infrastructure are an important example of how collective action is materialized. This would include city planning that would have enhanced the legibility of urban spaces and would have rendered diverse in-city locations highly accessible, for example, in Pugh et al. the gridded road plan of Maya Nixtun-Ch'ich' that also provided for storm drainage, and similar city planning as envisioned in Greek democracy (Fargher et al.) and for which there were analogous spatial patterns in Tlaxcallan, Teotihuacan, and Indus cities among others discussed in Blanton and Fargher (2011).

Other forms of high-access public infrastructure would have enhanced social intermingling in what Green calls deliberative spaces. Public infrastructure that allows for intervisibility between participants in ritualized events enhances possibilities for participants to gauge others' willingness to comply with social obligations (e.g., Blanton and Fargher, 2016, p. 191–204; cf. Ober, 2008, p. 201) (as Michael Hechter, 1990, p. 21 put it, in cooperative groups "individuals must be highly visible to one another"). Similar social infrastructures in this collection include the urban and deme-level public spaces in Athens and its territories (Fargher et al.); the standard architectural complexes

described by Stark and Stoner in the Classic period Gulf Coast that were readily accessible to households; the vast Period I plaza constructed at Monte Albán described by Nicholas and Feinman; plazas in Tlaxcallan and the massive platform at Tizatlán described in Fargher et al.; the Muskogean council houses and other examples discussed in Holland-Lulewicz et al.; and the Guachimontones of the Teuchitlán polity described by Heredia Espinoza.

## Discussion

The notion that political modernity is the inevitable outcome of directed political evolution is challenged by the processual perspective represented in this collection and by the discovery that, as is true today, cooperation, collective action, and good government sometimes will thrive and persist while in other cases they are not highly resilient. Challenges commonly stem from elite opposition to notions favoring egalitarianism and to limits placed on the power of those in positions of authority. But other challenges abound, including the vexing coordination problems presented by tasks such as the broad provision of public goods and equitable taxation (Blanton and Fargher, 2016, p. 115–158). In addition, highly cooperative political regimes are uniquely exposed to potential collapse when the principal leadership fails to adhere to norms, values and practices that inspire citizen confidence and willingness to comply with obligations (Blanton et al., 2020).

In some regimes built around good government, policies and practices that undergirded egalitarian society were abandoned and left little or no social memory, including Indus civilization (Kenoyer, 1997) and the Teuchitlán tradition discussed by Heredia Espinoza. However, there are examples where an impulse to preserve good government survived even when disrupted by intervening phases of relative autocracy. For example, at Monte Albán, Nicholas and Feinman allude to two lengthy phases during which collective government was sustained, the first lasting for 300 years, the second for 400 years. In some civilizational traditions, good government policies and practices were so resilient they eventually were woven into the fabrics of contemporary democracies. The latter is evident in the variable but persistent pattern of collectivity and democracy in Western Eurasia and the Mediterranean that is evident during the Iron Age but might have origins in Bronze Age systems of governance such as the "primitive democracy" of Early Dynastic and later Mesopotamian civilization (Fleming, 2004; Rothman, 2004). Tan's discussion of the Roman Republic and Fargher et al.'s discussion of *demokratia* illustrate relatively egalitarian Iron Age polities, while Thurston's northern European example illustrates how notions of egalitarianism could persist from prehistory into the present. Aleksandrov illustrates how traditions of electoral politics crossed the Atlantic from England and flourished under egalitarian conditions in the New England colonies.

The deep history of East Asia is another example of long-term resilience of good government practices. As early as the Chinese Late Neolithic Liu (2004, p. 247) encountered what she referred to as "group-oriented chiefdoms" (cf. Campbell et al., 2021). While autocracy dominated state-building during the subsequent Three Dynasties period, it was challenged by the Confucian critique of aristocratic governance that was instituted as state orthodoxy during the Han dynasty (Yates, 2001; Feinman et al., 2019). Like the enduring history of democracy in Western Eurasia and the Mediterranean, to varying degrees this egalitarian Chinese philosophy informed state-building policies of later dynasties and still echoes in recent episodes of state-building beyond China. Chinese statecraft of the Late Imperial period was so highly regarded that some of its practices, including open recruitment to positions of authority, influenced governmental reformers of the European Early Modern period (Brook, 2005, p. 189; Creel, 1970, p. 15–27).

Governing practices of the Native North Americans (such as those described by Holland-Lulewicz et al.), particularly the "Great Peace" of the Iroquois (Haudenosaunee) League (described in Birch's article), also have echoes to the present day. Most importantly, the League so impressed Benjamin Franklin that it played a role in his federalist design for government. From their research on how Native American institutions and philosophies influenced Franklin and other framers of the Constitution, Grinde and Johansen (1991, p. 239) conclude that "The flowering of the Enlightenment, which was spurred by Europe's "discovery" of America and its peoples, coincided with the founding of the United States and bequeathed to that nation a marvelous intellectual heritage, which has since contributed to worldwide aspirations for improvements in the human condition."

## Conclusion

Our work and the articles in this collection illustrate that values, strategies, actions, and processes associated with cooperation, collective action, and good government grew in diverse cultural contexts apart from the mentalities or philosophies alleged to have developed only in the growth of Western-inspired democracy. Our work and recent events (e.g., Snyder, 2018) also underscore the realization that modern liberal democracy cannot be considered a radically transformative and inevitable final stage of political evolution. Instead, research grounded in collective action and cooperation theories demonstrates that, past and present, frameworks that foster good government may thrive, become corrupted, or collapse. Because human histories are persistently negotiated and contested, good government neither can be taken for granted nor presumed to progress or improve. We must come to grips with the

reality that there are actions and institutions that we, as citizens and leaders, can take to arrest democratic backsliding and to foster and promote change. History provides lessons to absorb and inspire, but to learn them we must keep doing the work.

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All authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication.

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## Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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CONCEPTUAL ANALYSIS
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# Governance Strategies in Precolonial Central Mexico

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Among the Indigenous polities of precolonial Mesoamerica, the Aztec empire, headed by a confederation of three city-states, was the largest recorded and remains the best understood, due to its chronicling in Spanish and Nahuatl texts following the Spanish-Aztec war and colonial transformation to New Spain. Yet its political organization is routinely mischaracterized in popular media, and lesser-known contemporaries and predecessors in central Mexico exhibit variability in governing strategies over time and space of interest to comparatively oriented scholars of premodern polities. Common themes in governance tended to draw from certain socio-technological realities and shared ontologies of religion and governing ideologies. Points of divergence can be seen in the particular entanglements between political economies and the settings and scales of collective action. In this paper, I review how governance varied synchronically and diachronically in central Mexico across these axes, and especially in relation to resource dilemmas, fiscal financing, the relative strength of corporate groups versus patron-client networks, and how rulership was legitimated.

**Keywords: political organization, collective action, pluralistic governance, common-pool resources, archaeology, Aztecs, Mesoamerica**

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## INTRODUCTION

The gulf in understanding between popular media coverage and specialist discourse on the political organization of the Aztecs is surely one of the largest among the world's precolonial, non-Western societies. Popular accounts concentrate disproportionately on the politico-religious spectacle of human sacrifice at the Mexica-Aztec capital of Tenochtitlan—the dominant polity in the Triple Alliance empire—with coverage of new archaeological discoveries of skull-racks and the like serving as online click-bait that is typically decontextualized from practices of Mexica warfare, religion, or other facets of societal organization. An analogy might be depictions of imperial Rome focusing primarily on crucifixions, gladiatorial combat, and episodes of take-no-prisoners or sowing-fields-with-salt warfare to an audience unfamiliar with that society. Stemming from such a skewed representation, a layperson could be excused for thinking that Mexica, or Roman, governance was despotic and repressive, and that assumption may transfer to their lesser-known contemporaries and predecessors.

As other contributions to this issue demonstrate, this was neither the case in early Mesoamerica—comprising roughly the southern two-thirds of Mexico and adjacent countries of Central America—nor in many other parts of the precolonial Americas. Comparative analyses grounded in collective-action theory and its relationship with sources of fiscal financing (e.g., Levi 1988; Blanton and Fargher 2008; Blanton et al., 2020, 2021), and those documenting how barriers to the monopolization, or significant control over, valued external spot resources or extensive plough agriculture in the Americas (e.g., Boix 2015; Kohler et al., 2017; Kohler and Smith, 2018), combine to

illuminate the alternative trajectories of societies exhibiting lower measures of social inequality and more pluralistic governance than their Eurasian counterparts. In the United States we use the Algonquin term *caucus* to refer to a cherished democratic process, and the nation's founding figures established notions of liberty in a "New World" through symbolic appropriation of Native societies, but we continue to lose sight of the more pluralistic institutions that could exist in systems of governance of the precolonial Americas (Johansen 1996).

In this article, I combine insights from archaeology, history, and ethnography to consider over a millennium of political strategies in precolonial central Mexico, spanning some of the earliest urban centers in the region to it becoming the core of the Aztec empire. Archeology is the discipline that offers the most varied and temporally deep material record of human social change relevant to understanding long trajectories and variability in governance and their relationship to ecological and historical factors. Nevertheless, in its ambitious goal of studying the entirety of the human experience—the evolution of our species to the present day—archaeologists must foster stronger dialog with research from other fields, especially including political scientists, when considering variability in political organization and strategies of governance. I draw here on comparative research by social theorists such as Ostrom et al. (1994) and Levi (1988) in considering how governance varied diachronically in relation to resource dilemmas, fiscal financing, corporate groups, ritual practices, and how rulership was legitimated. This comparative, deep-time perspective also aligns with historical analyses that emphasize political economy and the financial underpinnings of rulership in drawing distinctions between extractive and inclusive political economies or absolutist and pluralistic polities (Acemoglu and Robinson 2013; Boix 2015). I aim to show how such analyses can be furthered through inclusion of the insights derived from the study of human-environment interactions and the material correlates of changes in political and economic organization in deep historical perspective.

## RESOURCE DILEMMAS AND POLITICAL ECONOMIES OF PRECOLONIAL CENTRAL MEXICO

With a socio-technological backdrop that included few utilitarian applications of metallurgy and the complete absence of large, domesticated animals, precolonial Mesoamerica contrasts with other world regions of primary state formation. Mesoamericans oversaw profound transformations in the scale and administrative complexity of polities, but these were associated with changes in labor relations and how cooperative networks functioned rather than with major changes in technology or the harnessing of energy (Feinman and Carballo 2018). The ecology and economies of Mesoamerica featured relatively few possibilities for political elites to exploit technological and exchange bottlenecks or to consolidate large tracts of agricultural fields enabled by plough agriculture. This differs significantly from various core regions of early states in Eurasia, where political elites had greater opportunities to monopolize or disproportionately control raw material sources and larger tracts of land, or to take advantage of production bottlenecks in certain industries of craft manufacturing (Carballo 2020a: 9–12, 107–125; Kohler et al., 2017; Morris 1989). Other related pivots in Eurasian political evolution include changes in the relative advantages offered by offensive or defensive military capacities that came with mounted cavalry, chariots, naval technologies, and increasingly elaborate fortifications (Morris 2010; Boix 2015; Turchin et al., 2021), all of which either do not apply at all to Mesoamerica or do but to a much lesser degree. In some cases, Eurasian political elites were able to significantly control military and transportation technologies, fostering more absolutist polities, whereas in others these technologies were distributed widely and provided balances to absolutist power, instead fostering more pluralistic or heterarchical political arrangements.

Central Mexico's ecological setting features a combination of tropical latitudes and mountainous terrain that resulted in the distribution of a diversity of complementary resources in adjacent regions, a situation that scholars have long noted encouraged economic symbiosis and cultural exchanges (Hirth 2013; Sanders 1956). With valley floors typically situated 2,200 m (7,200 ft) or more above sea level, highland lake basins and semiarid plains abut lower and lusher river valleys with adjacent wetlands (**Figure 1**). Storm systems originating from the coasts can be blocked by mountains in certain regions, resulting in rain shadows and more arid landscapes with precipitation well below the approximately 700 mm/year threshold that distinguishes moderate from high risk areas for rainfed maize agriculture. In others, central Mexico's highly volcanic landscape resulted in badlands marginal for agriculture, ashy soils especially productive for agriculture, or easily mined rock deposits useful for making stone tools, including abundant obsidian sources. Indigenous peoples thereby confronted three communal resource management issues that stand out as critical for the development of urban society: 1) access to sufficient arable land; 2) access to sufficient water for agriculture, either via rain or irrigation; and 3) periodicities in economic systems created through the effects of high climatic variability, volcanic and tectonic activity, and cultural or historical fluctuations in exchange networks (McClung de Tapia 2012). All three played a role in structuring the possibilities and limitations that central Mexican individuals, groups, and polities faced in their strategies of risk mitigation.

Using the language of collective-action theory (e.g., Ostrom 1990, 1992), irrigation systems within central Mexico's semiarid environment constitute a common-pool resource involving zero-sum resources, as water going to one field comes at the expense of another's. The possibility of exclusion of the resource can vary based on the ability to allocate water to particular fields, and not others, as well as how privately or collectively land was managed. Accordingly, the classifications of land, water, and other resources listed in the schematic diagram of **Figure 2** should be taken as variable axes, indicated by the presence of bidirectional arrows, rather than immutably fixed types of resource dilemmas. The scale and organization of agricultural

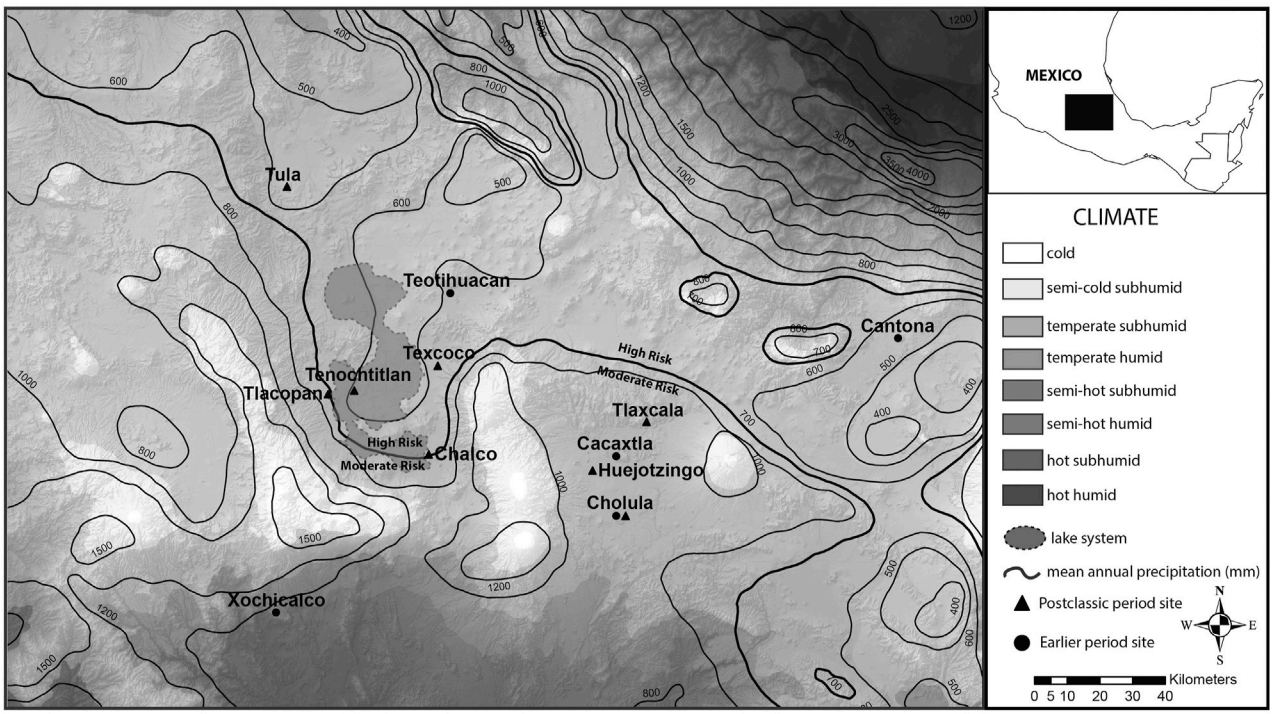



**FIGURE 1 |** Climatological map of central Mexico showing shaded climate zones, mean annual precipitation, and sites mentioned in the text. Data acquired from the Instituto Nacional de Estadística y Geografía (INEGI), Mexico.

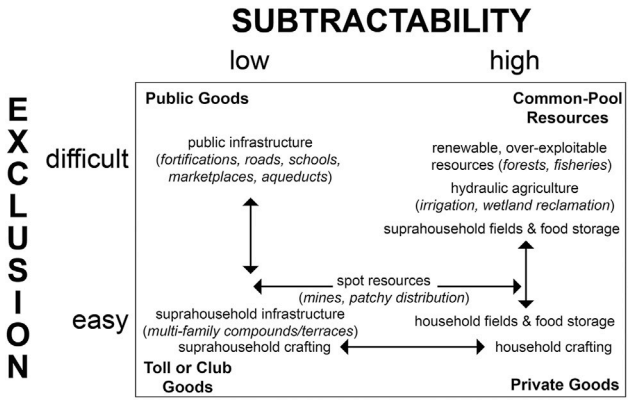



**FIGURE 2 |** Classification of types of goods (based on Ostrom et al., 1994), with examples of variable axes relevant to precolonial central Mexico.

work exchanges were impacted by a diverse array of land management regimes, with corporate land tenure representing a well-documented component of precolonial and contemporary Indigenous communities (Hicks 1986: 48–50; Lockhart 1992: 142–149; Sarukhán and Larson 2001). The prevalence of land worked jointly by numerous households means that agricultural fields were often a shared resource as well, and were therefore not as excludable as land that would be classed as "private" in other societies (Offner 2016: 25–27). The sophisticated system of irrigated lakeshore fields called *chinampas* are known historically from the Aztecs and archaeologically to have originated a few centuries earlier, whereas systems of canal irrigation date some two millennia earlier in both semiarid and more humid regions (Spencer 2000; Nichols et al., 2006). Contrary to the expectations of Marxist inspired models of despotic resource management, there is little empirical support for the notion of centrally controlled irrigation in central Mexico (Offner 1981; Doolittle 1990). Networks of agricultural terraces are also pervasive in this mountainous landscape and likewise present resource dilemmas, which are characterizable as toll or club goods because of their easier exclusion of other users but need for suprahousehold coordination, since mismanagement by one family leads to the degradation in the terraces of their neighbors (Borejsza 2013; Pérez Rodríguez 2016). This backdrop of agricultural strategies, and lack of metal ploughs or animals to pull them, means that successful crop production involved the mobilization of human labor to create landesque capital (Nichols et al., 2006; Morehart 2016).

In the realm of economic goods, Blanton et al. (2005) identify a sequence of political-economic transitions over three millennia of precolonial Mesoamerican history: 1) early interregional exchange centered on prestige goods, particularly between social elites earlier in the Formative period (ca. 1200–500 BCE); 2) the maturation of economies of regional goods associated with a proliferation of urban centers and wide participation on the part of non-elites in the later Formative and Classic periods (ca. 500 BCE—700 CE); and 3) the creation of a macroregional system better integrated through markets that

mobilized staples as well as bulk luxuries—finer goods that were widely available throughout the socioeconomic spectrum in the Postclassic period (ca. 1200–1519 CE). For central Mexico more specifically, the scheme should be amended to have the second transition end at around 600 CE, with the collapse of Teotihuacan and start of the Epiclassic period (ca. 600–900 CE). The period saw political balkanization and reconfiguration into smaller city-states featuring hybrid styles of art and architecture and attempts on the part of political elites to create the next Teotihuacan prior to the rise of the Aztec system, in a way analogous to European kingdoms following the collapse of Rome. I focus primarily on Classic through Postclassic governance in central Mexico, which span the regional-goods transformation culminating in Teotihuacan becoming the largest city in the Americas, balkanization and reconfiguration into smaller city-state polities, and the integration of the more commercialized "world" economy beginning with the Toltec capital of Tula and culminating in the Aztec empire.

As one of the key economic commodities of precolonial central Mexico, the trans-Mexican neovolcanic arc represents the largest and most spatially distributed obsidian flows on the globe to have been intensively exploited by humans (Cobean 2002). The obsidians and cherts used as weaponry and for basic food production in Mesoamerica were somewhat clustered on the landscape but were abundantly available and were impossible to completely monopolize (Hirth 2013). In general, central Mexican economies involved resources that were difficult to move in bulk long distances given the transportation infrastructure, so instead circulated through tax and market systems, usually representing internal revenue streams to state fiscal systems. This was particularly true for the regional-goods and macroregional-market transitions identified by Blanton et al. (2005). In a related vein, Mesoamerican warfare never featured the offensive or defensive arms race to match what occurred in Eurasia, such as through major changes in metallurgy and transportation technologies. Mesoamerican warfare generally involved stone weapons accessible to all, a complete lack of cavalry, and limited naval or siege tactics. Success was based on the ability to field more troops than an opponent through some mix of incentivizing through ideology and opportunities for social mobility, by taking captives on the battlefield for sacrifice at the temples of state capitals, and mandatory conscription through labor tax systems, rather than major technological advances in destructive capabilities (Cervera Obregón, 2017; Hassig 1992; Hassig 2016).

The diverse and multiethnic peoples of central Mexico acted strategically within this ecological and economic backdrop to organize labor, exchange networks, corporate groups, and fiscal systems undergirding polities in various ways. Yet, following the logic of deep-time political histories (e.g., Boix 2015), one might predict that barriers to elite control of key military and transportation technologies should have resulted on the whole in more collective or pluralistic polities. What does the historical record of the better documented later societies of central Mexico say?

## SYSTEMS OF GOVERNANCE IN LATER CENTRAL MEXICAN SOCIETIES

Textual sources from 16th century central Mexico provide rich detail not available for earlier periods, but they must be read critically because they are replete with the biases of their Spanish, Indigenous, or Mestizo (mixed ancestry) authors. This is especially true for political organization, as Cortés and other conquistadors consistently looked to identify a single leader to deal with diplomatically, both because this was simpler than consulting with multiple individuals and because it better matched their monarchical vision of Castile and other European kingdoms. Contact period central Mexico contained a spectrum of political organization, but power-sharing arrangements are well documented, both as confederations of polities and systems of co-rule within a single polity (Daneels and Gutiérrez Mendoza 2012). Examples include the highly pluralistic system of Tlaxcala (ancient Tlaxcallan), a co-rule structure at Cholula (ancient Cholollan), the confederated *altepemeh* (city-states or small kingdoms) of the Triple Alliance (Aztec) empire, and the patron-client-like kingdoms of the Mixteca-Puebla and eastern Nahua (Nahuatl-speaking) spheres (Carrasco 1971; van Zantwijk 1985; Fargher et al., 2010, 2011b). Understanding this variability provides opportunities for evaluating under what structural and historical variables "good" governance arises—meaning more pluralistic decision making with greater accountability of principals—and the ways in which it can be undermined. It also helps to identify what archaeological signatures are most appropriate for considering the remains of early civilizations who lacked extensive textual documentation.

Tlaxcala presents the most pluralistic or even republican governance, with attributes including a distribution of executive power through rotating office holders, rule by a council that included some level of participation on the part of non-elites, and an absence of residences that could be termed palatial (Fargher et al., 2011a). Spanish conquistadors likened Tlaxcala to the Renaissance republics of northern Italy, with [Cortés (1986):68] writing in his second letter: "The orderly manner in which, until now, these people have been governed is almost like that of the states of Venice or Genoa or Pisa, for they have no overlord. There are many chiefs, all of whom reside in this city, and the country towns contain peasants who are vassals of these lords and each of whom holds his land independently; some have more than others, and for their wars they join together and together they plan and direct them." In the colonial period, the Tlaxcaltecs presented themselves, in texts and pictorial documents such as the *Lienzo de Tlaxcala*, as a confederation between four nearby city-states: Tizatlan, Ocotululco, Tepeticpac, and Quiahuiztlan (**Figure 3A**). Texts authored by Spanish conquistadors single out Xicotencatl the elder, from Tizatlan, and Maxixcatzin, who represented the Ocotelulco faction of the confederation. Yet leading figures of other important factions in the governance structure are also named, including Temilotecutli of Tepeticpac and Chichimecatecle of Quiahuitzlan, and it is clear that within this pluralistic system decisions were made by a sizable ruling council that may have numbered in the low hundreds of representatives.

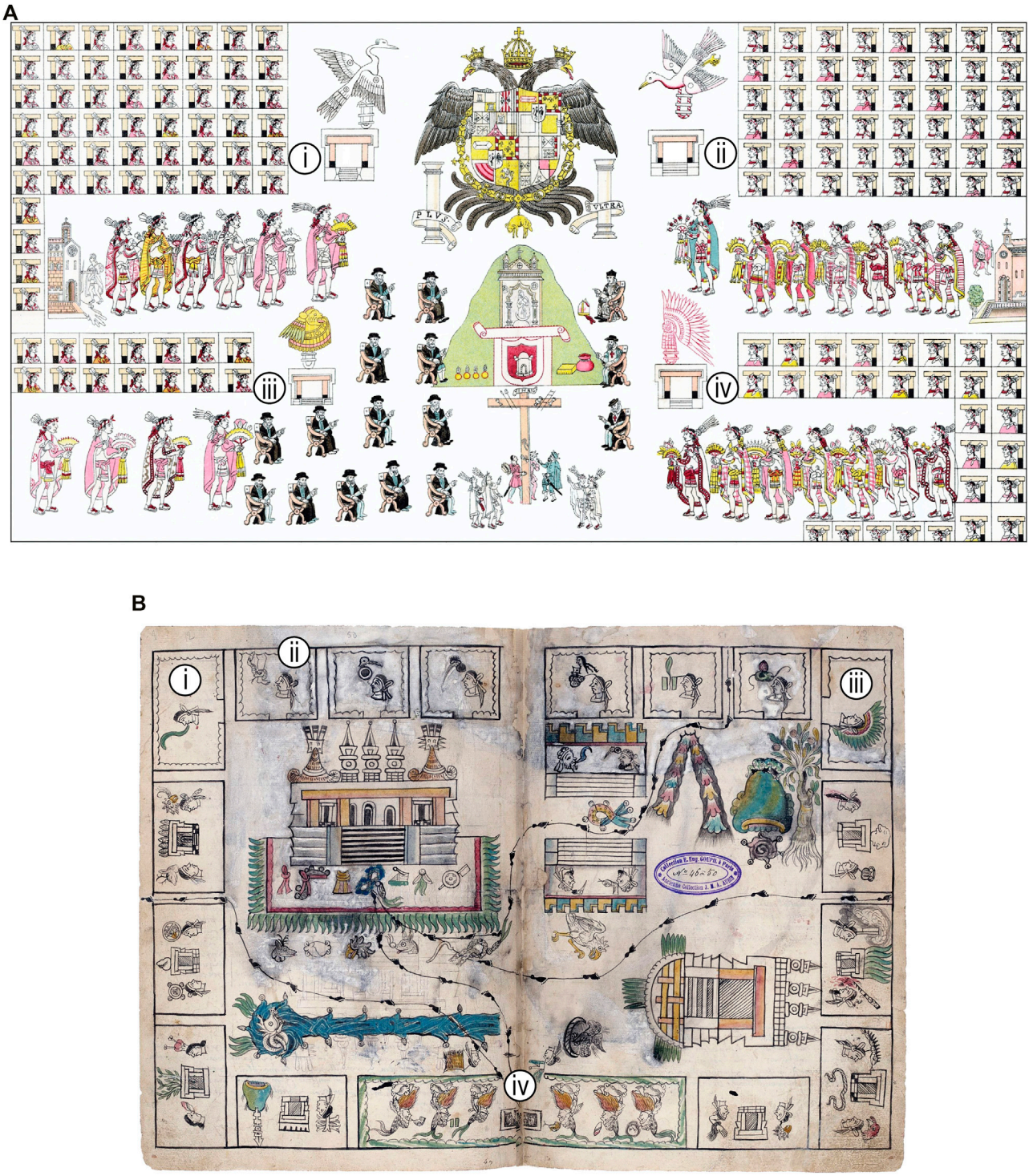



**FIGURE 3 |** Depictions of political organization by Indigenous scribes in 16th century manuscripts: **(A)** depiction of colonial Tlaxcala from *Lienzo de Tlaxcala* with toponym of polity in center, Spaniards below, and confederated rulers of **(i)** Tizatlan, **(ii)** Ocotolulco, **(iii)** Tepeticpac, and **(iv)** Quiahuiztlan, with their large ruling councils; **(B)** depiction of precolonial Cholula from *Historia Tolteca Chichimeca* with temple to Quetzalcoatl at center left, *calpultin* ("big houses") on border, paramount rulers and high priests the **(i)** Tlachiach and **(ii)** Aquiach, ruler of internal affairs the **(iii)** Chichimecatl teuctli, and **(iv)** noble council in the Turquoise House. Base images from Wikimedia (https://commons.wikimedia.org/) and Bibliothèque Nationale de France (www.gallica.bnf.fr).

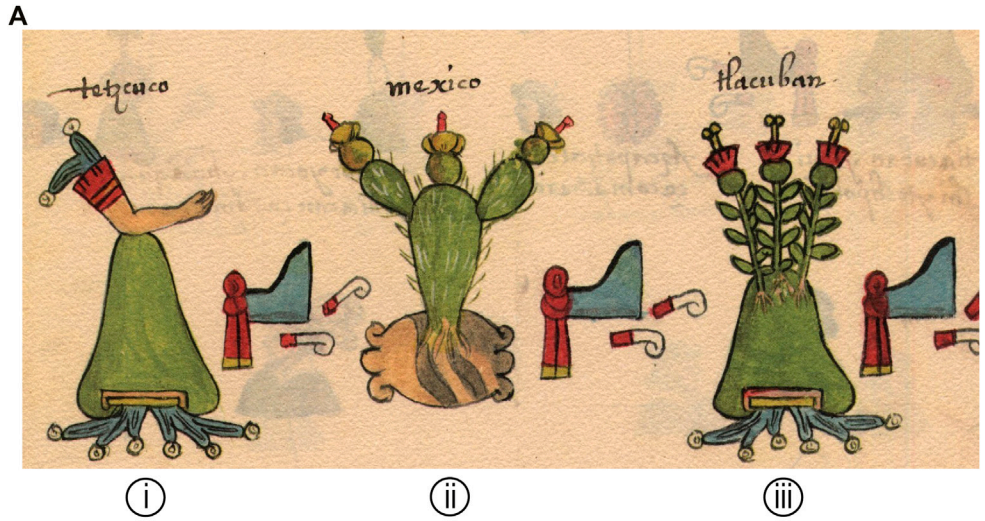
A variety of historically named figures were authorized as more prominent speakers in Tlaxcala but did not act as paramount rulers, and the four-part confederation seems a colonial period reconfiguration of what were previously wards or districts of a single, unified city (Fargher et al., 2010). The Tlaxcaltecs combined collective sociopolitical organization and active military resistance in fending off incorporation into the Aztec empire during the century prior to the arrival of the Spaniards. In a political system that permitted common people of non-noble rank to ascend to the ruling council, and which held its multiple rulers accountable in pursuing the collective good, the Tlaxcaltecs used pluralistic governance as a means of motivating their citizenry to defend against the external threat posed by the Mexica of Tenochtitlan in particular. The polity also forged strategic alliances with groups of ethnic Otomis who inhabited the north of Tlaxcala and remained independent from the empire, and for a while held a similar tripartite confederation with the city-states of Cholula and Huejotzingo, polities to the south whose relationships with Tlaxcala eventually soured prior to the arrival of the Spaniards, likely instigated by a pro-Aztec faction among Cholula's elites (Plunket and Uruñuela 2017: 529–530).

Cholula represents a different model of governance from Tlaxcala (Lind 2012; Plunket and Uruñuela 2017, 2018: 199–237). It was not as pluralistic in the number of key decision-makers but featured a system of co-rulership and the election of principals by a governing council that Cortés equated to how the Great Council of Venice elected its doges. Similar councils were also present in polities such as Huejotzingo and Chalco but, unlike these other polities, Cholula possessed a high level of prestige within Mesoamerica as one of its longest-lived cities. Its origins as an urban center began in the first millennium BCE, but it was during the first millennium CE that the city's inhabitants oversaw construction of the largest pyramidal-temple by volume in Mesoamerica (perhaps the world). At the time of the Spanish invasion Cholula played a pivotal role in Mexico as a market town and pilgrimage center dedicated to the god Quetzalcoatl. Because of this renown, rulers-elect of other central Mexican polities often traveled to Cholula for ceremonies of investiture.

Sixteenth-century documents provide details on Cholula's urban and political organization, including a map richly illustrated by an Indigenous scribe from the *Historia Tolteca Chichimeca* (**Figure 3B**). Following Mesoamerican cartographic conventions, the city is oriented with East at top. Cholula's urban epicenter is depicted with the largest structure representing the temple to Quetzalcoatl and the second largest representing the school for the children of nobles and certain non-elites training for the priesthood (the *calmecac*). A depiction of a grassy hill with a frog on top is a stylized representation of the Classic period Great Pyramid that had fallen into disuse by this time and therefore was not razed by the Spaniards in creating the colonial period city, as were Postclassic structures. The rectangular boxes surrounding the urban epicenter represent the city's *calpoltin* ("big houses"), which were a fundamental social unit intermediate between households and the state in most central Mexican polities. Exceptions to this on the map are boxes highlighting the leadership structure of Cholula, including the two high priests who co-ruled the polity and were charged with external affairs—the *Tlachiach* and *Aquiach*—depicted at top left and in smaller temples on the map (Lind 2012: 103). Another ruler charged with internal affairs, the *Chichimecatl teuctli*, is depicted at top right, and a council of six nobles is illustrated at bottom in the council chamber known as the "Turquoise House" (Plunket and Uruñuela 2018: 114). These six are reported to have acted as legislators and judges and were responsible for electing the three rulers in consultation with the larger governing council. The more oligarchic nature of Cholula's governance, relative to Tlaxcala, is apparent in the fact that the *Tlalchiach* and *Aquiach* could only be selected from among the nobility of a single *calpolli* of the city (Carrasco 1971: 372).

Although clearly not as pluralistic as Tlaxcala, Cholula, and some other historically documented central Mexican polities, the Mexica imperial capital of Tenochtitlan nevertheless presents a mix of pluralistic and absolutist attributes. The Triple Alliance leadership structure involved a confederation between Tenochtitlan, the Acolhua city-state of Tetzcoco (modern Texcoco), and the Tepanec city-state of Tlacopan (modern Tacuba), though Tenochtitlan was clearly the dominant polity of the three (**Figure 4A**). Viewed in comparative perspective, such alliances, confederations, or leagues represent one pathway for the scaling-up of city-state systems to imperial polities, like was the case with the Athenian empire of the fifth century BCE (Scheidel 2019: 54–55). This pathway tended to result in more indirect governance strategies than the imperial pathway that emphasized more direct means of territorial control (Trigger 2003; Smith 2017). In the case of Tenochtitlan, its paramount ruler (the *huey tlatoani* or "great speaker") was chosen based on the consensus of a noble council regarding their suitability for the office, rather than directly succeeding through primogeniture (Blanton and Fargher 2008: 246–248; Fargher et al., 2017; van Zantwijk 1985: 25–26, 178–179, 277–281). The office more frequently moved between brothers or uncles and nephews rather than father to son. Throughout its history, Tenochca society did not feature divine kingship analogous to that institution in pharaonic Egypt, the Inca empire, or the Classic period Maya, though the ruler who fatefully invited Cortés and his Tlaxcaltec allies into the city, Moctezuma, did advertise the divine sanctioning of his rule more forcefully than his predecessors (López Luján and Olivier 2009). Tenochtitlan's governance structure included secondary leaders who wielded significant power—such as the *cihuacoatl*, charged with internal affairs—and offered several opportunities for the social promotion of lower nobles and even commoners.

The fact that Tenochtitlan became Mexico City and the capital of the viceroyalty of New Spain makes the Aztec empire the best documented precolonial Indigenous polity of the Americas, though scholars continue to debate the exact nature of political organization and governance (Berdan and Anawalt, 1997; Rojas 2016; Fargher et al., 2017). An illustration of Moctezuma's palace in the *Codex Mendoza* combines an image with alphabetic glosses in Spanish and encapsulates some key attributes of governance at Tenochtitlan (**Figure 4B**). At the top is the "throne and dais of



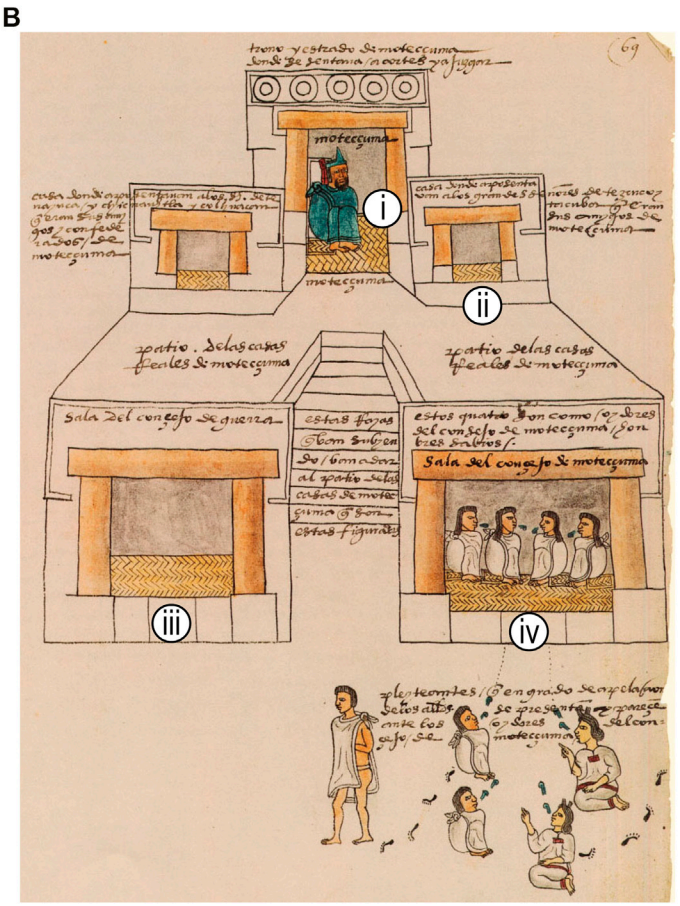




**FIGURE 4 |** Depictions of political organization by Indigenous scribes in 16th century manuscripts: **(A)** toponyms and great speakers (note turquoise diadems with speech scrolls) of the Triple Alliance between **(i)** Tetzcoco, **(ii)** Mexico-Tenochtitlan, and **(iii)** Tlacopan, constituting the Aztec empire, from *Codex Osuna*; (bottom)**(B)** depiction of Moctezuma's palace from *Codex Mendoza* showing **(i)** throne room, **(ii)** lodgings for visiting dignitaries, **(iii)** Council Hall of War, and **(iv)** Moctezuma's Council Hall. Base images from Biblioteca Nacional de España (www.bne.es) and Wikimedia (https://commons.wikimedia.org/).

Motecuhzoma where he sat in audience and to judge" [Berdan and Anawalt 1997: 222–225; see also Offner et al. (2016): 15–17)]. The middle tier depicts quarters for housing visiting leaders of other *altepemeh* of the Triple Alliance as well as other allies on diplomatic visits. The lower tier depicts a "Council Hall of War" for higher ranked warriors at left and "Motecuhzoma's Council Hall" at right. The council hall illustration shows four judges sitting in deliberation on appeals originating in commoners' court with four litigants pleading their cases depicted below. Rooms of the palace not depicted but known from other sources include the *Achcuahcalli* ("House of Constables"), store-rooms for staple and luxury goods, a jail, and quarters for the palace overseer as well as singers and dancers. In short, the image captures the courtly life of a palace at the apex of Aztec society that was certainly hierarchically organized yet also featured checks on principals and degrees of pluralistic decision-making available to noble councilmembers and high-ranking military officials.

Political organization in later central Mexican societies presents the variable hierarchical and heterarchical arrangements reviewed above but also similarities, since fundamental societal relations that structured fiscal financing and governance were grounded in systems of collective labor and rotary labor tax, largely representing internal revenue streams. The important axis of variability within these later central Mexican societies was the strength of the more collective suprahousehold social units comprised primarily of non-elites, the *calpolli* and *tlaxilacalli*, relative to the more exclusionary, noble and palace-based systems, the *teccalli*, in any given *altepetl*, and how this balance in societal organization impacted political financing and the labor relations underlying systems of governance (Martínez 2001; Gutiérrez Mendoza 2012; López Corral and Hirth 2012; Johnson 2017). The 16th century chronicler Alonso de Zorita (1963: 203) provided a rosy perspective of collective labor for public works or other forms of community service in Aztec society:

> "In the old days they performed their communal labor in their own towns . . . They did their work together and with much merriment, for they are people who do little work alone, but together they accomplish something . . . The building of the temples and the houses of the lords and public works was always a common undertaking, and many people worked together with much merriment."

We should be skeptical that communal labor was always undertaken with "much merriment," but it was clearly prioritized through a combination of informal social institutions and formal bureaucratic structures capable of mobilizing tax in labor and goods (Carballo, 2013; Rojas Rabiela, 1979; Smith 2015). Even human sacrifice, that most overtly coercive ritual practice of central Mexico, could be said to have formed part of the hegemonic discourse of collective work, in that the rarer sacrifice of citizens involved honoring them as productive, responsible, or even godly, while the more common sacrifice of non-citizen war captives and culturally debased slaves set them apart as non-productive members of society (Kurtz and Nunley 1993). The emphasis on internally derived fiscal financing through collective draft labor and staple goods made even the more hierarchical and imperialistic governance of the Aztec empire land more on the collective side of the comparative spectrum, particularly in regards to distribution of public goods and means of controlling principals (Blanton and Fargher 2008); yet that polity was clearly less pluralistic than the smaller, contemporary states of Tlaxcala, Cholula, and a few others of the period. What of earlier central Mexican societies for whom we possess no written records or relatively brief hieroglyphic texts used to primarily record calendrical cycles, place-names, and titles of office?

## SYSTEMS OF GOVERNANCE IN EARLIER CENTRAL MEXICAN SOCIETIES

In seeking to understand the deeper history of political organization and governance in central Mexico, archaeologists look to material correlates of the later, better documented cases. Architectural variability observed in Postclassic central Mexico suggests a direct correlation between more absolutist rule and the centrality of palaces (*teccalli*), with palaces often having been of equal or greater size than temples in cities of the Mixteca-Puebla sphere; present, but of a smaller scale than temples at Tenochtitlan, Texcoco, and Cholula; and minimized or absent in Tlaxcala. Similarly, the mortuary deposits of likely rulers thus far discovered are most elaborate in the Mixteca-Puebla sphere; potentially very elaborate, but involving cremation of the body in the possible case of the penultimate preconquest ruler of Tenochtitlan, Ahuitzotl (López Luján and Balderas, 2010); and absent in Tlaxcala. Precolonial depictions of rulers were present for Tenochtitlan, though decidedly secondary to religious imagery, and are thus far unknown for Tlaxcala. Finally, the distribution of goods and resources, whether part of the built environment of urban centers or artifact distributions among households and mortuary contexts, can be used to gauge key sources of fiscal financing, the organization of labor, and public-goods distribution. Such architectural, artefactual, mortuary, and iconographic variables provide lines of evidence in reconstructions of political organization among earlier central Mexican societies.

As was the case in later central Mexican societies, those of the first millennium BCE through first millennium CE exhibit material correlates consistent with variability in strategies of governance and how these articulated with religious systems and politicized ritual spectacles (Carballo 2016). In general, the initial pulse of urbanization into the region's first towns and cities during the later Formative period and a second pulse that saw the rise of Classic period cities—such as Teotihuacan, Cholula, and Cantona—archaeologically looks to have involved processes of social integration and the formation of more collective polities. It is during this period that Blanton et al. (2005) identify a regional goods transformation, when utilitarian economies became more robust and more equitably distributed among households of non-elites. Classic period cities,

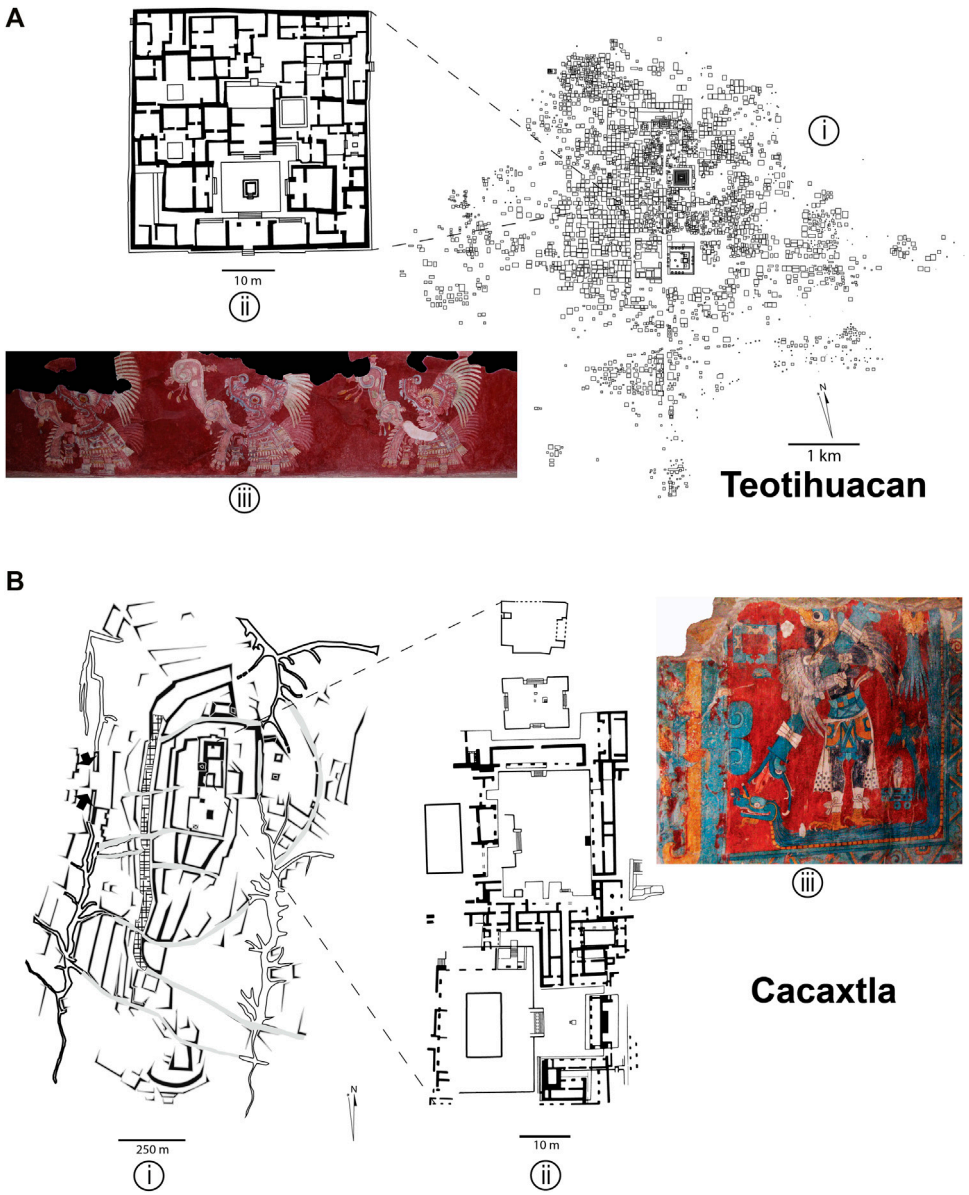



**FIGURE 5 |** Art and architecture from pre-Aztec polities: **(A)** Classic period Teotihuacan, showing **(i)** orthogonal urban plan, **(ii)** plan of the Yayahuala apartment compound, and **(iii)** mural of processing priests from Tepantitla; **(B)** Epiclassic period Cacaxtla, showing **(i)** acropolis-like urban plan, **(ii)** plan of palatial compound at its summit, and **(iii)** mural of figure in eagle outfit from doorway in northeast of palace. Photos and illustrations by David Carballo.

Teotihuacan and Cholula in particular, also grew as the result of rapid migration associated with volcanic activity in the southern Basin of Mexico. Urbanization and state formation therefore necessitated the integration of multiethnic populations, and this appears to have been accomplished through political ideologies that emphasized shared interests such as rain in a semiarid environment, agricultural fertility, cosmic renewal, military success, and generalized social roles rather than powerful dynasts or lineages.

During the first half of the first millennium CE, Teotihuacan became the most populous city of the Americas, with over 100,000 inhabitants, and the most powerful polity in Mesoamerica. Its political organization remains a point of contention among specialists, but most agree that the city and polity it controlled were characterized to a significant degree by collective institutions and political ideology (Carballo 2020b). Teotihuacan was in no way an egalitarian society and signs of social hierarchy are readily apparent in the size and elaboration of households, the distribution of mortuary furnishings, and the attire and hieroglyphic titles of office seen in the city's rich tradition of mural art. Nevertheless, specialists have characterized Teotihuacano governance as analogous to an oligarch republic, similar to the comparisons drawn by Spaniards for Tlaxcala and Cholula (Cowgill, 1997; Millon 1976), or perhaps organized as a quadripartite system

of co-rule (Manzanilla 2002), somewhat analogous to how the Tlaxcaltecs presented their polity in the colonial period. When scholars propose the alternate interpretation, that political organization at Teotihuacan was autocratic or despotic, they rely on simplistic notions not grounded in any comparative understanding of political history, such as a city-wide grid plan (**Figure 5A**), large public monuments, or a political ideology valorizing success in battle as the basis of their interpretations (see review in Carballo (2020b)). These authors are apparently unaware that all three could characterize the democratic or oligarchic *polis* of Classical Greece or the Roman Republic (Moragas Segura 2012). This debate also tends to lack any sense of the possibility of diachronic change, as if Teotihuacan and other Indigenous polities were locked into one form of political organization for centuries, even though we know of historical change in later polities of Mesoamerica, the Mediterranean world, and elsewhere.

Although Teotihuacan is often cited in world archaeology for the scale of its monuments and orthogonal, grid-like urban plan, its most noteworthy attribute was its housing. Teotihuacan may represent the only premodern city of its size where multi-family apartment living was the dominant residential arrangement, and over ninety percent of the city's occupants appear to have resided in relatively spacious and nicely made apartment compounds (Smith et al., 2019). Apartment living meant that repeat interactions were built into the fabric of daily life, and the intense craft production that appears to have taken place in most excavated compounds suggests that scalar economies were as well. Apartment compounds were grouped into urban neighborhoods and districts featuring the social infrastructure of shared plazas, temples, and other civic spaces (Gómez Chávez 2012; Manzanilla 2015; Carballo et al., 2021). The art of Teotihuacan does not offer any clear depictions of paramount rulers, though this negative evidence does not mean they did not exist for intervals of the polity's centuries-long existence (Carballo 2020b). It does mean, however, that political power was depicted more abstractly, with reference to notions of the social roles of individuals in keeping the cosmos going and the polity strong.

Following Teotihuacan's political collapse in the mid to late sixth century, several smaller polities developed in the city's former realm of hegemony, including Cacaxtla to the southeast and Xochicalco to the southwest. They exhibit hybrid styles of art and architecture suggestive of a period of political experimentation in vying for what the most powerful successor state would be. Cacaxtla has been relatively well studied archaeologically and iconographically, particularly its elaborate murals (Brittenham 2015). As a political capital, Cacaxtla was considerably smaller than Teotihuacan, with an estimated population between 15,000–20,000, and contrasts in the urban organization of the two cities are immediately apparent, such as the major urban construction at Cacaxtla being a restricted access acropolis that served palatial and civic-ceremonial functions (Serra Puche and Lazcano Arce 2003). Comparison of the two plans in **Figure 5** highlights the fact that this palatial compound was only somewhat larger than an average-sized apartment compound at Teotihuacan.

Cacaxtla's vivid murals are painted in a style that is more individualistic in their portrayal of humans than was the case in the mural tradition at Teotihuacan. They likely represent a fusion of central Mexican styles with those from the Gulf of Mexico and Maya lowlands, which both had thriving city-states at this time of balkanization in central Mexico (Brittenham 2015). The three largest murals preserved today depict a battle scene, two individuals richly garbed in eagle and jaguar outfits (**Figure 5B**), and the Maya god of traders carrying a pack of exotic goods from the lowlands, including the prized feathers of the quetzal bird. While it is not clear if any of the depictions may be of a ruler, their individualized attributes represent a departure from the artistic cannon at Teotihuacan. Economic indicators also suggest different fiscal streams undergirding the polity that Cacaxtla controlled. Large granaries found in the base of the acropolis are suggestive of elite consolidation of staple foods, and long-distance trade items, such as jade from Guatemala and turquoise from the Southwestern US, could indicate more of an elite control of trade in prestigious spot resources (Serra Puche and Lazcano Arce 2003:153–156). Although new finds could change our view of political organization in these two cities, the comparison serves to illustrate how archaeologists reconstruct political organization through material remains and triangulate between those remains and texts from the culture area in concluding, for instance, that Cacaxtla was more palatially and elite-network focused than Teotihuacan. The art, architecture, and artifact distributions of the two cities are indicative of polities with differing fiscal underpinnings, rulership structures, and allocation of public goods.

## CONCLUSION

Through this overview of political organization and governance in precolonial central Mexico I hope to have underscored how the Indigenous peoples of this part of the world developed a spectrum of strategies within the constraints and possibilities offered by time and place. The ecological and economic realities they faced meant that key resources were often more difficult for aspiring political elites to control than in many other world regions that saw premodern state formation. In comparative perspective, such resources in central Mexico were more frequently managed as common-pool resources reliant on collective labor and, when mobilized by political economies, more often constituted internal fiscal streams. Nevertheless, variability in governance is observable both synchronically and diachronically.

On the eve of Cortés' invasion, textual accounts make clear that the wider Aztec world featured an empire made through the confederation of city-states, other polities with co-rule structures and powerful governing councils such as Cholula, and the most pluralistic, republican form of governance at the imperial rival state of Tlaxcala. Similar variability can be gleaned through archaeological remains in the millennium or so leading up to these societies, indicative of more pluralistic governance at the pre-Aztec metropolis of Teotihuacan and a more exclusionary or patron-client system at the subsequent city-state of Cacaxtla. The region therefore offers compelling cases for examining the conditions within which more pluralistic governance norms and more accountable bureaucratic institutions arise or are suppressed by political elites. They expand the range of non-

Western cases that should be part of comparative scholarship on political history.

Reconstructions of premodern polities with little or no textual documentation draw especially on archaeology and iconography and lack the additional support offered by texts but expand the size of the comparative sample pool exponentially. They would greatly benefit from multidisciplinary collaborations between archaeologists and political scientists or other comparatively oriented social scientists. Archaeologists contribute the explanatory power of a materialist lens prioritizing variables of human-environment interactions and the material correlates of political legitimation, governance structures, corporate groups, collective labor, and fiscal streams. In turn, archaeological discourse about politics in the deep past tend to be siloed and would benefit from engagement with more transdisciplinary and comparative studies of political evolution and variability in political organization. Greater interdisciplinary collaborations between would strengthen our models of systems of governance and work towards identifying how humans have created more pluralistic and accountable governance before and how it can best be nurtured and sustained today.

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# Premodern Confederacies: Balancing Strategic Collective Action and Local Autonomy

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A confederacy is generally understood to be a formal, institutionalized alliance of peoples who act in mutual support to achieve common ends. While the emergence and maintenance of early and pre-modern states have received tremendous scholarly attention in the social sciences, the same cannot be said for confederations. This paper examines common features of premodern confederacies as an initial effort towards developing a body of theory aimed at exploring and explaining confederacies, leagues, and other modes of collective and regional governance. The central thesis posed is that confederation was an ongoing political process that provided a means for a diverse range of political formations to achieve collective strategic goals at a distance without sacrificing autonomy. Selected case studies ranging from Pre-Columbian North America to Medieval Europe are explored to evaluate this position. The case studies show that confederacies were capable of integrating a diverse range of political formations, from tribes to kingdoms. The question of whether or not confederacies constitute 'good government' is considered and since the objective of a confederacy is generally not to govern, the answer depends on the political organization of its constituent parts.

**Keywords: confederacies, theory-building, cross-cultural comparison, military, economy**

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## INTRODUCTION

A confederacy is generally understood to be a formal alliance of peoples who act in mutual support to achieve common ends. In the modern era, confederations have come to be associated with unions of sovereign states that stress the autonomy of each constituent part (e.g., the German Confederation, ca. 1815-1848 CE or Confederate States of America, ca. 1861-1865 CE). However, confederacies as formal strategies for achieving collective objectives have a deep past. In multiple world regions over the last ~5,000 years, autonomous political units formed institutions to advance their mutual ends. While variable in their character and organization, all exhibit a significant degree of organizational complexity and diversity. Yet, because they do not fall neatly into step-wise neoevolutionary stages of social complexity—instead operating on a multilinear plane parallel to more "complex" polities such as premodern states—confederacies remain under-theorized with respect to their evolution and organization.

Here, I examine common features of premodern confederacies as an initial effort towards developing a body of theory aimed at exploring and explaining confederacies, leagues, and other modes of regional collective action. Formalized institutions and conventions allowed members to secure collective benefits at a distance most often including collective defense and economic interdependence. Selected case studies of premodern confederacies are explored. This is not intended to be an exhaustive review. The purpose is to examine specific variables and processes

involved in the emergence, purpose, and maintenance of confederacies. General properties to be explored include the historical conditions of their emergence; modes of governance; strategic aims or goals; territory and demography; economy; and the conditions under which such they dissolved or were otherwise transformed into something else. Information comes from both archaeological and historical sources and not all data are available for every case. Taken as a whole, a generalized theory of why confederacies emerge, how they are sustained, and why they might eventually unravel or be transformed starts to take form.

I argue that rather than being viewed in social evolutionary terms, confederation should be understood as a processual organizational strategy that was effectively employed by a wide variety of socio-spatial configurations—from villages to city-states and pastoralists to intensive agriculturalists. Although the confederacies that most influenced political and anthropological thought were composed of "tribal" nations (i.e., Engels, 1884; Morgan, 1851; Morgan, 1877), premodern confederacies in fact included all manner of socio-political configurations, from loose coalitions of autonomous villages to kingdoms. It will be shown that premodern confederacies comprised purposeful compacts between regionally dispersed groups that allowed populations to achieve collective benefits without sacrificing local autonomy. Ultimately, the nature and durability of premodern confederacies in relates directly to the historical conditions that fostered their emergence, maintenance, and dissolution or transformation.

## What is a Confederacy?

Defining "confederacy" is not so much about what a confederacy is but the process and objectives of confederation.

Early identification of confederations in political scholarship can be traced back to Hermann (1836) and Morgan (1851, 1877) who identified confederacies of kin-based clans or tribes in ancient Greece and northeastern North America, respectively. In each case, it is noted that the confederation of political groups was purposeful, with the ability to engage in foreign policy and joint military action being foremost among those purposes (Hermann, 1836: 23; Morgan, 1877: 120). However, as expanded upon below, the purposeful and processual nature of confederation was aimed at securing collective action benefits and not coercive power.

Another definition of confederacy, from Tapper (1990: 68), considers it "a union of tribal groups for political purposes, sometimes on the basis of imputed common descent … usually with central leadership … but sometimes without—though some would term such an uncentralized alliance a coalition." Two things about Tapper's definition need qualifying in the context of the case studies presented in this paper. First, the groups that come together to form a confederacy need not necessarily be "tribal." Confederacies of chiefdoms, cities, and states can also be identified. The second portion of Tapper's definition does however apply. For our purposes, a confederacy must have a formal, institutional basis that distinguishes it from less formal alliances, compacts, or coalitions. Further, the institutional basis of a confederacy will provide an overarching, formal framework for organizing collective action without supplanting the institutional and political autonomy of its component parts. In order to achieve purposeful action, a political apparatus must be created and maintained in order to achieve the collective aims of the confederacy. This apparatus may also change in form, size, or nature over time. These structures typically consisted of councils or assemblies composed of representatives of pre-existing social and political units. In many ways, the process of forming and maintaining those institutional structures constituted what a confederacy was—a process of ongoing confederation—as opposed to a societal type.

The most important aspect of the nature of confederacy governance in opposition to more centralized polities is the balance between the preservation of local autonomy and the pursuit of collective action. In other words, those groups seeking to form confederacies want no part of Hobbes' social contract and the exchange of free will for centralized authority. In terms of governance, it is the leaders or representatives of the constituent groups that actually do the business of governing, whereas the role of the confederacy and its leadership is to organize and act to fulfil the objectives of the confederacy. Members of confederacies included groups of varying sizes, with distinct ethnicities, identities, fiscal and governing structures, and interests. This meant that the constituent leaders, towns or provinces, and citizens were potentially in conflict. Maintaining the balance between autonomy and cooperation took a great deal of work, and for that reason confederation should be understood on processual terms. The initial purpose and form of a confederacy at its founding may have changed as that purpose and its constitution evolved. When the historical (internal or external) conditions that fostered the strategic aims of a confederacy change, it may dissolve into its constituent parts, i.e. clans, tribes, towns, or be otherwise transformed into a more centralized polity, i.e., a state or kingdom through the same processual means.

## Why (or when) Might a Confederacy be "Good Government?"

Marx and Engels were strongly influenced by Morgan's ethnological description of the organization and underlaying political philosophy of the Haudenosaunee confederacy as an evolutionary precursor of class-based society in the Marxist critique (Hunt, 2010). Engels' *The Origin of the Family, Private Property and the State* (1884) comprises a review of alternative forms of social organization based on *gens* or extended kin-based groups. There, he aligns Morgan's (1877) ethnographic descriptions of the Haudenosaunee and other segmentary societies with Marx's historical materialism. As stated by Hunt (2010: 9): "In early 1882, as Marx was … in the Isle of Wight, Engels wrote to him … in order finally to get clear about the parallel between the Germans of Tacitus and the American Redskins [sic]." While Engels' (1884) focus is the changing role of the family and modes of production in the development of inequality, here that same comparison is made in service of understanding the political institution of the confederacy as the basis for strategic collective action.

Blanton and others' framing of "good government" is based on central tenets of collective action theory. Chief among these is the notion that cooperation based on mutual moral obligation arises primarily out of the management of jointly shared resources (Levi, 1988; Ostrom, 1990). Further, they postulate that "good government" based on collective action includes the following characteristics following (Blanton et al., 2020; Blanton et al., 2021): A mechanism for allowing the voices of the citizenry to be heard in political decision-making; checks on limits for the accumulation of power; private wealth does not play an uninhibited role in political agency; leaders have little control over fiscal economy; and provision of benefits to citizens.

The aforementioned principles have primarily been used to evaluate good government in states. In using the same to evaluate whether or not confederacies constitute good government I add two guiding hypotheses: 1) That confederacies strike an institutional balance between securing collective interests at a distance and maintaining local autonomy, and; 2) that confederacies emerge to achieve strategic, purposeful aims. The purpose of premodern confederacies was not governance of the persons whose leaders or representatives formed the confederacy but related to policy, actions, and affairs of the confederacy as they related to other, often external, conditions. Predominant among these are objectives that secure military and economic benefits for all confederated parties.

## Characteristics

In addition to the premise that confederacies permit local autonomy while allowing members to achieve strategic objectives, we should expect premodern confederacies to be defined by the following characteristics:

*History and formation:* Historical conditions as opposed to generalizable models of societal development foster the development of confederacies. These may include external pressures such as conflict or encroachment by other more powerful or militaristic entities. In many cases, the historical conditions of confederacy formation emerged from the coalescence of ethnically and linguistically diverse groups. In better understanding the historical and cultural contexts of confederacy formation we can better understand the conditions that foster confederacy-building as an alternative to centralization.

*Territory and Demography:* Maintaining collective action at a distance—the carrying out of joint objectives among dispersed, diverse, and autonomous populations was one of the essential functions of premodern confederacies. Unlike the familiar coupling of the state and urbanism, confederacies included settlement strategies comprising villages, towns, cities and nations, as well as both agricultural and pastoral lifeways. Territories occupied by members of a confederacy may or may or may not be contiguous but they are often expansive. Populations of confederacies as a whole vary between tens to hundreds of thousands.

*Institutional basis of leadership:* Confederation promotes effective collective action at a distance. Compacts among constituent groups were more formal than simple agreements or alliances and were maintained by institutions, constitutions, and rules based on collective action and perceptions of collective benefit. Although the organizational basis of confederacy governance may have included hierarchical or heterarchical ranking, structural principles provided checks on the accumulation of power or authority by any one person, faction, or group. As a result, coercion is minimal. Leadership positions may be achieved or inherited, although in many cases positions of authority were limited to facilitating consensus. Because the institutional structure and leadership of a confederacy will preserve the autonomy of the participating groups, leaders do not have the ability to interfere in the affairs of groups beyond their own.

*Economy and financing:* In this case, collective action is not based on the management of collective resources, but rather achieving one or more mutually beneficial objectives. Financing of the confederacy should be tied directly to those objectives and not governing per se. We should expect premodern confederacies to be characterized by economic independence and interdependence. One function of confederation was to reduce transaction costs and promote exchange among member groups. Collective policies regarding external trade may enhance long-distance trade relations. The financing of collective activities or activities with collective benefits are organized in ways that did not impinge on the autonomy or well-being of local groups.

*Dissolution and Transformation:* In keeping with their purposeful nature, confederacies are unlikely to persist beyond the historical conditions that necessitated their formation. While some confederacies were dissolved as the result of military losses or colonial encroachment, others were transformed into new organizational forms, including states and republics.

The aforementioned hypotheses and characteristics will be evaluated in the context of the following case studies. Of course, not every case will possess each of these attributes, contingent upon on the amount of information available or the unique historical circumstances of each group. Each is intended as a general sketch and thus certain complexities and controversies may be overlooked, however taken as a whole the selected cases support the primary arguments put forth herein.

## North America

### Northern Iroquoian Confederacies

In the 17th century, at least two Northern Iroquoian populations were organized into confederacies: the Haudenosaunee (Iroquois) and Wendat (Huron). Each formed in the later 1400s–1500s CE and were encountered by early European explorers, missionaries, and colonizers during the early 1600s–1700s CE. These were sizable groups, each with an estimated population of some 20,000–30,000 (Jones, 2008; Warrick, 2008). Although the basic social institutions in Huron-Wendat and Haudenosaunee societies were identical below the confederacy level, territorial considerations and the process by which each formed led to differences in their internal structure and functions (Birch, 2020).

Nations of the Haudenosaunee developed more or less *in situ* and their descendants remain in their traditional homelands in central and northern New York and adjacent regions to the present day. The Haudenosaunee confederacy emerged in the context of endemic warfare among its members. The founding

mythology for the confederacy describes the circumstances of the League's founding whereby the culture hero Deganawidah (the Peacemaker) travelled to each Nation bringing the message of peace and the mechanisms for ensuring it (Wonderley and Sempowski, 2019). Non-aggression pacts included protocols for ceremony and reparations if violence broke out amongst members.

The founders of the "Great Peace" designated 50 chiefly titles that were distributed among the five nations of the confederacy such that each clan in each nation had one or more representatives on the confederacy council (Fenton, 1998). Because clan affiliation was shared across multiple member nations, authority was dispersed and this served to undergird the confederacy with dense webs of mutual obligation. While confederation quelled tensions amongst members, warfare remained an integral part of Haudenosaunee culture as a means of satisfying personal needs (status, prestige, male identity) and public duty (revenge, adoption of captives, foreign policy) (Brandão, 1997). The formalization of the Haudenosaunee confederacy did not involve the relocation of member nations, who continued to occupy villages in their home territories. This was not the case for their confederated neighbors to the north.

While the Wendat confederacy may have initially emerged as a close relationship or alliance between two founding nations (Trigger, 1976), its growth appears to have been catalyzed by Haudenosaunee aggression (Birch et al., 2021). Ultimately, the Wendat confederacy of 1615–1651 CE comprised four nations concentrated in the uplands between Lake Huron and Lake Simcoe, in Ontario, Canada. Many of these peoples had formerly inhabited territories to the south and east but were driven north by Haudenosaunee raiding parties. While in some cases entire nations were adopted into the confederacy, smaller social units such as families were also incorporated into its constituent villages and nations (Tooker, 1964:10–11).

There is less known about the precise internal functioning of the Wendat confederacy compared to the Haudenosaunee (Trigger, 1976:58–59), but its organizational structure seems to reflect its integrative and incorporative nature. The Wendat confederacy council was composed of most of the civil headmen who sat on the councils of each nation and represented the clan segments present in each. Day-to-day governance took place at the village level. While the vast majority of confederacy-wide activities concerned organizing for collective offensive and defensive action against the Haudenosaunee, ties were also maintained thorough participation in elaborate mortuary ceremonialism surrounding ossuary burial and the associated "Feast of the Dead" (Williamson and Steiss, 2003).

In both cases, the confederacy structure acted to reduce transaction costs between member Nations during the early years of European colonization and later fur trade. However, both archaeological data (distributions of European-manufactured goods) and oral history indicate that economic relationships differed from village to village suggesting that trade and exchange was a community-to-community affair rather than being managed at the confederacy level (Brandão, 1997:106; Pavlish et al., 2018; Birch et al., 2021).

Ultimately, members of the Wendat confederacy were dispersed by Haudenosaunee attacks in 1650–1651, with the political core of the Huron-Wendat Nation re-establishing itself in Wendake, Quebec as the Huron-Wendat Nation. The League of the Haudenosaunee remained intact until January 1777, when the Five Nations were unable to reach consensus on whether to maintain diplomatic neutrality or side with the English in the American Revolutionary War. As a result, they decided to metaphorically "cover the Council fire," effecting a temporary suspension of the confederacy that permitted individual nations to act according to their own will (Parmenter, 2018:5). The contemporary Haudenosaunee confederacy, as reformed in the colonial era, remains an important political and social identifier for Iroquoian peoples.

## Muscogee Confederacy

There were multiple Indigenous groups organized into confederacies in the early colonial American South. The Southeastern confederacies are thought to have formed following the fragmentation of the Mississippian chiefdoms of the ca. 1,000-1550 CE period (Ethridge and Hudson, 2002), however elements of collective governance, including councils and council houses, also existed in those earlier, more centralized polities (Thompson et al., 2022).

The most expansive of the Southeastern confederacies was the Muscogee (formerly called Creek) confederacy, which formed in the 1500s (Swanton, 1922) or 1700s CE (Knight, 1994) and persisted until the removal-cum-genocide of Native Americans in the 1820s and 1830s. The territory occupied by members of the confederacy included portions of the alluvial floodplains of several major river valleys in Georgia and eastern Alabama. Two distinct population clusters focused on groups of key towns distinguish the Upper and Lower Muscogee. Population estimates from the 18th century range from 10,000 to more than 24,000 in approximately 60 towns (Cobb, 2019:108; Muller, 1997: 174–175).

The Muscogee confederacy has been described as a "territorial assemblage of small groups . . . with diverse cultural and linguistic backgrounds" (Knight, 1994:373). Some towns had been established in the region for hundreds of years and others were relative newcomers, having been displaced by the impacts of colonial encroachment, slave raiding, epidemic diseases, as well as the persistent population movements characteristic of Indigenous eastern North American societies. Demographic collapse, resettlement, and political volatility ca. 1,550-1650 CE is clear in both the archaeological and ethnohistoric records and created the backdrop against which Indigenous confederacies coalesced (Ethridge and Hudson, 2002; Cobb, 2019).

The Muscogee system of governance was based in part on shared values and pre-existing institutional forms (Chaudhuri and Chaudhuri, 2001:68–69). However, in the 18th century the primary purpose of the Muscogee confederacy was to provide a framework that permitted tribal towns (*talwas*) to organize for common action against external aggression and territorial encroachment. The formalization of the confederacy occurred directly as a result of European pressure. It most likely stabilized

during the Yamasee war of 1715-16 (Knight 1994:386) and became the dominant Native polity in the region into the early 1800s, becoming a major player in early colonial America (Cobb, 2019:108; Weir, 2016:13). It accomplished this objective without influencing the social organization and self-governance of the towns and tribes that were its constituent parts (Knight, 1994:374).

While members of the confederacy are often referred to by their ethnic (tribal) referents (e.g., Muscogee, Seminole, Hitchiti, Yuchi, Natchez, Alabama), governance took place at the level of the tribal towns, each of which possessed a square ground and the public and ceremonial facilities and offices associated with each.

The primary institutional framework for the confederacy was a National Council. A National Chief presided over the council. Chiefs from the member towns (*talwa micco*) attended these meetings. Chiefly offices were not hereditary and fitness was determined by community acceptance. There was no central or regular meeting place and meetings of the National Council were called in towns throughout Muscogee territory (Chaudhuri and Chaudhuri, 2001:71). While decisions were reached by consensus, all towns within the confederacy were not equal. Larger, more conservative towns served as "foundation towns" and smaller towns either formed by fission or were affiliated as the result of in-migration and adoption (Knight, 1994:375). Below the confederacy level were towns were organized into provinces headed by a "Great Chief" (*micco thakko*). Towns were also organized into moieties within each province. Miccos were chiefs with specified functions (Chaudhuri and Chaudhuri, 2001:8). While most Miccos were traditionally men, at least one female Micco is noted in the ethnohistoric record (Hudson 1997: 174–175). In addition to civil roles and in keeping with the importance of coordination for effective military action, the Muscogee had dedicated military offices. These included gradations of soldiers and sergeants (*tustenagee*) as well as war chiefs (*yaholas*). The mobilization of military leadership was subject to the general decision-making of the Muscogee Confederacy (Chaudhuri and Chaudhuri, 2001:77–78). Clan mothers also formed councils that dealt with issues such as the treatment of prisoners, arbitration of disputes, and violations of social policy (Chaudhuri and Chaudhuri, 2001:8). Specialized runners and teams of runners relayed important information from village to village and province to province (Chaudhuri and Chaudhuri, 2001:70).

The Muscogee subsistence economy was primarily agricultural in nature, supplemented by hunting, fishing, and foraging. Extensive exchange networks carried prestige goods such as marine shell and copper, as well as salt and other commodities. Plazas may have served as foci for both politically-charged and market exchange (Kowalewski and Thompson, 2020). In the later 1600s and 1700s, they also traded captives, deerskins, and furs with Europeans in exchange for European-manufactured goods (Lapham, 2005).

In 1813–1814, civil war (a.k.a., the Red Stick war) broke out among the Muscogee. It began as a conflict within the confederacy and expanded to include other Native enemies (the Choctaw and Cherokee), American militias, and interference from colonial powers (British and Spanish agents) (Weir, 2016). Military conflicts, land cessations, and genocidal policies of the United States government ultimately resulted in the forced removal of the Muscogee from their historic homelands in Georgia and Alabama to Oklahoma. While 4,000 people died on this journey and 3,000 more on arrival (Butler, 2021) the contemporary Muscogee Nation is a self-governing nation of more than 81,000. They have retained the National Council as their central governing institution, although many aspects of Western-style centralized government have necessarily been incorporated.

## Near East

Confederacies have been recognized as a political strategy deployed frequently in Near Eastern archaeology and history. Some scholars have argued that the tribal confederacy as a social formation had its origins in the early Bronze Age village and pastoral tribal communities of the Levant with the aim of controlling trade between Egypt and areas north (Finkelstein et al., 2000; van der Steen, 2005:11). However, these arguments are loosely defined and evidence is lacking for the institutional basis of confederation as defined herein.

Ancient Egyptian and Assyrian sources documented the existence of tribal confederacies on the borders of their empire. The most famous Near Eastern confederacy may be the Biblical twelve tribes of Israel. Israel's development from a tribal society led by heroic patriarchal figures to a state includes a stage in which it comprised a confederacy or league of tribes (Gottwald, 1979; Martin, 1989). According to Biblical texts, the Hebrews begin to consolidate their tribal confederacy in the uplands of the later Judaea and Samaria. Their common purpose is understood to have been defense against the militaristic Canaanite city states and the Philistaeans in the fertile coastal plains, both of which possessed superior weaponry (Zank, 2008). The Israelites' god is said to have endorsed tribal leaders, war lords, and judges, but not a single permanent leader or king. Smith (2003) details the political and moral tensions between the decentralized, tribal federation of the Israelites and the emergent intuition of kingship under David in the Hebrew scriptures. Israel's perception of itself as a confederation persists into the present day despite its transformation into a Nation State.

Hittite sources note an entity or territory in western Anatolia known as "Arzawa" (MacSweeney, 2010). Coalitions of Arzawans are recorded at several points throughout Hittite history from the Old Kingdom (ca. 1,650-1500 BCE) onwards, but in the 1200s a local ruler named Uhhaziti managed to unite the majority of the Arzawan groups into a pan-Arzawan confederacy that the Hittites considered a serious threat (Mac Sweeney, 2010:8). The result was aggressive military action that annexed the Arzawans and broke the confederacy up into three separate kingdoms.

In more recent Near Eastern history, in the 18th century, the Shahsevan confederacy emerged in opposition to the Ottoman empire (Tapper, 1997). Originally, the term *shahisevani* referred to loyalty and military service owed to the Safavid (Persian) Shahs and the Shia faith who dominated the area of present-day Iran from the 1500s-mid 1700s. By the 18th century, the Shia faith

became well-entrenched, the overarching authority of the Safavid had dissipated, and overcrowding of pastures and political fragmentation led to an overall sense of insecurity and disorder. In some parts of the region, chiefdom-like political structures emerged, organized around a chief or khan who could provide security, order, and some stability (Tapper, 1997: 129–136). These chiefs, together with other tribes and fragments thereof would come together in the 1760s as the Shahsevan confederacy.

The Shahsevan confederacy included both "commoner" (less powerful) and "noble" (more powerful) tribes with an appointed leader (*khan*). The Kahn had broad military and judicial powers, subject to consultation with a council of clergy (*mullahs*) and elders. There was an expectation that taxes would be collected, ostensibly to fund the Khan's entourage of courtiers, servants, and guards, as well as public officials, but local chiefs were in effect autonomous. The economy and society of ordinary nomads were little changed by the formation or dissolution of the confederacy (Tapper, 1997: 142–143). Trade and exchange do not seem to have been a priority of the confederacy, which functioned primarily to present a united front against the Ottoman Empire and provide basic regional governance. Ultimately, the confederacy broke apart amidst factionalism and power struggles among leading chiefs and tribes.

Tapper (1990) highlights later, more modern cases in where tribal confederacies form in opposition to external pressures from state governments or where centralized tribal unions form as part of a process of secondary state formation. In the latter case, they do not fit our definition of "confederacy" here, but rather more resemble secondary state formation among ethnically "tribal" peoples outside the margins of dominant Islamic urban society.

## Late Roman and Medieval Europe

### Germanic Tribal Confederacies

Scholarship of the later Roman Migration period includes descriptions of the "barbarians" who would ultimately bring about the decline of the western Roman Empire. Most of these were written by Roman chroniclers who did not have knowledge about the internal political organization of the tribes and confederations among them. For example: "Caesar describes tribes and confederacies that had little in the way of constitutions. The barbarians relied on conventions that facilitated infrequent political action of a limited range" (Young, 2015:359). Agreements and alliances among Germanic tribes may not have always met the definition of a formal confederation. However, in some cases they did form institutional arrangements that fit our definition of confederacy. Heather (2010:54) notes that while Germanic tribes of the first century were certainly capable of assembling supertribal confederations, the evidence suggests that they were primarily religious in organization, i.e., the "cult leagues" described by Tacitus, or short-lived from a unified, political standpoint. Organization for military purposes seems to have altered those dynamics and, in many cases, political units were created "on the march" with recruitment from a wide range of ethnic and linguistic populations (Heather, 2010:35).

In 357 CE, a "huge" army of Germani assembled near the modern city of Strasbourg was described as being led by various "kings" of the Alamanni (Heather, 2010:52). Another fourth-century confederation, the Tervingi, located in the foothills of the Carpathians and dominated by the Goths functioned in a similar manner to the Alamanni, though with a slightly different institutional structure based on leading "judges" (Heather, 2010:57). These confederations were not small. Estimates suggest the Alamanni and Tervingi could field some 10,000–20,000 warriors, suggesting total group sizes of 50,000–100,000, although Heather (2010:74) suggests what accounts there are underestimate the size of the total confederated population. Both cases provide compelling evidence of the ability of Late Iron Age and early Medieval Europeans to develop and maintain collective institutional means of promoting common strategic objectives at a distance without sacrificing local autonomy.

Alamanni kingship was hereditary and kings, princes, and other elites (optimates) presided over a series of sub-regions (cantons or *gau*). Repeated Roman attempts to put down the confederacy by eliminating these kings in combat was apparently not enough, as new leaders would emerge and the basis of collective action as a whole could not be undermined by such defeats (Heather, 2010:55–57). Heather (2010):56 writes that "Like many late antique and early medieval confederative entities, the Alamanni had, I suspect, an established repertoire of political and diplomatic conventions which defined and bound together their various kings in positions of overking and underking, the latter owing allegiance and some duties to the former, while still retaining direct day-to-day control of their own cantons."

Although participation in these Germanic confederacies may have initially been based on the principles of "good government" from the perspective of the general population, over time that social contract appears to have eroded. By the fourth century, it appears that Germanic leaders were able to extract labor, agricultural production, and coerced military service from the populace. This seems to have evolved in part, as kings and princes sought Roman goods and the creation of obligatory relations between their principalities and Roman authorities through the provision of taxes and military support (Heather, 2010:7).

For example, when they appear on the Danube Frontier in the second century, the Vandals were likely a militarized aggregation of peoples described as a confederacy (Wickham, 2016:25). By the fourth century this loose aggregation had become more formalized, and Vandal kings were certainly in place during the crossing of the Rhine in 405/6 CE. But as was the case for the Alamanni, the death of specific kings in various military engagements did not seem to alter the trajectory of the Vandals as a whole. While the Vandals as a people on the move may have been based on a confederation of kingships, during the time that they entered the western Roman Empire, marched across Iberia and crossed into north Africa this was no longer the case. Upon establishing themselves in Algeria, ca. 429 CE and succeeded in

cutting Carthage off from the rest of the Roman Empire one Vandal king, Gieseric, managed to consolidate power into a more centralized kingdom (Merrills and Miles, 2010:57–58, 70).

These developments in bureaucratic infrastructure and the emergence of entrenched social stratification ultimately set the stage for the emergence of more familiar forms of feudal Medieval governance in the late first millennium AD.

## Early Medieval Ireland

Gibson (2011, 2012) has made a compelling case for the existence of chiefdom confederacies in Early Medieval Ireland and compares them to certain other of the cases described herein. He defines these political confederations as chiefdoms that adopted a common identity and endonym and which were unified through common agreement (Gibson, 1995: 23; 2012: 31).

Although chiefdom confederacies appear as early as the fifth century in central Ireland (Gibson, 2012:30), the best documented is the Dál Cais confederacy of Thomond located in the Early Medieval Irish province of Munster (consistent with the modern County Clare) (Gibson, 2012). The Thomond confederacy first appears in the documentary record of the early 10th century and persisted until the 12th century CE. The constituent territories of Early Medieval Irish chiefdom confederacies were typically located near one another but were not necessarily territorially contiguous (not unlike the Haudenosaunee). While specific population estimates for this region are difficult to extrapolate, based on the total estimated population of Medieval Ireland as a whole (Hannah and McLaughlin, 2019) we can assume we are dealing with a population on the order of thousands to tens of thousands.

Textual sources describe the formation of a confederacy by chiefs of the west Munster region with the rationale of mutual defense. These chiefs were skilled in building and maintaining alliances and Gibson (2011:219) suggests that confederacies were created to facilitate predatory military expansion on the part of the confederacies' leaders. In either case, we see the same purposeful military compact as is the case in other examples. However, certain of these confederacies were also unified by coercive agreements, straining the conditions of local autonomy outlined herein. For these chiefly confederacies to hold up to the principles of good government, those that are overly coercive may or may not fit the bill.

The leading families of these chiefdoms were members of ranked clans. Documentary records indicate that the purported kin relations between the founding ancestors of each of the constituent chiefdoms remained intact for hundreds of years (Gibson, 2011:217–219). While succession to leadership was restricted to a given aristocratic lineage, new leaders were validated in an assembly and in at least one case, two apical chiefdoms had an agreement to alternate the paramountcy alternately during times of succession (Gibson, 2011:225).

While the subsistence economy of Early Medieval Ireland was agrarian, the political economy of Medieval Irish chiefdom confederacies was dominated by livestock management, principally cattle (Gibson, 2012:137).

The end of the confederacy of Thomond came about in the early 12th century CE when Muirchertaich Uí Brian created the first state in Munster (Gibson, 2011:218).

## Old Swiss Confederation

The Old Swiss confederation originated in western Habsburg lands around Lake Luzern in 1291 CE. The formation of the confederacy was finalized by the joining of all thirteen cantons (member units) by 1513 CE and at this time its population was estimated to number in the hundreds of thousands (Wickham, 2016:227). It is the precursor of the modern state of Switzerland though the original footprint was somewhat less than the modern Swiss territory.

The Old Swiss confederation is claimed to have begun with a peace agreement between the three cantons of Uri, Schwyz, and Unterwalden. The Federal Charter states the purpose of the confederation as being to advance common interests such as free trade and mutual defense. The original "Eight Old Cantons" came together before 1,353 and possessed rights and privileges in external affairs that were not extended to the five that joined after (Würgler, 2008:29–30). Both the confederacy and it is member polities maintained alliances and treaties with other external powers, notably the French (Würgler, 2008:32).

To promote effective implementation of the confederacy's diplomatic, military, and economic objectives, they established an overarching institutional structure. This was loose at first, however, after 1500 CE the Federal Diet (*Tagsatzung*) a legislative and executive council of delegates from the individual cantons was established. Each canton was equal in principle and each had one vote in council, regardless of the number of delegates or the population of the territory (Würgler, 2008:33). Cantons in turn held their own diets. The government did not rule over the confederated towns—each was politically and fiscally autonomous. Although the thirteen cantons together formed a contiguous territory, their geography, religious and political structures were diverse. In terms of governance, some were rural and democratic, some were urban, and others had patrician or guild-based constitutions (Würgler, 2008:33, see similarities with the Mayapan provinces, below).

According to Würgler (2008:38): "Internal stability was sustained by various economic structures. A complex division of labour kept the plains dependent on the milk and cattle produced in the mountains, while the mountain cantons depended on the grain that came from the plains and foreign markets."

In addition to establishing mutual security and economic benefit within their territories, most cantons were subject to the Habsburgs, and in 1386 CE, they jointly fought off an army sent to restore Austrian rule. This resulted in the defeat and death of the Habsburg duke Leopold III, giving the Swiss confederation a measure of confidence and legitimacy that allowed it to extend its range (Wickham, 2016:227). Some fighting did take place amongst cantons and their constituent parts, on account of the conflicting interests of nobles, towns, and peasants. However, a flexible military strategy allowed for the rapid deployment of infantry across the confederated territories. Part of their military success was owed to a highly capable

peasant-based military. So successful were the Swiss in training their citizenry, that they were used as mercenary forces by other powers. Although the confederacy passed laws prohibiting citizens from entering foreign military service of their own accord and requiring foreign powers to petition the Diet and negotiate terms, in practice however both Swiss men and foreign rulers usually ignored the regulations (Dean, 2012). In these ways, the Swiss confederacy attempted more of the business of governing the citizenry than can be observed in other cases discussed herein. The Swiss are also one of the longest-lived confederations identified, persisting for more than 500 years and its ideals continuing to constitute certain aspects of the modern Swiss state, suggesting a certain degree of "good" governance evidenced by the retention of multiple territorial and ideological facets.

The confederation came to an end in 1798. However, it was not without internal conflict during this period and both internal and external mediation (organized by the French in many cases) prevented the confederation from breaking apart or otherwise dissolving (Würgler, 2008:36). However, its end came about not from internal discord per se but from the rise of Napoleon and the invasion of the French Revolutionary Army (Schelbert, 2014).

## Greece

### Archaic Greece

During the Greek Archaic period, ca. 1000 BCE—650 BCE, political systems described as *ethnos* dominated the central and western portions of modern-day Greece. These primarily consisted of loose associations of affiliated villages and territories. Others developed a more formal confederation, as was the case for the much-studied Boiotian League (e.g., Buck, 1979; Mackil, 2013; Gartland, 2016). A sense of ethnic unity seems to have pervaded these early political experiments and encouraged people to see them in a positive light (Mackil, 2014:276).

Boeotia lies to the north of the eastern part of the Gulf of Corinth in central Greece. The Boiotian League developed around 500-525 BCE in response to hostilities between Boiotians and the Thessalians to the north and threats from Athens from the south (Mackil, 2013:24).

The League was dominated by Thebes, but each participating town was represented in the governing assembly (*halia*) and each nominated dedicated military leaders (*boeotarchs*) (Buck, 1979: 124–125). The objectives of the League focused on "joint military action and the integration of local economies within the region" (Mackil, 2013:29).

The governments of Boiotian towns (*poleis*) and villages consisted of councils of magistrates who were the heads (or chiefs) of noble clans (*gene*). One magistrate, the Archon, was first among equals and bore symbols that reflected their religious and military functions. These roles circulated on an annual basis (Buck, 1979: 92–93). Encroachment of the central governing body was prevented by the local councils of individual cities, to which all important questions of policy had to be submitted for approval.

Boiotian towns were organized into districts for administrative purposes. Districts coordinated to meet military levies and were taxed in a "strikingly equitable" fashion on the basis of the size of their territory (Mackil, 2013: 298). Standard coinage was produced by multiple Boiotian mints suggesting formalized economic cooperation (Mackil, 2013:248–249).

The unity of the league against external threats did not entirely prevent violent disagreements between Boiotian cities (Mackil 2013:29). After the Greek defeat at Thermopylae, Thebes and most of Boeotia sided with the Persians during the Persian invasions of 480 and 479 BCE. After the subsequent Greek naval victory over the Persians, the Boiotian League was dissolved. While the League was able to reform and secure a major military victory over Athens (while allied with Sparta) in 446 BCE (Mackil, 2014:273), a later defeat by the Athenians resulted in the destruction of cities and crops. The league later opposed Sparta in the Corinthian War (395–387) and was again defeated and again dissolved. Aristotle noted that "the democracy [of Thebes] was destroyed as a result of bad government" (Mackil, 2013:34–35). As such, it may have been a combination of military defeat and the inability to maintain or reconstitute the institutional structure of the confederacy that brought about its end.

### Classical and Hellenistic Greece

In Classical and Hellenistic Greece, *koina* (singular: *koinon*) were ancient Greek federal states that arose out of the cooperation of city-states (*poleis*) and villages. According to Mackil (2014:271): "The koinon was something radically different from the ethnos, a complex, regional state with a careful and deliberate distribution of power among several interdependent scales (polis, district, and koinon), rather than a group of communities with loose and informal structures for cooperation." Koinon were inherently cooperative and developed as a means for closely interacting city-states to formalize an institutional basis for collective action. Both access to and acquisition of resources beyond individual polis and ethnos and military security were major factors that led both urban and rural peoples to enter into a koinon (Mackil, 2014:280).

In Classical and Hellenistic times, the Achaean League was the most successful institution to have emerged in an attempt to unite the Greek city-states on the Peloponnese. The first Achaean league arose in the fifth century. The league was named after the region of Achaea in the northwestern Peloponnese, which formed its original core, with the city of Helike serving as capital. The destruction of the ancient capital by an earthquake and tsunami in 373 BCE led to the dissolution of this initial league. It was reformed in 280 BCE in opposition to Macedon and as an ally to Rome (Caspari, 1914).

As the League expanded, new members were promised internal autonomy and freedom from the confederacy's garrisons, in exchange for the mutual swearing of oaths that served as agreements about the terms of incorporation (Mackil, 2014:279). The Achaean League comprised both rural agriculturalists and urban commercial traders and the governing structure of the League evolved to meet the needs of an expansive populace (Caspari, 1914:212). This involved agreements to hold assemblies in various member cities on a rotating basis (Mackil, 2014:279).

Councils of magistrates established institutions to facilitate access to the variable resources of the territory, including establishing frameworks for property rights, management of resources in times of scarcity, and facilitating economic interdependence of the poleis and their citizens (Mackil, 2014: 280). The koinon of Hellenistic Greece are one of the more centralized examples discussed herein, transforming into a structure more akin to a federal state than a confederation during its later history.

The Achaean League effectively organized for wars against other koinon such as the Aetolian League and the Macedonians. However, a failure in diplomatic relations with Rome eventually led to their defeat and collapse. Following the defeat of the League at the Battle of Corinth, the city was razed, and the League dissolved in 146 BCE, ushering in the Roman era.

## Korea

The Three Kingdoms Period of Korean history speaks of confederated peoples known as Old Joseon (also *Kochosŏn, Gojoseon*) in the northern Korean peninsula ca. 300 CE, as chronicled in textual documents and known to some extent from archaeological data (Lee et al., 2005). In the southern Korean peninsula, Old Joseon's counterpart was Jin (also Chin) also being described as a loose confederacy (Gibson, 2011:222). "These confederacies ultimately broke apart into their constituent units (geosuguk), which then reformed into new confederacies: Puyŏ (also Buyeo), Koguryŏ (also Goguryeo), Ye, the Three Han (Samhan), and Gaya (or Kaya)" (Gibson, 2011:222).

Of these latter confederacies, we can take a closer look at Koguryŏ, first noted in Chinese history as a loose affiliation of five tribes (Parker, 1890:185) or a confederation of five clans (*Sanguo Ji*) living in the rugged terrain north of the Yalu river. Whichever is the case, these groups appear to have been multiethnic in nature and pressed by the expanding Chinese empire and possibly also the nomadic peoples on China's northern Frontier. The result was the development of a culture that included warriors on horseback that posed intermittent threats to China's northern frontier (Nelson, 1993: 208–209).

The purpose of the confederacy seems to have been to defend member territory from Chinese Imperial encroachment. Each clan within the confederacy constituted a basic military unit. The chief of each clan formed the governing body of the confederacy, with one chief elected from this body as "supreme commander" (Nelson, 1993:209). In the first century BCE this chieftainship became an inherited office, after which time the confederacy was transformed to a kingdom and from which the Koguryŏ, one of the Three Kingdoms, traces its origins (Joe, 1972:22).

On the tip of the southern peninsula, the Kaya (or Gaya) confederacy developed at the mouth of the Naktong River and region to the west. This was a confederacy of six polities collectively known as the Kaya (Nelson 199: 237). Similar to the situation in the north, the Kaya polities developed from the chiefly political structures of the twelve tribes of the ancient Byeonhan confederacy, which existed from around the beginning of the common era to approximately 400 CE. Of the Kaya polities, two of these (Ponkaya or "root" Kaya and Taekaya or "great" Kaya) were the strongest of the group. Military and political parity among the six prevented the development of a central state (Kim, 1982).

The basis of the Kaya economy was trade in iron, emphasizing mining, processing into tools and weapons, as well as ingots traded within the Korean peninsula, the Japanese highlands and with China (Nelson, 1993:237). While hill-top fortresses and evidence of a militaristic society are clear from burials (iron armor and weapons; mounted cavalry in wall-paintings) (Nelson, 1993:238–241), it is unclear if the primary objective of the Kaya confederacy was maintaining the stability needed to support their trade-based economy or resisting military incursions from the Silla and Baekje kingdoms that flanked their northern, eastern, and western borders. Some indication of the latter comes from the fact that the Kaya confederacy was later conquered by Silla, one of the Three Kingdoms of Korea, an annexation that was complete by 562 CE (Nelson, 1993:247).

In these cases, there is a deep history of confederated polities in the region. Ultimately, the military and economic objectives of Korean confederacies were unable to withstand the centrifugal forces of state formation either within their own region or the territorial ambitions of adjacent, more centralized polities.

## Postclassic Maya

Located on the Yucatan peninsula of Mexico, the polity centered upon the Postclassic Maya city of Mayapan has been described as both a state and a confederacy (Masson, 2021). It was founded between 1,150 (Masson, 2021) and 1300 CE (Roys, 1957), was transformed during the period of Spanish conquest, and persisted until ca. 1600 CE. The population of Mayapan itself has been estimated at some 16,000–17,000 (Masson, 2012). Population estimates from the Spanish era record towns and provinces with populations ranging from the thousands to tens of thousands (Roys, 1957).

The Mayapan confederacy emerged following the collapse of the polity centered upon Chichén Itzá. Its purpose appears to have been to provide a political and institutional framework for the expansive economic network that straddled the northern Yucatan. The 900-1200 CE period is marked by the abandonment of southern lowland city-states and a northward shift in population and activity. While famously painted as a "collapse" (Demarest et al., 2004; Turner and Sabloff, 2012), more recent scholarship inverts earlier perspectives and asserts that "Postclassic Maya society represents a resilient reconstitution rather than a collapsed remnant of a Classic period apocalypse" (Masson, 2021:280).

The Mayapan confederacy consisted of 10 territorially contiguous *cuchcabal* (jurisdiction, translated to provinces by the Spanish) (Roys, 1957:3). Each province was ruled from a prominent town. The city of Mayapan functioned as a confederacy capital. Individual provinces had various systems of governance, some rather centralized under a single ruler or ruling class and some consisting of a loosely allied groups of

towns. All provinces had multiple towns, each headed by a local head (*batab*) who was supported by the town and who performed executive, judicial, and military functions (Roys, 1957:6). Lands were held in common by the town, but improvements such as fruit trees and cultivated crops were private property (Roys, 1957:8).

Provincial leaders were members of leading or elite lineages and sat on an assembly or council of lords. The council served as an institution of joint government (*multepal*) and permitted multiple elites to participate in governance, and although influence was not distributed evenly among members, it provided a place to "negotiate, advocate, and resolve conflict" (Masson, 2021:292).

Each of the lords of Mayapan built their own administrative groups in the site's monumental core. Despite not being as architecturally impressive as Classic period monumental architecture, these compounds were lavish, with colonnaded halls, temples, oratories, shrines and other "trappings of high culture" (Masson, 2021:286). Contact-period accounts further suggest that these lords were able to mobilize and tax thousands of laborers and subjects. Elite compounds in Mayapan were supported by produce and resources from their home provinces (Sharer and Traxler, 2006:602). Variable wealth divisions also existed among commoners, with urban commoners being somewhat better off than the rural poor (Masson, 2021:285). Civil and religious offices were distributed amongst these elite factions (Sharer and Traxler, 2006:601).

In its early years, Mayapan became a major commercial center, controlling production and trade in salt, pigments, cotton textiles, honey, pottery, copper, obsidian, and slaves, among other commodities (Sharer and Traxler, 2006:599). Evidence for links to central Mexico and down the Caribbean coast point to an expansive cultural and economic network. Early Spanish accounts of the region describe thriving commercial towns, bustling markets, rich merchants, and canoes piled high with merchandise (Kepecs, 1999:7).

Although Mayapan's centralized governing structure certainly meets our definition of confederacy–meeting strategic aims while maintaining local autonomy, there is the question of whether or not Mayapan's confederacy constituted "good government?" Reports indicate that certain Maya lords wielded considerable power, with the capacity to mobilize and tax thousands of laborers and subjects, and many of them lived affluently.

There is evidence for a decline in societal well-being in the 14th century at the Mayapan capital, including evidence for famine, interpersonal violence, and political unrest, as well as evidence for out-migration. In the mid-fifteenth century, it appears that climatic challenges exacerbated factionalism within the confederacy, "causing unrest and triggering a concerted military effort orchestrated from within the governing council by the Xiu faction, mounted against the influential Cocom faction. Following the massacre of the Cocom and the abandonment of the city, regional unity ended" (Masson, 2021:284). Governance returned to the local level.

Environmental hardship aggravated political divisions caused by Mayapan's fall and early colonial accounts indicate that there was much inter-provincial warfare just prior to Spanish arrival (Landa, 1941:41). In this way, although the confederacy seems to have been forged in order to promote commerce, the suppression of conflict amongst members was also a feature that collapsed with the collapse of the confederacy governance.

## DISCUSSION

These case studies uphold the thesis that confederacies functioned to achieve strategic collective action at a distance while preserving local autonomy. In terms of aims and objectives, there appear to be two primary reasons confederacies formed: one military and one economic. Assessing whether or not confederacies were "good government" in Blanton (2020), Blanton (2021) terms is a slightly more complicated question because governance was inherently local. The business of the confederacy was to achieve strategic objectives, not to govern local populations. When confederacies did govern it was weakly and their will could be subverted at the local level or result in transformation into another form of political organization.

In the cases discussed herein, the most common strategic aim of confederation was organization for joint military action. In some cases, this was due to external forcing in the form of aggressive or expansive neighbors (e.g., Wendat, northern Korea, Germania, Near East, Muscogee); in others, forming a joint military unit also served to reduce conflict between members of the confederacy (e.g., Haudenosaunee, Old Swiss). However, once a confederation was effectively militarized, they were capable of engaging in defensive or offensive action (e.g., Ireland). The second most common strategic objective was economic in nature. In some cases, confederacies formed in order to facilitate trade and exchange by lowering transaction costs among members and providing an institutional framework that supported trade, exchange, and markets among its constituent parts (e.g., Mayapan). In multiple cases, both military and economic objectives were achieved, either intentionally or as a consequence of one or the other (e.g., Old Swiss, Greece). It is notable that two of the most economically-motivated confederations: The Old Swiss Confederacy and the confederacy centered at Mayapan also included the most intra-group conflict in the cases above. These two cases were the most durable confederacies discussed herein, each persisting for ~500 and ~400 years, respectively. The shortest-lived confederacies were those of Boeotia and the Shahsevan, each persisting for a century or so, with the set having an average of ~250 years. This may not mean that confederation for economic motivations is a recipe for political longevity so much as the fact that the others formed in places and times that were more prone to conflict and the political instability it engenders. Nevertheless, an important direction of future research should involve detailed attention to how military, economic, and political objectives were financed by members of confederacies. Mackil's (2013) close analysis of the fiscal regimes of Greek confederations could serve as a model. A concurrent question relates to the impact of the environment on

the development of confederacies and how they might have been affected by ecological (as well as historical) change.

Did confederacies constitute "good government" in Blanton (2020, 2021) terms? Based on variability in the cases described above, I believe the answer is no. Although, when functioning correctly, the strategic military or economic goals of a confederacy ostensibly provided benefits to the populace. Good governance involves mutual moral commitments between leaders and citizens (Blanton et al., 2020). Physical and economic security are thus paramount among the institutional relationships between the leaders of a confederacy and their populaces.

In some cases, such as the Northern Iroquoian and Muscogee cases, the distribution of authority amongst leaders and representatives of nations, towns, and kin groups meant that there was a better chance that "the will of the people" was represented at the confederacy level. It may be significant that in these cases, disagreements between members in one case lead to the dissolution of the confederacy and in the other civil war. In neither case, was transformation into a more centralized or coercive political structure a culturally-permissible possibility. In other cases, (e.g., Ireland, Germania, Mayapan) hereditary leadership and succession dampened or prevented the will of the people to be exercised in political decision-making. As such, we cannot say that premodern confederacies were uniformly more "democratic" than early states.

A point that contrasts sharply with the notion of a confederacy as a societal "type" is that in a number of cases, (e.g., Mayapan, Germania, Old Swiss, Greece) the constituent units within a confederacy were governed in diverse ways—from more to less centralized with varying degrees of entrenched hierarchy, mechanisms for the extraction of revenue, and collective benefits (or not) for the populace. Collective action and social inequality are perfectly capable of co-existing in all kinds of human social configurations ranging from hunter-gatherers (Wengrow and Graeber, 2015) to pre-modern states (Blanton and Fargher, 2008). The flexible and durable properties of confederacies show them to be another such example of political innovation, but neither confederacies nor their constituent parts correspond to a neatly constrained societal type.

In some cases, i.e., the Lords of Mayapan and Alamanni kings, leaders did not necessarily act in the interests of their subjects. In some cases, desire to extract taxation and tribute to support ambitions beyond those of the populace (e.g., elite consumption, predatory expansion) was, in the Medieval Irish and Iron Age Korean cases, the thing that transformed them into kingdoms and feudal states. In the absence of centralization around a single authority, the confederacy-as-institution grew powerful enough to impose it is will on member nations or provinces, the confederacy was transformed into something more akin to a federal state, as was the case among the Hellenistic Greek Koinon and the Swiss.

Blanton et al. (2020:2) identify scholars that suggest that "weak" premodern states were as such because they failed to extract revenue in the form of taxation due to the friction of distance or a lack of information (about potential sources of revenue) (Mayshar et al., 2017; Stasavage, 2020). In response to this critique about the effectiveness of confederacies as political structures, I return to the central thesis of this paper: That the purpose of a confederacy was not to govern, per se, but rather to achieve collective objectives while preserving local autonomy. The centralization of revenue-generation in order to support a structure of social control was exactly the opposite of what confederation was designed to achieve. The price of that autonomy was a less stable political apparatus than can be accomplished through the centralizing tendencies of the state. In this way, confederation is an ongoing process of negotiation as opposed to a single set of roles or relations aimed at consolidating power and revenue.

While the concept of a confederacy is often equated with principles of equality and democratic relations among members (Engels, 1884; Trigger, 1976), the cases discussed herein have shown that the degree of "good government" that exists both at and below the level of the confederacy as an institution can vary significantly. Future directions in investigating and theorizing confederacies could productively interrogate that variability with respect to strategic goals and component parts. For example, what is the interplay between local or sub-regional economic structures and the financing of collective objectives (military or otherwise) in confederacies with variable political components? Is some degree of centralization, i.e., the role of Thebes in the Boiotian League or Mayapan in the Yucatan, a stabilizing or destabilizing force? Certainly, the examples and conclusions reached here suggest that pre-modern confederacies are worth studying with the same degree of rigor that has been applied to their counterparts among pre-modern and early states.

## AUTHOR CONTRIBUTIONS

The author confirms being the sole contributor of this work and has approved it for publication.

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# "Let Us All Enjoy the Fish": Alternative Pathways and Contingent Histories of Collective Action and Governance Among Maritime Societies of the Western Peninsular Coast of Florida, USA, 100–1600 CE

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Ethnographers have ably documented the great extent and diversity of social institutions that contemporary fishers and shellfishers employ to collectively manage common property resources. However, the collective action regimes developed among ancient maritime societies remain understudied by archaeologists. We summarize research into the development and form of collective action among the maritime societies of the western peninsular coast of Florida, USA, drawing on our own recent work in the Tampa Bay area and previous work elsewhere in the region, especially the Calusa area to the south. Archaeological evidence suggests that collective action became more important in Tampa Bay in the first centuries CE, probably owing to a marine transgression that resulted in more productive estuaries. Groups here staked claims to productive estuarine locations through the founding of villages, the building of mounds, and the construction of relatively simple marine enclosures. Historically, these changes resulted in societies of relatively small scale and limited authoritarian government. In contrast, collective action developed later in the Calusa area, may have begun in relation to resource scarcity than plenty, and may been founded in kinship rather than in public ritual. Collective action in the Calusa area resulted in projects of greater scale and complexity, providing a foundation for more hierarchical and authoritarian social formations.

**Keywords: collective action, common property, maritime societies, good governance, mass capture**

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## INTRODUCTION

Acheson (2015, p. 1) has noted that oceans "are almost always held as common property" owing to the fact that marine resources are typically low in value relative to the costs to defend them. Still, property is best conceived as a "bundle of rights" (North, 1990, p. 47) and, as Schlager and Ostrom (1992, 1993) observe, the property-rights regimes of fishers vary with regard to rights of access, withdrawal, management, exclusion, and alienation (i.e., transfer of ownership). These rights also vary individually with regard to social position; Schlager and Ostrom (1993, p. 16–19) define four classes of property-rights related to fishers based on increasing collective-choice rights: from users, to claimants, proprietors, and owners.

Consistent with the understanding of variability in rights to fisheries, ethnographers have documented great diversity in the common property regimes associated with contemporary maritime societies, from open access to territorial and exclusive (e.g., McCay, 1980, 1998, 2001; Cordell and McKean, 1986; Begossi, 1995; Aswani, 1999, 2002; Acheson, 2003, 2015; Aswani and Hamilton, 2004). These studies suggest that the character of common property regimes established among maritime groups varies with physical factors, such as the relative abundance and mobility of the resource and the physiography of the habitat (e.g., inshore vs. off-shore), as well as social factors, including the size and homogeneity of the population, the effectiveness of political leadership, and cultural values toward sharing (Wilson et al., 2013; Acheson, 2015, p. 37–39). By extension, we might expect maritime societies to display variation with regard to the dimensions of good governance identified by Blanton et al. (2021): public goods, bureaucratization, and controls exercised over governing principals. To date, however, discussions of good governance have focused almost exclusively on agrarian states.

Archaeological evidence suggests that early humans began fishing and shellfishing at least 150,000 years ago (Marean et al., 2007; Colonese et al., 2011; Cortés-Sánchez et al., 2011). Some researchers have suggested that shellfish gathering may have been key to the evolution of cooperation and modern human behavior (Jerardino and Marean, 2010). Shell middens—often of extensive size—appear around the world in contexts dating to the late Pleistocene and early Holocene (Waselkov, 1987, p. 124–126; Erlandson, 2013, p. 26). Marine resources appear to have been key to the later development of hierarchical societies across a number of regions of the planet (Mosely, 1975; Erlandson, 2001; Pearson, 2007; Grier et al., 2017). The fishing industry was also critical to the development of mercantile economies in Europe (Holm et al., 2019). Yet the variability of collective action regimes developed among ancient maritime societies remains understudied by archaeologists, as are the historical implications such variability holds for governance.

We summarize research into the development and form of collective action among the maritime societies of the western peninsular coast of Florida, USA, drawing on our own recent work in the Tampa Bay area and previous work elsewhere in the region, especially the Calusa area to the south. We emphasize variability in pathways to collective action, focusing especially on sea tenure and the construction of systems for the mass capture of marine life (i.e., traps or enclosures) but also the relation of these to other collective-choice projects such as aggregation into villages and the construction of mounds. We also consider the contingent histories of resource governance that flowed from variability in the form and ecology of collective property regimes.

## PALEOECOLOGICAL AND ARCHAEOLOGICAL CONTEXTS

Tampa Bay, Florida's largest open-water estuary, covers an area of ∼1,300 $km^2$ (499 $mi^2$) on the west-central coast of the Florida Peninsula (**Figures 1**, **2**). The Y-shaped embayment, comprised of several sub-basins, is oriented on a roughly northeast-southwest axis that extends approximately 60 km (37 mi) from its heads in Old Tampa Bay and Hillsborough Bay to its mouth in Lower Tampa Bay (Morrison and Yates, 2011, p. 17; Yates, 2011, p. 1). The bay is extremely shallow, with an average depth of only about 4 m (Brooks and Doyle, 1998) and with 90% of its area shallower than 7 m (Orlando et al., 1993). Tides are small in amplitude, with a diurnal range of 70 cm. Freshwater input is low, with ∼85% of the inflow to the estuary coming from four principal tributaries: the Alafia, Hillsborough, Little Manatee, and Manatee Rivers.

Once assumed to be a drowned river valley, recent geological findings indicate that the bay is underlain by a number of sinkholes (Brooks and Doyle, 1998; Donahue et al., 2003; Hine et al., 2009). With the melting of ice in the warming that ended the most recent glacial period, the gulf shoreline migrated inland as sea level rose, such that by around 2000 BCE the physiography of the region evolved into something resembling the configuration of modern Tampa Bay (Donahue et al., 2003; Cronin et al., 2007). Pollen records from local sediment cores and interior upland lakes document the expansion of mesic and hydric forests after ∼2000 BP, consistent with continued elevation of aquifers and increasing precipitation (Watts, 1969, 1975, 1980; Willard et al., 2007; Van Soelen et al., 2010). Analyses of stable isotopes (Alvarez-Zarikian et al., 2005; Wang et al., 2011, 2013) and speleothem accumulation (Van Beynen et al., 2008) corroborate this signature and suggest warm and wet climate through ∼600 CE, a local manifestation of the broader warm and wet climatic episode widely referred to as the Roman Optimum (Crumley, 1987; Ters, 1987; Lamb, 1995). These same proxies, as well as pollen data (Willard et al., 2007; Jackson and Pluckhahn, 2020), suggest that generally cooler and drier conditions prevailed from 600 to 850 CE, corresponding with the broader Vandal Minimum that brought cool aridity to much of the globe (Stothers, 1984; Crowley and North, 1991; Meese et al., 1994; Gunn, 2000; Curtis et al., 2001). Peninsular paleoclimate records suggest the return of warm and wet climatic conditions after ca. 900 CE, a pattern that aligns well with the broader Medieval Optimum period (Crumley, 1987; Lamb, 1995; Gunn, 2000). The most recent (and apparently the mildest) cool and arid reversal, known as the Little Ice Age, began around 1300 CE and lasted variably into the Spanish contact period (Alvarez-Zarikian et al., 2005; Walker and Surge, 2006; Van Beynen et al., 2008; Jackson and Pluckhahn, 2020).

Archaeological evidence indicates initial human settlement of Florida before the end of the last ice age, by at least 14,000 years ago (Dunbar and Webb, 1996; Dunbar, 2006; Halligan et al., 2016). However, the earliest evidence of human settlement in Tampa Bay dates to the Paleoindian period (11000–8000 BCE) (Daniel and Wisenbaker, 1987). Settlement increased over the course of the subsequent Archaic period (8000–1000 BCE). Elsewhere on the Florida peninsula, Native peoples began substantial fishing and shellfishing by 5000 BCE, sometimes using food waste to construct massive mounds and midden complexes (Russo, 1991, 1994; Saunders and Russo, 2011; Randall, 2013, 2015; Gilmore, 2016; Randall and Sassaman, 2017). However, extensive shell middens and

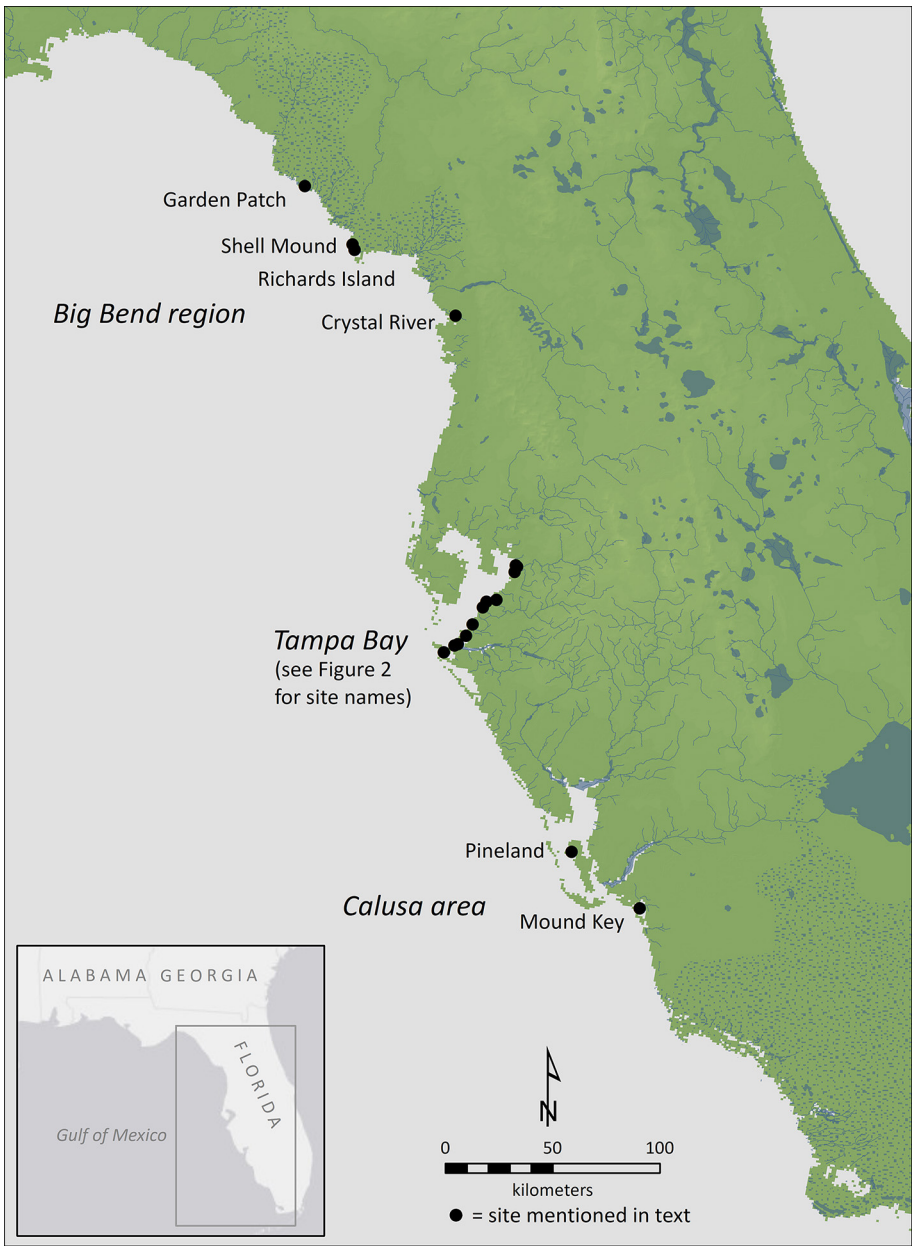


**FIGURE 1 |** The western Florida Peninsula, showing locations of Tampa Bay, the Big Bend region, and the Calusa area (with sites mentioned in the text).

mounds do not appear in the archaeological record of Tampa Bay until the subsequent Woodland period (ca. 1000 BCE to 1050 CE). Villages expanded in number, size, and permanence during this period (Pluckhahn and Thompson, 2018) and, with contemporaneous Hopewellian societies across eastern North America, the Native peoples of Tampa Bay region began constructing small burial mounds (Moore, 1900, 1903). Platform mounds were constructed at several sites along the western Gulf Coast (Wallis et al., 2015; Pluckhahn and Thompson, 2017, 2018), including—as we discuss below—at sites in Tampa Bay. Excavations at a few of the burial mounds in the region produced artifacts of extra-local materials and styles typical of the Hopewell tradition of the American midcontinent (Moore, 1903, p. 409–410; Greenman, 1938), although the bulk of the exchange appears to have been items of local origin (Seeman, 1979; Thompson et al., 2018).

After a period of reorganization late in the Woodland period that included reductions in mound building, trade, and ceremony (McElrath et al., 2000), a new Mississippian way of life emerged from a "Big Bang" at the Cahokia site in the American midcontinent (Pauketat, 1994, 2004). Carried through trade and migrations, Mississippian identity spread from Cahokia to

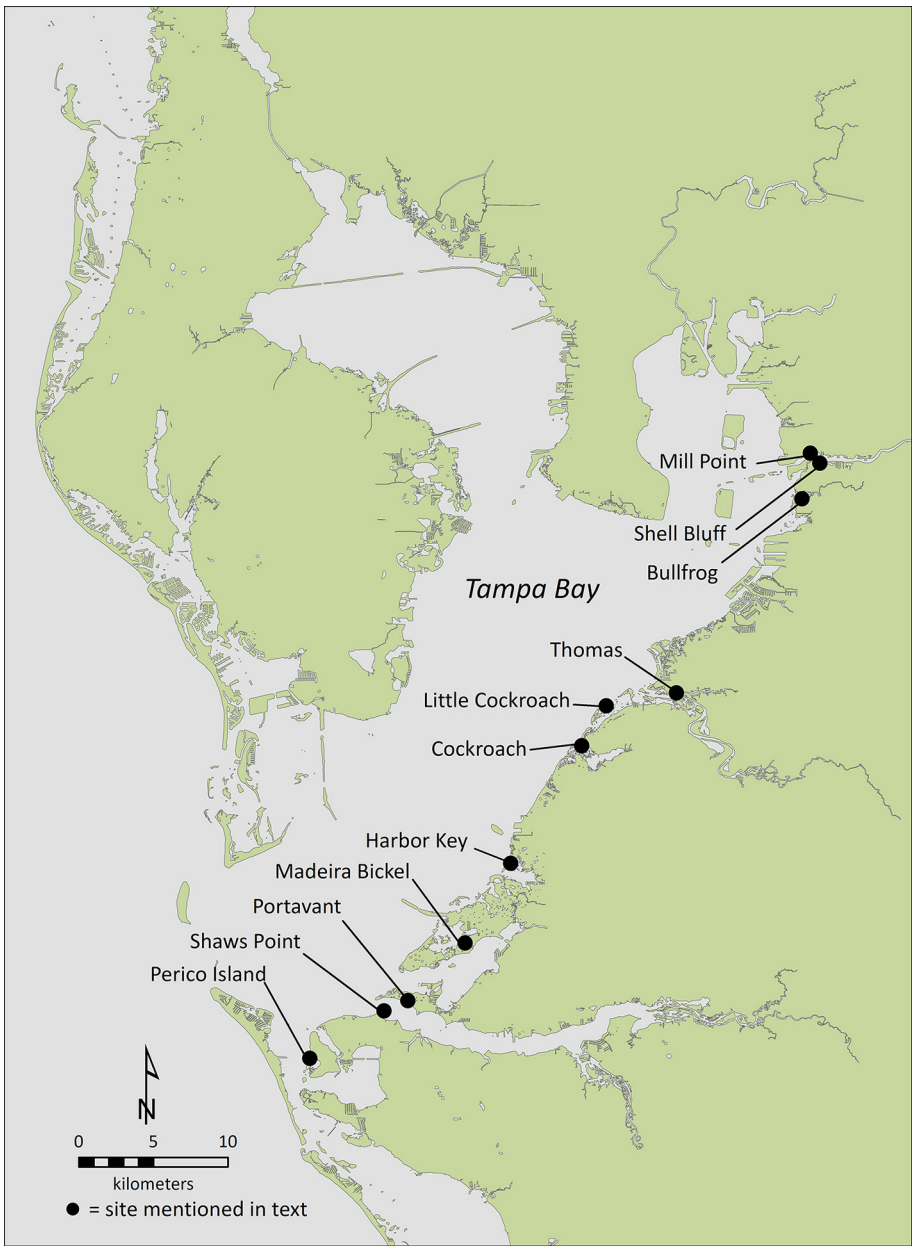


**FIGURE 2 |** Tampa Bay (with additional sites mentioned in the text).

much of the Southeast US, including the Florida peninsula. But the markers of this identity—including hierarchical social organization, larger villages, platform mounds, maize agriculture, and iconographic depictions of cosmological and warrior themes in shell, stone, and pottery—were differentially adopted and reinterpreted locally (Alt, 2006; Blitz, 2010). Mississippian societies in Tampa Bay remained focused on maritime resources rather than maize, and were only weakly integrated into the wider networks of exchange in prestige goods (Griffin and Bullen, 1950; Mitchem, 1989). Nevertheless, ethnohistoric sources from the 1500s describe a socio-political landscape not unlike elsewhere in the Mississippian Southeast, with territorially circumscribed polities led by hereditary "caciques", or chiefs (Milanich and Hudson, 1993; Milanich, 1995; Hudson, 1998).

## EVIDENCE FOR COLLECTIVE ACTION

Ethnohistoric sources from the colonial-era Southeast US, while limited in detail and obviously biased in perspective, suggest that land tenure among the Native societies was largely communal (Swanton, 1911, p. 75, 166; Hudson, 1976, p. 295; Muller, 1997,

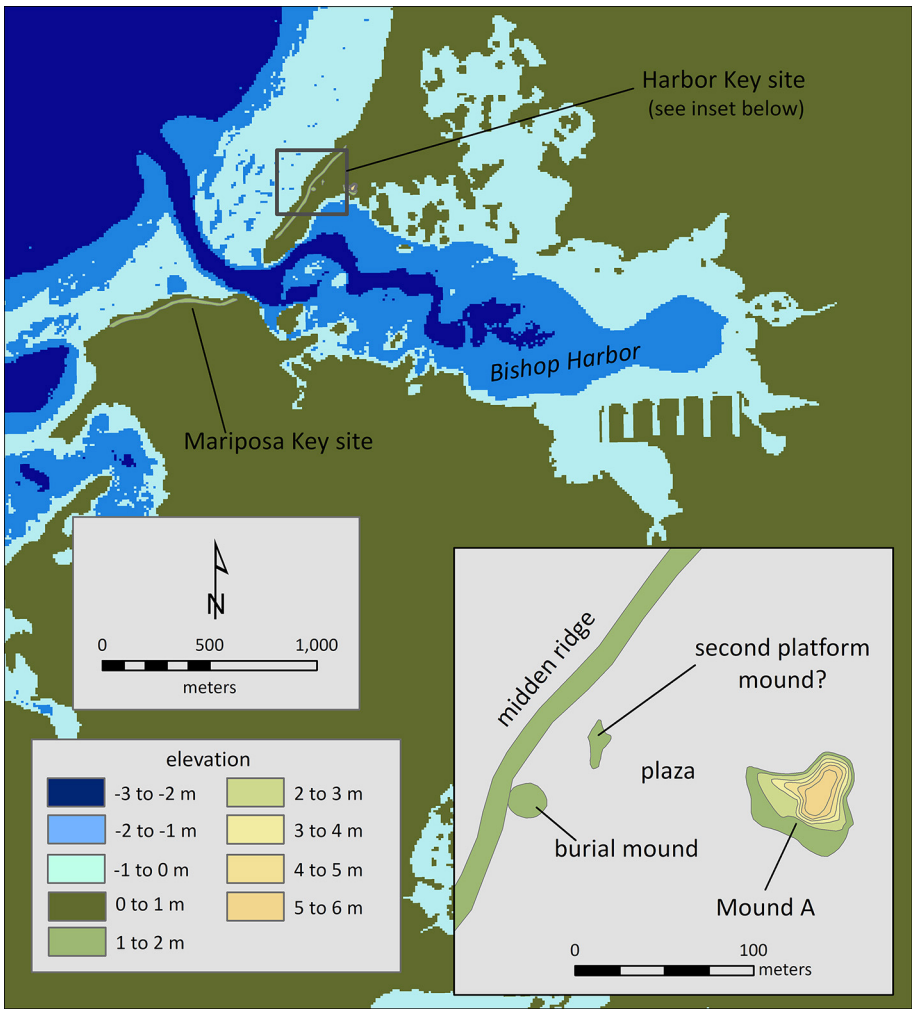


**FIGURE 3 |** Bishop Harbor and associated sites forming enclosure.

p. 268). Large fields were sometimes divided into individual allotments by household or lineage, but the planting of fields was done collectively. In some accounts, chiefs stood on mounds or plazas to call people to work, and imposed fines on those who failed to attend.

Unfortunately, the systems of marine tenure that were employed by coastal- and riverine-dwelling residents of the Native Southeast US were less commonly noted. However, the sparse accounts suggest that fish were sometimes caught en masse in traps or canals. For example, the French explorer René Laudonnière, in his chronicle of a 1562 voyage to the Atlantic coast of Florida, described the traps there as "weirs, or enclosures, made out of reeds like a maze" and capable of "speedily" loading up the French with "trout, mullet, flounder, turbot, and a multitude of other species" (Laudonnière, 2001, p. 20). Laudonnière does not describe how the fish traps he observed were owned or managed. However, an account of the earlier (1539–1542) expedition of Hernando de Soto expedition suggests the chief of a town in the Mississippi River Valley "had there for his recreation and pleasure" a canal capable of producing copious quantities of particularly large and delectable fish (Elvas, 1993, p. 117–118). De Soto was sometimes often offered large quantities of fish as "aid or prestation" to feed his army (Muller, 1997, p. 236). In some cases, tributary offerings of fish may have served mainly as a supplement for maize as supplies dwindled with time since harvest. However, in some portions of the Southeast, fish—rather than maize—constituted the major form of tribute extracted from commoners and exchanged between chiefs (Elvas, 1993, p. 117–118; Rees, 1997).

The archaeological remains of ancient and historic-era fish weirs—while not common–have been identified at a number of sites in the region (Connaway, 1982, 2007). The majority of these were constructed in shallow interior rivers and streams and consist of linear, diagonal, or V-shaped dams, usually formed of rock but sometimes of wooden stakes with withes of cane, and sometimes with a central trap (Connaway, 1982, p. 148). Another form consists of "longshore traps" consisting of straight fences running perpendicular to a river's

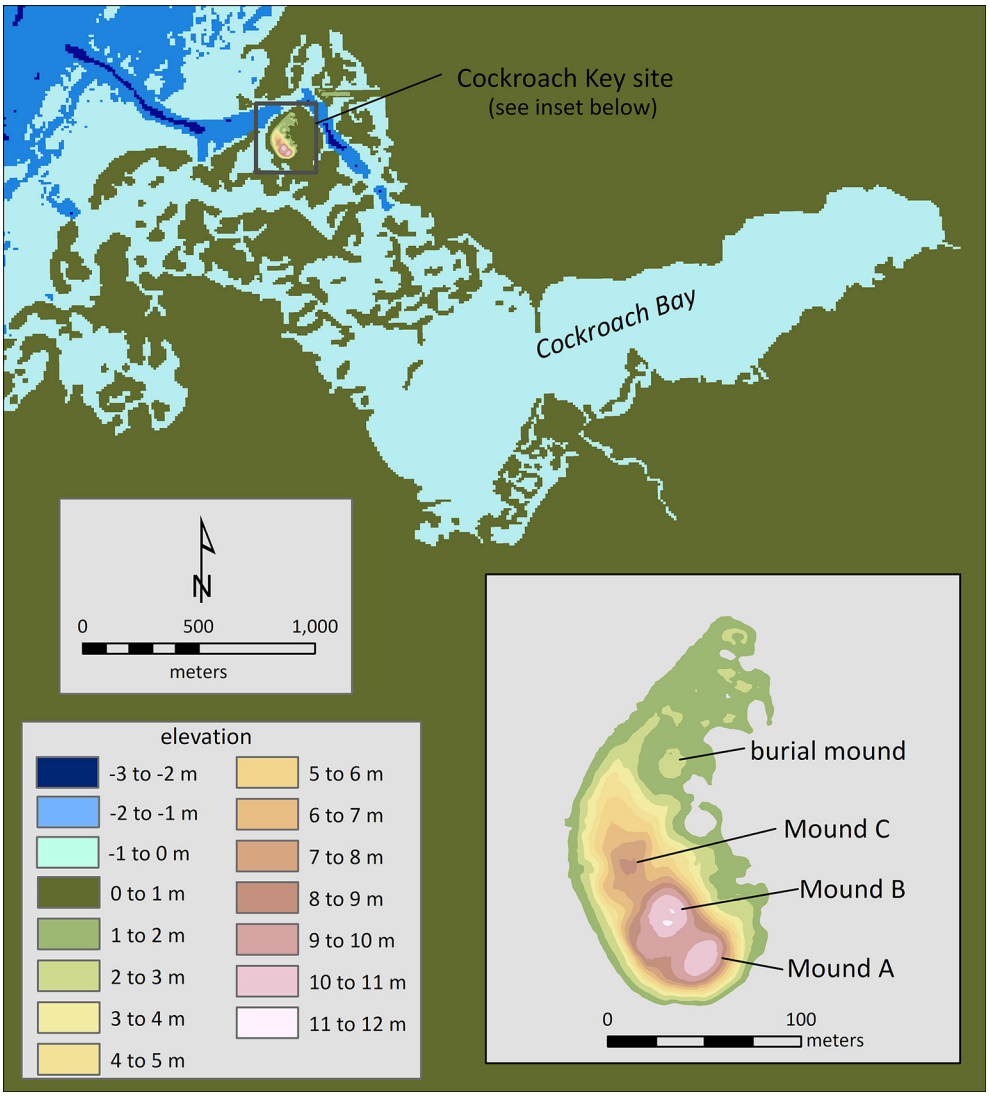


**FIGURE 4 |** Cockroach Bay and associated site forming enclosure.

edge and leading to an impoundment structure, designed to trap fish feeding along a bank or spawning upstream (Connaway, 2007, p. 6). A final basic form consists of tidal weirs constructed of wooden stakes or rocks with a trap at the center, built in bays and tidal inlets to catch fish on outgoing tides.

Until recently, no ancient fish trap sites had been identified archaeologically on the coasts of the Florida peninsula. The paucity of evidence for such technologies is hardly surprising, despite the obvious importance that marine resources held for the region's Native inhabitants. The sandy substrate of the region's coasts and estuaries, combined with the frequency of intense storms, are not conducive to the preservation of intertidal structures of relatively ephemeral construction. Extensive modern development of the coastline further reduces the likelihood that the archaeological remains of such technologies remain preserved.

Nevertheless, recent evidence suggests that fish traps were constructed by precolonial Native peoples in areas both to the north and south of Tampa Bay on the western Florida peninsula. For the Calusa area of southwest Florida, Thompson et al. (2020, p. 8374) present evidence that so-called "watercourts"—"subrectangular arrangements of shell and other sediments around centralized inundated areas" —functioned for the mass-capture and storage of fish. At the Mound Key site, Native people constructed two such impoundments, connected to a "Grand Canal" to form a "single hydrologic system" (Thompson et al., 2020, p. 8377). The authors suggest that the Calusa would have strung nets across the end of the canal to corral fish into the watercourts through openings that could then be likely closed by nets (Thompson et al., 2020, p. 8380). Radiocarbon

dating suggests that construction of the fish trap and storage system began with the Grand Canal sometime around 900 CE (Thompson et al., 2020, p. 8377), and concluded with the addition of the impoundments between 1300 and 1400 CE (Thompson et al., 2020, p. 8380).

For the marsh dominated "Big Bend" area to the north of Tampa Bay, Sassaman et al. (2020, p. 43–44) present evidence that Native peoples built a tidal fish trap consisting of a seawall of oyster shell and muck enclosing a series of tidal pools. While the fish trap could not be directly dated, a nearby midden produced a date of ∼550–650 CE. Sassaman et al. relate the fish trap to summer feasting at Shell Mound, a civic-ceremonial complex around 2 km to the north dating to the interval from around 400–600 CE.

We can't yet point to direct archaeological evidence for the use of similar mass-capture techniques for ancient Tampa Bay. This may simply reflect poor preservation relative to these areas of the coast; certainly, the Tampa-St. Petersburg metropolitan area is more heavily developed. Alternatively, or additionally, it may reflect the lack of concerted attention to the archaeology of Tampa Bay, especially (until recently) using modern methods. However, we suggest another explanation: mass capture technologies employed in Tampa Bay were of a different form, built to take advantage of the numerous small nearshore bayous and embayments along landward margins of the estuary.

Ethnohistoric evidence for this is provided by Garcilaso de la Vega, a chronicler of the Soto expedition which landed in Tampa Bay in 1539. We quote De la Vega's account at length for both its description of the weir and for the hints it provides regarding its collective ownership and management:

> You should know that these Indians had constructed great enclosures of dry rock in the Bay of the Holy Spirit so as to be able to enjoy the skates and many other fish that came in with the high tide and remain there trapped and almost dry when the tide was low. In this manner they caught many fish which the Castilians with Captain Pedro Calderón likewise enjoyed. Thus, it came to pass that 1 day two Spaniards, Pedro López and Antón Galván…desired very earnestly to go fishing, and although they had no permission from the Captain to do so, they set forth in a small canoe, carrying with them a…boy named Diego Múñoz…While these men were fishing in a great enclosure, twenty Indians approached them in two canoes, and in the meantime many others waited for them on the land. Entering the enclosure these twenty men addressed the Christians kindly, some speaking in Spanish and some in their own tongue. "Friends, friends," they said, "let us all enjoy the fish." Pedro López, who was a crude and arrogant individual, replied: "Dogs! We don't have to traffic with dogs." With that he grasped his sword and wounded an Indian who had come near. Then the other Indians, on perceiving the unreasonableness of these Spaniards, hemmed them in from all sides, and striking them with their bows and arrows as well as their oars, they killed Pedro López, who had caused the fracas, and left Galván for dead with his head laid open and his whole face torn by the force of the blows. Diego Múñoz, they took prisoner but did him no further harm because of his extreme youth (De la Vega, 1988 [1605], p. 229–230).

Assuming the veracity of this report,[1] and at the risk of over-interpreting an account of such brevity, we take a number of lessons from De la Vega's relation. First, and most obviously, the late precolonial Native peoples of Tampa Bay constructed systems for capturing marine resources en masse. De la Vega's reference to these in the plural suggests the Spaniards may have seen more examples than the one where this incident occurred. In addition, some of these systems of mass-capture were of relatively large size, as attested to by his description of the feature as a "great enclosure" capable of capturing "many" fish, and apparently large enough to hold at least three canoes at a distance.

The description of the trap as constructed of "dry rock" does not reconcile with the paucity of stone in the region; it is possible that the traps could have been constructed of fossilized coral or limestone, but even these materials are uncommon in the area's surficial deposits. We therefore think it more likely that the enclosures De la Vega describes were comprised of piled shell, which could easily be confused with limestone from a distance, based only on casual observation, or through retelling of the story. Of course, this does not preclude the use of other materials in combination or in place of shell.

Combining these inferences regarding size and material, we suggest that the Native systems of mass capture that the Spanish observed in Tampa Bay may have consisted of small embayments, the mouths of which were artificially restricted by the deliberate piling of shell. By placing nets or stakes at the relatively narrow openings to these embayments, the features could have functioned as tidal fish traps, as the Spanish accounts suggest. However, these artificially enhanced embayments also enclosed other important forms of marine resources, including oyster reefs, clam beds, seagrass meadows, and marshes. For this reason, we refer to these as "corrals" or "enclosures" (borrowing from the Spanish), rather than simply as fish weirs.

De la Vega's account suggests to us that these enclosures were collectively owned and managed. This is most obvious in the Native entreaty to "let us all enjoy the fish," which seems to imply at least collective rights of access and withdrawal. This inference is also supported by the Spaniard's descriptions of the "great" size of the structures and the "many" people who watched the incident unfold from adjacent land. It is possible, and perhaps likely, that smaller traps or cultivation facilities were in place within these larger enclosures. It also seems probable that much fishing and shell-fishing production took place in open waters of the bay beyond these enclosures. For example, among the Native fishers of California and the Northwest Coast, the largest fisheries involved weirs and stone fish-trap enclosures, but much of the

[1]De la Vega, of Spanish and Quechua descent, likely relied on the recollections of expedition-member Gonzalo Silvestre in writing his history; it is thus generally considered a source of uneven reliability (Hudson, 1998, p. 448–453). However, several factors suggest we may be in a position to lend greater credence to this anecdote. First, the incident occurred very early in the expedition, where De la Vega's account most closely approximates the details provided by other chroniclers (Hudson, 1998, p. 450). Next, owing to the fact that Galván survived the attack but with diminished mental capacity, the other soldiers "made this man repeat his tale many times" for their amusement (De la Vega, 1988 [1605], p. 230). We also note that fish weirs were likely familiar to Europeans, given archaeological evidence for their long history on the continent (O'sullivan, 2004; Viveen et al., 2014).

production came from smaller reef-net fisheries and temporary dams targeting seasonal runs of specific species (mainly salmon) (Swezey and Heizer, 1977; Claxton, 2003). We lack evidence for net fishing technologies in Tampa Bay, but it seems likely that these would have been employed at least seasonally, when species like mullet run in dense quantities. Likewise, we expect that much of the shellfish production must have focused on the larger oyster reefs and clam beds beyond enclosures.

Finally, De la Vega's account also makes it clear that the enclosures were actively defended, suggesting collective rights of exclusion. In this regard we note that the Indians did not allow the Spanish to finish fishing before confronting them, but instead appear to have sent two canoes to intervene. The active defense of territory is consistent with Spanish descriptions of well-defined polity boundaries in Tampa Bay, as we noted above.

Based on reconstructions of the De Soto entrada, De la Vega's account is presumed to refer to the southeastern portion of Tampa Bay (Milanich, 1995, p. 71–75; Hudson, 1998, p. 69–71). Although the archaeology of this area is poorly developed, we know that mound sites were established at the mouths of nearly every river and embayment in this portion of the estuary (see **Figure 2**). Proceeding from the southern entrance to Tampa Bay, these include the mound complexes at the Perico Island site at the mouth of Palma Sola Bay; at the Shaws Point and Portavant sites at the west and east ends of the mouth of the Manatee River; at the Madeira Bickel site between Miguel and Terra Ceia Bays; at the Harbor Key site at the mouth of Bishop Harbor; at the Cockroach Key site at the mouth of Cockroach Bay; at the Little Cockroach Key site near the entrance to Little Cockroach Bay; at the Thomas site near the mouth of the Little Manatee River; at the Bullfrog Mound site at the mouth of Bullfrog Creek; and, finally, at the Shell Bluff and Mill Point sites at the mouth of the Alafia River.

At a minimum, the siting of these mounds in conspicuous locations suggests an imperative to claim particular resource locales. But in several cases, the placement of mounds and associated middens also seems to have functioned to further restrict the naturally constricted mouths of small embayments. Perhaps the best example of this is at Bishop Harbor, where linear shell ridges—each at least 700 m long and reaching a maximum elevation of around 1.5 m—were constructed at the Harbor Key and Mariposa Key sites to either side of the mouth of the embayment, restricting the entrance to a channel only about 100 m wide (**Figure 3**). A weir or net across this ca. 1.5 m-deep channel would enclose an area of nearly 2 square kilometers with a maximum depth of only around 1 m below MSL. The modern diurnal tide range in this area of around 0.66 m (NOAA, 2021) is enough to leave portions of the embayment exposed at low tides, perhaps resembling the sort of "great enclosure" described by Vega. At the Harbor Key site, which constricts the northern side of the narrow channel described above, Native peoples erected a platform mound ∼6 m high, with a narrow, rectangular summit measuring about 18 m long and 6 m wide. A ramp extends ∼30 m west-northwest from the summit of the mound to an apparent plaza, bordered on the opposite side by a smaller mound (possibly also a platform, about 1 m high) and a burial mound (roughly 1 m high and 21 m in diameter) (Bullen et al., 1952; Burger, 1979; Wheeler, 2002).[2] Recent radiocarbon dating suggests the larger platform mound was likely initiated around 200–300 CE, with the final mound surface utilized between around 400 and 550 CE.

A second example comes from slightly further north at Cockroach Bay, a ca. 1.5-square kilometer embayment with a maximum depth of around 1 m (**Figure 4**). Recent archaeological work at the Cockroach Key site, building on prior work in the early twentieth century (Moore, 1900, p. 359–361; Willey, 1949, p. 158–172; Bullen, 1952, p. 20–25) indicates that Native peoples began occupying a shoal on the southern bank of the narrow channel leading to this embayment by around the first century CE. Over the following six centuries, the settlement was transformed into a substantial civic-ceremonial complex comprised of a ca. 4-m tall shell midden, three platform mounds (Mounds A and B reaching ca. 10-m tall, Mound C around 5-m high), and a large burial mound. At low tides, the mound complex at Cockroach Key, combined with a series of low islands, effectively limits access to the embayment to the main channel, again approximating the sort of fishing enclosures described for this region by the Spanish in the 1500s.

Ongoing analysis of faunal remains from Harbor Key and Cockroach Key may eventually provide additional archaeological evidence for the catching of fish in enclosures. At present, we can only report that fish and shellfish remains are common, constituting the vast majority of the sediment on the sites. We also note that in their work in a now-submerged portion of the midden at the Cockroach Key in the 1930s, WPA crews noted the presence of "deposits of almost pure fish scales" and interpreted this as evidence for the processing of fish prior to cooking (Bullen, 1952, p. 24).

## ALTERNATIVE PATHWAYS AND CONTINGENT HISTORIES

Archaeological evidence—while not conclusive—supports the ethnohistorical account of ancient systems of mass-capture of marine resources in Tampa Bay, complementing the recent identification of such systems in areas to both the north and south (Thompson et al., 2018; Sassaman et al., 2020). However, the pathways that led to these systems varied, and the resultant facilities took on different physical forms and ecological functionalities. These factors, in turn, also influenced local histories of governance.

Thompson et al. (2018, p. 39) provide a model for the development of collective action in the Calusa area that focuses on the appearance of larger corporate kin groups and their ability to transform surplus labor into the construction of large-scale public works, especially in the context of environmental change. Briefly, they suggest the process began sometime soon after 500 CE as households reorganized from single to multi-family units, evidenced archaeologically by the appearance of larger dwellings, in response to an inferred episode of sea level regression and climatic instability ca. 650–800 CE (the Vandal Minimum) (Thompson et al., 2014, 2018, p. 39). As

[2]Milanich, J. T. (unpublished report). *The Bishop Harbor Archaeological Complex. Report on File, Florida Master Site File*. Tallahassee, FL.

more favorable climatic conditions returned ca. 800–900 CE, multi-family households came together to form co-resident communities, aggregations that were facilitated through their cooperation in the construction of canals within and between settlements. Eventually, as noted above, some communities also constructed systems for the mass capture and storage of fish (Thompson et al., 2020).

The pathway to collective action seems to have been much different on the stretch of coastline to the north of Tampa Bay. Here, a series of marine transgressions around the beginning of the first millennium appear to have prompted aggregations of small households into villages around the first or second century CE (Pluckhahn et al., 2015; Wallis et al., 2015; Pluckhahn and Thompson, 2018; Sassaman et al., 2020), well-before such aggregations appeared to the south in the Calusa area. Many of these villages seems to have developed in locations where burial mounds had already been established; evidence from the Crystal River site suggests that sea level rise may have prompted residents of the coast to congregate more permanently in better protected locations where they had formerly gathered seasonally for mortuary ceremonies (Thompson et al., 2015; Lulewicz et al., 2017). Sassaman et al. (2020, p. 27) (see also Sassaman et al., 2019) suggest that the early village at Shell Mound was established on a "solstice-oriented dune", reflecting a new temporality that emphasized cycles of renewal in the face of landscape change. In their telling, beginning around 400 CE and continuing for at least 250 years, these cycles were marked by ritual feasting at the summer solstice, provisioned—at least in part—by the mass capture of mullet and other fish (Sassaman et al., 2020, p. 43).

Perhaps not surprisingly, given its intermediary location, the history of collective action in Tampa Bay finds both intersections and divergences from these case studies. As with areas to the north, there is evidence that collective action here increased in the first or second century CE with aggregation into villages at sites such as Cockroach Key and Harbor Key. Also like the areas to the north, the initial impetus for population aggregation may have been a pulse in sea level rise; recent sediment coring in several areas of Tampa Bay (see also Gerlach et al., 2017) suggests a marine transgression also occurred here around the first century CE, causing a relatively rapid replacement of marsh by sand flats and seagrass beds. Both sites contain burial mounds but we are unable to say if these predate the period of village formation, as seems to have often been the case to the north. Ongoing isotopic studies of oysters may clarify if the settlements grew more permanent over time.

Whatever the circumstances of their founding, the villages at Harbor Key and Cockroach Key expanded over the course of the next few centuries, corresponding with the favorable conditions of the Roman Optimum. This trajectory closely parallels mound sites to the north at Crystal River (Pluckhahn and Thompson, 2018), Garden Patch (Wallis et al., 2015), and Shell Mound (Sassaman et al., 2020). As at these other sites, copious quantities of shell from oysters and marine gastropods, as well as the bones of fish and other marine vertebrates, were deposited as a result of both daily subsistence and ritual feasting.

Unfortunately, we have little record of rituals specifically relating to fishing in the US Southeast; ethnohistoric accounts are biased to the agricultural-related rituals of later pre-colonial interior societies. Still, one account from the 1700s is suggestive of the possibility that these might have been more common than evidence allows; James Adair described Native peoples of the region driving fish into traps, after which "they make a town feast, or feast of love, of which every one partakes in the most social manner, and after which they dance together, singing…their usual praises to the divine essence, for his bountiful gifts to the beloved people" (Adair, 1986, p. 432–433). Archaeologically, we know that feasting debris was commonly used to construct platform mounds, which were enlarged in a series of stages that evoke rituals of renewal, as described by Sassaman et al. (2020) for Shell Mound but as seem to have been common for the public monuments of the Woodland period more generally (Knight, 1990, 2001; Kassabaum, 2021; see Claassen, 2010 for discussion of rites of renewal in earlier periods).

Fishing-related feasting and ritual, by satisfying social and cosmological debts (Cobb and Stephenson, 2017, p. 160) and by encouraging cooperative behaviors (Carballo et al., 2014; Miller, 2021), may have been the primary social institutions for mitigating collective action problems. McNiven (2004) describes how the public rituals of indigenous fishers of Australia, by invoking spirits of the sea and the dead, mediated marine tenure at various scales of inclusiveness, from household to clan and larger communities. Pluckhahn and Thompson (2018, p. 116) likewise suggest that public ritual at Crystal River served in part to regulate access and conflicts over resources such as shellfish beds and fishing locations. As DeMarrais and Earle (2017, p. 191) observe, "face-to-face interactions sustained over years, kinship, and shared cosmologies foster trust, reciprocity, and reputation, which, in turn, facilitate cooperation" (see also DeMarrais, 2016, p. 3). The modular organization of small-scale societies facilitates the transfer of cooperation from one form or context to another (Roscoe, 2009; Miller, 2021; see also Carballo et al., 2014, p. 112). This may help explain how cooperation in the context of ritual transferred to greater collective action in subsistence production, as evidenced by the fish traps documented by Sassaman et al. (2020). We suggest the same may hold in Tampa Bay, as Native peoples employed the food remains from collective rituals to construct enclosures for collective subsistence production.

Sassaman et al. (2020, p. 22) see ecology and economy playing a secondary role to cosmology in the development of fish traps in the area of Shell Mound. However, we see the economic motivations as equally important for the development of collective action among the Native societies of Tampa Bay. Specifically, the siting of villages and mounds in highly visible locations at the mouths of small embayments with high resource potential suggests to us that sea tenure became more exclusive. As Roscoe (2006, 2009, 2017) notes, village formation is often predicated on collective interests in subsistence and defense, even in the absence of offensive warfare. Territoriality typically develops "when the benefits of holding a bounded area are higher than the costs of defending it" (Acheson, 2015, p. 30). This "economic defendability" is influenced by a number of factors but especially the abundance and predictability of resources (Dyson-Hudson and Smith, 1978, p. 23; Cashdan, 1983, p. 47). Shoreline retreat and the onset of optimal climate during the first centuries CE may have made estuarine resources both more abundant and predictable, incentivizing aggregation and the staking of claims

to productive territories. The construction of enclosures further augmented the "economic defendability" of key areas.

In sum, collective action in Tampa Bay and the Big Bend region to the north seems to have progressively ramped up across the first half of the first millennium CE, in a period of relatively favorable climate: from aggregation into villages, to the construction of mounds, and on to the establishment of enclosures and more exclusive systems of sea tenure. There are differences between the two areas—we have suggested that competition may have been a greater factor in motivations behind the development of more exclusive property rights in Tampa Bay—but their histories are more similar than different.

The same cannot be said for the Calusa area to the south. Marquardt and Walker (2013, p. 877) report little evidence for mound construction in the region before 1000 CE. Thompson et al. (2018, p. 39) suggest that collective action here began with the drier and cooler conditions of the Vandal Minimum (ca. 650 CE), as single families responded to environmental challenges by combining to form multi-family units that resided together in larger structures (up to 20 m a side) and cooperated in resource extraction (Thompson et al., 2014, p. 67; Thompson et al., 2018, p. 35). Collective action thus came to be structurally embedded in Calusa society through kinship and residence patterns (Thompson et al., 2018, p. 39), consistent with Miller (2021, p. 166) observation that "cooperation begins at home." As more favorable climatic conditions returned ca. 850 CE, multi-family households came together to form larger communities and began cooperating in larger collective action projects, including the construction of mounds and canals. Eventually, as noted above, some communities also constructed systems for the mass capture and storage of fish (Thompson et al., 2020).

If the pathways to collective action were different in the Calusa area than they were for Tampa Bay and the Big Bend, so too were the forms of collective action projects. Specifically, although collective action may have been slower to develop in the Calusa area, may have formed more in relation to resource scarcity than plenty, and may been founded more in kinship than in public ritual, it eventually resulted in projects of greater scale and complexity. To an extent, these differences may simply reflect differences in physiography, one of the factors Acheson (2015, p. 37–39) identifies for variation in sea tenure. The enclosures and traps in the Tampa Bay and Big Bend regions, in that they took advantage of natural embayments, likely required less labor.

However, as Acheson further notes, the character of sea tenure also varies with social factors, including the effectiveness of political leadership. In this regard, it seems apparent that Calusa leaders were able to mobilize and manage labor more effectively than their counterparts to the north. For example, the main canal at Pineland in the Calusa area ran ∼4 km and would have required the excavation of some 30,000 cubic meters of sediment (Marquardt and Walker, 2013, p. 880–881), dwarfing the labor invested in the construction of even the largest (10-m tall) mounds in Tampa Bay at the Cockroach Key site. Likewise, the facilities for trapping and storing fish that the Calusa developed—while relatively small in areal extent—would seem to have required more planning and greater coordination than the simple tidal traps identified by Sassaman et al. (2020) at Richards Island or the large enclosures inferred by us for Tampa Bay. Beyond the greater labor required for their construction, Calusa canals and fish traps would also seem to have required more maintenance, since they would have been prone to sedimentation.

Sea tenure is also influenced by the size of population (Acheson, 2015, p. 37–39), and it seems likely that the greater complexity of the Calusa systems of mass capture was both product and factor in the higher density of people there relative to Tampa Bay and the Big Bend area to the north. Certainly, at least the Calusa towns appear to have been more densely packed. Historical accounts indicate that the capitol town of Calos at the Mound Key site was home to ∼1,000 people, residing in 16 very large houses that held an average of 63 people each (Marquardt and Walker, 2013, p. 853–854). The chief's house was said to be capable of holding 2,000 people. In contrast, a Spanish account from the sixteenth century describes the Native town of Ucita—presumably among the larger communities in Tampa Bay—as consisting of "seven or eight houses" in addition to the chief's house on top of a mound (Robertson, 1993, p. 57). The houses in Tampa Bay are generally described as small "huts," although there is one mention of a structure that could hold "more than three hundred people" (Worth, 2014, p. 92). Archaeological evidence of domestic architecture in Tampa Bay, while limited, is consistent with these descriptions of smaller houses (Willey, 1949, p. 167–168; Woods and Austin, 1995).

As we noted above, Schlager and Ostrom (1993) have observed that property rights may vary with regard to access, withdrawal, management, exclusion, and alienation. Thompson et al. (2018, p. 39) see the Calusa canals and fish traps as intended "for broad-scale benefit, not restricted in their use." Certainly, this must have been true, broadly speaking; canals likely made travel into the interior safer and more efficient, enhancing connections to other population centers (Marquardt and Walker, 2013, p. 881; Thompson et al., 2018, p. 39–40). Likewise, the construction of systems for trapping and storing fish required "coordinated effort and collective buy-in from larger segments of society" and may have enhanced food security for the population at large by a more permanent and less seasonally variable supply of fish (Thompson et al., 2020, p. 8380).

But there are reasons to suggest that the rights to the access, withdrawal, and management of collective infrastructures was more restricted among the Calusa. For example, canals were located in close proximity to mounds associated with the most prominent lineages, suggesting that they may have been controlled locally by Calusa elites (Thompson et al., 2018, p. 39). The proximity of elite household or lineage groups to canals would have made it far easier for them to monitor who was extracting what and where resources were going to, making it more difficult for commoner households to resist hegemonic obligations. At a broader scale, while the canals may have fostered "inter-community cooperation" (Thompson et al., 2018, p. 39–40), they likely also functioned to move tribute to political centers (Luer, 1989; Thompson et al., 2018, p. 39–40). In addition, while the fish trapping and storage facility at the Calusa capital of Mound Key probably provided resources for community feasting, some elite households—by way of their closer proximity and the addition of restricted ramps—seem to have enjoyed

privileged access to these facilities and their products (Thompson et al., 2020, p. 8380). In the terminology developed by Schlager and Ostrom (1993) to describe the rights of fishers, Calusa elites may have come to serve more as owners or proprietors of collective-choice rights than simply claimants or users.

The comparative analysis of pre-modern states undertaken by Blanton and Fargher (2008, p. 14) indicates that controls on ruler agency are predicated on their bargaining with "taxpayers," whose position depends largely on the extent to which rulers are dependent on them for achieving their revenue goals. It would thus not be surprising if the more restricted nature of Calusa fish impoundments had important ramifications for governance. Marquardt and Walker (2013, p. 886) and Marquardt (2014, p. 14) has previously suggested that state-level governance emerged among the Calusa only in the 1500s, when their leaders began monopolizing the people and treasures recovered from Spanish shipwrecks. However, he and his colleagues now suggest that Calusa "kings" emerged several centuries earlier, as individual lineages gained greater prominence through the control of surplus fish stocks (Thompson et al., 2020, p. 8380; Marquardt et al., 2022, p. 2). Abetted by its control of canals that facilitated interregional connections from the capital at Mound Key (Marquardt and Walker, 2013, p. 880–881), the Calusa developed into a weak-tributary state governed by a hereditary king who ruled a population divided into nobles and commoners (Hann, 1991; Marquardt, 2014). The introduction of Spanish goods and people in the sixteenth century may thus have only amplified elite proprietor rights to the access, withdrawal, and management of collective infrastructures. In any case, by the 1500s, the Calusa king held sway over much of the southern Florida peninsula, collecting tribute from more than 20,000 subjects across 50–60 communities (Marquardt et al., 2022, p. 1). Marquardt et al. (2022) note that the Calusa king and his closest kin "held strictly guarded religious knowledge" (see also Marquardt, 2014, p. 14, 16). This, coupled with the oversized proportions of Calusa ritual structures suggests that ritual here possibly leaned to forms that Blanton (2016, p. 24) terms "constitutive" and defines as intended to affirm the legitimacy of monarchical rule through spectacle.

In contrast, the political landscape of Tampa Bay remained more heterarchical, as evidenced by Spanish descriptions of smaller territorial polities with shifting boundaries, often speaking different languages, and frequently at war with one another (Mitchem, 1989, p. 594; Milanich, 1995, p. 72–73; Hudson, 1998, p. 69–85). Chiefs here appear to have had relatively limited authority, with no evidence of the pronounced status distinctions that seem to have held among the Calusa. As in the Calusa area chiefs here may have played a prominent role in public rituals but these rites seem to have centered on broadly-held principles of renewal (as described above), rather than the sort of esoteric knowledge controlled by Calusa kings. Spanish accounts suggest that villages in the Tampa Bay area often included small temples and charnel houses, typically placed on the central plaza opposite the chief's house (Robertson, 1993, p. 23; Milanich, 1995, p. 75–76). The apparent visibility and inclusivity of ritual calls to mind the rites of inclusion and "doing together" that Blanton (2016) associates with more collective forms of governance.

Eventually, after Spanish invasions destabilized many of these polities, one group—the Tocobaga—appears to have consolidated power over many of its former rivals, at least for a short interval (Milanich, 1995, p. 74; Mitchem, 1989, p. 596). Spanish accounts attest to the chief's ability to organize a force of an estimated 1,500 warriors over the course of a few day (Solís de Merás, 2017, p. 178), suggesting that Tocobaga may have been able to consolidate power over a larger area. As in the Calusa case, some of Tocobaga's power may have been tied to the control of precious materials and people salvaged from Spanish shipwrecks (Milanich, 1995, p. 74). But Tocobaga's reign would soon end at the hands of their Calusa rivals (Hann, 1991, p. 262).

Given the paucity of historical records and the limited state of archaeological knowledge, we would be hard pressed to systematically compare the Native sociopolitical systems in Tampa Bay and the Calusa area with regard to variables of good governance (Blanton and Fargher, 2008, p. 133–248). In a qualitative sense, Calusa collective action projects seem to have provided more in terms of public goods, including transportation infrastructure (e.g., canals), public safety (e.g., establishment of a regional hegemony that suppressed internecine conflict), and support of ritual events and religious institutions. But the Calusa also seem to have exhibited fewer controls over authoritarian governance, with principals exercising a greater degree of control over material resources (e.g., fish, Spanish gold and slaves) and more differentiation with regard to standard of living (e.g., oversized houses).

## CONCLUSION

Feinman (2017, p. 463) observes that "cooperation dilemmas are met through the implementation of problem-oriented innovations or 'social contracts' that serve to negotiate or establish the bases for specific, yet variable, arrangements of leadership, power, and religious behavior." This variability of arrangements is true as much for maritime societies as any other, a fact well-documented by ethnographic studies of contemporary fishers but rarely addressed by archaeologists for past maritime societies.

Our comparison of the Native maritime societies of the western Florida peninsula identifies variation in pathways to collective action, the resultant development of the property-rights regimes, and the contingent histories of governance. Specifically, collective action became more important in Tampa Bay in the first centuries CE, as groups staked claims to productive estuarine locations through the founding of villages and the construction of mounds and enclosures for the capture of marine resources. In contrast, collective action was slower to develop in the Calusa area, may have formed more in relation to resource scarcity rather than plenty, and may been founded more in kinship than in public ritual. However, it eventually resulted in projects of greater scale and complexity, which we suggest were also more exclusive with regard to collective-choice rights and more authoritarian with regard

to governance. As with the Native peoples of Tampa Bay described by the Spanish, the Calusa may have collectively "enjoyed the fish," but some may have enjoyed more fish than others.

## DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

## AUTHOR CONTRIBUTIONS

All authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication.

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# The Foundation of Monte Albán, Intensification, and Growth: Coactive Processes and Joint Production

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Most early sedentary villages (c. 1500–500 BCE) in the Valley of Oaxaca, Mexico, were situated on or near well-watered land. Around 500 BCE, a new hilltop center, Monte Albán, was established at the nexus of the valley's three arms, where agriculture was far riskier due to unreliable rainfall and a dearth of permanent water sources. During the era of its establishment, not only was Monte Albán larger than any earlier community in the region, but many other settlers moved into the rural area around Monte Albán. This marked shift in settlement patterns in the Valley of Oaxaca and the underlying processes associated with the foundation of Monte Albán have long been debated. How can we account for the immigration of people, some likely from beyond the region itself, to an area where they faced greater risks of crop failure? One perspective, reliant on uniform models of premodern states as despotic, viewed the process from a basically top-down lens; leaders coerced subalterns to move near the capital to provide sustenance for the new center. Yet more recent research has found that governance at Monte Albán was generally more collective than autocratic, and productive activities were centered in domestic units and not managed from above. Based on these new empirical foundations, we reassess earlier settlement and land use studies for the Valley of Oaxaca and view this critical transition as initiated through coactive processes in which new institutions were formed and new relations forged. Shifts in defense, ritual, domestic organization, craft production, and exchange all coincided with this episode of growth fostered by joint production, which intensified agrarian yields through increased domestic labor investments.

**Keywords: prehispanic Mesoamerica, Valley of Oaxaca, good governance, distributed power, agricultural intensification, economic growth**

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## INTRODUCTION

With its time depth, archaeology has a novel perspective on the intensification of land use and food procurement (e.g., Stephens et al., 2019), the process through which greater labor inputs are allocated to enhance productivity yields per unit of land. For many decades, explanations for intensification have been framed in two principal ways. One, mainly focused from the bottom up and grounded in the writing of Boserup (1965), views the process as provoked by population pressure on resources and inadequate food supplies, which necessitated that people work harder and take steps to enhance yields through their added labor allocations. The second, underpinned by entrenched truisms regarding the uniformly autocratic, top-down governance of premodern

societies (Carneiro, 1970; Marx, 1971), views agrarian intensification as the outcome of elite coercion to foster the accumulation of greater surplus and wealth. These two perspectives are not mutually exclusive and have been combined in some arguments (e.g., Sanders et al., 1979). Likewise, they are compatible with the presumption that premodern growth was uniformly constrained by Malthusian factors (but see Netting, 1990; Erdkamp, 2016; Van Limbergen et al., 2020).

Here, we examine an episode of intensification, demographic increase, and economic growth that we argue was neither spurred by demographic pressure nor directed through top-down coercion. In focusing on land use, settlement, and institutional changes at and around the prehispanic Zapotec city, Monte Albán (Valley of Oaxaca, Mexico), during the episode bracketing the city's foundation, we explore a historical chapter in which agrarian intensification occurred in a context of the formation of new institutions of good ("collective") governance (e.g., Bevir, 2012, p. 101–119; Rothstein, 2014; Blanton et al., 2020) that ultimately underpinned the site's 1,300-year duration as the principal central place in its region. We view increased labor inputs both from the bottom up, the factors that attracted domestic units to an emergent center and prompted their investment in significant landscape modifications, and from the top down, the new institutions that drew in-migrants and established a cooperative basis for defense and security that encouraged interhousehold cooperation and sunk-cost (landesque capital) investments (Janssen et al., 2003; Fisher and Feinman, 2005) in terracing and other small-scale agrarian intensifications (Hakansson and Widgren, 2007; Widgren, 2012). At early Monte Albán, intensification was part of a process of joint production (Blanton and Fargher, 2016, p. 245–281) in which higher labor inputs, greater yields, increased population, and intensified economic activity were tied to new socioeconomic arrangements that relied on the exaction of internal resources, muted elite aggrandizement, enhanced defense, transfers through emergent networks of marketplace exchange, and new modes of interpersonal interdependence and cooperation.

In subsequent sections, we begin with background to prehispanic Mesoamerica, the Valley of Oaxaca, and Monte Albán with a focus on agriculture, production, and the domestic economy. We then review governance and institutions at the valley's central city, focusing on the early periods of its occupation. Based on these discussions, we do not see Monte Albán's establishment as an entirely top-down process (Feinman et al., 2021a). We then move to a more in-depth discussion of settlement, land use, and agrarian productivity in the Valley of Oaxaca, covering the period from before Monte Albán through its episode of most rapid growth. We find no empirical support for population pressure. In conclusion, we present a scenario for joint production and the suite of changes that occurred during the centuries that followed the emergence of Monte Albán. This episode has broader comparative implications for how we conceptualize premodern intensification, governance, economic growth, and their iterative linkages.

## BACKGROUND TO OAXACA AND MONTE ALBAN

Monte Albán was founded c. 500 BCE at the nexus of the three arms of the mountain-ringed Valley of Oaxaca, the largest expanse of flat land in Mexico's Southern Highlands (Blanton, 1978; **Figure 1**). The hilltop settlement grew rapidly to become one of the earliest cities in prehispanic Mesoamerica, a premodern world that stretched across the southern two-thirds of Mexico to the western parts of Honduras and El Salvador. By the time Monte Albán was established, more than a thousand years had passed since foragers transitioned from mobile lifeways to sedentary communities. Maize, beans, and squash, which had been domesticated prior to village formation, were key elements of an agricultural economy, with maize providing the bulk of calories. Early villagers also exploited a mosaic of other natural resources including clay for making ceramic vessels and figurines, stone for making tools and ornaments, and xerophytic plants and succulents that supplemented agricultural produce and provided fiber that was processed into a range of woven products. Yet, even from the earliest sedentary settlements, households were largely not self-sufficient and consumed a range of goods that they did not produce, including obsidian, obtained through both local and long-distance exchange networks (Feinman et al., 2018a; Nicholas et al., 2021). The shift to sedentary life required more than just technological and subsistence innovations; it also was a social process through which formerly dispersed populations not only adjusted but committed to living in larger communities and interacting with larger groups of people on a daily basis.

The three arms of the large Y-shaped Valley of Oaxaca are defined by the Atoyac River and its principal tributary, the intermittent Salado River. The climate is semiarid, rainfall is unpredictable and spatially patchy across the region, and not all sectors of the valley floor receive the minimum annual precipitation (700 mm) necessary for reliable rainfall farming of maize. Valley terrain comprises three principal environmental zones—alluvial valley floor, foothills (piedmont), and mountains—that also are unevenly distributed across the valley and provide an array of resources and different opportunities for farming (Kirkby, 1973; Kowalewski et al., 1989, p. 20–24; Nicholas, 1989).

The prime factor that determines maize productivity is the availability of water (Kirkby, 1973), and a diversity of water management practices have been used since prehispanic times (Flannery et al., 1967; Flannery, 1970). These manipulations, which increase agricultural yields, include wells and pot irrigation, check dams, and small-scale canals, all of which were easily managed or implemented at the household level (**Figure 2**). For prehispanic Mesoamerica more generally, a rich array of documentary and archaeological evidence has documented that production—both craft and farming—was situated almost entirely in domestic contexts and was not centrally managed or controlled from above (Feinman, 1999; Hirth, 2009). Domestic production, household mobility/migration, multicrafting/multiple occupations per domestic unit, and marketplace exchange are recurrent patterns in Oaxaca and

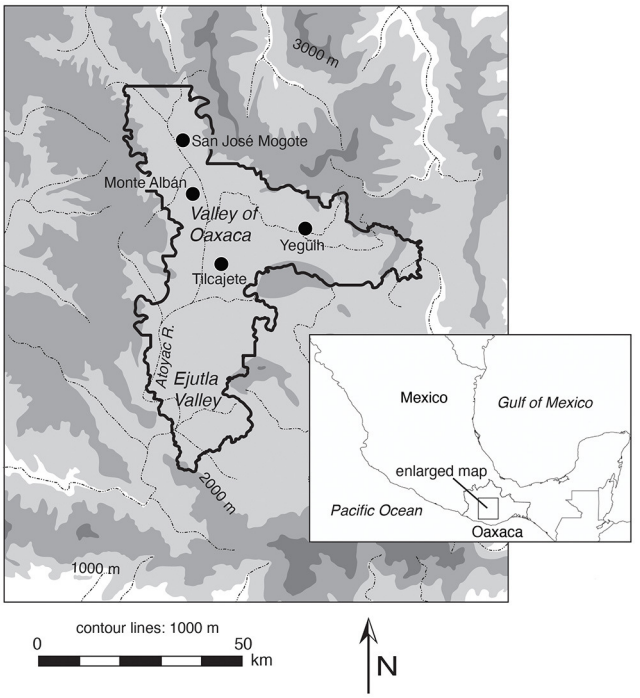


**FIGURE 1 |** The Southern Highlands of Mexico, showing the limits of the regional surveys, which encompass the Valley of Oaxaca and adjacent Ejutla Valley, and the location of Monte Albán and pre-Monte Albán head towns.

**FIGURE 2 |** Water manipulation practices in the Valley of Oaxaca: small well (top), check dams (center), and small irrigation channel (bottom).

Mesoamerica more broadly (Taylor, 1972; Feinman, 1999, 2006; Inomata, 2004; Feinman and Nicholas, 2007, 2012; López Corral and Hirth, 2012; Inomata et al., 2020), and they remain key elements of the contemporary Mexican economy.

The Valley of Oaxaca was a core politico-economic region of prehispanic Mesoamerica (Palerm and Wolf, 1957). The mapping project at Monte Albán (Blanton, 1978) and regional surveys of the valley and adjacent areas (Blanton et al., 1982; Kowalewski et al., 1989; Feinman and Nicholas, 2013, 2017a; **Figure 1**) recorded the settlement history of the region, including population levels estimated for each site following widely accepted practice and procedures that use site area as the principal empirical component (see Hassan, 1981, p. 66–72; Drennan et al., 2015, p. 16–25). Prior to Monte Albán's founding, most of the populace resided in one of three clusters of settlements, one in each arm of the valley, which were separated from the others by largely unoccupied areas, including the center of the valley where Monte Albán was later situated (Blanton et al., 1999, p. 42). In each arm, a cluster of smaller communities surrounded one larger settlement that had special functions and served as the "head towns" of small competing polities. At the largest of these, San José Mogote, and other surrounding sites, iconographic symbols on ceramic funerary offerings signaled social segmentations both within and between settlements (Marcus, 1989; Marcus and Flannery, 1996, p. 95–96; Blanton et al., 1999, p. 39–42).

This millennial pattern was broken c. 500 BCE when Monte Albán was built on a steep hilltop in the center of the valley (Blanton, 1978; **Figure 3**). The settlement's establishment and rapid growth in size and monumentality set off a dynamic episode of innovation and change that included demographic, dietary, and other economic shifts (**Table 1**). Populations grew rapidly not only at the new center, which became the largest and most monumental city in the valley's prehispanic history, but also in the surrounding countryside (Blanton et al., 1993; Feinman and Nicholas, 2013, p. 52). This dramatic episode of change required

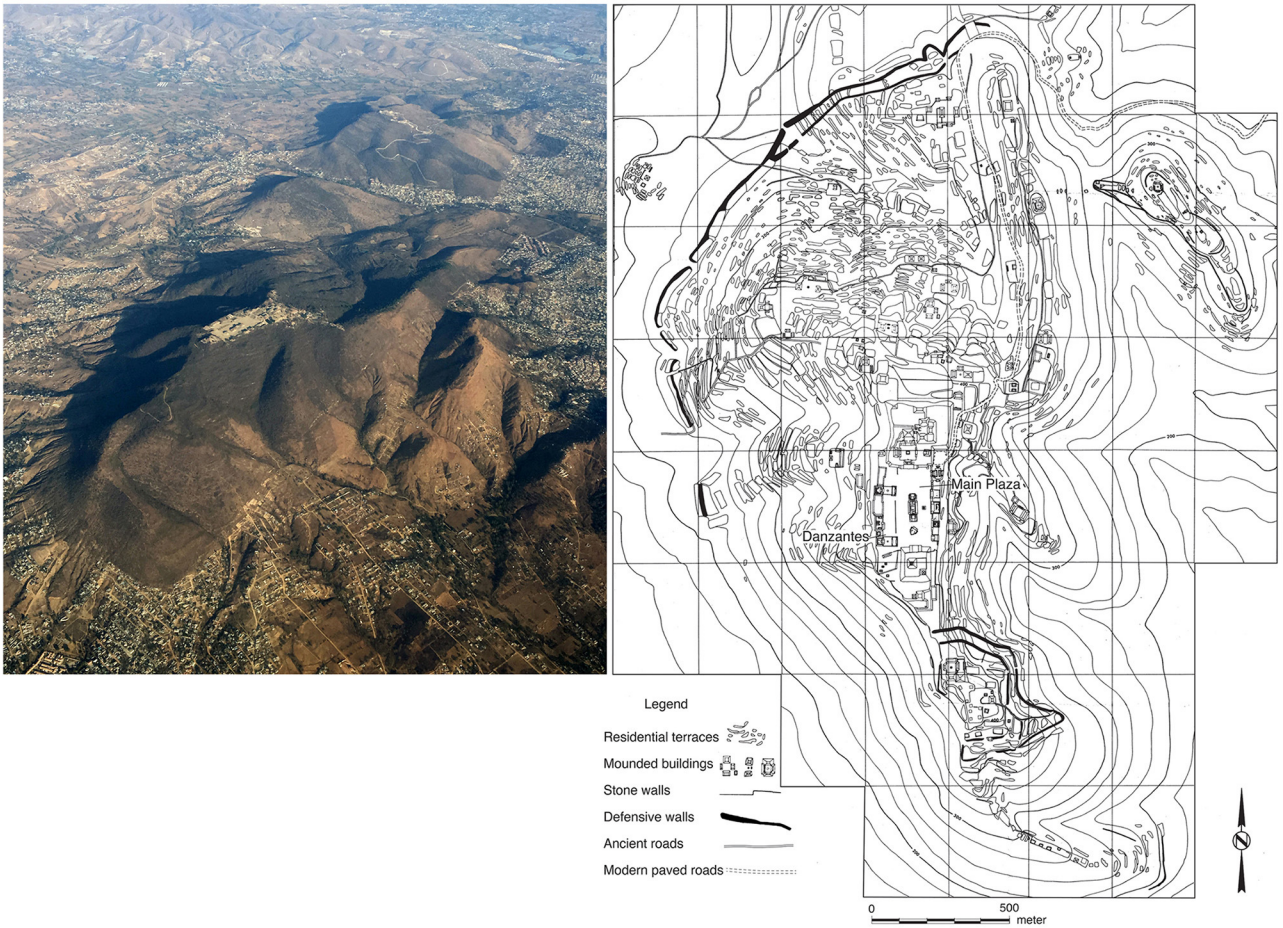


**FIGURE 3 |** Monte Albán: ruins visible on hill in the center of the Valley of Oaxaca (left) and map of the main hill (right, adapted from Blanton, 1978, Figure 1.3).

the coordination of huge expenditures of labor to build the new city. The rocky hilltop was flattened into a large Main Plaza with monumental buildings constructed along its edges. The scale and orientation of this central plaza represent a key transition from prior community plans in the region, as did the expanded use of carved stone monuments, calendric information, and short glyphic texts (Caso, 1965; Marcus, 1976, 1980, 1992, p. 70–71). 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. At that time, small-scale irrigation features were constructed on the lower slopes of the hill (O'Brien et al., 1982; Rojas and Beccan Dávila, 2020).

There is overall agreement that the establishment of the new center was an episode of transformational change—a hinge point—in the historical trajectory of the region. Proposed explanatory frames have been diverse but largely follow two main approaches. One set emphasizes mostly bottom-up, human/land processes that stress the importance of environmental factors and land quality in the settlement decisions that individuals make (Sanders and Nichols, 1988). Other explanations are top-down, seeing settlement decisions, or the rise of a new center, as the outgrowth of the increasing power of elites and their use of coercion. In this approach, which affords agency exclusively to leaders, powerful rulers could coerce farmers to migrate and produce surplus for them (Santley, 1980; Marcus and Flannery, 1996, p. 155–158). Existing data and expanding avenues of research shed doubt on both conceptual frames.

## GOVERNANCE AT MONTE ALBAN

The despotic nature of non-Western preindustrial societies is a long-held tenet that presumes the concentrated power of principals and state control over modes of production and distribution (Wittfogel, 1957; Marx, 1971). As Mesoamerican archaeologists moved away from antiquarianism in the mid-twentieth century and asked broader questions regarding long-term political and economic change (e.g., Armillas, 1951; Palerm, 1955; Palerm and Wolf, 1957; Sanders, 1976), they presumed that the Mesoamerican past would generally be in accord with Marx's Asiatic Mode, thereby accounting for the major episodes of politico-economic and demographic change that were emerging

**TABLE 1 |** Changes in the Valley of Oaxaca, 600–150 BCE.

| 600 BCE | 150 BCE |
|---|---|
| Population about 2,000 | Population more than 50,000 |
| Largest community San José Mogote, population 1,200 | Largest community Monte Albán, population 17,000 |
| Some 80 other settlements, mostly tiny hamlets | Some 643 other settlements, including towns of >1,000 |
| Nearly universal access to farmland with reliable water | Many dependent on rainfall agriculture alone (greater risk) |
| Most of the valley covered with trees | Significant deforestation and erosion around settlements |
| The financing of government was limited, symbolic, personalized | Fiscal financing in labor and goods to support Monte Albán's populace and governance |
| Beginnings of a warfare human-sacrifice complex | Raiding and violence commemorated in monuments, Monte Albán fortified |
| Ancestor veneration | State religion of lightning-clouds-rain-fertility |
| No evidence of canal irrigation | More intensive agriculture, including canal irrigation |
| Household storage of produce (bell-shaped pits) | Some goods likely acquired through markets (no bell-shaped pits) |
| Maize cooked by steaming or boiling | Maize cooked as tortillas using comals |
| Few craft specialists, mostly elite adornments | More craft specialists who produced basic goods for everyday use |
| Most houses wattle and daub, a few adobe brick | Houses of adobe brick |

in the expanding archaeological record. Following decades of painstaking field research and analyses, these presumptions generally have not borne out empirically (Blanton and Fargher, 2008; Feinman, 2017). Yet, for many, "trust in the brave new world of archaeological data is opposed by the belief in a model of human behavior that has guided scholars in the social sciences since the nineteenth century" (Erdkamp, 2020, p. 43). This bias underpinned early top-down views of Monte Albán's foundation.

Comparative archaeological approaches to preindustrial societal change have long been influenced by Carneiro's (1970, p. 733) dichotomous division between coercion and voluntarism. In the former, change is driven by powerful rulers who coerce subalterns to follow their lead. The latter (voluntarism) is a functionalist construct in which people willingly give up core elements of their personal autonomy for the good of the whole. Neither approach is satisfactory as the sole base for the establishment of larger-scale cooperative formations. Social formations based heavily on coercion and predatory rule have and do exist, but they tend to be costly to maintain and are often short-lived (Blanton and Fargher, 2008, 2016), while voluntarism is an untenable basis for the consolidation of political power, as people rarely act to promote the good of the whole if it potentially comes at their own expense. Levi (1988) outlines an alternative, quasi-voluntary compliance, in which political institutions are founded and maintained through social contracts and norms that establish expectations for both leaders and followers (Ahlquist and Levi, 2011). Compliance is built through trust and assurance, which fosters and affirms cooperation (Cook et al., 2005). When subalterns have degrees of agency, a basis is established for more cooperative forms of governance (Sewell, 1992, 2005, p. 143–146; Blanton and Fargher, 2008, p. 5–6). Yet to address free riding, human cooperative arrangements and collective forms of governance generally construct social institutions and interpersonal relations to monitor, sanction, and punish (Ostrom, 1993, p. 1908–1909; Carballo et al., 2014, p. 103). Diversity in the configuration of these institutions and personal networks reflect variability in the sticks and carrots associated with prosocial behavior (Bevir, 2012, p. 114–115; Simpson and Willer, 2015).

The view that premodern polities were uniformly despotic has been challenged globally. "The state never was a unified entity capable of imposing its will on society" (Bevir, 2012, p. 115). We now know that preindustrial societies in Mesoamerica and across the globe were not always despotic (Blanton and Fargher, 2008, p. 5–11; Feinman and Carballo, 2018), nor did rulers in these preindustrial worlds directly control basic production or the modes of distribution as once presumed (Smith, 2004; Feinman and Nicholas, 2012, 2017b; Feinman, 2017). Just as governing strategies of cities and polities today vary along a continuous scale of autocratic to more collective (Feinman and Carballo, 2018), so did governance in a sample of 30 historical cases that are empirically documented with textual sources (Blanton and Fargher, 2008). In this historical sample, concentrated power (autocratic) tended to co-occur with meager public goods investment, limited government, and reliance on "external" revenue sources, such as the control of spot resources, royal estates, or the monopolization of trade routes. Distributed power (collective) tended to occur with sizable bureaucracies, dispersal of public goods, and reliance on local or "internal" sources of revenue to fund governance. Social scientists may not agree on what accounts for this institutional variance, but organizational diversity in the premodern past is becoming much more broadly recognized (Acemoglu and Robinson, 2012; Bevir, 2012; Stasavage, 2020; Green, 2021).

Archaeologists have begun to work out additional indicators of variation in premodern governance that are expressed in the material record (Blanton and Fargher, 2011; Feinman and Nicholas, 2016a; Feinman and Carballo, 2018). How extreme or muted are disparities of wealth in life or death? Does monumental architecture foster exclusivity (elite tombs and memorials, dynastic temples) or access (e.g., open plazas, wide access ways, community temples)? Are palaces prominent or is it not clear where the leader resided? Does political ideology expressed in art emphasize lineal descent, divine kingship, and royal patron deities or does it emphasize abstract principles of offices, cosmology, and fertility? These physical characteristics tend to co-occur, so that the first alternative from each question is indicative of more autocratic rule and the second part is associated with more collective/good governance.

In a study of 26 prehispanic urban centers in Mesoamerica, Monte Albán was one of 12 that was characterized as a collectively organized city based on a series of indicators that include political economy (external or internal financing), governance (divine

kingship or "faceless" rulership), and architecture (emphasis on palaces or communal architecture) (Feinman and Carballo, 2018). There are numerous indicators that Monte Albán was not a highly unequal city (Feinman et al., 2021a, 2022): there are no rich tombs, 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. 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 (Levine et al., 2021). Flattening the hill's rocky top and then defining and creating this large open space entailed planning, coordination, and cooperation. 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; this carved stone portrays a masked individual who appears to be leading a ritual while impersonating Cocijo, a principal deity (Marcus, 2020, p. 147). Rule was largely faceless (Feinman et al., 2021a, 2022). This stands in contrast to earlier and contemporaneous centers on the Gulf Coast, where carved stone heads and altars were erected (Pool, 2007), and lowland Maya centers from the last centuries before the Common Era, where concentrations of valuable exotics were cached in select funerary contexts (Pugh, 2022).

The allocation of the hill's apex for civic-ceremonial space and the lower slopes for commoner residences afforded a broad social accord. Built environments are not neutral, but political (Wakefield, 2018, p. 2), and Monte Albán's footprint with a large, relatively open central space and a dearth of ostentatious displays of leader aggrandizement does not evince exclusionary (non-distributed) power. The city's concentrated residential precincts comprised strings of artificially flattened terraces that shared long retaining walls. Construction of the terraces required allotments of domestic labor to clear trees, flatten steep inclinations, erect stone walls to retain flat spaces where houses would be built, and to construct drainage channels to divert rainwater from living spaces. The construction, sharing, and maintenance of front retaining walls involved high degrees of interhousehold cooperation between neighbors (Kowalewski et al., 2006). 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 in certain ways. For example, commoners adopted construction techniques and basic ceramic wares that previously were the domain of high-status families (Feinman et al., 2021a, 2022). In the early city, most houses included contiguous rooms with plaster floors, often constructed around a patio; they were built with adobe bricks on stone foundations instead of the mud and thatch typical of earlier commoner houses (Winter, 1974; Marcus and Flannery, 1996; Flannery and Marcus, 2005). The reduced-fired, grayware pottery that had previously been confined to decorated serving bowls and ceremonial objects became more broadly distributed in the centuries after Monte Albán was established. This level of cooperation and coordination, a social charter and norms, reveals that Monte Albán was a collectively governed city from its founding (Fargher, 2016; Joyce and Barber, 2016; Feinman and Nicholas, 2017a, 2019).

Our changing perspective on the nature of early governance at Monte Albán sheds serious doubt on a top-down model of coercive rule to account for Monte Albán's demographic growth and the intensification of food production necessary to provision the city. No large-scale production has been uncovered, and there is no indication of central-governmental food storage at Monte Albán, as one might expect with top-down economic control or redistribution. Economic production at Monte Albán was situated in domestic contexts (Feinman, 1999). Instead of being coerced to move to Monte Albán, people were attracted to the city. Monte Albán was settled by a sizable group (1,000 people?) and rapidly grew to ∼5,000 people within a few hundred years. Populations also increased in the rural areas around Monte Albán, and the annual rate of population growth in the valley (it was even greater at Monte Albán) exceeded what could have been maintained by natural increase alone (Feinman et al., 1985). Populations expanded again in and around Monte Albán after c. 300 BCE. The threefold growth was too large to be accounted for by local, "natural growth," so that people must have been drawn to Monte Albán and the valley from more distant, extra-regional locations.

Prior to Monte Albán, early "head towns" were generally positioned adjacent to good farmland. But the new city was located in an area of the valley where agriculture was riskier and largely dependent on unpredictable rainfall. Why would people move to a place where they faced a high risk of crop failure, where they could have been taxed more highly, and where, if governance was coercive, they had little voice? Can we better understand the growth of Monte Albán through a lens that also focuses from the bottom up—as a movement to economic opportunity or other decisions made by individuals? Here, we examine settlement and land use in the valley, focusing on the periods that bracket the foundation of Monte Albán, from the preceding Rosario phase (c. 700–500 BCE) through the foundation (Monte Albán Early I, c. 500–300 BCE) and early growth of the city (Monte Albán Late I, c. 300–100 BCE).

## SETTLEMENT, LAND USE, AND AGRARIAN PRODUCTIVITY IN THE VALLEY OF OAXACA

Studies of land use and consumption in the Valley of Oaxaca during the latter half of the twentieth century (Kirkby, 1973; Kappel, 1977) provide invaluable information that we use in conjunction with the regional history of prehispanic populations and settlement distributions derived from archaeological survey (Blanton, 1978; Blanton et al., 1982; Kowalewski et al., 1989; Feinman and Nicholas, 2013, 2017a) to examine the dispersal of sedentary villages, including Monte Albán. Kirkby (1973) documented the heterogeneous distribution of land and water resources in the valley and categorized land classes based on yields of maize, the region's staple and culturally most

important crop (e.g., Joyce, 2021). Her range of per-unit yields for each land class take into account the unreliability and spatial variation in rainfall. Kirkby (1973, p. 124–129) also analyzed archaeological corn cobs from dry caves in the region to extrapolate modern yields back into the prehispanic era. Because cob length is directly related to yield (Kirkby, 1973, Figure 48b), her documentation of a steady increase in length due to human selection provides estimates of increasing maize yields over time.

Drawing on Kirkby's seminal work, we defined three principal land classes (Kowalewski, 1980, 1982; Nicholas, 1989): high water table and canal irrigable (class I), where the highest yields are possible; marginal water table and good flood water farming (class II), where good yields are possible but generally much more variable year to year; and poor flood water farming and dry farming (rainfall dependent, class III), where crops may fail in dry years (**Figure 4**, left). Based on Kirkby's study, air photographs used during the survey to record site locations, and our on-the-ground observations, we mapped the distribution of these land classes across the valley (**Figure 4**, right). Most notable was the patchiness of highly productive land (Kowalewski, 1980). We used Kirkby's ranges for each land class to calculate high (wet year) and low (dry year) potential yields (in metric tons) across the valley for each time period. Through weather records, we identified areas that generally receive <700 mm of annual rainfall (the minimum for reliable harvest) and decreased potential yields in areas of chronically low rainfall (Kowalewski, 1980, 1982). These figures do not represent actual prehispanic crop yields but are approximations of the productivity of arable land across the valley at different times in the past. Once we had potential annual maize harvests (used as a proxy), studies of consumption in several small contemporary villages in Oaxaca (Kappel, 1977) provided the basis for calculating potential populations for dry, average, and wet years. Population estimates based on dry-year yields present a lower baseline that is purely hypothetical, as the effects of a dry year are not felt equally, even within valley subregions, where spatially patchy rainfall can result in better harvests for some farmers than others.

In previous works (Kowalewski, 1980; Nicholas et al., 1986; Nicholas, 1989; Feinman and Nicholas, 1990, 1992, 2018), we compared the distribution of ancient populations to potential populations at various spatial scales. For the Valley of Oaxaca as a whole, there was no pressure on resources during the earliest periods when per-unit maize yields were the lowest, at the time that Monte Albán was initially settled, or in later periods when the valley's population reached its highest levels, even in years of lower-than-normal rainfall (Nicholas, 1989, p. 458; cf. Sanders and Nichols, 1988). We also discounted the notion that settlement locations, including Monte Albán, were a direct consequence of household decisions to settle on the best land and that during episodes of population growth, settlements and households maximized their access to prime farmland (Nicholas et al., 1986; Feinman and Nicholas, 1987, 1992). At the time that Monte Albán was settled, all of the best land was not densely occupied or inhabited. There was no systematic infilling of all prime farmland before poorer-quality land was settled (contra Santley, 1980).

Throughout the era of early sedentary villages in the valley (c. 1500–500 BCE), when populations were lower, settlement generally tracked agricultural potential (Nicholas et al., 1986); most villages were located on or near well-watered land, and the largest ones were adjacent to productive patches. This millennial pattern ended with the founding of Monte Albán. The new city was not well-situated relative to prime farmland (contra Sanders and Nichols, 1988), nor were most of the small villages that sprouted up around Monte Albán. Throughout the remainder of the prehispanic era, the clustering of settlements, large and small, did not match the distribution of the best farmland (Nicholas et al., 1986; Nicholas, 1989).

These studies were designed to test models proposing that population/resource imbalances provoked the emergence of hierarchical forms of governance in the Valley of Oaxaca and that agrarian resources played a key role in household decisions of where to settle (Santley, 1980; Sanders and Nichols, 1988); the Oaxaca data do not support either model. The spatial scales employed in these analyses, however, are less appropriate for examining intensification of land use and food procurement in the Valley of Oaxaca before and after the foundation of Monte Albán with a focus on the city and its immediate hinterland. For the present analysis we examine the relationship between changing population and agrarian resources using 10-km-radius circles—a distance easily traversed in a day's round-trip on foot (e.g., Lightfoot, 1979; Drennan, 1984). Without beasts of burden or wheeled transport in prehispanic Mesoamerica, there were limits on how far food could be transported. We systematically calculated total amounts of each land class within 10-km-radius circles overlain on the land use map. Through this exercise we identified the location of the four areas of 10-km radius that have the highest aggregated potential agrarian returns—one in the northern arm, two in the southern subvalley, and one in Tlacolula (**Figure 4**, right; **Table 2**). The narrow, northern (Etla) arm has a fertile floodplain, and the streams flowing out of the surrounding mountains provide excellent opportunities for irrigation. The Valle Grande, to the south, has the broadest expanse of flat alluvium and receives slightly more rainfall than other valley arms, so rainfall farming tends to be more productive there. In the eastern (Tlacolula) arm, the most fertile bottomland is in the west along the Salado River, where floodwater farming is possible. The four circles are placed independently of any prehispanic settlement. Theoretically, they could have supported the highest populations; one might expect that a settlement as large as Monte Albán would be located within one of the circles, but it was not.

Prior to 500 BCE (Rosario phase), population centers and smaller settlements were situated in all four circles (**Figure 5**), which were more densely settled than other parts of the valley but still far below potential carrying capacities (**Table 2**). After c. 500 BCE, Monte Albán was not positioned in one these areas of prime farmland but on a set of hills in the center of the valley where rain is often inadequate for reliable maize harvests. Much of the area comprises rolling hills and arroyos. To examine population relative to arable land near the new city, we centered an equivalent 10-km-radius circle on Monte Albán. Almost half of the valley population resided there in Early I, a distribution at odds with agrarian potential that placed the city's residents and

**TABLE 2 |** Maize yields, archaeological populations, and potential populations for the four most productive 10-km-radius circles in the valley and equivalent area around Monte Albán*.

| | Etla | Northern Valle Grande | Southern Valle Grande | Western Tlacolula | Monte Albán |
|---|---|---|---|---|---|
| **Rosario (maize yields in metric tons)** | | | | | |
| Based on all arable land average year | 8,010 | 6,354 | 6,797 | 5,928 | 4,781 |
| Dry year | 4,166 | 3,166 | 3,238 | 1,380 | 1,599 |
| Wet year | 11,855 | 9,542 | 9,659 | 10,475 | 7,964 |
| Based on available labor average year | 421 | 64 | 66 | 85 | 68 |
| Dry year | 365 | 44 | 56 | 31 | 40 |
| Wet year | 477 | 84 | 76 | 140 | 96 |
| **Early I (maize yields in metric tons)** | | | | | |
| Based on all arable land average year | 9,516 | 7,585 | 8,130 | 6,492 | 5,398 |
| Dry year | 4,706 | 3,468 | 3,449 | 1,416 | 1,709 |
| Wet year | 14,326 | 11,701 | 11,986 | 11,569 | 9,087 |
| Based on available labor average year | 1,783 | 684 | 315 | 556 | 804 |
| Dry year | 1,465 | 518 | 263 | 174 | 368 |
| Wet year | 2,100 | 851 | 367 | 938 | 1,239 |
| **Late I (maize yields in metric tons)** | | | | | |
| Based on all arable land average year | 11,563 | 9,136 | 9,730 | 8,326 | 6,804 |
| Dry year | 5,283 | 3,820 | 3,799 | 1,541 | 1,892 |
| Wet year | 17,844 | 14,452 | 14,663 | 15,111 | 11,716 |
| Based on available labor average year | 5,080 | 2,708 | 1,276 | 1,534 | 3,266 |
| Dry year | 3,179 | 1,365 | 736 | 440 | 1,183 |
| Wet year | 6,982 | 4,051 | 1,816 | 2,629 | 5,349 |
| **Rosario** archaeological population | 963 | 185 | 153 | 281 | 192 |
| **Potential based on all arable land** | | | | | |
| Average year | 38,843 | 30,811 | 31,268 | 28,744 | 23,185 |
| Dry year | 20,200 | 15,352 | 15,701 | 6,993 | 7,753 |
| Wet year | 57,486 | 46,271 | 46,836 | 50,796 | 38,618 |
| **Potential based on available labor** | | | | | |
| Average year | 2,042 | 310 | 321 | 414 | 331 |
| Dry year | 1,769 | 214 | 271 | 149 | 196 |
| Wet year | 2,315 | 406 | 371 | 680 | 466 |
| **Early I** archaeological population | 3,728 | 1,488 | 617 | 1,798 | 7,114 |
| **Potential based on all arable land** | | | | | |
| Average year | 46,143 | 36,779 | 37,423 | 31,482 | 26,175 |
| Dry year | 22,818 | 16,817 | 16,725 | 6,864 | 8,287 |
| Wet year | 69,469 | 56,741 | 58,121 | 56,100 | 44,064 |
| **Potential based on available labor** | | | | | |
| Average year | 8,644 | 3,318 | 1,526 | 2,698 | 3,897 |
| Dry year | 7,102 | 2,512 | 1,274 | 846 | 1,785 |
| Wet year | 10,186 | 4,124 | 1,778 | 4,550 | 6,009 |
| **Late I** archaeological population | 12,062 | 6,292 | 2,721 | 3,860 | 24,591 |
| **Potential based on all arable land** | | | | | |
| Average year | 56,072 | 44,303 | 44,761 | 40,375 | 32,994 |
| Dry year | 25,617 | 18,526 | 18,421 | 7,472 | 9,173 |
| Wet year | 86,526 | 70,080 | 71,102 | 73,277 | 56,814 |
| **Potential based on available labor** | | | | | |
| Average year | 24,636 | 13,130 | 6,189 | 7,442 | 15,838 |
| Dry year | 15,416 | 6,617 | 3,570 | 2,134 | 5,738 |
| Wet year | 33,857 | 19,643 | 8,808 | 12,749 | 25,938 |

**All circles are placed and labeled on **Figure 4**.*

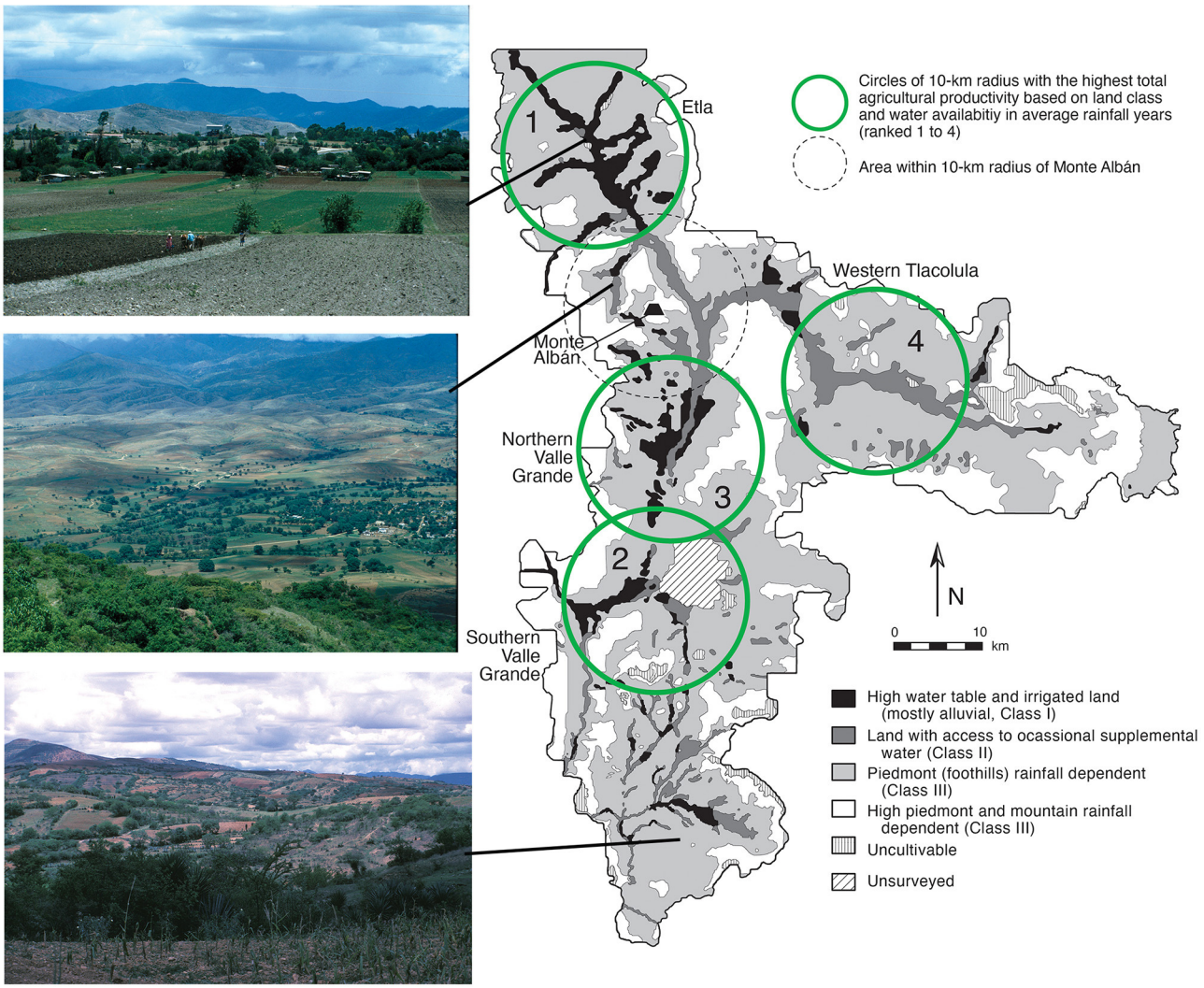


**FIGURE 4 |** Land classes in the Valley of Oaxaca: prime farmland (top), floodwater farming land (center), piedmont slopes (bottom), and distribution of agricultural land classes across the valley (right).

rural neighbors at risk of poor harvests in some years (**Figure 6**; **Table 2**). For at least two centuries after the founding of Monte Albán (500–300 BCE), none of the four most productive areas experienced population growth that exhausted or filled in all the available prime land, and during Monte Albán Late I (300–100 BCE) (**Figure 7**; **Table 2**), populations continued to expand in the city and on the surrounding foothills where agriculture was riskier.

To this point, our analysis has considered the amount and quality of arable land in the Valley of Oaxaca. Yet agrarian yields are neither finite nor static; rather they reflect an iterative process that includes labor and human investments (Fisher and Feinman, 2005; Hakansson and Widgren, 2007; Widgren, 2012). To analytically consider labor requires an approximation of the personnel committed to agriculture, how much land one person can farm, and the distance that farmers are willing to travel to their fields. First, based on a demographic study of several small villages in the Valley of Oaxaca in the latter half of the twentieth century (Kappel, 1977, p. 425–455), we estimate the farming labor force at 50% of the archaeological population (Kowalewski, 1980, 1982). Second, we rely on Kirkby's (1973, p. 73) estimate that a farmer can cultivate 2 ha of land using the traditional Middle American hoe, the *coa*. Third, without access to dependable transport, farmers tend to live near their fields. In catchment studies, subsistence cultivators generally focus most heavily on arable land within 2 km (Vita-Finzi and Higgs, 1970; Dennell and Webley, 1975; Peebles, 1978) and restrict intensive agriculture to within a 1-km radius of their settlement (Chisholm, 1968). We use 2 km as a reasonable approximation for prehispanic Oaxaca.

Based on these assumptions, families living within the four most productive 10-km circles in Etla, Valle Grande, and western

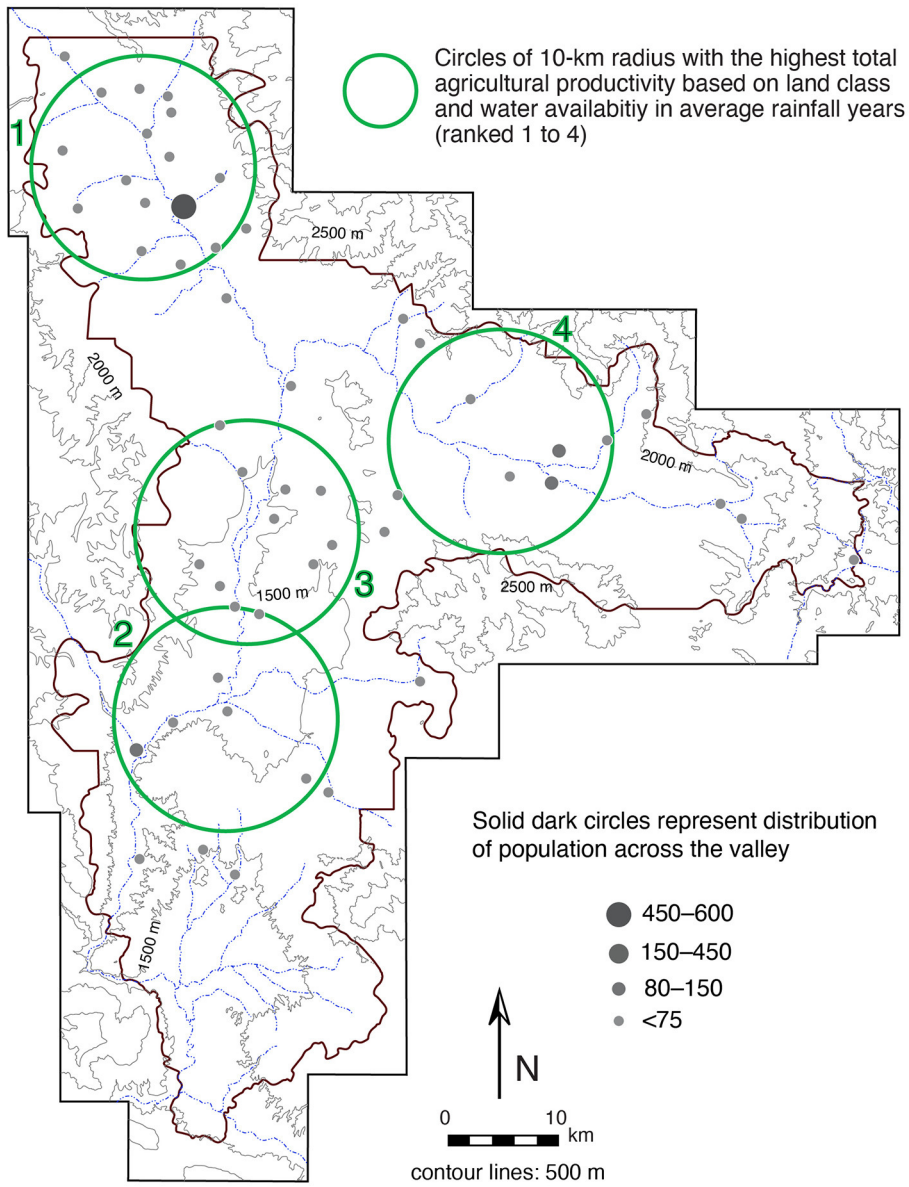


**FIGURE 5 |** Distribution of the Rosario phase population in the Valley of Oaxaca relative to the expanses of most productive land.

Tlacolula were able to support themselves on land near their homes from Rosario through Late I (**Table 2**), although in a dry year, some households in western Tlacolula may have relied on surplus food from neighbors who had a more successful harvest. In contrast, the combination of prime farmland and agricultural labor force within 10 km of Monte Albán was not large enough to fully provision the city (**Table 2**). Rural households attracted to the area in Early I could generally grow more than enough food for their own needs, and a ready demand from the city encouraged intensification. But rural surpluses were unlikely to provide enough to feed all of Monte Albán's urban residents, who were not primarily farmers. In dry years, some rural families also would have depended on surpluses produced by other households. Populations increased three-fold in and around Monte Albán in Late I, with the city's rural hinterland experiencing a greater expansion of population than almost anywhere else in the valley. Many households moved to previously unoccupied piedmont locations where good harvests were possible with sufficient rainfall, but years with poor crops were equally likely. Although much larger than in Early I, the agricultural labor force still was unable to produce enough surplus to fully provision the city in most years, and a larger proportion of rural households faced food deficits in dry years (**Table 2**). Despite these risks, for centuries,

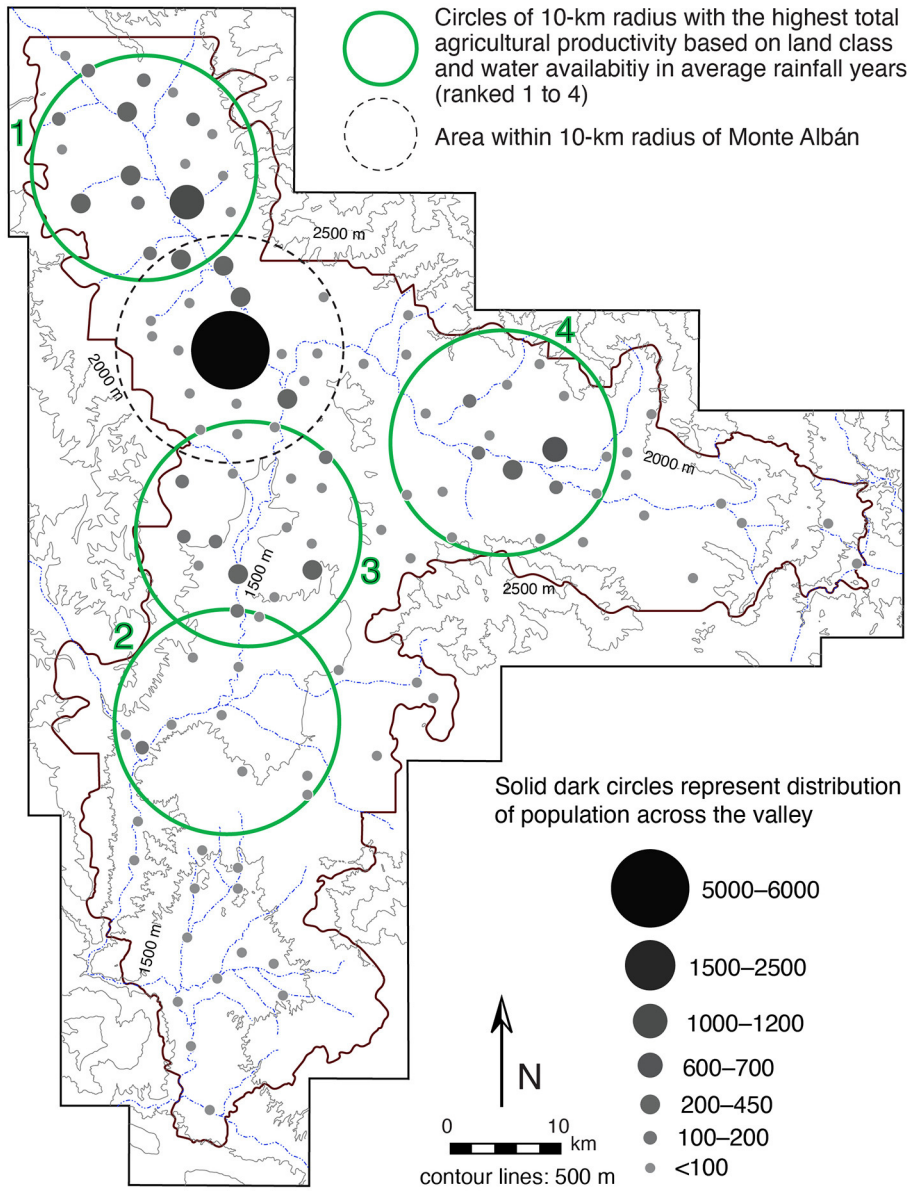


**FIGURE 6 |** Distribution of the Early I population in the Valley of Oaxaca relative to the expanses of most productive land.

Monte Albán drew people to the area, some of whom must have depended on exchange for sustenance when their crops were insufficient. Alternatively, households engaged in more intensive practices, building check dams, digging wells, and constructing small channels to divert water to their fields, including small systems of canals near the base of Monte Albán to increase agricultural yields (O'Brien et al., 1982; Rojas and Beccan Dávila, 2020).

These settlement–land comparisons illustrate that Monte Albán was not settled and did not grow for reasons principally associated with land quality. When we look at the actual distribution of valley settlements and where there was sufficient labor to grow surplus crops, we suspect that the agricultural catchment for feeding Monte Albán likely extended 20 km from the city (Feinman, 1998; Blanton et al., 1999), although valley-wide political unification did not occur until later in the prehispanic sequence (Feinman, 1998; Feinman and Nicholas, 2005, 2013, 2017a). The exchange networks that moved food to the city created a high degree of interconnection among small settlements and Monte Albán. This interdependence required cooperation, infrastructure, and institutions that together provided the means of moving food and distributing seasonal surpluses. Human behavior, land use practices, and institutions undergirded the foundation and sustainability of Monte Albán, a place that lasted for 1,300 years as the region's largest and most monumental center.

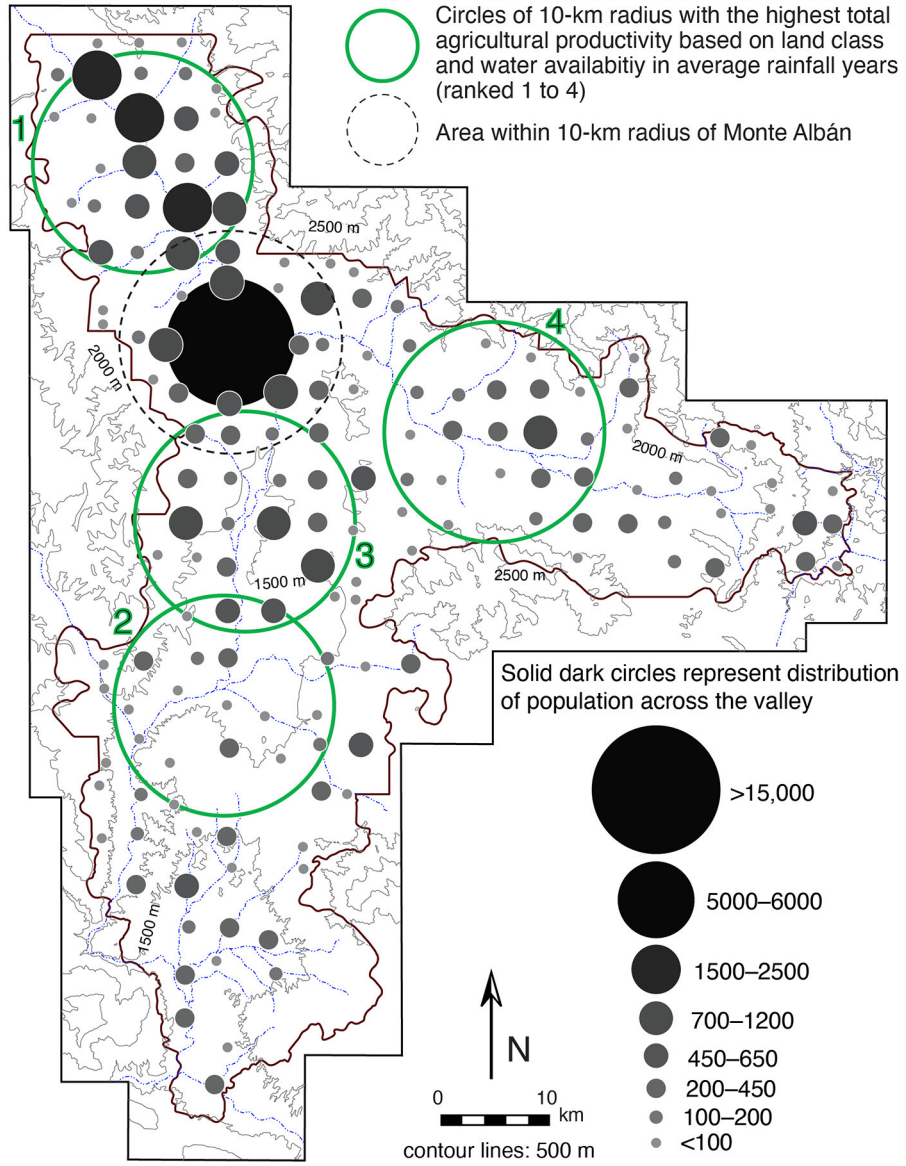


**FIGURE 7 |** Distribution of the Late I population in the Valley of Oaxaca relative to the expanses of most productive land.

## JOINT PRODUCTION, COACTIVE PROCESSES, AND NEW INSTITUTIONS

Monte Albán's emergence cannot be fully explained by either pervasive population pressure or coercive governance. Any pressure on resources in the area immediately surrounding the new city was a consequence of families choosing to move to perceived opportunities or security. Unilinear models that ignore or minimize interpersonal relations and human institutions are inadequate to account for how people get big things done (Kowalewski and Birch, 2020, p. 30), and c. 500 BCE, the foundation of Monte Albán was one such great transformation. The processes of change were more iterative and coactive, and to understand this transition we have adopted a multiscalar lens that focuses both bottom-up and top-down, while taking account of people and resources.

Although we refute these uniform, unilinear attempts at explanation, we do not see all aspects of Monte Albán's rise and seeming sustainability (Feinman and Carballo, 2018; Feinman et al., 2022) as an entirely unique process without historical parallels. Rather, we direct analytical vantage at a middle theoretical range that focuses on recurrent processes and relationships between specific dimensions or directionalities of change (Hedström and Swedberg, 1996; Smith, 2011). More specifically, Monte Albán's rise signified a historical episode in which agrarian intensification, demographic growth,

nucleation, and economic expansion occurred in the context of new, relatively collective, yet more hierarchical institutions of governance (Sheehan et al., 2018; **Table 1**). Blanton and Fargher (2016) have defined the working of such coactive processes in the context of joint production, where institutional steps were taken that promoted the economic productivity and the well-being of domestic units, thereby enhancing overall agrarian returns while fostering demographic and economic growth. Generally, one of those steps was investments in rural infrastructure (Fargher and Blanton, 2021).

For archaeology, it is empirically challenging to document sustainability and well-being. But there is no question that Monte Albán's lengthy duration as its region's central place was unmatched in the prehispanic Mesoamerican world (Feinman and Carballo, 2018). Likewise, what data we have indicate that there was no marked decline in nutritional health with the foundation of the city (Hodges, 1987, 1989), and throughout its history, the high-status and subaltern cohorts of Monte Albán experienced lesser degrees of disparity in health and diet than was the case in other Mesoamerican cities (Wilkinson and Norelli, 1981; Blitz, 1995; Márquez Morfín et al., 2001). Certainly, in relation to the neighboring cities of the Maya, inequality was relatively muted at Monte Albán (Feinman et al., 2018b; Thompson et al., 2021a,b).

Monte Albán's establishment and the transformational episode of intensification and growth that accompanied it parallels processes outlined by Millett (2001) bracketing the growth of early Rome (see also Hopkins, 1978; Erdkamp, 2016, 2020), which also was organized relatively collectively (Blanton and Fargher, 2008; Blanton et al., 2020). Millett (2001, p. 27–31) listed a suite of indices for premodern growth: (1) more agricultural land under production, (2) population increase, (3) proportional increase in the labor devoted to non-agricultural production, (4) increase in non-agricultural goods, (5) increase in per capita productivity, (6) higher taxation, and (7) the innovation of currency. Despite significant differences in urban scale, transport technologies, and a range of other factors, the indices of growth put forth by Millett for early Rome align with and help us organize and illustrate (see also Stark et al., 2016; Stark, 2020) the changes that occurred in the Valley of Oaxaca (c. 500–100 BCE).

There is no evidence in Monte Albán's early history to suggest that rule at the center was highly autocratic or that there was great inequality. There is no indication of large central storage facilities that would be expected with top-down control of the economy and of the organization and distribution of production. Rather, governance at Monte Albán was collective, and the initial settling and building of the emergent city involved high degrees of cooperation and coordination (Blanton et al., 1999; Feinman et al., 2021a, 2022). From the site's beginning, the apex of the hill was leveled into an open, central plaza that was large enough to hold a significant portion of the city's population (Levine et al., 2021) to engage in ritual and other activities that fostered the building of community. The allocation of the highest reaches of the site for civic-ceremonial space, including the large Main Plaza, and lower slopes for commoner residences required planning and coordination. The construction of houses on compact, artificially flattened terraces required extensive cooperative labor, and the sharing of retaining walls by neighboring households involved high degrees of shared interhousehold responsibility regarding drainage and the maintenance of communal walls and paths (Kowalewski et al., 2006). The interdependence of adjacent households was fostered through shared concerns with the potential neglect of neighbors that could cause degradation of terrace retaining walls and other shared features (Pérez Rodríguez, 2016).

Institutional shifts that occurred with the foundation of Monte Albán attracted residents and fostered growth. Monte Albán's hilltop location provided an element of security, and defensive walls were erected early in the site's history (Blanton, 1978). Raiding and warfare were persistent threats in pre-Monte Albán times, and the defensive advantage of a hilltop location provided incentives for both the powerful and the producers to move to the new city (Blanton et al., 1993, 1999; Feinman et al., 2022). Rapid growth at Monte Albán led to greater intraregional flows of food and other utilitarian goods that were transferred through a new economic institution, marketplace exchange (Feinman et al., 1984, 2021a,b; Winter, 1984), which helped buffer farmers against unpredictable rainfall. Advantaged by its location at the nexus of the valley's three arms, Monte Albán's emergent networks of marketplace exchange increased the city's interdependence with other parts of the valley, thereby helping ameliorate risk.

Population increases in the Valley of Oaxaca after c. 500 BCE were dramatic, especially at Monte Albán and its immediate surrounds. Part of this growth was internal as the provisioning of the capital's population placed new production demands on rural families. The city provided a ready demand for food, and the new institution of marketplace exchange gave farmers a mechanism to trade surplus crops for other goods they needed. One way that rural households respond to new opportunities and labor demands is to have more children who can work in the fields or assist with other tasks to increase total production for the family (Cowgill, 1975). But the tempo of population growth in and near the city exceeded what could have been maintained by natural increase alone and was fueled in part by in-migration (Feinman et al., 1985). Defense provided by the city's hilltop location and economic opportunities made the valley attractive to people from outside the region so that they were willing to move to terrain with high agrarian risk near the emergent center where they potentially would be subject to institutional demands on their labor and production. Domestic and individual migration has been a recurrent aspect of Mesoamerican economies, past and present (Burgoa, 1674; Taylor, 1972; Blanton et al., 1996).

With in-migration, Monte Albán's early populace was diverse. Cooperation and collective action were fostered at Monte Albán through shifts in ideological messaging, which emphasized supernatural unity at the expense of the prior factions or social segments. During the pre–Monte Albán era, the dualism evidenced through were-jaguar and fire-serpent symbols that were shared across much of the western half of Mesoamerica diminished. At Monte Albán, these symbols largely were replaced by ceramic figures of Cocijo (lightning, rain), a more restrictively Oaxacan supernatural (Blanton et al., 1999, 101–107). Effigy vessels displaying Cocijo (or people wearing the supernatural's

**FIGURE 8 |** Carved stone *danzantes* at Monte Albán.

attire), as well as other representations associated with water and rain (toads, ducks, shells), increased in prominence (Caso and Bernal, 1952, Figure 30; Caso et al., 1967), associated with an emphasis on general fertility and renewal. With a population drawn from different settlements, this universalizing ideology promoted collective action and goals (Blanton, 2016, p. 24, 31; Feinman, 2016, 2021, p. 11). Cocijo's representational preeminence at Monte Albán (and affiliated sites in the valley) endured for more than a millennium. On Monte Albán's Main Plaza, other rituals were carried out in the *danzantes* gallery (Marcus and Flannery, 1996, p. 150–154), where carved stones commemorated the sacrifice of enemies, likely captives depicted without clothes (Coe, 1962; Marcus, 1976, p. 45, 1992, p. 393; Marcus and Flannery, 1996, p. 153; cf. Urcid and Joyce, 2014; **Figure 8**). This centrally situated, public display seemingly served to legitimate the authority of the city's governors, emphasizing themes of sacrifice and the forging of a collective us vs. them (Joyce, 2009, p. 192; Joyce and Barber, 2016, p. 47; Feinman et al., 2022).

The rural population around Monte Albán grew in sync with the city. Rising food demands in the urban center led to increasing labor demands for clearing and bringing more agricultural land under production. Selection for larger cobs was an ongoing process that raised per-unit agricultural yields, and small-scale water-manipulation practices to increase yields are documented for the prehispanic era (Flannery et al., 1967; Flannery, 1970). Small irrigation canals and other features for diverting and collecting rainwater were constructed on the lower slopes of Monte Albán, mostly for agricultural use (O'Brien et al., 1982; Rojas and Beccan Dávila, 2020). Intensification was a household decision, as these features could easily have been constructed by the labor of a few collaborative households. Planting xerophytic vegetation on the stone retaining walls of residential terraces and other rocky slopes was another form of intensification that helped prevent erosion and provided supplemental food in spaces where maize and other cultivars do not thrive (Feinman et al., 2007; Feinman and Nicholas, 2020a). The caloric returns of xerophytic plants are significant relative to the amount of labor needed to plant and husband them.

Agricultural intensification did not occur in a vacuum but was interdependent with non-agricultural production, which increased proportionally. The concentrated populace provided scalar advantages to producers in both transport costs and the opportunities for intensified production (Feinman, 1986), making it possible to make more goods at a lower cost per item. Specialized craft production shifted from a small minority of households crafting elite and other items destined for long-distance exchange during the pre-Monte Albán era to expanding numbers of specialists making utilitarian goods for local exchange, notably pottery (Feinman et al., 1984; Feinman, 1986). During Early and Late I, these activities are most apparent in the vicinity of Monte Albán, where farming households shifted labor allocations more heavily to agrarian pursuits, leaving them less time to make their own pots. Ceramic vessels became more standardized; modifications were made for ease of manufacture and transportability at the same time that new forms were created, including the *comal*, or tortilla griddle, for making tortillas, a food whose portability allowed greater flexibility in the deployment of labor. The change to more elaborate houses required greater work inputs and new producers to make the adobe bricks for the walls, to process lime into plaster for floors, and to cut stone blocks for foundations (Blanton et al., 1999), not only in the city but in small communities beyond (Whalen, 1988, p. 293).

The construction of the Main Plaza and the building of monumental public structures that lined the plaza was an infrastructural investment that required lime, cut stone, adobe bricks, and lots of labor, both skilled and unskilled. These public investments imply demands on local producers. In return, residence in the urban center provided a range of goods and services, including defense. Through marketplace exchange networks, the city's residents had access to both local products and a wide range of goods from faraway places, including obsidian tools that were traded to the valley from an expanding suite of sources located hundreds of kilometers away (Nicholas et al., 2021). Nevertheless, although exotics were present at early Monte Albán, the bulk of the evidence supports the financing of the early city based on internal resources, including resident labor, agrarian production, the manufacture of local craft goods, and the emergent marketplace exchange system.

There is no evidence for currency in the early history of Monte Albán. Nevertheless, cloth is a good that was used as currency in later prehispanic Mesoamerica (Baron, 2018). Cloth was woven in Middle Preclassic Mesoamerica (900–600 BCE), and there is evidence of specialized cotton growing at that time in lowland areas, where circular sherd disks with central perforations most likely were used for spinning thread (Stark, 2020, p. 12). Perforated sherd disks at later sites in Oaxaca also were used for spinning (Carpenter et al., 2012); if sherd disks found at pre-Monte Albán sites in Oaxaca (Flannery and Marcus, 2005, p. 77) were as well, then cloth is one possible medium of exchange for emerging marketplace transactions.

The initial founding of Monte Albán and its subsequent growth over the next several hundred years was the most rapid episode of demographic expansion in the prehispanic Valley of Oaxaca. It also was an episode of economic growth. Joint production, a process by which families were encouraged to move to Monte Albán (or nearby) to provision the city as a trade-off for access to a range of goods produced by others as well as greater security and opportunity was a key factor. This critical transition was accomplished through coactive, iterative processes by which new institutions, like marketplace exchange, were formed and new degrees of interdependence and cooperation forged. The spatial layout of the city, the concentrated settlement pattern of residential terraces, roads that connected neighborhoods, water dispersal features, marketplaces, monumental public/ritual buildings, and greater defensive security all facilitated production, distribution, and consumption shifts that yielded the opportunity for enhanced well-being. These early infrastructural investments at Monte Albán also likely undergirded Monte Albán's sustainability in a manner that parallels more contemporary examples (e.g., Amin, 2008; Klinenberg, 2019; Latham and Layton, 2019; Jensen and Ramey, 2020). Although growth slowed after the first 300 years of occupation, Monte Albán remained the preeminent regional central place in the Valley of Oaxaca for 1,300 years.

Governance at Monte Albán was neither stable nor static. After 200 BCE, extra-regional territorial expansion (Redmond and Spencer, 2006) underpinned a shift toward more external revenue sources and more concentrated power and wealth (Feinman and Nicholas, 2013, 2017a; Fargher, 2016; Joyce and Barber, 2016). This shift was reversed circa 300 CE during a subsequent episode of agrarian intensification, marked by distributed power and relatively muted degrees of economic inequality (Feinman et al., 2018b; Feinman and Nicholas, 2020b). Nevertheless, after 700–800 CE, political fragmentation and shifting external relations culminated in the partial abandonment of Monte Albán, which ushered in an episode of more autocratic, transactional political relations (Feinman and Nicholas, 2013, 2016b,c, 2019).

## CONCLUSIONS

The establishment of this Zapotec capital illustrates that intensification need not be driven by demographic pressure or top-down coercion. In the prehispanic Valley of Oaxaca, the population never exceeded regional capacities, and any local imbalances that emerged (i.e., Monte Albán's location in an area of agrarian risk) were the consequence of in-migration to economic opportunities rather than movement to prime farmland (Nicholas et al., 1986). Monte Albán was founded on a hilltop in the hub of the valley, at least in part because of its defendable central location, as the product of a coalition or unwritten social contract that benefited both leaders and followers. Offensive warfare is not the sole engine that uniformly drives increases in settlement aggregation or political complexity and scale (e.g., Kowalewski, 2012; DeMarrais, 2016; Lemke and Carter, 2016; Feinman et al., 2021a).

The provisioning of the new city afforded economic opportunities through joint production that attracted people to move nearby and intensify agricultural yields, thereby fomenting the most rapid episode of demographic growth in the history of the Valley of Oaxaca. Even in the premodern non-Western world, there were eras in which intensification coincided with demographic and economic growth (Stark et al., 2016). What makes Monte Albán's foundational episode all the more important to continue to study is that it appears to have led to a sustainable central place with a relatively low level of inequality and better degree of wellness (health/diet) compared to many of its contemporary (prehispanic) Mesoamerican urban centers. In short, this is a premodern historical instance where early investments in public infrastructure and goods fostered longer-term sustainability (Jensen and Ramey, 2020).

At the same time, coactive processes associated with collective (good) governance at Monte Albán also prompted an episode in which new innovations were adopted or devised that included everyday inventions, such as new ceramic forms (the *comal*) and novel layouts and materials for house construction and burial (subterranean cists and tombs). There also were new public buildings (the *danzantes* gallery), institutions (marketplace exchange), and enhanced public displays of written texts and calendrics. In sum, the establishment of Monte Albán was a period of demographic and economic growth that spurred new innovations in a context of good governance and relative equity and was a hinge point for more than a millennium of subsequent history in the region. Would it also be appropriate to consider it as "enlightened" (e.g., Conrad, 2012)?

## AUTHOR CONTRIBUTIONS

All authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication.

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# Political Cohesion and Fiscal Systems in the Roman Republic

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For over two centuries, the largest public revenue of the Roman Republic was a levy on property that was earmarked for infantry pay. It was collected by wealthy local landowners and redistributed to soldiers in the district. This article argues that the period of *tributum* was largely one of political calm because the tax systems effectively reinforced social and political hierarchies. Within three to four decades of *tributum*'s invention, intra-elite politics began to stabilize, and within three to four decades of its cancellation, intra-elite politics began to destabilize. With little role for a central bureaucracy, local elites across the countryside used their roles as tax collectors to derive bargaining power in politics, but also to control local economies and to demonstrate their high rank in a society that revered public leadership in service of the military.

**Keywords: fiscal sociology, Roman Republic, *tributum*, *tribuni aerarii*, taxation**

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## INTRODUCTION

So much has been written in recent years about the resilience and fragility of liberal democracy (Foa and Mounk, 2016, 2017; Levitsky and Ziblatt, 2018; Mounk, 2018; Runciman, 2018; Keane, 2009; Acemoglu and Robinson, 2019). Case studies of failure abound. Yet, the Roman Republic deserves a lot more attention than it has received, because no modern equivalent provides an example of such long durability coming undone. Modern instances tend either not to have "died" yet, or to have failed after relatively short lifespans.[1] I know of no other example of an electoral regime that combines these three critical factors: (1) A population that reaches more than one million (adult male) citizens by the time of its end; (2) A proven ability to survive innumerable challenges over more than four centuries; (3) A well-documented collapse that owes nothing to foreign invasion or military disaster (on the contrary, Rome kept winning wars and expanding even while its republic was violently converted to autocracy).

The goal of this article is to show that the Roman Republic's durability was aided by a tax system that was unusually well-integrated into the social networks and political ideology of the regime. The Romans eschewed bureaucracy in favor of community participation in tax payments and collection. Fiscal transfers were embedded in cultural systems and social networks that strengthened the positions of key stakeholders, and that year after year brought the regime's goals and legitimacy into the lives of citizens. The dissolution of the fiscal system, however, weakened the regime's cohesion and contributed to the eventual collapse. I will argue that at least one source of collective action against the status quo was a result of this fiscal system's disappearance.

[1]I define "short" here as being younger than the oldest living citizen. The point of this is to create a category of states in which no citizens experienced an earlier, alternative regime. Thus, "long-lived" regimes are those in which no citizen knew the state in some other form. This ensures that all citizens had been steeped in the regime's acculturative forces.

## THE REGIME

Although no one could claim that Rome was a *liberal* democracy, many have argued "that we cannot deny the Roman Republic *a* place in the history of democracy (Millar, 2002b, p. 6—original italics)."[2] I would not use the word "democracy" for Rome, but it is undeniable that the Romans had established an "electoral regime." According to the Romans themselves, that regime was founded in 509 BCE—debate surrounds the particulars here—and persisted until it was ended by Gaius Julius Caesar following his invasion of Rome in 49 BCE, after which, autocratic emperors ruled Rome. Such longevity—roughly twice that of the United States so far—is proof that the Roman Republic was no frail regime. It very successfully sustained itself across generations.

Though our evidence is obviously not as rich as a modern historian is accustomed to, recent scholarship has demonstrated that the Republic survived for so long thanks to a rich array of symbols, rituals, rhetorics, and integrative practices that generated attachment and consensus among citizens (esp. Hölkeskamp, 2010, 2017). In particular, we can see what values the culture esteemed and how they decided to assign praise and criticism in ways that entrenched the domination of the great families who were winning elections. This is critical, because we cannot know how "good" governance or "morality" (Blanton et al., 2020) or "value-based legitimacy" (Kiser and Levi, 2015, p. 565) were identified without understanding the cultural context. Nor can we understand the impact of principals like Augustus or Commodus without understanding how the sources that describe them constructed narratives of praise and blame (Blanton et al., 2020, p. 8; Karceski and Kiser, 2021, p. 708). The fiscal and political system endured because it aligned with the values that Romans treasured. It was important to Romans that all citizens—free, adult males by default—were given the right to vote, but it was equally important that some people received more voting power than others. Influence was distributed unequally, because Romans believed in gradations of dignity. At the bottom were slaves, then the (especially urban) poor, through the middle rungs of professionals and smaller landowners, to the rich (largely rural) landowners. At the top were those from a circle of noble families that dominated politics and that, though open to new talent, tended to feature the same few families at its heart in each generation. Voters consistently—though never exclusively—chose candidates from these families (Hopkins and Burton, 1985).

Rome was thus a steeply hierarchical place and a deferential population saw virtue in that inequality (Flaig, 2003; Morstein-Marx, 2004; Hölkeskamp, 2010). The great threat to the ruling class was not a proletarian revolution, but autocracy. Terrified that one aristocrat might gain power over his peers, the elite operated within a defensive constitutional structure that sought to limit individuals' power at all times. There were four key principles:

1. Tenure of power was to be short. Terms of office were limited to annual terms and no one—unless in the most desperate military circumstances—was to hold office in successive years. Eventually, regulations banned holding the consulship twice within a 10-year period.
2. All office was to be shared. Even the mighty consuls, who waged the wars of expansion, had to be paired two per year. To be consul alone was to be an oxymoron.
3. Access to public money had to be approved by the aristocratic collective in the form of the senate. No consul had executive control over the fisc.
4. Officeholding had to be suited to the relatively small number of families that enjoyed leadership positions in generation after generation. The nature of office therefore had to be generic enough that any competent member of the aristocracy could acquire the skills to be elected. The great families could not develop a bureaucratic state in which experts and technocrats were more qualified and more deeply entrenched than aristocratic sons trained in war, law, and oratory.

The importance of these principles is clear in the aftermath of the Second Punic War (218-201 BCE), in which Rome, despite losing such nightmarish battles as that of Cannae (216 BCE), vanquished the existential threat of Hannibal and the Carthaginians. The victorious commander who ended the war was Publius Cornelius Scipio Africanus. He retained an army for most of a decade and introduced innovative drill and tactics that led to the conquest of Eastern and Southern Spain and what is now Tunisia. His career was a demonstration that a Roman army, if left in the hands of the most gifted commanders for years on end, would be all but invincible against even the most brilliant opponent. Instead of institutionalizing that promising approach, contemporary leaders took from Scipio's career the lesson that no man could ever be allowed to accrue such standing. Limits were placed on terms of office and on repeated office, while Scipio himself was eventually hounded into retirement (Astin, 1989). It was better to lose the odd battle abroad than risk another Scipio at home. And history vindicated his enemies. The next man to achieve such a long run in command of an army was C. Marius, who in 88 BCE precipitated a civil war and in 87 BCE marched on Rome and massacred his enemies.

Scipio defied the principles of aristocratic leadership. He was put in command while holding no regular office. He waged war in Spain and Africa without a real colleague. He was in office for more than a year. He captured the lucrative silver mines of Spain and the rich agricultural lands near Carthage, and at one point he built a fleet by calling on the donations of supporters (Briscoe, 1989). He also raised the bar on competence to such a level that few if any of the sons of great families could compete.[3] They worked to forbid any repeat of those extraordinary feats. In the resulting political context, there were two main reasons why establishing an intensive taxation system was so difficult: the first was that any man who worked to establish it would be out

[2]Other bibliography includes but is not limited to Millar (1998), Yakobson (1999), Wiseman (2011) and the collected articles at Millar (2002a).

[3]The well-informed Polybius, writing a generation or two later, believed that Scipio had numerous opportunities to make himself a king in conquered lands (though not specifically of Rome), but declined (Polyb. 10.40).

of office by the time it bore fruit; the second was that operating a bureaucracy demanded expertise and risked placing the elected aristocrats under the control of the powerful bureaucrats and mandarins who ran the system. One can imagine a Scipio creating a fiscal system that would fuel his 10 or more years in charge, but for everybody else—with 1 year in office and without the same fearsome organizational abilities—an intensive fiscal system bore little appeal. They lacked the abilities to manage it and the opportunity to benefit from it.

## THE *TRIBUTUM* SYSTEM

Until the creation of a profitable empire, Rome relied on three main sources of revenue (Neesen, 1980; Nicolet, 2000; Taylor, 2017). The first was rents on publicly owned land and other assets. The second was indirect taxation from tolls, customs dues, sales taxes, etc. Both of these sets of revenue were paid into the treasury and could be spent on any public good. The third revenue, however, would remain the largest until Rome came to access the riches of an overseas empire (Taylor, 2017). Named *tributum*, it was a levy demanded whenever Rome fought a war, which in practice made it all but annual.[4] It was calculated as a proportion of overall property declared by a family's patriarch in the quinquennial census and the proceeds could only be used to fund infantry pay.[5] The sources date its inception to the year 406 BCE and, amid new wealth pouring in from the provinces, it was permanently suspended in 167 BCE (Mersing, 2007).

Its operations are never explicitly described by our sources—almost all of our extant sources were written after its suspension, and, in any case, elite Romans responsible for literature tended not to write about day to day administration—but the outlines are clear enough.[6] Every five years, the Romans elected a pair of censors, for terms of a year and a half. These two men would lead a census that recorded how many citizens there were, where they lived, how many sons they had and how much property each owed. Every Roman was then assigned a regional tribe according to his locale and placed in a voting century reflecting his wealth, with the richer landowners in the first class and the poorer landowners progressively being assigned down to the fifth class.[7] On the basis of conscription shortages for the fleet, where the landless served as rowers, Rosenstein has argued that only something in the order of 14% of citizens were "proletarii" who owned no land (Rosenstein, 2016, p. 86). Just how unequally wealth was distributed is unfortunately unclear for now, so the distribution of citizens to classes first through fifth is a matter of hypothesis (Rosenstein, 2016).

In almost every year, the Romans raised an army that required pay, and unconscripted landowners had to fund this by paying *tributum* as a percentage of their overall declared property. Rates were quite low, as was typical of premodern states (Bang, 2015). Rosenstein and Taylor have suggested something in the order of 0.2–0.46% of total property; for someone with very little land, that would be a meager payment, but even for the richest Romans, it would still be quite low, equating to between 15 and 34% of what a family of five would spend annually on wheat.[8] The real challenge for the system, however, was not calculating a person's payment, but actually collecting and transferring such vast sums from the farms to the soldiery. This was no simple matter. Most problematically, *tributum* was implemented before the Romans had adopted coinage. The system they developed thus had to be able to move sufficient resources without the convenience of a single medium of exchange. The solution was to rely on districts known as "tribes" (called a *tribus* in Latin). Once the year's campaigning was completed, the pay owed to each soldier was calculated and each tribe was told how much was owed to the soldiers.[9] Wealthy landowners in each tribe then paid the soldiers out of their own estates. These men were called *tribuni aerarii*.[10] Their next task was to reimburse themselves by collecting *tributum* from taxpayers in their district.

Some have doubted that this military pay and *tributum* were possible before coinage, but this is unnecessary skepticism. It fails to appreciate both how under-monetised the Roman countryside remained for most of its history—rural areas would feature low levels of coinage even at the end of the Republic, centuries after coinage's introduction (Hollander, 2007)—and how effectively the pre-coinage economy could move resources. People were already exchanging goods and services without coinage, and *tributum* merely demanded that they incorporate this fiscal payment into their economic lives as well. As was so common in premodern societies, it must have been normal for farmers at all levels of wealth to be borrowing or lending with each other, and especially with the richest local landowners.[11] Medieval England serves as a comparison. Even without the notaries of Southern Europe, medieval English villages were still thriving debtscapes: "In some [fourteenth century] villages, lending, and indeed borrowing, was so widely disseminated that almost everyone must have been involved in it."[12] This was all part of "a necessary collaboration," in which capital and labor had to circulate in ways

[4]I will refer to *tributum* as a tax in this article, though technically it does not meet the definition (Nicolet, 1976, 19-26, 1980, 153-6). It was only demanded in years of military service, it was not fungible by the government but was earmarked for one purpose, and it was refundable if the war turned a profit (though in practice it was only repaid rarely).

[5]A similar tax on the estates of widows and orphans was used to fund the cavalry.

[6]Tan (Forthcoming). My reconstruction varies in certain ways from that of Nicolet (1976, 1980, 2000) and France (2020), the longest and most thorough treatment of *tributum*.

[7]It is possible that property declarations were only precise enough to place a landowner into a property class, with all men then paying tax on the minimum qualification for that band (Rosenstein, 2016). This would have decreased fairness, but would have greatly simplified bureaucracy. In any case, especially for the early decades of *tributum*, this is a matter of speculation.

[8]These calculations involve enormous margins of error, but the order of magnitude is likely correct (See Rosenstein, 2016; Taylor, 2017, p. 163–166). *Tributum* only funded infantry pay, however, and so other revenues were needed to cover other public costs.

[9]The lengths of campaigns could vary wildly, from short local affairs to prolonged wars, as shown in Rosenstein (In Press).

[10]The term *aerarii* is related to the word for bronze, and the words *tributum* and *tribunus* are obviously related to "tribe" (though see Nicolet, 1976, p. 53). For the etymology, see France (2020, p. 54–55). These men had to volunteer their time and labor, but there was no attempt to sell offices or to a salary or prebend.

[11]The ubiquity of credit was persuasively sketched in Graeber (2011). For an illuminating comparative case study, see the studies of medieval English villages at Clark (1982) and Briggs (2009).

[12]Briggs (2009, p. 146).

that "mirrored economic interdependence."[13] In both England and Rome, farmers did seasonal labor on each other's farms, shared capital equipment, supplied goods on credit for processing (like fiber to ropemakers or hides to tanners) supplied dowries for marriages and more. It is likely true that, due to a lack of coinage, few transfers could be resolved in a single transaction, in which a precise value was established and paid in a single moment. Instead, as in England, Roman farmers were embedded in a network of economically intertwined estates, in which people were constantly accruing or dissolving debts with each other over time. The benefit of basing the fiscal system on the regional tribes was that it kept payments within local networks that were already accustomed to exchanging goods and labor throughout the rural calendar. *Tributum* could thus be integrated as just another payment amid the debts, credits, contracts, purchases, sales and wages that were already moving between estates.

The key was the way in which taxation was integrated into pre-existing social and economic networks, resembling models of "social extraction" rather than state taxation (Lust and Rakner, 2018). This very decentralized system did not rely on a top-down approach, in which an administrative center managed the payments of thousands of taxpayers and soldiers. Instead, the tribes allowed Rome to fracture the overall fiscal system into lots of local units which were manageable for the local elites who already dominated local economies. These elites were already lending capital, hiring laborers, buying, selling, contracting and renting within their communities, and *tributum* was integrated into these existing socio-economic networks. A bricolage approach created a fiscal system by harnessing the networks of trust and dependence that were already regulating the interactions of local landowners. It channeled tax payments along the same interpersonal relations that bound smaller landowners to larger ones throughout the countryside. Crucially, this meant that fiscality was bound to the same values and interpersonal commitments that governed the rest of rural society and the economy embedded within it. One could not cheat when paying or collecting tax without undermining one's position within the community. Civic behavior could not be dislocated from social standing and from ongoing economic relationships within local networks. Unable to create a centralized fiscal system mediated through coinage, the Romans were forced to raise revenue in a way that was unusually integrated into society. This fiscal system, I argue, had a strong cohesive force in Roman politics and society.

## APPROACH

That the Roman Republic was peculiarly resilient and enduring is self-evident in its four and a half century history. The purpose of this article is to examine how the fiscal system contributed to that durability. There are three approaches upon which I draw to construct my argument.

The first is the field of fiscal sociology that began a century ago (Goldscheid, 1958; Schumpeter, 1991), but is now most associated with the work of scholars such as Margaret Levi and Charles Tilly, since refined and developed further.[14] Although Tilly's goal was to explain the rise of the modern, Western Nation state, he illuminated processes that are applicable to premodern cases as well (Tilly, 1993). In particular he showed how bargaining and concessions are necessary in exchange for sustainably high tax revenues. Early modern states and their rulers were desperate to raise revenues to fight wars. They had to tax their citizens to raise those revenues, but gaining access to all that wealth required some degree of consent, which in turn necessitated bargaining and concessions on the part of rulers. Levi (1988) similarly argued that rulers act rationally in maximizing revenue, but do so within constraints of bargaining power, transaction costs and discount rates. In doing so, she emphasized the social, economic and political contexts that shaped tax systems.

Jerome France has recently wondered whether this conception is applicable to antiquity, or whether it is inextricably rooted in the modern notion of a relationship between taxation and representation (France, 2020, p. 25). But Tilly is on safe ground here. The dynamic on which he focusses is not a moral notion of what is just in a civic community—i.e., an ideal that taxpayers ought to have a representative democratic voice—but is a universal reality that people with something to withhold will be likely to extract a price for access to that thing. In this case, taxpayers could make taxation inefficient by refusing to pay, by underpaying or by "footdragging" (Scott, 1985). The fact that taxpayers demanded political representation in much of Tilly's account reflects a goal that was indeed contingent on modern political circumstances in the West, but the fact that "withholdability" granted bargaining power reflects something available to populations across time. The cultural question is not whether Romans derived bargaining power from their indispensable fiscal roles, but how and for what they chose to use it. They might have sought the same concessions that modern taxpayers sought, or they might have sought something else; what matters is that they had the means to extract concessions.

The second approach from which this article draws is the agency theory (Kiser, 1999; Kiser and Kane, 2007) that focusses on the relationship between, on the one hand, the principals in the senate and in elected office and, on the other hand, the *tribuni aerarii* in the countryside who had to effect the collection of *tributum* and the payments to soldiers. In the case of the Roman Republic, the story of bargaining power has an extra variable. Because the *tributum* system was fractured into so many local units, the state relied on the compliance both of taxpayers and of the *tribuni aerarii* who collected *tributum* as a public service. There is thus a need to examine the bargaining power both of the taxpayers who could have refused to pay, and of the *tribuni aerarii* who could have refused to operate the fiscal machinery. Neither group was coterminous with the political elite that was deciding to fight the wars. The consuls and the senate could declare war, but it would come to nothing without the taxpayers and the tax collectors. Because there could be inconsistencies between the political interests of those groups, there was potential

[13] Clark (1982, p. 261).

[14] Tilly (1993, 2007); with Levi (1988), Backhaus (2005), Martin et al. (2009), Monson and Scheidel (2015), and Martin and Prasad (2014).

for conflict. As Herb (2005) has noted, rulers are dependent on agents when the latter control tax collection. Moreover, since the *tribuni aerarii* were volunteering a free public service, there were few professional and organizational mechanisms that allowed principals to enforce standards among the tax collecting agents. There was very little in the way of bureaucratic machinery at all; they operated in the "gray area between state and non-state" service provision (Lust and Rakner, 2018, p. 280). Censors may well have been able to demote them from the ranks of the *tribuni aerarii*, but it is not clear that they had the investigative capacities to discover misconduct, and in any case, they were only in office for 3 years out of 10.[15] As a result, other social, cultural and legal forces were needed to ensure that tax collectors were efficient and scrupulous. Understanding the principal-agency relationship in this kind of "social extraction" requires something other than bureaucratic control (Lust and Rakner, 2018). This was not the "compulsory cooperation" that sees so many states co-opt the services of local elites (Mann, 1986; Bang, 2015), but was more akin to politicians performing public service to elevate status and influence.

Finally, because these social forces were so important, this article will draw upon research into the performative politics of the Roman Republic, and in particular into Rome's hierarchical "political culture."[16] While many scholars have emphasized the Republic's democratic elements—especially its many annual elections and the constant need for leaders to address the people through oratory—others have argued that the potential structural powers of Rome's direct democracy were never actualised in practice. Although a vote of the citizens could theoretically effect any arbitrary popular desire, such "constitutional" sovereignty depended not only on a leader to propose such a measure in an assembly, but on voters internalizing a sense that they were entitled to exercise their judgement in an executive manner. Many scholars in the past two decades have denied the existence of such a democratic mindset. Instead, they have emphasized the deference, dutifulness, and even obedience ("Gehorsamkeit") that prevented the citizenry from exercising such decisive influence over elites. This deeply entrenched sense of hierarchy has to inform any study of collective action in the Roman Republic. It has to account both for the unusual degree of deference felt by the taxpayers and for the status benefits that accrued to the *tribuni aerarii* as wealthy agents of tax collection.

To contextualize the dynamics of collective action and of fiscal sociology, it is necessary to emphasize that Rome in this period did not operate as a bureaucratic state with legalistic operations (Mouritsen, 2017). It sustained and rejuvenated its Republican practices much more through symbols and rituals that affirmed the community's acceptance of the socio-political hierarchy (Hölkeskamp, 2010, 2017). For example, a small subset of families, known as patricians, were allowed to wear special shoes, while senators came to wear togas with purple trim, veterans of elite cavalry service were granted gold rings, and office-holders were accompanied by special attendants bearing the famous *fasces* (bundles of rods tied together alongside axe heads). The descendants of successful leaders could point to temples or statues that commemorated famous deeds from earlier history (Kuttner, 2004; Davies, 2017). Political activity incorporated elite priestly rituals such as prayer, sacrifice or the reading of the flights of birds (augury), while the right to assemble or address the citizenry emphasized the exclusive authority of that year's official leaders (Morstein-Marx, 2004; Scheid, 2015). The most splendid of all rituals were the grand religious ceremonies presided over by aristocratic priests and the famous triumph, in which a victorious commander paraded his army through the streets and advertised his spoils (Ostenberg, 2009). All of this was part of the constant spectacle of Roman political life that reaffirmed the excellence of the regime. Almost all of Roman politics was a collective activity involving a leader and an audience of onlookers.

To be a member of that regime, a man had to demonstrate his quality before the eyes of the people. It certainly helped to be the son of a great family, but there was no birthright to leadership and all offices had to be secured through the votes of the people. They affirmed excellence. Rising through the ranks—holding office approximately every third year—young leaders had to demonstrate the quality of their leadership in whatever function they held: Soldiers would prove their abilities to become military tribunes; military tribunes would have to demonstrate their abilities if they hoped to run for senatorial offices; and only having shown their mettle in these offices could one hope to complete a career with the much lauded consulship. This system of progression by election—in a society that performed as much of public life outdoors as possible—ensured that leaders were constantly performing their jobs in both senses of the term. Elected office and public service thus constituted their own kind of spectacle. There was no more secure proof of high status than to be seen by soldiers or voters to be performing acts of public leadership. And of all the forms of public leadership—from providing public entertainments to issuing contracts for temple cleaning—the highest status was bestowed upon military activities (Harris, 1979).

Among the earliest evidence for Rome's political mindset is a funerary inscription for L. Cornelius Scipio Barbatus, consul in 298 BCE. Written in a poetic meter, it mentions Scipio's personal life and personal qualities in only the most generic ways. Instead, it builds toward his election wins and success in leading military campaigns:

> "Cornelius Lucius Scipio Barbatus, born to his father Gnaeus, a man strong and wise, whose form was equal to his manly virtue. He was consul, censor, and aedile among you. He captured Taurasia Cisauna in Samnium. He subdued all of Lucania and led away hostages."

The use of the second person plural for the Roman readers—and the emphasis that he held office "among you"—reiterates that politics was a performance before the eyes of the community. The epitaph builds, moreover, to the climactic account of his military

[15]There is no evidence that Rome operated any system of reporting neighbors' under- or over-valuation in the census, as seen in fiscal regimes like that of Han China (Lewis, 2015, p. 287–288).

[16]A convenient overview can be found at Jehne (2010). For monographs, see Flaig (2003), Morstein-Marx (2004), Hölkeskamp (2010, 2017), Mouritsen (2017).

deeds. His son, Lucius, who was consul in 259, left behind a similar epitaph:

> "Most at Rome agree that he was the best of the good men, this Lucius Scipio. The son of Barbatus, he was consul, censor, and aedile among you. He took Corsica and the city of Aleria, and dedicated a Temple to the Tempests in return."

Again there is no mention of his private life, merely of the esteem in which he was held and his record of public leadership. As an indication of how crucial the judgement of the citizen audience was, he even opens with a bold claim that most Romans judged him to be "the best of the good men." Again, the account builds toward his military victories. Similarly, a eulogy for L. Caecilius Metellus in 221 BCE lacked personal anecdotes or reminiscences from the son who delivered the speech, but instead emphasized hierarchy, military excellence, public service and constant recognition by the onlooking community:

> "[he] left it in writing that his father had achieved the 10 greatest and best things which wise men spend their lives pursuing: for he wanted to be a first-class warrior, the best orator, the mightiest commander, to have the greatest affairs conducted under his religious auspices, to enjoy the greatest honor, to have the highest wisdom, to be deemed the pre-eminent senator, to make a fortune in a respectable way, to leave many children, and to be most renowned man in the community; and that these things had fallen to his father's lot, and to that of no one else since Rome's foundation."

The things worth noting about this man were largely his political and military accomplishments, and his status is reinforced throughout by the role of the people in affirming his excellence: they "deem" him the most eminent senator, they vote for him in elections, they are the community in which he enjoys "renown." Roman politics emerges as an ongoing spectacle in which a community judges a man's actions, bestows status on him through election if deemed worthy, and thus permits him to lead the state in great actions. That above all else delivers a special place in the hierarchy.

Within that culture, it has been easy for scholars to focus on the holders of elected office and on the urban sites of the great elections, speeches and rituals. The use of local elites to collect taxes, however, means that these political dynamics also applied to the rural communities in which taxes were paid and infantry pay was distributed. The highest echelons of leaders—like those eulogized above—earned their status by demonstrating their value in war and politics, but the act of collecting *tributum* and paying troops meant that wealthy landowners in each area could do the same on a local level. They, too, could perform public leadership before the eyes of the local community. The fiscal system ensured that the dynamics of creating hierarchy through political spectacle was available to the *tribuni aerarii* who, year after year, before the eyes of the community, collected taxes and paid infantry in each rural district.

## POLITICAL EFFECTS OF *TRIBUTUM*

According to our main source for the period (Livy), *Tributum* and military pay were instituted in 406 BCE, and it only took until 401 before it was being withheld to extract political concessions.[17] Taxation became part of a hostage game. Political and military leadership had been all but monopolized by the narrow group of families who claimed special religious positions (the patricians) to the exclusion of all other claimants (plebeians), some of whom could be very wealthy; the last plebeian to hold high office was in 422, and before that one has to track back to 444. In 401, however, things changed. Four out of six military commanders in 400 were plebeian. In 399, there would be five out of six. In 396, after another boycott of tax collection, there were again five plebeians out of six commanders.[18] The creation of the *tributum* system was, I argue, the catalyst for change. Wealthy plebeian landowners must have been among the *tribuni aerarii* who collected *tributum* and redistributed it to the soldiers, and we are told that plebeian leaders in 401 BCE refused to play their fiscal role (Livy 5.12.3-9). That left patricians in a bind. Needing a paid military in the midst of war with the neighboring city of Veii, they could try to win the politics by vilifying the plebeian leaders as selfish and reckless, or they could accede to the demands of the plebeian leaders. They chose the latter, and the results are clear in the re-emergence of plebeian officeholders. The elections in 401 returned a majority plebeian college of leaders for 400.

While taxation always bestows bargaining power upon taxpayers, there were two features of *tributum* that invited especially salient conflict. The first was that the mechanisms of *tributum* provided an unusually high degree of influence to rich landowners, since they were not just taxpayers, but were the tax collectors as well. Patrician political leaders could determine to wage war, but they relied on *tribuni aerarii* to act as agents in raising revenues to fuel the military. That agency gave these wealthy plebeians enormous control. The second feature was that the principal-agent relationship was bound up in issues that were integral to each party's identity. The patrician principals came to depend on plebeian agents to finance the wars that were so central to patrician identity as a military aristocracy. At the same time, patricians were relying on the participation of wealthy plebeians who were in many respects defined by their exclusion from high office; the centrality of plebeian service in the fiscal system was at odds with the suppression of their political ambitions. Plebeians had been locked out of political equality, but once patricians bound the financing of warfare to the participation of plebeian elites, that status quo was destined to crumble. Patricians were desperate to fight wars, and there was no way that they could continue to suppress rich plebeians once they had handed them the power to determine whether such wars were financed or not. Plebeian elites now had the power to frustrate

[17] Livy 5.12.7-13. Livy was not writing until nearly 400 years after these events, and that must be borne in mind here. It is impossible to know whether he had accurate information on such distant affairs. For the problem of how to read Livy and what to trust (see the authoritative Oakley, 1997).

[18] Though the Roman Republic usually had two consuls lead the army, this period saw experimentation with a larger annual college of "military tribunes with consular power".

patrician military ambitions, and that was an enormous source of bargaining power.

Political equality was not instantaneous, however. Preventing the paying—and hence raising—of an army was risky business, and though similar boycotts of taxation seem to have led to plebeian electoral success in 379 BCE (Livy 6.31.1-5), the tactic became far from regular. Nonetheless, the shift in bargaining power was real. A law was passed to grant plebeians regular access to the consulship from 366 BCE, and after years of wavering, that access was permanently guaranteed in 342 BCE. Thus, a little less than four decades passed between fiscal reform and a shift in plebeian political equality.[19]

Once this was achieved, the central dynamic shifted from one of conflict to one of cohesion. The regime's reliance on the participation of the population to pay taxes and on wealthy landowners to collect them, meant that policy had to be formulated with broad, communal interests in mind. In periods of stress, voters could assert themselves to control major issues of war and peace, and as taxpayers and tax collectors, they could not be ignored (Tan, 2017, chapters 4, 5). But the *tribuni aerarii* never again directly leveraged their position to prevent the collection of *tributum*. There appears to have been broad consensus that *tributum* was worthwhile and run well; with few possible exceptions, neither taxpayers nor tax collectors are recorded as hostile.

Though no source details acts of tax collection, one reason for stability was likely that the *tributum* system reinforced the social and economic hierarchies of rural communities. Cato the Elder, writing in the second quarter of the second century BCE, sketches an agricultural economy in which farmers were constantly interacting in a variety of ways. He promises that farmers who are friendly will find neighbors more willing to purchase produce, to contract for work and to supply labor. They will similarly offer help and material if any construction is required.[20] At the same time, the farm manager should collect repayments from neighbors who had borrowed from his master, while he himself must borrow from no more than two or three families.[21] All of this advice presupposes that farmers sell to neighbors and rely on them for supplies and labor when building; Cato's advice also suggests that, without restrictions to the contrary, farm managers would likely borrow from more than three lenders. At the heart of so many of these transactions must have been the largest landowner in the area, whose capital, production surplus and need for labor made him the dominant node in the network. *Tributum* reinforced his dominance by forcing local farmers to pay him tax each year and allowing him to factor such payments into the accounts of credits and debits that he was already running with his neighbors. This gave him even more economic control over his neighbors than he already enjoyed. Moreover, collecting *tributum* and paying soldiers singled him out as the man with the highest status, the man with the state's imprimatur. In a world in which politics was the spectacle of public service, tax collection afforded *tribuni aerarii* the opportunity to demonstrate leadership on a local level. These were the men who were on show as wealthy and capable, and who could be seen each year ensuring that the troops were paid. Their fiscal role provided the leadership demonstration on the local level that consuls provided on the larger civic level.

This system survived into the second century with few challenges, but in 167 BCE, it was indefinitely suspended, and history shows that it never reappeared. Given how successfully the *tributum* system had been maintained—and given that the Romans continued to fight expensive wars—it is worth asking why it was abandoned. The main reason was probably that a system designed to be managed in local rural communities was no longer suitable for multiyear campaigns from Portugal to Tunisia to Turkey. However, it is possible that the rich landowners who ran the system as *tribuni aerarii* were more concerned with making money in the new provinces than they were in persisting with the onerous collection of *tributum* from neighbors and the payment of infantrymen. *Tributum* must have consumed time and energy for those who ran it, and in the face of so many lucrative opportunities in the empire, its abandonment must have come as a relief to many. Entrenching dominance of local economies was worth a great deal of effort when profit-making was still a largely domestic enterprise; but once there were Macedonian mines, Sardinian fisheries, and Spanish olive groves to exploit, the appeal of local farming communities no doubt waned.

From 167, then, Rome operated almost entirely on indirect taxes (customs dues and sales taxes) and payments from overseas communities. It kept its budget quite small (Tan, 2017; Taylor, 2017, 2020). The old *tribuni aerarii* thus remained as wealthy landowners, but they no longer operated a fiscal system in addition to their own private businesses. For many such men, this was surely a relief, but it can only have weakened their local prominence and their political bargaining power. Freed from reliance on citizens' *tributum*, the ruling class could take a harder line when political challenges emerged, and this may have contributed to the assassination of two reformers (Tiberius and Gaius Sempronius Gracchus in 133 BCE and 121 BCE respectively) along with thousands of supporters (Tan, 2017, chapter 6). But we may also be able to see *tribuni aerarii* regretting the loss of their status roles. Around 30 years after *tributum*'s end, the same wealthy landowners were agitating for reform. As an elite that did not run for elected office, these men (the *equites* or equestrians) pushed for control of juries in certain legal trials (Davenport, 2018, p. 59–66). While this has traditionally been seen as a way to control the regulation of their business activities, I argue that it was equally motivated by a desire to regain a place in state activities as a source of status. Tensions would remain between the political class in the senate and the equestrian class of wealthy non-officeholders right down to the end of the Republic, at which point, with the emergence of autocracy, Augustus would create a raft of new offices exclusively for these equestrians. Only then would the

[19]Between 406 and 366, there were several years artificially "inserted" into the historical record as periods of supposed anarchy, so that some amount of years between 376 and 366 did not actually exist. Once we remove four or five of those years, then 406 becomes 402 or 401, and hence the period from fiscal reform to political reform was more like 35 years than 40. For discussion of these artificial years [see (Drummond, 1990; Cornell, 1995), p. 399–402].

[20]Cato, *On Agriculture* 4.1.

[21]Cato, *On Agriculture* 5.3.

excellence of this wealthy order again be sufficiently recognized through roles of political leadership in the state. The old fiscal role was finally replaced.

## DISCUSSION

The Roman Republic offers the chance to examine fiscal sociology in a society that featured minimal bureaucracy and no standard currency for payment. Tax farmers were well-known for their service in other areas of state activity (Badian, 1972; Tan, 2017, chapter 2), but they were never employed to collect citizens' property tax (*tributum*). Instead, the principal-agent relationship was constructed as a public service performed by a class of local elites. They were not paid and it is not clear how (or even if) the state could punish them in case of malpractice; as was typical in Roman law, much was left to the individual to pursue his own affairs, and we know that discharged soldiers were legally permitted to seize the property of *tribuni aerarii* who failed to provide them their pay (Gaius, *Institutes* 4.26-7, Aulus Gellius, *Attic Nights*. 6.10.2-3). The most striking feature of *tributum* was, therefore, that the principals, who declared war and decided how much tax was necessary, neither employed nor contracted for tax collectors. They had very little leverage over the men who collected *tributum*.

And yet the *tribuni aerarii* collected *tributum* with few hiccups for more than two centuries. Why? And how was their performance policed? It is possible that they participated because they profited from corruption, but I doubt that, because the social price paid for corruption would have been immense—Claude Nicolet, the most distinguished scholar of *tributum*, even speculated that they overpaid as a kind of liturgy or community service (Nicolet, 1980, p. 162). The fiscal system was so enmeshed in local communities that *tribuni aerarii* could only underperform if they were willing to earn the ire and disrespect of their neighbors and peers, and this likely exerted a more moderating influence than any top-down bureaucratic regulation could.[22] Smaller farmers could grant or withhold both the taxes and the social esteem that *tribuni aerarii* craved; this endowed them with meaningful bargaining power. Thus, by embedding fiscal structures in rural social networks, the Romans allowed social norms and reputational pressure to police good government. To be a corrupt tax collector would have been to stand before a local community as a dishonorable man. It would have risked intimate economic, social, and possibly even familial relationships. On the contrary, the interdependence of taxpayers and tax collectors meant that all transactions had to take place within the context of sustainable long-term relationships; this self-regulating dynamic removed the need for rulers to monitor tax collectors, which was always difficult with premodern technology (Kiser and Karceski, 2017, p. 80). Moreover, definitions of good government can change from culture to culture (Karceski and Kiser, 2021). This embedding of fiscal structures in social networks, however, ensured that *tribuni aerarii* would always be aware of local expectations.

If there was potential for such damage, why then did the *tribuni aerarii* agree to perform this onerous public service? I argue that there were three main reasons. The first was that *tributum* probably made neighboring farmers even more economically dependent on the rich *tribuni aerarii* than they already were. A compulsory annual payment could increase indebtedness or be used to pay off debts, or it could be paid in some desirable commodity or paid in labor or access to capital or whatever else suited both parties. By empowering them to demand one more payment per year form their taxpayers, this can only have strengthened the economic dominance of wealthy landowners. The second reason is that the honor of being named a *tribunus aerarius*—presumably in the quinquennial census—was an attractive marker of status in a community that prized hierarchy above all else. It may have been a lot of work, but every act of tax collection reaffirmed before the eyes of the community that this man was the one selected as a *tribunus*. It demonstrated his superior rank. The third reason was that Rome was full of symbols and rituals that committed the community to support warfare (Harris, 1979). Service toward that goal was the most culturally valued activity. And because *tributum* was a revenue earmarked for infantry pay, it was not only appealing in itself, but was an opportunity to perform acts of state service and leadership in support of war. Providing pay to troops before the eyes of the community was precisely the kind of spectacle that demonstrated excellence and high status. While leading an army was limited to the loftiest few, collecting *tributum* and distributing infantry pay was a similar role that brought prestige on the local level.

In the earliest years of *tributum*, tax collection may well also have been attractive as a source of bargaining power against the patrician elite. It is striking that, both when *tributum* was instituted and when it was suspended, elite politics shifted in the wake of fiscal reform. Rome always restricted political and military leadership to a narrow circle, but in a world so fixated on hierarchy, that left the second or third rung of wealthy citizens unable to access these most precious sources of status. Most wealthy men refrained from competing in elections, yet they comprised a large and important group requiring a place in the socio-political hierarchy. When *tributum* was invented, the narrow circle of officeholders was confined to patrician families, but within 30–40 years, plebeians had effected reform to remedy that situation. Though there would be further struggles, the tide was inexorably turning. The military's dependence on plebeian *tribuni aerarii* was simply too great for plebeian claims to be resisted and collective action became more potent as a result. We can see similar shifts in elite relations after the end of *tributum*. In this case, it was 30–40 years before there was agitation to grant wealthy non-officeholders control of certain juries that policed senators. Again, the class of wealthy landowners who were not holding office transformed their relationship to the political elite. With the emergence of *tributum*, tax collection provided the bargaining power to demand greater equality; with its disappearance, the old tax collectors were forced to find some other source of bargaining power and some other way to demonstrate high-status public leadership. In both cases,

[22] As comparison, Clark (1982 p. 270–271) notes that medieval English "villagers readily balanced demands for payment against the personal benefits and trust involved in maintaining long-term relationships".

elite relations were transformed within three to four decades of fiscal reform. There was turmoil in elite politics before *tributum* and for its first decades, then there was extended peace, then there was conflict again after *tributum* disappeared. This at least suggests that, once the plebeians secured political equality, *tributum* contributed to political quietude for generations. Its end, I argue, led to imbalance between the officeholding and non-officeholding elite.

This kind of politics would have been too risky in an imperial context, and it is worth emphasizing that the *tributum* system was abandoned as Rome transitioned from a city-state regime to an imperial one, with taxes being collected from Spain to Greece. Rome would increasingly rely on the cooperation of provincial elites (Tan, 2020). Yet, once plebeians had gained sufficient political equality, there was nothing like the antagonism between principal and agent that we see elsewhere; as fellow citizens of a city, with common foes threatening borders, there was a only a very weak boundary between political leaders and *tribuni aerarii*. Moreover, the *tribuni aerarii* had little to no access to military force. Even if the most powerful families still retained forces (Armstrong, 2016), they posed nothing like the threat that Chinese emperors feared (Deng, 2015; Lewis, 2015) or that a Japanese daimyo could wield (Brown, 2015). The essential structure here is intra-community rather than imperial, and that changed the costs, goals and negotiations involved.

Blanton et al. (2020) have argued that "to maintain its power, the state's fiscal health, and taxpayer compliance, leadership will be compelled to demonstrate a willingness and ability to comply with moral claims directed at them and to make use of the state's resources for generally shared benefit." The Roman system of *tributum* avoided questions of "shared benefit" by earmarking the revenue specifically for the most culturally valued activity: warfare. It was collected from farmers and paid to infantry on the local level without ever having to involve the central fisc. Moral claims, however, are relevant here. In Rome's deeply-embedded hierarchical culture, the most moral thing was to assign proportional status. The peculiarly under-bureaucratised system of *tributum* achieved precisely that by co-opting the services of rich landowners to perform the vital public service of collecting taxes and paying the troops. This marked them out as more distinguished than their neighbors. In doing so, it reinforced hierarchy in rural communities. Moreover, as they cut deals, cracked down on the stingy and showed leniency to farmers unable to pay, they strengthened ties in their rural communities. High-status state service, combined with deeper dominance over local networks, likely increased the cohesion of the political system by embedding non-officeholding elites as stakeholders and as mediators between the local communities and the central state. So long as they held that role, politics at Rome was relatively peaceful.

## DATA AVAILABILITY STATEMENT

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author/s.

## AUTHOR CONTRIBUTIONS

The author confirms being the sole contributor of this work and has approved it for publication.

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CONCEPTUAL ANALYSIS
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# Keystone Institutions of Democratic Governance Across Indigenous North America

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Defining and examining democracy in non-Western contexts is a conceptual challenge. This is largely because scholars of contemporary political systems outside of anthropology can envision no alternative pathways other than Western expressions of democracy. Such thinking inhibits our understanding of past, and indeed future, democratic systems. In this paper, we argue that there is no such thing as a "democracy," but rather there are institutions that facilitate democratic governance. More specifically, we argue that in Indigenous North America "keystone institutions" facilitated complex institutional arrangements and broad participation by a citizenry in the distribution of power and authority. While these characteristics define such Western democratic institutions as the Athenian assembly, the Icelandic Althing, or the U.S. Congress, we argue that comparable keystone institutions of governance can be identified across Indigenous North America. To illustrate these points, we provide a series of cases that demonstrate the variability in the forms that democratic keystone institutions might take. We specifically focus on axes of variability related to the scale and scope of participation facilitated by each institution, the degree to which the institutions distribute power equitably, and the complexity and formality of the institutional arrangements held together by the keystone institution. Importantly, we argue that the concept of the keystone institution as an analytical tool for seeking out the emergence and role of democratic forms of governance transcends the utility of dichotomous categories such as Western/non-Western or state/non-state that limit productive comparative frameworks and the inclusion of non-traditional case studies of democracy in global conversations.

**Keywords: democracy, institutions, Indigenous, North America, archaeology, collective action**

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## INTRODUCTION

Conventional scholarship places the beginnings of democracy in the West (Muhlberger and Paine, 1993, p. 23). As Chou and Beausoleil (2015, p. 1) reflect, democracy's past and future "is one premised on the export of democratic institutions, developed within a particular cultural context in the West, that has as its culmination the end of history and the triumph of Western liberal democracy in all corners of the globe." There seems to be no version of this history in which the West does not play a leading role in the formation and development of democratic governance. Yet,

as we argue here, there are many examples of democratic institutions that play critical roles in non-Western societies, and in some cases such institutions influenced those very bastions of ancestral democracies held by scholars as the origin of Western political traditions. In fact, in Graeber and Wengrow's (2021) recent book, they point out that non-Western forms of democratic practices and institutions are everywhere one looks in terms of the archaeological literature, from state-level societies, like those of central Mexico, the Indus Valley, or Mesopotamia, to the Haudenosaunee of northeastern North America.

The inclusion of non-Western expressions of democracy within broader intellectual discourse remains a conceptual challenge, largely because scholars of contemporary political systems continue to argue that there are "no democratic alternatives to what is routinely called the Western model of democracy, only non-democratic ones" (Alexander, 2005, p. 159; cf. Isakhan and Stockwell, 2011; Przeworski, 2015; Youngs, 2015a,b). In this sense, theorizing about such conditions has translated into common sense, and it has become difficult to imagine a democratic past and future that can be disentangled from Western iterations (Zakaria, 1997, p. 26). This is despite the well-documented evidence for many sorts of democratic institutions, particularly in the Middle East, India, China, and Africa, both contemporary (e.g., Soroush, 2000; Jenco, 2010; Isakhan and Stockwell, 2011; March, 2013; Lamont et al., 2015) and archaeologically/historically (see Blanton and Fargher, 2008, 2011, 2016; Blanton et al., 2021).

As a response to such conceptual constraints, researchers of comparative politics have routinely focused on long-established conceptions of core democratic principles such as the rule of law, popular sovereignty, and freedom or liberty as important foundations for democratic theorizing (Chou and Beausoleil, 2015, p. 2). Archaeologists have focused on developing frameworks to evaluate the many dimensions and range of collective strategies employed by pre-modern states, both Western and non-Western, and the ways that these strategies can be translated for cross-cultural and cross-temporal comparison (e.g., Blanton and Fargher, 2016; Blanton et al., 2021). As Zakaria (1997, p. 24) poses in reference to contemporary discourse on modern democracies: "Western liberal democracy might prove to be not the final destination, but just one of many possible exits." From an archaeological and historical perspective, we alter this statement, and suggest that, similarly, Western conceptions of democracy might not be the singular trailhead of the democratic path, but one of many possible democratic starting points.

In this article, we review and compare the historical contexts, development, characteristics, and mechanics of institutions of democratic governance across four regions of Indigenous North America. While recently scholars have issued challenges to Western-centric narratives of democracy, few have considered the institutions of non-state societies as forms of democratic governance. Such institutions are often relegated to processes of "cooperation" or "egalitarianism" in the context of studies that seek to illuminate the development of generalized human behaviors (e.g., Trigger, 1990; Stanish, 2017). Indeed, the term "government" itself is rarely used to describe non-state political apparatuses (sensu Giddens, 1985; Carballo et al., 2012; Roscoe, 2013). Consequently, state-level societies remain the focus of the robust analytical frameworks that have been developed to examine the forms, characters, and "goodness" of governments across archaeological and historical cases (e.g., Blanton and Fargher, 2016; Blanton et al., 2021). By framing the study of democratic institutions as a historical question that does not necessarily begin with the state, we provide a starting point for a more critical inclusion of non-state forms of governance. More importantly, we introduce the concept of the keystone institution to highlight the important, central role that democratic institutions often play in binding together webs of institutional arrangements and to explore when, where, and why democratic institutions sometimes fulfill these roles over other forms of hierarchical, autocratically organized governments.

One of the main challenges that we wish to overcome is the tendency to apply generalizations of what is or is not democratic that, based on varying and often changing criteria, are at times either overly ambiguous or wildly constraining. Such definitions may depend on systems of representation, notions of liberty and freedom, or in some cases the presence of institutions that facilitate direct vote. These debates and descriptions often regard democracy as a characteristic of society. We argue, however, that democracy in this regard does not exist. Rather, there are only institutions, organizations of people that carry out objectives using regularized practices and norms, labor, and resources (Holland-Lulewicz et al., 2020, p. 1), that facilitate democratic forms of governance. That is, particular institutions, built and maintained by individuals and groups, are responsible for giving democratic character to a particular form of governance. Such institutions accomplish this by facilitating wide participation in processes of governance and/or providing a mechanism for the equitable distribution of power and authority. Keystone institutions do so through their ability to crosscut and bind together complex institutional arrangements. Such arrangements may include disparate, diverse, sometimes autonomous, and sometimes contentious positionalities. Despite this diversity and the potential for dissonance, both keystone institutions and those institutions or persons they bind together constitute the structural basis of society, though such structures are of course always negotiable and subject to historical and processual change. As in the ecological sense, keystone institutions are critical to the success, sustainability, and life of a given sociopolitical system. We argue that this keystone characteristic is a defining feature of democratic institutions that can be empirically identified across contemporary, historical, and archaeological cases and, as an analytical tool, can facilitate productive cross-cultural comparison.

Herein the remainder of this article, we first review the major tenets of an institutional approach and introduce the concept of the keystone institution, with particular attention to its utility in exploring forms of governance. We then provide four case studies from across Indigenous North America with the goal of formally comparing the roles and histories of democratic keystone institutions within a range of non-Western, non-state institutional arrangements. More specifically, we argue that democratic institutions often emerge as keystone institutions that

serve to integrate, manage, and maintain complex institutional constellations. Finally, we pose that the concept of the keystone institution as an analytical tool for describing the emergence, roles, and variability of democratic forms of governance is useful in transcending the utility of dichotomous categories that limit more inclusive comparative frameworks.

## KEYSTONE INSTITUTIONS

Institutions are defined here as organizations of people that carry out objectives using regularized practices and norms, labor, and resources (Holland-Lulewicz et al., 2020, p. 1; Kowalewski and Birch, 2020). This definition aligns with what Douglass North (1990, p. 73) refers to as organizations: purposive entities designed by their creators to emphasize objectives defined by the opportunities afforded by the structure of society. As a note, while our definition aligns with North's organizations, his use of the term institution refers to the structures, norms, or "rules of the game" that actually structure such social, political, or economic interactions (North, 1990). Rom Harré (1979) defined institutions as "…an interlocking double-structure of persons-as-role holders or office-bearers and the like, and of social practices involving both expressive and practice-based aims and outcomes." Blanton and Fargher (2016, p. 41), in their work on comparative governance in pre-modern and modern states explicitly focus on institutions, noting that particular "groups" are defined by the "network of individuals who participate in a system of activities specified by the charter of a particular domain-purposed institution." They go on to note that in complex societies there will be multiple different institutional contexts for cooperation that sit side by side (Blanton and Fargher, 2016, p. 41). Holland-Lulewicz et al. (2020) describe what they refer to as "institutional constellations" or "arrangements," the totality of institutions, and the relationships between institutions, that give form to society. Similar to Blanton and Fargher (2016), we choose here to focus on the emergence, development, form, character, maintenance, and roles of institutions that facilitate inclusive modes of government, and that serve to mediate and discourage the centralization of power or authority around any single individual, role, or entity.

Beyond individual institutions however, the real power of an institutional approach lies in its recognition that the properties of individual institutions are just as important to understand as the overall arrangement of institutions, the complexity and form of their arrangement, and the ways they articulate with one another in broad institutional constellations. Indeed, Kowalewski and Birch (2020, p. 30) argue that what is often called "society" is actually the arrangement of interactions among institutions, "the push and pull between institutions having their own objectives". Referencing archaeological approaches, they go on to point out how archaeological information on institutions is often hidden by conceptual packages like "cultures," types of "societies," or particular "modes of production" (Kowalewski and Birch, 2020, p. 34). In this way, in archaeology an institutional approach allows us to avoid abstraction and misplaced reification of particular concepts (Kowalewski and Birch, 2020, p. 34). In this regard, we might apply this same logic to the use of "democracy" as a conceptual unit. Abstract, misplaced concreteness of "democracy" as a meaningful analytical concept actually obscures the institutions that facilitate democratic governance. In this way, "democracies" do not emerge or fail. Instead, institutions are built, managed, and transformed through human action.

Societies are typically composed of a range of institutions that deal with distinct realms of decision-making and objectives (Bondarenko et al., 2020; Holland-Lulewicz et al., 2020; Kowalewski and Birch, 2020). Kowalewski and Birch (2020, p. 38) argue that diminishing the diversity of institutions, or over-centralizing their functions (e.g., in a totalitarian arrangement), means that success in addressing critical problems will be diminished. Keystone institutions that are totalizing in their nature, attempting to bind institutions together through autocratic control, may be more fragile and inflexible than institutional arrangements that consist of many distinct parts, articulated with one another in complex ways. Indeed, Kowalewski and Birch (2020, p. 40) use the example of the strength of a single, thick filament against the strength of a braided cable. Keystone institutions are the central tether to which other institutions are braided, bound, or otherwise articulated. When these keystone institutions serve as the point of governance, a product of this braiding process is the opportunity and potential for widespread participation in governance and the distribution of power and authority among distinct, though interconnected, institutions via the keystone institution, key principles and characteristics of democratic governance.

Drawing on our four cases from across Indigenous North America, we pose that forms of governance can be analyzed, measured, and defined by their roles as "keystone institutions." Of course, many institutions that may be considered keystone institutions might not facilitate the democratic forms of interaction described above (e.g., the totalitarian state from Kowalewski and Birch, 2020). While not all keystone institutions may be collective or democratic in character, in our brief review of the literature it does seem that such institutions play a critical role in premodern societies in North America and elsewhere that were invested in inclusive governance. Importantly, keystone institutions themselves may vary along a spectrum of internal organization and in the ways that they bind together institutional arrangements. That is, there is variation in how broadly participation is afforded to a citizenry, the actual nature of that participation, and in how well or widely power and authority are actually distributed. For example, a given government, such as a contemporary federal government, may facilitate extremely wide participation in the process of governance, but this participation may, for example, be primarily limited to voting. Citizen voice, interest, and sentiment may have negligible effect on actual policy outcomes (Gilens and Page, 2014). So, while participation is broad, the actual distribution of power may be quite narrow, with real authority vested in a limited number of representatives across a relatively small number of interconnected institutions. This is of course not always the case, and as researchers have effectively demonstrated, there are many cases where federal governments provide a range of mechanisms beyond voting that facilitate effective participation and serve as "good

governance" (e.g., Blanton and Fargher, 2008; Blanton et al., 2021). Further, even keystone institutions that facilitate citizen voice may not impinge on the ability of individuals to amass power and navigate institutional arrangements that facilitate self-interested motives and objectives. As we will explore, certain forms of hierarchy and inequity in balances of power are not necessarily effectively mediated through democratic governance. Indeed, these axes of variation can be compared across both culturally and historically diverse cases, across space and time, and regardless of arbitrary categorizations (e.g., the West v. the rest) or misplaced reifications of overgeneralizations (e.g., democratic or not).

## INDIGENOUS NORTH AMERICA

In the following North American case studies, we illustrate instances in which keystone institutions emerged and served to integrate complex institutional constellations that, in turn, facilitated "democracy." In each case, democratic arrangements of institutions emerged that encouraged broad governance through the effective linking and cross-cutting of component institutions. In the southeast, councils emerged across Muskogean-speaking communities as a way to integrate disparate decision-making institutions at multiple sociopolitical scales. Among Northern Iroquoian societies in the northeast, an intricate clan system served as the socio-structural architecture for democratically-based institutions of governance. Across the Puebloan Southwest, a network of religious sodalities emerged as a way to integrate diverse populations and disperse sociopolitical power. And in the Coast Salish region of the northwest, we explore a case where keystone institutions were situational, neither fixed in time nor space, but durable nonetheless, tied to the potlatches hosted by multi-family corporate Houses, events that served to regulate and make possible a system of decentralized, autonomous institutions. For each case, we review the mechanics of each institution as keystone institutions, and the materiality of these institutions, namely architecture, that would have facilitated and inscribed the actual institutionalization of democratic practice.

### Ancestral Muskogean Councils of the Southeast

Today, the Muscogee Nation lies within the bounds of the modern state of Oklahoma. However, for thousands of years, Ancestral Muskogean peoples occupied the Southern Appalachian region and south through the modern states of Georgia, Florida, and Alabama. Ancestral Muskogean refers to both the people who lived in this region and who spoke various forms of the Muskogean language family. Because many of these groups built and used councils as a form of governance and as an institution of consensus-building, we refer to the genealogies of these institutions as Ancestral Muskogean, though we use archaeological, ethnohistoric, and ethnographic accounts of councils from sources primarily derived from members and ancestors of the Muscogee Nation specifically (see Thompson et al., 2022).

Chaudhuri and Chaudhuri's (2001, p. 68–73) *A Sacred Path: The Way of the Muscogee Creeks* provides a valuable account of Ancestral Muskogean political institutions. They note that one of the most important tasks of Ancestral Muskogean governance is maintaining harmony within the community. In recognizing the constraints of classic collective action problems, noting that differences in perceptions, personalities, and interests are the perennial seeds of social conflict, modes of Ancestral Muskogean governance provide solutions to these problems through specific social and political institutions and their representatives. While the "laws of nature" provide a set of primary guiding principles for behavior, engagements, and decision-making, the secondary principle of Ancestral Muskogean governance is that of democratic consensus and is meant to clarify the remaining ambiguities of the political landscape. The main institution responsible for such processes, composed of interlinked centers of decision-making, with checks and balances intended to facilitate wide participation in social and political life, and to avoid the development of a permanent political elite, is that of the council.

Council houses are circular in form and range between 12 and 37 m in diameter, able to host hundreds of people (Thompson, 2009). Council houses have been identified archaeologically across the Ancestral Muskogean homeland over long periods of time, with the earliest known council houses dating to at least the sixth century CE (Thompson et al., 2022). Ethnohistoric accounts from the sixteenth century describe the intricately structured interiors of these buildings, with particular seating arrangements and detailed histories painted upon the walls (Shapiro and Hahn, 1990, p. 512). The emergence of the council house was likely associated with the broader appearance of the ceremonial square ground, a particular arrangement of settlement features including mounds, plazas, council houses, and other attendant structures (Thompson et al., 2022; though such square grounds sometimes do not include attendant, permanent architecture or earthen constructions and may predate the emergence of council houses in the region). Square grounds continue to operate today among descendant communities and council houses continue to be used as forums for civic engagement in political processes.

We argue that the council emerged as a keystone institution in the sixth century CE and continues to serve to organize a complicated entanglement of disparate, situational decision-making bodies (Thompson et al., 2022). The emergence of these institutions was contextualized by increased sedentism, intensified intra- and inter-regional interactions, and the nascent formalization of villages/communities as indicated by the emergence of the classic form of the Ancestral Muskogean square ground. We argue that the council as a democratically-based keystone institution works to coordinate multiple, overlapping, informal, and potentially competing institutions including those of individuals, households, lineages, corporate groups, sodalities, and/or clans.

As Chaudhuri and Chaudhuri (2001, p. 75–80) describe, the institution of the council provides a formalized space for decisions of community councils, regional councils, clan mothers, beloved men and women, and other community members drawn from a diverse set of autonomous institutions

to be made after conferences in which conflicting views are discussed. In this way, decision-making is explicitly non-hierarchical and does not involve the vertical alignment of superior/inferior relationships. While *mekkos* (often interpreted by the Spanish as meaning chief) have been wholesale translated by archaeologists as serving classic chiefly roles, their political powers were limited and constrained as members of the council. Indeed, *mekkos* were more akin to executives of the council, whose service was to uphold the principles and decisions decided on through council-based decision-making. *Mekkos* lacked an inherent source of authority outside of the context of the council (Chaudhuri and Chaudhuri, 2001, p. 79–80). Additionally, at the regional level, different kinds of *mekkos* and different scales of councils replicated across discrete communities and regions were not beholden to one another in any hierarchical scheme like the ethnographically derived concept of the chiefdom would imply.

In Ancestral Muskogean societies, councils served as keystone institutions that bound together and negotiated collective action among potentially competing realms of situational decision-making (i.e., households, lineages, Tribal towns, regions, clans). As institutions, they provide a political space for participants within a given network (or set of nested networks) to come together to participate in the process of government. Representatives are drawn from and represent cross-cutting lineages, clans, households, and communities, with the result that each were (and are) represented within the council as a whole. Voices are heard, discussed, and considered until consensus is reached. As the *mekko* represents a particular role within the context of the council, the *mekkos* themselves serve at the will and service of the council and of the general populace who participate in the system of governance. Indeed, the *mekko* was likely not a hereditary position. Instead, this role was filled on the basis of personal qualities, competency, and potential to effectively take on the responsibilities of the role. As such, the council house is a physical representation and formalization of entanglements between different decision-making circles and individuals with varying degrees of power, authority, and representation. It is also a durable, physical symbol of the checks put in place on those seeking to exercise power beyond what is afforded to them by society. It is likely that increasing tensions between such circles and the nascent emergence (or potential for the emergence) of sociopolitical and economic inequality, as well as the need to maintain newly emphasized geographic boundaries, led to the formation of the permanent institution of democratic governance that continues to prove successful today, ca. 1,500 years later (Thompson et al., 2022).

## Northern Iroquoian Clans

The term Northern Iroquoian refers to both a linguistic group and a cultural pattern shared by populations who historically occupied the Lower Great Lakes, Finger Lakes, and Susquehanna and St. Lawrence River Valleys of northeastern North America. These groups were primarily the ancestors of the contemporary Huron-Wendat Nation, Nations formerly comprising the Haudenosaunee confederacy, and various Wyandot communities in Canada and the United States. From the seventeenth century onwards, Europeans referred to these societies as the Huron, Iroquois, Erie, Neutral, and Susquehannock, although other Iroquoian-speaking populations were also present in the eastern North American landscape.

Prior to the colonial era, Northern Iroquoians lived in villages comprised of longhouses, often surrounded by palisade walls. The longhouse-based extended family was the basic unit of production and consumption. Longhouses were occupied by groups of related women, together with their spouses and children. Titles and names were inherited through the female line and although matrilocal residence was the norm, males in high-ranking lineages remained in their natal homes (Trigger, 1978). In the seventeenth century, Iroquoian peoples were organized into multiple political confederacies. Each confederacy was comprised of allied Nations, consisting of one or more village-communities that occupied distinct settlement clusters. Villages, nations, and the confederacy all held councils, which were typically held in the longhouses of influential lineages. The keystone institution that cross-cut and bound all of the aforementioned institutional arrangements—from the household to the confederacy—was the clan.

Clans did not govern in and of themselves. Rather, they structured the function of institutions of interdependence and governance throughout the Iroquoian world. As such, the social and structural architecture of good government (as per Blanton et al., 2021) was facilitated by the scaffolding of the clan system. Clans help to balance collective action and autonomy in flexible ways that permitted both political freedom and political equality, essential qualities of democracy (Munck, 2016).

The clan as a social-structural construct likely emerged in the Archaic period (∼8,000–1,000 BC) of the eastern Woodlands in order to facilitate relations among social groups spread widely across the landscape (Anderson, 2002; Thomas et al., 2005). Clans may have initially emerged as a means of structuring relations and interactions among dispersed peoples and their periodic aggregations. However, when people came together to form permanent villages, the functions of clans remained essentially the same: providing a basis for rules of interaction, categories of relatedness, expectations regarding cooperation and reciprocity, and roles in ritual and political institutions and events. In this way, these clans may be among the most durable *and* flexible institutions in Indigenous North America.

As keystone institutions, clans structured participation in institutions of governance. Leadership was heritable within clans and both male and female positions of authority were associated with names passed down from generation to generation within the clan (Wonderley and Sempowski, 2019, p. 6); both achieved and ascribed status were recognized (Trigger, 1976; LaBelle, 2013). Both men and women held their own councils. Male clan representatives were nominated by senior women of the clan (Fenton, 1998, p. 215). Women's—and especially clan mothers'—counsel was a prerequisite for all manner of political action in Iroquoian society, including decisions about warfare and external relations (Magee, 2008).

Each clan segment had civil and military leaders who sat on political councils that discussed and made decisions about domestic and external affairs at multiple social and spatial

scales. Among both the Wendat and the Haudenosaunee, clans historically controlled seats on the confederacy council (Tooker, 1964, p. 43; Morgan, 1851, p. 61). Although council seats were distributed within the Nation (Fenton, 1998), it was the clan who determined which individual was elevated to those positions. Clan representatives held a considerable amount of influence. However, the balance between clans ensured that no one individual or group accrued too much power. Members of a village or Nation may agree that the leader of a clan segment could represent them, but that did not give the representative any right to interfere in the affairs of any clan segment but his own (Trigger, 1976, p. 58). This ensured that decision-making remained consensus-based, and that the ability to achieve both collective action at a distance and preserve local autonomy remained intact.

The social-structural groupings of clans into moieties and phratries permitted larger-scale divisions for ceremonial and political reasons. Moieties allowed multiple clans to come together to form a dual division. Phratries functioned in essentially the same way but split the population into three groups. The Relation of 1648 suggests that there were "three principal Captains" of the Huron-Wendat, an interpretation bolstered by later historic sources (Steckley, 1982, p. 29). These phratry representatives were involved in an elaborate negotiation to repair diplomatic ties between the Huron-Wendat and the Jesuits involving gifts given by Huron-Wendat clan segments and phratry heads to the Jesuits, and from the Jesuits to the representatives of the eight Huron-Wendat clans (Trigger, 1976, p. 749). The involvement of multiple articulations of clan segment, clan, and phratry leadership in these negotiations speaks to the flexibility and durability of the clan as a keystone institution.

Totalizing, strongly centralized institutions are less effective than cross-cutting and interdependent institutions when it comes to achieving societal goals (Kowalewski and Birch, 2020). Blanton et al. (2021) argue that cooperative, collective, democratic, or consensus-based institutions will function as "good governance" primarily by integrating, aligning, or quelling tension between the disparate and overlapping institutions that comprise society. In this way, Iroquoian clans functioned as keystone institutions that created strong social webs of good governance as opposed to tall towers.

## Sodalities of the Puebloan Southwest

The Puebloan towns of the southwestern U.S. are concentrated, and have been so for over 1,000 years, in the four corners region, though primarily across northeastern and east-central Arizona and northwestern and west-central New Mexico. At the time of European contact in the sixteenth century, across dozens of towns, seven mutually unintelligible languages from four unique language groups were being spoken, six of these languages continue to be spoken today among contemporary Puebloan towns (Ware, 2014, p. 21). The practices, traditions, languages, and histories of these towns did not constitute a monolithic culture. Yet, for 2,000 years, these communities lived among one another, linked together through a complex arrangement of familial, residential, and non-kin-based institutions organized in a way to facilitate a balanced system of governance both within communities and between autonomous towns through an integrated and accommodating system of secret societies and religious cults known as sodalities. These sodalities served as keystone institutions, facilitating the diverse participation in the livelihood and survivance of Puebloan towns and mediating the distribution of political, ritual, and economic power across a mosaic social landscape.

Generally, Puebloan towns can be split into the Eastern and Western Pueblos. The Western Pueblos of eastern Arizona (e.g., Hopi) and west-central New Mexico (e.g., Zuni) remained primarily bound together through systems of kin over many generations. The Eastern Pueblos along the Rio Grande river however, saw the de-emphasis of kin-based institutions in favor of a system of non-kin-based sodalities at some point in the thirteenth or fourteenth century, though they may have played key roles within these Puebloan societies as early as the seventh or eighth century (Ware, 2018a, p. 272, 2014, p. 131). Sodalities, also referred to as secret societies or ritual societies/cults, were present across all Puebloan towns. While their primary responsibility is to manage communal rituals, this fundamentally extended to the management of many secular aspects of community governance (Ortiz, 1969; Ware, 2018b, p. 652–653).

There existed, and still exist, dozens of sodalities, each tasked with particular ritual and/or secular responsibilities. Most of these sodalities have a home pueblo, that is, the origins of particular sodalities can be traced back to particular pueblos, where the secret knowledge requisite for membership continues to be held (Ware, 2018b, p. 652). As such, most sodalities have "chapters" in each of the Puebloan towns, and new members often must travel to the appropriate originating town for training, sometimes even performing rituals and religious rites in the language of the originating town (Ware, 2018a, p. 273, 2018b, p. 653). Most importantly, membership is not determined by kinship or residence. On the contrary, membership fundamentally crosscuts kinship boundaries, critically mediating the potential divisiveness of kin-based contention and factionalism (Ware, 2018b, p. 653). And, as most sodalities are pan-Puebloan, their integrative function extends beyond the boundaries of individual towns.

General consensus among archaeologists posits that sodalities emerged as important keystone institutions sometime between the fourteenth and sixteenth centuries. Their function was to regulate agricultural and irrigation systems, organize political affairs, and integrate diverse populations coalescing in large aggregate towns (Dozier, 1970; Adams, 1991; Ware, 2014, 2018a,b; Mills and Ferguson, 2018; Ortman, 2018; Plog, 2018; Clark et al., 2019). Taking as a point of departure the social history of one town, Tewa, Ortman (2018, p. 72) outlines this process, arguing that sodalities, as non-kin based organizations, first emerged in contexts organized around unilineal kin groups, and that these sodalities gradually supplanted lineage-based forms of governance and organization. This initial emergence of sodalities is associated with the emergence of integrative architecture—kivas—sometime between the eighth and ninth centuries. Kivas likely served as places for dispersed avunculates of matrilineal groups (groups of matrilineally related males,

dispersed across towns and communities through a matrilocal system of residence) to meet and fulfill responsibilities to their lineages (Ware, 2014; Plog, 2018, p. 94). Sometime in the mid-eleventh century, there was a breakdown of the system of descent group ranking and centrality of lineage-based systems of organization, a movement characterized by the transition from closed, kin-based leadership to open, sodality-based leadership once these sodalities detached from their original lineage-based institutions (Ware, 2014, p. 131; Plog, 2018, p. 122–123).

It is likely that ranked descent groups emerged as small farming villages grew throughout the eighth century, and as more groups coalesced, a system of ranking developed based on seniority (Ware, 2014, p. 131). In the eleventh and twelfth centuries, newly independent sodalities began to challenge and eventually usurp the political power and organizational centrality of kin-based groups (Ware, 2014, p. 131). Between the thirteenth and sixteenth centuries, following a rapid expansion of aggregate towns, coalescing in the context of large scale in-migration across the northern Rio Grande, Clark et al. (2019, p. 282) argue that the "elevated importance of sodalities in subordinating lineages and other groups became apparent in the unitary plaza-oriented settlements of the fourteenth-century." Indeed, they go further, to suggest that "in rejecting hierarchical organizations and emphasizing communal institutions and spaces…" these societies may have been more participatory and inclusive than many contemporary democratic states (Clark et al., 2019, p. 282).

Once central to holding together the complex array of institutional arrangements that defined Puebloan societies, sodalities became responsible for rituals, secular decision-making, rain and water control, curing illness, controlling witchcraft, success in hunting and warfare, maintaining social conformity, and the initiation of youth among many others (Ware, 2018a, p. 272). Internally, sodalities are generally hierarchical, with priests at the top of a limited membership. In regard to governance, the priesthood performs the critical role of appointing, or ratifying the appointment of, all religious and secular leaders (Ware, 2018a, p. 272).

Sodality membership itself is often voluntary, with membership not determined by kinship or residence. As such, the latent function of such groups is to explicitly and effectively bind together those belonging to different residential groups and lineages (Ware, 2014, p. 34–39). In this way, power and authority across the Puebloan world were exercised by groups, not individuals (Ware, 2014, p. 41). Sodalities themselves were ranked, with a single, most important sodality occupying the apical position within the system, with the lead priest of the lead sodality serving as the head priest, and the individual in the community with the most imbued political power (though in many cases, power was shared among a coalition of chiefs and priests; Ware, 2014, p. 67). However, "the power of individual leaders is still held in check by the countervailing power of the ritual associations to which the leaders belong" (Ware, 2014, p. 101) and the power of both sodalities and their leaders was moderated by other ritual sodalities that shared widely the responsibilities of community governance (Ware, 2014, p. 41).

As Ware points out, "cross-culturally, sodalities thrive in multi-ethnic, multi-linguistic contexts, where interethnic relationships need to be continually negotiated and potential conflicts mediated" (Ware, 2018a, p. 273; also see Lowie, 1954; Little, 1965; Banton, 1968; Sills, 1968; Anderson, 1971). The sodality system of the Puebloan southwest met these challenges as a keystone institution that served to facilitate a form of distributed governance that "cross-cut local communities and crossed language boundaries to form a broad set of regional interactions based on ritual that, among other things, helped to address the inherent risks associated with small, isolated farming populations" (Ware, 2018a, p. 273).

## Coast Salish Houses of the Pacific Northwest

Societies of the Northwest Coast of North America, and particularly those of the Coast Salish region of southwestern British Columbia and northwestern Washington, offer another useful example of democratic currents in Indigenous governance. The political systems in place at the time of contact with European nation states, and likely for centuries if not millennia preceding that contact (Angelbeck and Grier, 2012), incorporated both broadly inclusive, bottom-up elements and formal regulating events hosted by particular institutions. In combination, this system acted as a form of non-institutionalized governance (Grier and Angelbeck, 2017). Houses, defined here as in the Straussian sense (see Ames, 2006) as "corporate bodies holding estates made up of material and immaterial wealth perpetuating themselves through the transmission of names, goods, and titles down hereditary lines" (Lévi-Strauss, 1982, p. 174), were the primary socioeconomic units of Coast Salish societies. As keystone institutions, they organized and hosted integrative potlatches at varying intervals that served to drive a situational form of governance that encouraged broad, meaningful participation by constituents.

Coast Salish politics have been described by Angelbeck and Grier (2012) as decentralized, in that regional political systems were essentially composed of various autonomous actors. These actors were typically the heads of large, multifamily households. Though sometimes referred to as "House Chiefs" (e.g., Ames, 1995, 2006; Coupland, 2006), the position was not a formal title or office. Rather, it was generally assumed by the highest-ranking member of the household. Household leadership was earned, and in turn leadership represented household interests on the political stage. However, political leadership was drawn from a higher stratum of titled nobles, meaning those who had the most direct ties to founding ancestors, inherited names, and held title over household corporeal resources. In this sense there were divisions within society that kept some House chiefs from positions of political leadership and its accompanying authority and prestige (Suttles, 1960; Angelbeck and Grier, 2012).

Among the Coast Salish groups, systems of social hierarchy were far less formalized than among other groups of the coast (Suttles, 1987; Coupland, 2006). Indeed, while there remained a strong focus on class distinction and prestige, formal systems of social ranking were far less emphasized among the southern Coast Salish (Suttles and Lane, 1990, p. 494). In addition, counterbalancing the emphasis on leadership often used to

describe these societies, among the Coast Salish in particular, there was substantive freedom for families and individuals to change or to move houses. Families had much more economic autonomy within their houses and were less constrained by the authority of house leaders and their membership in a house (Suttles, 1987, 1990; Suttles and Lane, 1990; Coupland, 2006). These principles are reflected in the materiality of Coast Salish plank houses, the physical buildings housing the constituent families of a larger corporate household (Suttles, 1991, p. 215; Grier, 2006). Among the Coast Salish, families had their own hearths and own food stores, and there were no permanent communal or central hearths (Suttles, 1990, p. 464; Coupland et al., 2009, p. 95). These plank houses were built so that sections could be added or removed to accommodate the movement of people as well as the hosting of large integrative events (Suttles, 1991). Coast Salish households were decidedly collective systems, defined by the effective integration of autonomous nuclear families and tied to other households through institutional events, relationships, and movements, and importantly, by potlatches. This stands in contrast to the hierarchy seen in other societies of the Northwestern Coast defined by the surrender of autonomy to a more communalistic household in a dialectical relationship (Coupland et al., 2009, p. 84; Angelbeck and Grier, 2012).

Households were thus the key institutions in regional politics, being connected to other households via a complex and decentralized network of local and regional ties established through both the movement of families across households (Coupland et al., 2009) and the integrative events, namely potlatches, hosted by individual households and house heads. Angelbeck and McLay (2011), Angelbeck and Grier (2012) provide useful summaries of how this decentralized system worked to coordinate and facilitate action at multiple scales. The latter study used the framework of anarchism to illuminate the nature of decentralized regional politics in Coast Salish societies, arguing that complex regional interactions can be affected without recourse to political centralization, or in this case, without a permanent keystone institution that serves to bind together institutional arrangements.

Less explored in such analyses of decentralized forms of governance are the mechanisms that can and have coordinated heterogenous and heterarchical networks of autonomous actors. As Grier and Angelbeck (2017) describe, consensus-based decision-making facilitates broad participation and equitably disperses power and authority across interconnected, yet autonomous parts. Such heterogeneous networks can be quite complicated and messy, particularly as the number of interacting agents increases—a notion cogently articulated in the scalar stress arguments advanced by Johnson (1982). A central node of coordination in Coast Salish networks was in fact the renowned potlatch, an event that was hosted within and by specific Houses. In both anthropology and popular perception, the potlatch has been viewed as a competitive ceremony or feast involving intense competition for prestige amongst wealthy high-status rivals, resulting in incredible levels of largess and destruction of property.

However, a broader read of the ethnographic record of the potlatch reveals how it provided the institutional framework for Coast Salish political engagement, coordinated action, and resource management in service of both collective and individual ends. Suttles (1960, p. 303) is quite clear on this point, arguing that the potlatch must be understood "as a regulating mechanism within the total socio-economic system". Trosper (2002) more specifically argues that throughout the Northwest Coast the potlatch must be viewed as a system of governance. Indeed, in the case of the Coast Salish in particular, given the less formal expression of social ranking compared to other Northwest Coast societies, and the relative autonomy of families within and between households, the potlatch did not have the singular or primary function of establishing and maintaining individual or ideal group rankings to the extent seen elsewhere (Suttles, 1987, p. 41), though it did still accomplish these objectives. Instead, we might better understand the potlatch among the Coast Salish as an integrative mechanism facilitated by households that served to bind together institutional arrangements, arrangements that archaeologists have shown to have deep, millennia-long histories.

The rationale behind this view—potlatch as governance—lies in the breadth of functions it performed. As an assembly of individuals and political factions, it provided an arena for the assertion and validation of status claims and rights to property. In the context of the potlatch, conflicts were resolved (and sometimes initiated), debts repaid, marriages transacted, deaths recognized, and leadership positions affirmed. Importantly, this process was collective and democratic, in that the validation of changes to the social order asserted by the host came through their acceptance by those in attendance, as signaled through their voluntary participation in the ceremonial proceedings and collective witnessing of the outcomes. In this sense, the potlatch can be thought of as a kind of situational Congress in which legal titles and rights were claimed, established and regulated, and thus society more broadly was reproduced. Importantly, potlatches, the households that hosted them, and the diverse and autonomous constituents bound together through participation in these events, served the role of keystone institution in periodically reaffirming the articulation of institutions that formed the decentralized arrangement of Coast Salish societies.

None of this is to discount the notion that the potlatch acted as an arena of status competition that could simultaneously serve the interests of the wealthy and privileged, reinforcing structural inequalities in Northwest Coast societies. Indeed, giveaways of wealth at potlatches provided elevated status for those who arranged and hosted the event, which in turn offered opportunities to build additional wealth. In this sense, the existence of a keystone institution that promoted broad-based and consensus-driven governance did not stave off inequalities in society, underscoring the perhaps timeless reality that politics, wealth, and inequality are difficult to disentangle even when institutions of "good governance" prevail.

The diversity of functions the potlatch served strongly points to its character not as an event, but as an institution-of-the-moment hosted within and by particular Houses, and as a central regulatory node in Coast Salish society and in Northwest Coast societies more broadly. The "true nature" of the potlatch

has been intensely debated in anthropological circles for well over a century, but the more holistic view of this institution reveals it to be both inclusive and foundational to inclusive governance. In this way, households were critical in facilitating the participation of many families, households, and community leaders in the process of governance through the integration of regularly autonomous institutions, consistent with functions and properties of a democratic keystone institution.

## DISCUSSION

In the previous section, we detailed the mechanics, characteristics, and contexts of democratic keystone institutions and processes as manifest across four Indigenous North American regions. These were, and in some cases continue to serve as, institutions that bound together complex institutional constellations. Though each of the keystone institutions we describe are unique and function in very specific, historically situated ways, there are important similarities and differences that can illuminate substantive characteristics of the kinds of institutions that facilitate democratic forms of governance. We focus here specifically on comparing across axes of variation related to (1) degrees of centralization and formalization, (2) aspects of participation, both breadth and kind, and (3) the equitability of power distribution afforded by institutional arrangements and the particular ways these arrangements are articulated through keystone institutions.

Each of the keystone institutions reviewed here exhibit varying degrees and qualities of centralization. On the one hand, each serves as the metaphorical center of particular institutional arrangements. On the other hand, not one of these democratic institutions materializes as a single, autonomous, centralized institution in the same way that we might think of a federal government or other bureaucratic entity (e.g., a congress or national assembly, or "the state."). Ancestral Muskogean councils, Northern Iroquoian clans, Puebloan sodalities, and Coast Salish houses through the hosting of potlatches, all serve as integrative institutions in one way or another. Although manifesting at different social and spatial scales, each is central to institutional arrangements in that these keystone institutions offer the organizational blueprint or tether for disparate institutions to coalesce to make decisions and confer with one another, or in some cases to explicitly challenge threats to such collective endeavors. In this sense, all of the keystone institutions described here are the basic building-blocks of these processes. Nevertheless, the way that these processes unfold, and the forms of centralization (or decentralization) facilitated, vary substantially.

Ancestral Muskogean councils are materially central, as places where integrative and collective activities explicitly occur. At the same time, there is no single council. The council as an institution is replicated across social and spatial scales. There are village councils, local councils serving multiple villages, and larger regional councils drawing representation from many scales and institutions. While there existed a scalar hierarchy that may give the guise of a centrally integrated system of councils, no such vertical integration or hierarchical/subordinate system existed. In any case, centralization of decision-making occurred at many scales across many materialized "centers."

For Northern Iroquoian society, there were many overlapping institutions of governance, each designed to deal with particular social and political realms (e.g., war councils, civic councils, intra-clan governance at multiple socio-spatial scales). The social architecture of governance was distributed horizontally across clans and centralized institutions of decision-making drew differentially from clans, moieties, and phratries, ensuring representation of multiple voices and constituencies. These complex arrangements of relationships provided a strong web of overlapping institutions that at once produced unique, functional epicenters of decision-making, but that, at the same time, regulated against the emergence of a single, centralized body of consensus-building. Such a body of collective decision-making was decidedly dispersed across the many constituent parts of a democratic whole.

The materialization (or non-materialization) of this political model is consistent with clans as keystone institutions over a centralized governing body. Indeed, no specialized architecture was associated with governing. Instead, council meetings and other forms of assembly occurred within the long-houses of particular leaders, usually those from the lineages from which particular council leadership positions were drawn. This is not unlike the assemblies congregated within Coast Salish plank houses by households. The decentralized democracies of the Northwest Coast were dispersed in a similar fashion. In place of clans, households served as the epicenters where collective governance occurred. Instead of hosting formal councils, houses hosted potlatches that served a similar, if less formalized role as councils. In Northern Iroquoia, the permanence of governance structures was imbued in the clan system, not the councils themselves. It would seem that councils, without attendant architecture symbolizing their formalization and permanence, existed only when in session or situationally. Similarly, the integrative governance of the Coast Salish existed only through actual practice, the hosting of a potlatch-as-Congress or -council, not simply as an event.

The sodalities of the Puebloan Southwest, similar to the wide networks of horizontally articulated institutions of Northern Iroquoia, comprised a mostly decentralized system of governance in the sense that power and participation were dispersed across organizational units, including specific sodalities or moieties and within and across specific communities. Sodalities served as the most important institutions of governance within Puebloan communities and drew membership from across disparate lineages, households, clans, and moieties. The sodalities themselves were similar to the system of Northern Iroquoian councils, each with requisite responsibilities. Though unlike Northern Iroquoian councils, sodalities were highly formalized through attendant architecture, namely kivas. Kivas served as permanent, formalized places for legitimizing and validating the system of sodalities and thus for allowing the integration and articulation of complex institutional arrangements. The existence of these Puebloan sodalities allowed the formation of relationships that crosscut familial and residence-based

institutions and funneled social and political power across a distributed network of secret societies.

Just as no single, all encompassing, centralized political entity emerges in any of these cases, the same can be said for leadership positions. As organizations of individuals bound together to achieve a common purpose, none of the keystone institutions described here include autocratic leadership, nor do they allow for such roles to emerge across other institutions. There are certainly important individuals imbued with responsibility, held up by reputation, regarded highly, and who have even accumulated a disproportionately large amount of wealth. In all cases, however, leadership is either limited to the constraints placed on them by the wider institutional body (e.g., the council, checks and balances across sodalities) or distributed across a diverse range of decision-making institutions and confined to wielding any amount of authority within narrowly defined realms (e.g., war councils, women's councils, household matters, etc.). Indeed, a defining feature of the institutional arrangements described here is the distribution of authority across institutions, facilitated by the keystone institution itself. These keystone institutions, while central to broader institutional function, work to distribute power across institutional arrangements.

In the case of Northern Iroquoian politics, leadership and authority are beholden to the councils within which they serve and to their constituents (e.g., the clan members, usually women, who elevated them to leadership roles). Across Muskogean councils, the mekko is a specific role within the institution of the council. In this way, leadership is distributed across sociospatial scales, from village councils through regional councils and down through particular households and lineages. In any case, mekkos serve primarily as executors and promoters of the decisions reached through council-based consensus. Like Northern Iroquoian leaders, there exists no objective, external source of power.

Similarly, "House Chiefs" of the northwestern coast are representatives of their houses. In fact, they are merely the largest stake-holding member of the house, owning the majority of the estate, but not the entire house. Like the Northern Iroquoian or Ancestral Muskogean leaders in the examples we describe here, such authority is replicated and distributed across institutions, in this case households. Like Northern Iroquoian politics, such distributed authority is materialized through the role of the house as both domestic space and political epicenter, unlike the central, specialized architecture of Ancestral Muskogean councils (though in some cases the council houses of the southeast have been referred to as the "chief's house," metaphorically). While authority shifts between houses throughout different events and times, it remains situationally distributed.

In none of the cases described here is participation completely equitable, neither in access to participation nor in the character of that participation. In the case of the Puebloan Southwest, sodalities are the heart of governance. While they drew membership from across familial and residential institutions, and extended beyond community boundaries as a system of pan-Puebloan socio-ritual networks, binding together households, lineages, clans, and communities, participation in this system is actually quite limited to a small subset of the citizenry. Those serving in these secret societies, within which power and authority are vested, may have numbered on average only fifty individuals for each community (Ware, 2014). These would have primarily been adult men who chose to take on such a role. Thus, while power is distributed widely across these networks of diverse sodalities, it was at once still concentrated in the hands of a social, political, and ritual elite. This does not mean, of course, that these elite had absolute power. On the contrary, the sodality system included a series of checks to ensure good governance. These checks included cross assigning leadership positions (e.g., one sodality nominating individuals for service in another society), integrating members from distinct moieties, and even processes by which leaders could be removed.

In the case of both Ancestral Muskogean and Northern Iroquoian systems, leaders served as specific representatives of the institutions bound together through the keystone institutions. In the southeast, councils were populated by members from across households, lineages, clans, and towns, representatives of the membership of each of these constituent institutions. Similarly, in the northeast, the clan system ensured that participation was widely distributed across residential and familial units, with direct representation of institutional members by specific leadership from those institutions. While lacking these more formal systems of ensuring wide participation, participation in Coast Salish potlatches was similarly wide, if not wider in regards to the percentage of the total population participating. That said, in the absence of such formalization, leadership remained mostly *ad hoc*, completely dependent on the participation of families and other households and only situationally meaningful within a context of familial autonomy. In all cases, these political arenas, no matter how collective, distributed, or equitable, and no matter how "good" the governance, still often served as venues for individual achievement and status competition. What we have demonstrated, however, is that individual mobility, degree of centralization and formalization, breadth of participation, and distribution of power vary in ways that ultimately support variable forms of democratic governance. The power of an institutional approach, and of a focus on keystone institutions, is that we can avoid approaches to describing and comparing modes of government that overgeneralize from narrow sets of criteria or overly simplified checklists of presence or absence of democratic principles. Instead, we can formally evaluate and compare these features across keystone institutions that facilitate, in different ways, varying forms of democratic governance.

## CONCLUSION

The democratic, keystone institutions described here are a subset of institutions that served to aggregate disparate preferences and positionalities into equitable social choice (sensu Coleman and Ferejohn, 1986, p. 9). Indeed, democratic institutions, the constraints they impose, and the freedoms they create are alleged to organize choice meaningfully. That is, to ensure that a social or public choice reflects public sentiment

(Coleman and Ferejohn, 1986, p. 14). Through the analytical lens offered here, focusing on keystone institutions, we are able to avoid the misplaced reification of "democracy" as a feature of society. Instead, we highlight that democracy is an assemblage of institutional arrangements and intentional actors. We can move from the ethos of "democracy" to the actual mechanisms that facilitate such forms of governance. Of the most recent writings on the history of democracy, such efforts have either disregarded the potential non-Western origins of democratic institutions (e.g., Keane, 2009), relegated them to some lesser form, for example "primitive democracies" (e.g., Stasavage, 2020), or have not been able to un-anchor democracy from the state, even in non-Western historical contexts (cf. Graeber and Wengrow, 2020). The challenge for archaeologists, or anyone interested in a true comparative approach to governance, is not necessarily to identify principles of democracy, but to identify specific institutions that exhibit and enact democratic principles, and translate across cross-cultural frameworks that allow us to explore the ways that they have been materialized in the past, continue to be expressed in the present, and how they may be realized in the future.

## AUTHOR CONTRIBUTIONS

JH-L and VT contributed to conception and design of the study. JH-L wrote the first draft of the manuscript. JB and CG wrote the Northern Iroquoian and Northwest case study sections respectively. VT and JB contributed heavy editing to the full draft. All authors contributed to manuscript revision, read, and approved the submitted version.

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# A Civil Body Politick: Governance, Community, and Accountability in Early New England

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In the early XVII century, when the New England colonies were established, the English Crown, preoccupied with domestic matters, interfered little with matters of colonial administration. The government system created by the colonists, was inspired to a certain degree by the religious ideas shared by many Puritan colonists but was shaped by political necessity and social conditions specific to the colonies. This created a system characterized by a much higher degree of accountability than in England, ensured by numerous checks on government power, both formal and informal. The same principles, initially applied to governance in individual settlements were later used for the colonies and the Confederation of New England, the first major inter-colonial political union. Early New England serves as an example of practical application of ideas in many ways similar to (and in many ways drastically different from) what we today call democracy as a foundation of ultimately successful government. By modern standards, the representative nature of the New England government was very limited, since it excluded women, Native Americans and other marginalized groups from the political process. It was also deeply rooted in a specific set of religious ideas. Nevertheless, the principles of elected representative government, present in some form in many Western polities, rarely served as a foundation of those political systems, still in most cases monarchies with limited government accountability. In New England these principles formed the core of the government system. This essay explores the formation of the early New England political system, its underlying ideas, both religious and secular, the way it faced some of the challenges encountered in the first decades of English settlement in the New World, and its eventual dissolution under external pressure.

**Keywords: early New England, colonial society, Puritanism and political development, British Empire, social cohesion**

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## INTRODUCTION

This essay examines the New England colonies (Plymouth, Massachusetts Bay, Connecticut, and New Haven) in the XVIIth century within the framework of the "good government" concept based on the collective action theory (Blanton et al., 2021). When referring to "good government" we draw primarily on the works of Blanton and Fargher, and earlier works on collective action theory (Levi, 1988; Cook et al., 2005; Blanton and Fargher, 2008). While the concept resists precise quantitative definitions, in broad terms "good government" is defined by its ability to "acknowledge and respond to citizen voice, <its> capacity to provide desired services to its citizenry, such as public goods, and

its capacity to set limits on the ability of those in positions of authority to benefit privately from the state's resources" (Blanton et al., 2021). That does not necessarily mean that such a government must be based on electoral process or resemble contemporary Western polities—as Blanton and Fargher (2008) have shown, good government is a global and trans-historical process, not limited to societies of Western modernity. Numerous mechanisms of good government exist besides election, including various checks on the power of government officials, open recruitment to positions of authority, etc. Our goal is to examine the good government practices and institutions in New England and the conditions which shaped them.

The New England society during the period we focus on, from the founding of the Plymouth colony to the creation of the Dominion of New England, differed in many ways from other European colonial ventures of that era. The colonies were governed by elected magistrates. Formally subject to royal authority, New England settlements were essentially self-governing, and the colonists, not London officials or investors, determined the structure of political institutions. Preoccupied largely with internal matters for most of the century, English authorities had few resources to spare for colonial ventures in the New World, especially for relatively small and not particularly profitable settlements of religious dissidents in New England. As a result, for the better part of a century—1620 to mid-1680's—the colonial political system developed on its own with little outside interference. The resulting polity was in many ways more democratic than most of its Western contemporaries. Obviously, the ideas of civil rights as we know them today were completely alien to XVII century New Englanders, as were the concept of universal suffrage or most forms of religious tolerance. In this context democratic means only that the consent of the citizens—in this case, of the free adult men of the colony belonging to a Protestant religious community—was a necessary precondition for securing political power, and the public had numerous ways to limit the power of government officials and prevent potential abuses.

The New England government, like any political system, was shaped by numerous factors, and it would be impossible to describe it fully within one essay. We will focus on the ideological and social foundations which led to the emergence of accountability as a major element of early New England politics. Two factors distinguish New England from other English colonies—the influence of religion and a specific social structure. We will examine those key issues and attempt to trace their influence on the political structure of the colonies. We will also have to look at the way the early New England political system eventually dissolved.

This essay seeks to present not new information, but a new interpretation of social and political development of early colonial New England by introducing anthropological concepts and ideas to the study of an area which traditionally was mostly explored by historians. European colonies in the New World have relatively rarely attracted the attention of anthropologist studying social development. We believe applying the relevant theoretical approaches, such as the collective action theory, to those cases may contribute to both further development of the theory, by presenting new and widely varied cases for further study, and to a better understanding of histories of specific societies, by situating them in a broad cross-cultural framework. The importance of a cross-cultural understanding of good government has been shown before (Blanton et al., 2021), and in this regard New England may provide a useful example of, among other considerations, the reasons for eventual decline of a good government.

## SOCIAL AND ECONOMIC BACKGROUND

English expansion in mainland North America started in 1607 with the founding of Jamestown. Jamestown was first and foremost a commercial operation. While matters of international prestige and potential opposition to Spanish expansion did play a part in securing royal support for the settlement, as did the ideas of spreading Christianity and civilization propagated by colonial ideologues (e.g., Purchas, 1614; White, 1930; Winslow, 2014), the primary goal of the Virginia settlement was profit. The population consisted mainly of young, poor, unskilled male laborers, most willingly entering indentured servitude to improve their economic situation (Anderson, 1991, p. 14–41; Taylor, 2001, p. 117–138, 169, 172).

Unlike Virginia and the Caribbean settlements, New England colonies were not commercial ventures. The investors in England expected the colonies to bring some revenue, but for the colonists the primary goal was to establish a godly society far from the degradation and vices of Europe (Anderson, 1991, p. 100–128). Plymouth settlers moved to the New World collectively, as an established congregation. Those who came to New England later were also driven largely by religious sentiment, and often had familial or social ties to those already in New England. Obviously, not all the immigrants from England belonged to those core socio-religious groups, even the Mayflower had several "independent" settlers, but the congregations formed the core of the New England society, and a person's chance to establish themselves in the colonies often depended on their ability to establish themselves as members of a church. Religion was a powerful source of social cohesion (Demos, 2000; Taylor, 2001, p. 117–143, 166–167).

Colonists primarily interested in setting up a godly society saw their settlement as a permanent one. They brought over their families, sometimes several generations. This created a much more balanced social structure in terms of gender and age distribution. New England settlements resembled English towns, with relatively equal numbers of men and women, with children of all ages and the elderly prominently represented (Anderson, 1991).

New England colonists were relatively affluent. Most were artisans, many had some real estate in England and planned to support themselves in the colonies by renting it out. The modern concept of middle class is not directly applicable to XVII century society, for simplicity's sake it can be said that most New England colonists were middle-class. Some were less well-off than the others, of course, but poverty was not nearly as widespread as it

was in England, nor was it as pronounced (Anderson, 1991; Levy, 2009).

On the other hand, New Englanders were not exactly rich. Even the wealthiest colonists would be considered well-off, but not exceptionally wealthy in England. This was partly a consequence of the dominant ideology, which stressed the importance of community and saw an overabundance of individual wealth as suspect. What New England colonists strived for was "competency"—the ability to provide a decent living to oneself and one's family and to contribute to the community, but no more than that. Accumulating more wealth than competency required was seen as suspect at best and downright immoral at worst. Most colonists intentionally chose farm work or crafts, seen as honest labor, instead of potentially more profitable ventures, specifically because they did not want to jeopardize their moral and religious wellbeing in favor of material gains (White, 1930, p. 1630; Vickers, 1990; Anderson, 1991, p. 125; Taylor, 2001, p. 172).

In terms of social status, New England was also less stratified than other colonies. Most of the colonists were free men and women, some were minor gentry, but none were aristocrats, members of the highest strata of English society.

Colonial leaders often had some connections among the elites in England, yet their position in the colonies was not necessarily contingent on those connections. Officials were elected by the colonists, and it mattered little how well-connected they were. Their ability to retain power depended not on the generosity of London benefactors, but on the support they could muster among the colonists. Sure, those with friends in high places were useful—they may be sent to England to speak on behalf of the colonies, and they were protected to a degree, on several occasions the transgressions of such individuals were punished by exile instead of harsher measures specifically to avoid the wrath of their patrons (e.g., Dillon, 1975, p. 191–193; Chronicles of the First Planters of the Colony of Massachussets Bay, 1979, p. 363). But the impact of connections with elites on their standing in the colonial society itself was limited.

Land ownership, still one of the main sources of social status in England, was far less important in New England. Land was one resource the colonists had in abundance. Even though most of the land in New England was occupied by Native Americans, and the colonial leadership had to use some ideological maneuvering to justify appropriating it, a solution was eventually found, and expansion began in earnest (Aleksandrov, 2019). The amount of available land compared to the number of settlers allowed colonists to allot it quite generously. Even the least wealthy colonists owned relatively large (by English standards) plots, and the publicly owned town commons were abundant and accessible to all (Levy, 2009, p. 91).

A New England town was seemingly much like an English one. The differences, though perhaps not obvious at first glance, were crucial. The New England society was the English society devoid of its extremes. Both the upper and lower outliers of the economic and social structure were absent. This lack of social extremes created a remarkably cohesive society. Similar religious views of most colonists also cemented social unity.

## SOCIO-ECONOMIC STRUCTURE AND POLITICAL DEVELOPMENT

The title "governor" was used in New England, much like in other colonies, but the position was quite different. The difference was not in the function, governors handled similar problems, but in the fact that governors, as well as local magistrates, were elected, not appointed.

The idea of electing public officials was familiar to the English. Aside from members of the parliament, on the local level some parish officials were elected (Levy, 2009, p. 21). This local political participation became especially important after the introduction the 1601 Act for the Relief of the Poor ("The Old Poor Law") (Lees, 1998, p. 19–39).

However, In England local nobility exerted considerable influence on local politics. The requirements for most public offices, even those occupied by commoners, meant that they were reserved to a relatively small group of most prosperous local farmers or artisans. These people were connected to local gentry and nobility by economic, personal, and occasionally even familial ties. The local political system in England was mostly controlled by the local landed elites. In most cases, one had to belong to a group of supporters and clients of the landowner to have any chance of occupying a political office (Dunkley, 1973, p. 838–839; Levy, 2009, p. 91). Decisions made by such officials were largely determined by their patrons. The political influence of nobility did wane in the XVII century with the rise of the new economic elites, but in rural areas the power of landholders still held strong.

In New England many of the key determinants of this system were absent, and new ones emerged. In the early XVII century, the political influence of nobility and gentry was still very much seen as natural and was rarely questioned. In the colonies those were barely, if at all, present—a few colonial leaders did come from minor gentry families, but the majority did not, and even for those gentlemen it's questionable whether their origins played any part in securing their authority and influence. John Winthrop, for example, was a wealthy gentleman, but the source of his personal authority and public trust was his legal acumen and reputation as a religious thinker. In any case, most colonial governors and magistrates were commoners.

This highlights the difference between New England and Virginia. A full comparative study of these two colonial governments is beyond the scope of this essay, it seems necessary to note that, like New England, Virginia did establish a representative local government. However, there were several major differences between the two government systems. Firstly, the Virginia Assembly was established by the Virginia Company, a commercial association that originally funded the establishment of the colony. Consequently, any legislation proposed and passed by the Assembly was subject to approval of the Company officials. In New England the representative governing body was a natural extension of the colonists' ideas about a godly society, in Virginia it was set up as an instrument of relieving the growing social tension by outside authorities. In time the role of the Company diminished, but during formative stages, the Assembly was an

extension of the Company's authority more than a tool of political representation for the colonists (Horn, 2005, p. 240; Roper, 2009, p. 79–80). The second important difference concerns the recruitment of officials to the positions of authority. While nominally any free Virginian was eligible to be elected, a ruling elite emerged early on, consisting of largest landowners with close political ties to London, and the access to political offices for most colonists was limited at best (Taylor, 2001, p. 139–140, 144; Billings, 2004, p. 105; Roper, 2009, p. 10).

Jamestown was settled by the poor—much like the early colonial propagandists suggested it should be. Advocates of colonization often specified that the main benefit of settling the New World would be getting rid of the rapidly growing masses of paupers crowding English cities. The leadership, on the other hand, was often in the hands of the very rich. Many colonial investors were, of course, aristocrats and rich merchants. Governors and officials initially were often military men, with direct ties to the members of the upper social strata in England (Taylor, 2001, p. 131). When later local elites developed, their status was based on owning large amounts of land and political ties to London, and their behavior was mostly modeled on English landed elite. Leadership was conditional to the support of English magnates and the profitability of the colony, and the larger population had little say in the matters of leadership (Steele, 1989; Cave, 2011). Thirdly, the governors were appointed from London and not elected.

As we have mentioned, good government, in the sense we are using the term, does not necessarily require elections. Similarly, the presence of a representative body in itself does not imply good government. In the case of Virginia, the growing influence of landed elites and their disproportionate influence over the political process limited the development of good government practices to a certain extent (Roper, 2009, p. 11). In line with the collective action approach, it may be said that Virginia, which relied heavily on production of export goods, was tied to an external source of revenue, also precluding development of good government. However, further study is required to make any definitive conclusions, and the present work is concerned with the specifics of New England.

The absence of aristocracy in New England was not coincidental. The situation with lord Brooke and lord Saye and Sele and their planned move to New England illustrates this perfectly. Both were immensely wealthy aristocrats, members of the highest orders of both political and economic elite in England. Both were also ardent Puritans, and in the mid-1630's have seriously considered moving to New England—which would undoubtedly bring considerable benefits to the colonies. But they had conditions. Specifically, the political structure which was by this point well-established was an issue. The magnates had reservations about the magistrates being elected, about the influence of the church, and most importantly about power falling into the wrong hands. If they were to grace the colonies with their presence and the accompanying wealth, the power had to belong to "gentlemen of the country." Their position had to be hereditary, of course. The franchise was to be restricted, and the only criteria for voting was, unsurprisingly, land ownership—ensuring that only the owners of the largest domains would have any say in political matters (Foster, 1971, p. 38; Kupperman, 1989, p. 20–26).

Despite the potential benefits of attracting puritan magnates, the New England colonists adamantly refused to conform to these conditions. John Cotton, one of the most prominent ministers was tasked with composing a response an official response, and also added a more personal letter—which, though incredibly polite, reaffirmed the colonists' commitment to their chosen political order. Cotton's response also advocated theocracy as the most godly form of government, but his understanding of theocracy was rather specific, and he still insisted that "the magistrates are neither chosen to office in the church, nor do govern by directions from the church but by civil laws and those enacted in general courts <...> by the governors and assistants" (Cotton, 1636).

Entrenched wealth was as absent in New England as traditional political elites. Although some colonists were wealthier than others, the wealth distribution was far more equitable in general. The property left in England did generate benefit and provide for some material comforts for the wealthiest but did not translate directly into a significantly higher standard of living. In terms of such basic indicators of higher economic status as housing, wealthier colonists were not that different from their less well-off neighbors—land was easily available, but materials and other resources necessary for construction were limited for everyone. The inherited wealth and property were largely left behind even by those few who had them in the first place.

The situation did of course change as the colonies grew, and a new economic elite, primarily mercantile, emerged by the mid-to-late XVII century. But even these new elites were never as separated from the rest of the population as they were in England. Even if the colonists managed to make a fortune, they were still bound by the same social restraints as their peers. Specifically, the idea of competency as a goal of a godly person in economic terms prevented the more egregious demonstration of individual success. If one showed off their economic success visibly, they would have likely faced the accusations from the community of being self-involved, avaricious and of putting material wealth before God. The dominant ideology actively discouraged excessive accumulation of wealth, ensuring the stability of a more or less equitable congregation would persist even in the growing colonial society not limited to a single religious community (Vickers, 1990). Not only was entrenched wealth largely absent, efforts were made to prevent it from accumulating. Until at the very least the late XVII century, material wealth did not translate into political influence as directly or as efficiently as it did in England. A rich merchant did have considerable resources at his disposal, but, unlike a rich gentleman back in England, was not perceived as inherently more worthy of a political office than a simple farmer or artisan, thus severely limiting his ability to buy his way into a political office. As a result, many if not most magistrates, even governors, were not necessarily rich, and most rich merchants preferred to stay out of politics.

Differences in land ownership contributed significantly to a more equitable distribution of social and political power. In

England, owning a sizable plot of land was a source of both wealth and status. In New England farms of the size that would make most Englishmen envious were available to most colonists for a fraction of the price. Consequently, the status of a landholder could not be exploited for political gain as easily. Unlike the Chesapeake colonies, where larger plots of land were directly allocated by the government, usually to the wealthy and well-connected individuals, in New England land was allocated by town magistrates or town assemblies, which prevented excessive concentration of land (Taylor, 2001, p. 170).

However, another resource was far more scarce and far more important than it was in England, and that was labor. One drawback of the balanced social and economic structure of New England was relative lack of people capable of performing physically demanding labor. Many colonists were well-established, "middle-class" artisans—that is, middle-aged men and women used to labor that required skill and precision, but not necessarily physical strength. And they were often accompanied by families, by the very young and the very old. Farm work, especially clearing out new farmland, required a lot of hard work. As a result, labor was in extremely high demand in New England (Levy, 2009).

A simple solution would be to import indentured servants, like Virginians did. But the New England Puritans were wary of mass influx of poor young men in the colonies, worried it might disrupt their society and lead to all sorts of "mischief." More importantly, those laborers imported from England would likely be Anglican, or, even worse, Catholic. Employing them would endanger the spiritual wellbeing of the colonists, which the Puritans were drastically opposed to. There were indentured servants in New England, especially in larger towns, but comparatively few and their social life was strictly regulated. Another possibility was using Native American labor resources, acquired by force or coercion—Native American slavery became the foundation of forced labor system in New England, but the numbers of either captives or Native Americans willing to work for the colonists were limited (Newell, 2015).

As a result, the labor of young free colonists became incredibly valuable, resulting in appropriately high wages, much higher than in any other region populated by the English. Laborers, therefore, acquired unusual amount of economic power and influence over the colonial economy. This, in turn, led to a growing political influence of the workers. On the one hand, the magistrates realized the potential for social disruption inherent in laborers' participation in politics and attempted to control it. Young people, not just indentured servants, but free, local-born men, were often assigned jobs by the magistrates. Enforced apprenticeships for children became a routine and widespread practice. At least until the moment they inherited the land owned by the parents, the young people's labor was generally in the hands of the town. As Levy notes, children and young servants formed a significant part of the labor force in New England and expanding the rights of the town to control it was vital for the colonies' survival.

Although the distribution of labor resources was under magistrates' control, the political participation was not. Laborers en-masse played a significant role in shaping local politics. Decisions about limiting outside access to town job market were made under clear influence of masses of workers. Given their importance for the colonies' economy, their political voice, expressed through voting or through public opinion, could not be ignored. If the policies of the magistrates went contrary to the worker's wishes, they had numerous ways to counteract. The elections were, of course, the primary one. In England the magistrates could always rely on the support of local elites and their clients, in New England this support structure did not exist. Magistrates realized perfectly well that their ability to deal with public discontent was severely limited. There was no higher authority to call upon for support. The only power the magistrates could have potentially used against the masses was the militia—itself composed of those same workers. This resulted in a political system far more equitable than in England, with much larger segments of the population exerting considerable political influence. A less stratified society led to a less stratified distribution of political power. The magistrates' positions and titles were similar to English ones, the public had significantly more control over the government.

In terms of economic structure in general, early New England was far more reliant on "internal revenue" (Blanton and Fargher, 2008, p. 112). Production was mostly carried out by individual farmers, and though some of their plots of land were large by English standards, they were not even close in terms of size, number of workers of overall productivity to large plantations in other colonies. No staple cash crop was produced. In the early decades, the revenue generated in these colonies was almost exclusively internal. Later New England did develop certain profitable "external" sources of revenue. Commerce was important and became the foundation of local elites in the second half of the century, introducing a significant external element to the revenue structure. Two other industries, connected to commerce, were more localized—whaling and fishing, sources of important export good, were conducted all over the Atlantic, but many ships and their crews were based in New England itself. Shipbuilding, while providing resources for long-range trade, was also a local industry—an industry which grew immensely by the end of the century and was of crucial importance not just to New England, but to the British Empire as a whole (Taylor, 2001, p. 169, 174; Levy, 2009). The colonies did also draw on resources back in England, by attracting new settlers and investors. So overall structure of revenue could perhaps be best described as mixed. In terms of collective action theory, that may be a contributing factor in fostering the development of good government (Blanton and Fargher, 2008, p. 254). A mixed revenue structure does not guarantee, of course, good government, its emergence is influenced—positively or negatively—by other factors. In the case of New England, the key factor was religion.

## RELIGIOUS FOUNDATIONS

In popular history, the first New England colonists are usually called Puritans. We will refer to them as such for simplicity's sake, but it's important to note that early New Englanders

belonged to several denominations and did not necessarily agree completely on dogmatic matters or even church structure (Pestana, 1991; Knight, 1994). They were, however, all non-cofromists—that is, they refused to conform to the practices and doctrines of the Church of England, and they were all Calvinists, though interpreting Calvin's teachings in slightly different ways. The differences between denominations and even specific congregations are a fascinating subject, but this essay is concerned with issues common throughout New England, so for our purposes "Puritans" seems a sufficient designation. Politically, the structure of New England colonies was remarkably similar.

The influence of religion on New England was profound. It was so significant, that some scholars chose to proclaim New England a theocracy, though others have argued convincingly against such suggestions (Fiske, 1899; Zakai, 1986; Foster, 1991; Levy, 2009; Johnson, 2015). To call New England a theocracy would be not necessarily an overstatement, but an oversimplification. The relationship between religious and secular authorities was more complex than simple subordination. Perhaps more accurately it can be described in terms of a limiting influence, of checks and balances. Religious authorities did not necessarily control the secular ones, but certainly influenced their response to emergent challenges of colonial life. The church served as a moral authority, ensuring that politics did not get in the way of the peoples' desire for a godly life—which was for many New Englanders, the main reason for the colonies' existence.

The first settlers in New Plymouth were already an established congregation, already united into a single spiritual body. The political system existed to deal with purely secular matters the community was facing, for the congregation to deal with the outside world. The political authority was to be an extension of the congregation itself, not something imposed upon it by the society outside of the religious community. It would be a secular arm of the same collective spiritual body, serving its interest and subordinate to it.

Of course, such institutions would not only originate from within the congregation, but their nature would also be by necessity determined by spiritual beliefs. Particularly, the idea of a covenant was extremely important. Personal relationship with God was based on a personal covenant. The church itself was a result of a covenant between believers, and between believers and God (Rohr, 1965; Stoever, 1978; Zaret, 1985). Logically, the new collective political body of the congregation would be based on the same idea—a covenant between members of the church to ensure the worldly affairs are taken care of.

This earliest set of political institutions, established by the Mayflower Compact, was indeed theocratic—not in form, but in principle. "Civil body politick" was a necessary extension of the spiritual "body politick." However, the political and religious spheres were clearly separated. Many matters did not concern religious authorities at all. Taxation, trade regulation, mutual defense, international relations, even marriage were all important, but strictly secular issues. The individual officials, governors and assistants could seek guidance and advice from ministers, like any member of the church, but no minister had authority over them. If some issues belonged, by the terms of the covenant, to the sphere of political authority, attempting to control them would be as much a violation of said covenant as secular authorities attempting to interfere with the contents of a sermon or with accepting new members into the congregation (Cotton, 1636).

The scope of the newly established political authority expanded relatively quickly. The colonies were growing. Newcomers did of course belong to similar religious bodies, but in secular matters they were independent, so the political authorities were no longer representing just one congregation, but several—still handling the same secular matters for all of them, and necessarily employing representatives from different churches. Despite being based on the theological concept of a covenant, political power was separated from the church.

That doesn't mean, of course, that the church and its representatives had no influence on politics. At the very least, government officials were still expected to consult the ministers to determine the godly course of action in difficult situations. And consult they did, on numerous occasions. Before starting the war with the Pequot in 1636, for example, and later during most major conflicts with either Native Americans or the French colonies, generally during any sort of crisis. Governors would consult their own ministers, or sometimes assemble notable preachers from several churches to examine specific issues. Their opinion held great weight and their advice was generally followed. Though informal, these church-state interactions often determined the political decisions made by the officials (Winthrop, 1908, p. 186; Cave, 1996, p. 109; Turner, 2020, p. 150, 308–309, 201).

One area where Puritan ministers were unquestionably an authority was the legal system. The influence of the English legal tradition was unquestionable, but the laws had to conform to Biblical principles, and in many cases were based on the Old Testament (including, for example, the legal foundations of slavery, justified by Biblical quotations) (Colonial Laws, 1889, p. 52; Wiecek, 1977). Naturally, the ministers often had to evaluate the legislation from a Biblical perspective. However, once the law was considered sufficiently "godly," it was passed by the general court which was not subordinate to the church, and was carried out by civil authorities, even if it concerned religious matters [like witchcraft cases, as in the infamous case of Salem (Norton, 2002)].

The relations between the church and the public in general in New England were also different from the English model. New England congregations chose their own ministers, which changed the power dynamics. In England, the Church was an extension of the state, an instrument of controlling the population. In catholic countries the Church was not subject to state power, but was a separate political actor, largely independent from the public as well. In New England, religious authorities were chosen by the public. While ministers could find themselves in conflict with their parishioners on some issues, such situations rarely lasted long—a minister the congregation was unhappy with was dismissed and replaced with another, more agreeable one. A minister's livelihood depended on the support of their congregation. Ministers were rarely able to dedicate enough time

to provide for themselves and were dependent on the salary the congregation paid them and on donations (Holifield, 1993; Demos, 2000, p. 8; Norton, 2002, p. 16–18, 124). Consequently, in dealing with secular authorities the ministers were likely to act as a conduit for public opinion. The church organization, the religious authority, was as much an extension of the congregation as the elected officials.

The congregation also played an important role in the emergence of a new social hierarchy. In terms familiar to the English the social status of most colonists in New England was relatively similar. But relatively quickly new sources of high social status began to emerge. The status of a full member of the church was very important and provided significant social benefits. Most people were not members of the church. Unlike the Catholic Church, in Puritan churches the status was not easy to obtain. There was a profound difference between a parishioner, someone who attended the services regularly, and a full member of the congregation, one of the elect. To become a member of the church one had to not only attend the services regularly, but also to publicly show their commitment. To do so one had to describe, in full detail, their own spiritual conversion, the moment they personally accepted the Lord as a guiding force in their life. This extended public confession was then judged by the congregation. Success was not guaranteed, and some prospective "saints" were denied the coveted membership, sometimes repeatedly. Since the final decision was made by the congregation, membership was a mark of recognition not just of spiritual accomplishment, but of acceptance by the community. Confirmation was inevitably a social act, and, though it is only speculation on our part, it's hard to avoid the idea that in many cases denying membership was as much a result of rejection by community as of strictly spiritual shortcomings (though it would be unwise to see the whole process as a purely social one, most New Englanders were fanatically religious even by the standards of their time, and took spiritual responsibility very seriously—undoubtedly in many cases they denied prospective members because they honestly believed they have not yet experienced a true spiritual conversion) (on the community ritual aspect of conversion see Holifield, 1993). Once granted, membership status gave no material benefits, but endowed one with a moral, spiritual, and even political authority recognized by the society in general—they could become selectmen (though some lower local offices were accessible to non-members), their word would carry all the more weight in court, in political debates or in any social situation.

Religion had a profound influence on political institutions of New England. Starting with the fact that they were based on the same ideological foundation as religious authority, on the idea of a covenant. Political structure was, at least initially, an extension of a congregation, a religious and spiritual unity. Despite that, the separation between religious and secular authorities was established early on. Religious authorities did not control any secular matters directly but served as one of the mechanisms of public control over politics, politicians and officials. Both the ministers, who influenced and consulted officials, and the officials themselves, were responsible to the congregation. The very idea of the covenant, an agreement as a foundation of authority, implied accountability. Rather than dominating the political sphere, religion became one of the key checks on political power and instruments of public control. At the same time, the idea of competency, founded on Puritan theology as well, served as perhaps the most important ideological leveling mechanism, limiting the potential for self-aggrandizement. The perspective of church censure and even exclusion further cemented the effectiveness of the church as a mechanism of preserving social cohesion. An important part of New England social and institutional structure were such leveling mechanisms that prevented aggrandizement by the emerging elites, primarily through a specific religious mindset and the influence of the church community, or rather, community through church.

## NEW ENGLAND CONFEDERATION

Perhaps the most notable political development of the XVII century in New England before the creation of the Dominion was the emergence of the New England Confederation. The colonies first decided to act together at the outset of the Pequot War in 1636. The refined version of their agreement, signed in 1643, formalized the structure of the union (Public Records, 1850, p. 9–10; Bradford, 1856, p. 416–423). The council of the United Colonies of New England became a representative body with ill-defined, but broad powers.

Supposedly a representative body where each colony would have an equal voice, the Confederation quickly became a political tool of the Massachusetts leadership, which used it quite effectively to promote its commercial interests pressure the other colonies politically—including, for example, forcing them to provide militia units for demonstrations of power to the natives and even participating in conflicts in which individual colonies had no interest at all (Drake, 1999, p. 166).

No other region of British colonization had similar institution. If any form of colonial "Parliament" was established, it was on the authority of a European government, and limited to a single colony. The reasons for inter-colonial political entity emerging in New England are relatively obvious—the aforementioned lack of attention from England, the non-existence of colonial administration as such, and the Puritan view of the colonies as a godly alternative to the irreversibly "spoiled" English society.

Much like the authority of local magistrates, the authority of the Confederation was limited in many ways. Specifically, it had little ability to interfere with internal affairs of individual colonies, much less individual settlements. It's power, like the power of the local magistrates was held in check by mostly the same mechanisms. Representatives were elected, not appointed, and should their conduct not satisfy the people, they were subject to recall. The same informal checks that limited local authorities applied to inter-colonial ones as well.

However. the matters the Confederation authorities made decisions on were far removed from local concerns, and consequently drew less attention from the public in general. Aside from major decisions, such as declarations of war, most of the day-to-day business was of little concern to an average colonist, especially because their own way of life was not really

in any danger in any case – the local affairs being left to individual colonies.

This created a political space less subordinate to the public control than local authority in New England. The growing influence of Massachusetts in the Confederation illustrates this quite well. On the local level, if a wealthy individual tried to enforce their own will on the others through abusing the powers of a magistrate, they would face considerable backlash and probably won't stay in power for long. On the inter-colonial level, preventing such abuses was considerably more difficult since many informal leveling mechanisms existed primarily on the level of individual towns. The decisions Massachusetts carried out were motivated primarily by economic concerns, they involved using political power to secure economic advantages and financial gain for a limited number of wealthy individuals, the highest strata of Massachusetts merchants. This was the one area where power dynamics more familiar to Europeans at the time played out—the wealthy and powerful using political power to improve their position even further, with little regard to the public interests.

## DISSOLUTION OF NEW ENGLAND POLITICAL SYSTEM

The political and social order established in New England survived several major internal crises, including two wars with Native Americans, one of which, King Philip's War, was staggeringly devastating by colonial standards, as well as constant political threats from New York government, several religious controversies, and a number of political crises (Cave, 1996; Drake, 1999). What it did not survive was the attention of the Crown. After the Restoration, the emergent New England way of governing caused concern in London. Eventually, using numerous complaints from Edmund Andros, the governor of New York, as a formal reason, the Crown decided to interfere (Drake, 1999). Dominion of New England was established, a royal governor was appointed, as well as an Anglican bishop, the Massachusetts Bay Colony charter was revoked.

Even though the Dominion proved to be short-lived, the New England political order never recovered. From 1689 onward, the governors and lieutenant governors were appointed by the Crown, not elected. Even though some of the institutions established in the XVII century survived, the political power was no longer dependent on the public. While the governors had to take public opinion into account to an extent, they were accountable not to the people, but to higher authorities in London. At the local level they wielded considerable power, and the magistrates often relied on their connection to the governor or even to London directly to secure their position. Workers managed to retain significant, by British standards, political influence and town meetings were still a major force in local politics (Labaree, 1979). The church retained some of it influence. But the power dynamics in general became much closer to the European norm.

It would be too simple, though, to describe the collapse of the New England political order as just a result of an outside intervention. The relatively equitable politics of New England depended primarily on one crucial factor—social cohesion, a relative equality of status supported by a communal ideology. Over time, this cohesion became harder and harder to maintain. The first casualty was probably the economic balance. New mercantile elites emerged, and, though they still avoided ostensible demonstrations of wealth and luxury, their economic power by the late XVII century has grown considerably. The new elites were not above using political means to secure economic advantages. On the level of individual colonies this behavior was curtailed by the accountability of political power to the larger population. But as soon as the highest power in the colony was no longer bound by public approval, the elites began to integrate themselves into political power structures and use politics to their advantage. This accelerated the accumulation of wealth and made status differences, both economic and social, more profound and evident.

Similarly, religion as a source of social cohesion was not nearly as effective as it once was. As the colonies grew, the religious uniformity inevitably decreased. The original Puritan communities were soon joined by the Baptists, the Quakers (initially persecuted, but eventually accepted) (Pestana, 1991), followed by the Anglicans, the Presbyterians the members of numerous minor protestant denominations, and later even the Catholics. The ideological basis of the system and one of the major vehicles for government accountability was quickly dissolving.

The creation of the Dominion was a decisive blow for the New England political order. But the forces that disrupted the initially cohesive society were already present within it. There was no effective mechanism, aside from ideology, of controlling the accumulation of wealth by the elites or their ability to employ it to achieve political power. The system of accountability, of formal and informal checks on political power, was established, but it was not nearly as efficient in controlling economic power. Social cohesion led to the emergence of a relatively equitable political system based on accountability. But this system could only exist in a cohesive society. As soon as drastic status differences emerged and the ideological foundations of cohesion no longer bound large portions of the population, the system was no longer tenable.

## CONCLUSIONS

The government system in early New England exhibited significantly more accountability than most of its Western contemporaries. This accountability emerged in the newly established colonies due to the influence of both a communal ideology and social conditions. The idea of a covenant served as a model for establishing both a religious congregation and a colonial government, which was viewed, at least early on, as a secular arm of the congregation. Puritan religious institutions played a significant, though not always formalized, role in the political process. Aside from their direct involvement in the development of colonial legislation, puritan ministers consulted the magistrates and governors on many issues, serving also as an

intermediary between the public and the magistrates. Communal ideology based on puritan religion, shared by the majority of the population, prevented excessive accumulation of wealth and slowed down the emergence of economic elites, strengthening social cohesion.

The social and economic structure of the colonies was remarkably balanced. This relative similarity of status and the absence of traditional elites capable of usurping political power, contributed to the creation of an accountable government and secured a significant role of the public in general in politics, further strengthened by high demand for labor, which led to growing wages, growing economic power of workers and, consequently, their growing political influence.

Social cohesion was a necessary condition for the continued existence of a political system which can be considered an example of "good government." As the colonies grew, the influence of ideology based around a congregation as a social unit waned. The communal ideal of competency as the ultimate economic end goal of an individual lost its importance. New elites, not hindered by the dominating social position of aristocracy or by a communal ideology quickly amassed wealth and status, using them to secure political benefits. The interference of royal authority, the creation of the Dominion, dissolved the New England political order. Some elements of the more equitable power distribution remained, but the new social environment never allowed it to recover after the dissolution of the Dominion.

These developments are consistent with the cross-cultural analysis within the framework of the collective action theory. One aspect that seems to have played a key role in the New England case is social capital. Social capital "gets at the importance of institutions that facilitate cooperation between households <> sharing of labor and dispute resolution" and implies "well-developed practices for local governance and recruitment of officials, common property management and communal ritual cycles that would promote community social cohesion" (Blanton and Fargher, 2008, p. 283). All these key elements were evidently present in New England, from a well-developed local elective governance to an institution focused on maintaining community cohesion, the congregation. Social cohesion, a necessary foundation of good government in this case, was maintained primarily through religion. The idea of competency and the notion of a religious community were as important, if not more important, than a specific internal source of revenue.

The political developments in early New England were obviously important for the history of the region, and a case may be made for their significant influence on the US. However, the study of these early colonial developments reveals, in our opinion, several key point that may apply to other societies and may inform our understanding of good governance and government accountability in a wider context. The connection between social cohesion, lack of drastic differences in economic status, and government accountability can be seen as a cross-cultural phenomenon, highlighting certain deficiencies in the development of democratic institutions in a contemporary context. Of course, in New England the ideology was inextricably tied to a relatively specific set of religious beliefs, thus limiting its impact on a wider and more diverse society, but this does not diminish the overall importance of an ideology focusing on preventing potential abuses of status and power for the development of an accountable government. Likewise, the concept of social contract as a foundation of the government system, evident in early New England, can be seen as one of the cornerstones of an accountable government system at least in early modernity. The principle was used in New England well-before the idea was articulated by the Enlightenment thinkers and was one of the primary drivers for the emergence and maintenance of good governance.

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CONCEPTUAL ANALYSIS
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# Complexity, Cooperation, and Public Goods: Quality of Place at Nixtun-Ch'ich', Petén, Guatemala

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Public goods are "non-excludable" and "non-rivalrous" resources, including roads, water management systems, and plazas, as well as "symbolic public goods," such as religious architecture and social identity. Public goods occur in greater abundance in cities with more cooperative and inclusive forms of organization, which seems to undermine arguments that elites constructed them to augment their power. Such goods are major "pull" factors drawing migration to modern cities, but ancient cities also had public goods that likely attracted immigrants, increasing their population and diversity. We examine these ideas at Middle Preclassic-period (cal 800–300 BC) Nixtun-Ch'ich', in Petén, Guatemala. This city and other Preclassic metropoles in the Maya lowlands seem to have been on the more-cooperative end of a cooperative–competitive spectrum, compared to most cities of the Classic period (AD 200–900). We also speculate about how symbolic public goods were coopted to create a more exclusive social system in the Late Preclassic period (300 BC–AD 200).

**Keywords: public goods (pg), urbanization, cooperative systems, Preclassic Maya, quality of place**

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## INTRODUCTION

The emergence of complex societies, especially those known as cities and states, has long intrigued scholars. Myths frequently credit early cities to the work of gods, while archaeologists typically ascribe them to authoritarian rulers or kings. Such top-down narratives envision monarchs as agents who build and create as part of their struggles to maximize status and power. Were ancient rulers really the foundations of social complexity? Complexity refers, by definition, to multiple units interlaced into a single system, not a singular entity. What binds complex societies together is cooperation (Stanish et al., 2018), not a self-serving quest for glory.

Here, we dispense with the trope of public works as elite actions to bolster their stature, and instead turn to a different, bottom-up way of viewing social complexity, emphasizing cooperation, and collective action. We do not dispense with leadership, but argue that early leaders were frequently held accountable and focused upon solving problems and improving the societies that they led. Collective action theory focuses on the agency of rational social actors in negotiating with societal leaders (rulers, principals) for benefits in return for their labor, tribute, military service, or other contributions (see Levi, 1988; Ostrom, 1990; DeMarrais and Earle, 2017). Building on these ideas, the editors of this volume have addressed collective action theory in terms of good government and joint production sources of revenue (Blanton et al., 2020, 2021).

Good government is characterized by moral bonds and obligations—moral being relative to each society—between citizens and leaders in provisioning equitable benefits to all. These benefits are typically seen as public goods or public works, such as goods and especially services, including transportation infrastructure, water control, public safety, food security, and support of ritual events and institutions (Blanton et al., 2021, Table 1).They materially represent a society's emphasis on a common greater good, and are more prevalent in societies lying at the "more-cooperative" end of a conceptual cooperative–competitive social-organizational continuum, a heuristic developed through analysis of numerically coded variables in a cross-cultural comparative study of 30 pre-modern states (Blanton and Fargher, 2011; Blanton et al., 2020, 2021).

We explore public goods at Nixtun-Ch'ich', an early lowland Maya city in northern Guatemala, to argue that the city had a more-cooperative system of social and political organization. During the Middle Preclassic period (ca. 900/800–400/300 BC), Nixtun-Ch'ich' was the largest site on Lake Petén Itzá and its environs, and the capital of an archaic primate state (Pugh et al., 2021; Rice and Pugh, 2021). Between cal 800 and 500 BC, the city was planned and constructed as a sacred landscape, with a grid of corridors and monumental architecture. The planning intimates the presence of centralized leadership, but we cannot identify rulers because, as is generally true of the Maya Middle Preclassic period, rulers were anonymous and invisible (Freidel, 2021), absent in art, monuments, and lavish tombs, until the Late Preclassic. Whoever the city's early leaders were, we contend that they were primarily concerned with the greater good rather than self-aggrandizement, and that they, like early elites elsewhere (see Graeber and Wengrow, 2021), often contrived to enhance the lure of ancient cities to maintain population.

## COOPERATION AND PUBLIC GOODS

Early evidence of social integration often results from autonomous groups gathering in special locations to exchange goods, and feast and labor together—all examples of cooperative behavior (Stanish et al., 2018). Social complexity requires cooperation, which necessitates complex systems of coordination (Hardin, 1990) and deeply interpenetrating infrastructural power. Working together is the foundation of any complex social system, and more-cooperative societies tend to be more stable than those that are more competitive (Feinman and Carballo, 2018, p. 15). Increasing complexity and size in more-cooperative societies requires the development of leaders to organize and prevent cheating (Kohler et al., 2012). Even competitive states require some cooperation, with benefits to those cooperating. Otherwise, the cost of punishing free riders—those who use or benefit from public goods but refuse to contribute their share of the costs—would be too great (Hardin, 1990).

### Cooperation and Leadership

More-competitive states expend significant resources on sovereigns in the form of palatial residences, extravagant tombs, and celebratory monuments. These states also exhibit greater inequality, including exclusionary tactics regarding access to ceremonial spaces and prestige goods, and invest considerably less in public goods. In contrast, more-cooperative societies are less exclusive, with less inequality. Resources are invested more in serving the greater welfare through public goods or works and common lands. Visible symbolism focuses more upon the collective and cosmogenesis, rather than upon the lords and their ancestors (Blanton, 1998; Feinman and Carballo, 2018, p. 10). Leaders in cooperative societies receive rewards in the form of resources and status, but not enough to permanently elevate their status substantially above the rest of the community.

Societies can become more or less cooperative over time. When the leadership begins to develop exclusionary tactics, diverting the surplus of cooperative activity to exalt their status and infringing on public goods, then a shift toward a more competitive system of governance has begun. The increasing sacrifice of public goods/works to invest in the ruler, as a matter of divine right, is a prelude to despotism. Collective rituals may be refocused to incorporate the paramount and their ancestors as key players in community formation (communogenesis) and/or cosmogenesis. While the collective can still enjoy local sanctity and solidarity, elites have greater access to and knowledge of these symbolic and ritual goods. Ancestors, for example, act as intermediaries between the community and the supernatural world. Their activities mimic those of mythical heroes and gods, and may contribute to communogenesis. Sovereigns may ritually reenact these actions, assuming the stature of ancestors or deities (Helms, 1998, p. 124–125), but in so doing, they may encroach on public interaction with the spiritual world.

The shift from a more-cooperative to a more-competitive system does not represent the culmination of a unilineal trend, as the public can push back against such leaders. Nor is a competitive shift progressive, as cooperation encourages "higher per-capita payoffs than could otherwise be obtained by working in smaller groups of households" (Stanish et al., 2018, p. E6716). Cooperative leadership strategies can be far more effective in controlling individual behavior than despotic power (Mann, 1984, p. 189).

### Public Goods

Public goods are shared resources hypothetically available to all. They generally increase social interaction and enhance quality of life (Florida, 2014, p. 200). Most public goods visible in the archaeological record are material products of public works, built through obligatory collective labor or some form of taxation. These may include hard infrastructure, such as travelways or storage accommodations, as well as services such as education, food distribution, defense, and sanitation. Many public goods double as social infrastructure—investments that enhance social interaction such as gathering places (plazas, streets, and parks) (Klinenberg, 2018).

Pure public goods are non-excludable and non-rivalrous resources (Cornes and Sandler, 1996): that is, a person cannot be excluded from using them, and one person's use of the goods does not exclude use by another person. Pure private goods are those that can be used only by those who have some claim to ownership. Most public and private goods are impure to some degree: they are not clear binaries, but rather exist on a

continuum (Cornes and Sandler, 1996, p. 4). Most goods have a certain degree of excludability. Club goods, for example, are public goods with access reserved to a certain segment of the population (Cornes and Sandler, 1996, p. 12) to limit declining use-value through overuse or crowding. Payments or fees may be required for access. At the same time, private goods may not be entirely private and indivisible: the owner of one piece of land may produce pollution (e.g., of a water system) that impacts the use of nearby lands owned by others.

## Symbolic Public Goods

Public works projects frequently focus on the social and political (and performative) processes of "place-making" as a public good. "Places" are socially constructed spaces that have assigned meanings. They are "politicized, culturally relative, historically specific [spaces that] come into being through praxis" (Rodman, 1992, p. 641–642). Places are lived and experienced, and their meanings can vary over time and according to different users. The processes of spatialization—defining and cognitively ordering spaces, whether natural or human-built—result in an organized landscape of places with real or imagined meanings, often subjective and deeply symbolic, that contribute to a sense of community. Heritage resources and sacred spaces provide good examples of spatialized symbolic public goods. In modern cities, these are externalized and internalized, but also often contested (Siemiatycki, 2005; Alonso Gonzalez, 2014). Some seemingly mundane spaces, such as open plazas and still or moving water, also can become places with symbolic value, for example as boundaries, in the case of the last.

The spatialization of public goods is often encouraged by religious beliefs, such as the concept of the divine city, believed to have been created by divine intervention. Ancient examples include Eridu and Jerusalem in the Near East and Tollan in Mexico. Humans can create divine cities by following religious doctrines. For example, among Renaissance Catholics, Rome displaced Jerusalem as the earthly manifestation of Heavenly Jerusalem as a result of urban planning using numerology, geometry, and harmony, plus the location of the tomb of St. Peter and other relics (Andersen, 2021, p. 349–351). Such actions can become politicized and unpopular, however: many seventeenth-century Scandinavian Protestants rejected Rome's centrality and constructed their own "square-shaped" cities as earthly Jerusalems through similar city planning involving numerology (e.g., numbers 5, 7, 12), symbolism, and harmony (Andersen, 2021, p. 351–367).

The sacred quality of certain public goods is not limited to temples and other highly symbolic places. Creator gods established the orderly Earth and eternal cycles of fertility. For these gifts, humans are perpetually indebted to the gods (Godelier, 1999). Because high gods and other supernaturals are often believed to punish selfish persons like free-riders or shirkers, religious beliefs tend to encourage cooperation (Johnson, 2005). In ancient societies, contributions to the public good would have included following religious rules, participating in rites, and making offerings, along with aiding construction and preparing and providing resources for feasts and other events (Miller, 2021).

## Festivals and Feasting

Festivals vary in their themes, but are "collective, participatory celebrations" (Quinn and Wilks, 2013, p. 15), both social and symbolic public goods. Festivals can help integrate persons who had no previous interactions and increase the bonds of those with preexisting associations. They tie the resulting networks/communities to particular places, although the experiences of participants vary (Quinn and Wilks, 2013). Whereas, rituals are communal events, those of more-collective and more-competitive states vary significantly. Those of the former emphasize trust among participants, while the latter vociferously proclaim the legitimacy of the ruler (Blanton, 2016, p. 42).

Archaeologists often emphasize the feasting aspects of rituals, as the serving vessels and faunal remains leave strong traces in the archaeological record. However, we acknowledge that feasts are part of larger ritual programs and perhaps not the most central activity of festivals.

Feasts are unusual instances of food-sharing that most commonly occur in ritual contexts. They are symbolically dynamic and can evoke solidarity, while also signifying inequality (Hayden, 2001). Feasting is linked to early pilgrimage centers, settlement aggregation, and cooperation, including the construction of ceremonial places (Stanish et al., 2018).

Festivals and feasts involve social cohesion, the communication of social information, and the construction of status and inequality. Theoretical models vary in their emphasis on these qualities (Hayden and Villeneuve, 2011, p. 441) but, as with public goods, we must be wary of assumptions that elite agents sponsored them to bolster their own stature. Hypothetical efforts at poor governance—if we can even refer to status-seeking as governance—require direct evidence. Symbols and deities appropriated by divine rulers, such as pools of water among the Maya (see Normark, 2019), when the society takes a despotic turn, cannot be assumed to represent precursors to divine rulership in an earlier time of more collective governance (Pugh, 2021). Such is also true of feasting. All ritual participants are agents and in more-collective organization, rituals do not follow an austerely top-down structure (Feinman, 2016).

Abundant evidence of feasting exists for the Maya. A communal festival called *cuch* focused on deer, and was associated with rain, agriculture, rebirth, and seasonality (Pohl, 1981). Dogs were commonly featured, along with deer, in Middle Preclassic feasts (Sharpe et al., 2018). In Colonial times, dogs were associated with the Underworld, renewal, and cacao (White et al., 2001, p. 92).

# CITIES, THEIR MANAGEMENT AND GROWTH

Cities, with dense populations and extensive face-to-face interactions, possess a strong quality of place and inspire awe (Florida, 2014; Yoffee, 2015). They extract resources from the hinterlands, but differ from them in function (Smith, 2014), and possess infrastructure that furthers social interaction (Blanton and Fargher, 2011, p. 507–517; Bettencourt, 2013). Cities are

social reactors that enhance creativity, wealth, production, and consumption, all of which lower hard infrastructural costs (Bettencourt and West, 2010) and tend to have heightened occupational specialization (Algaze, 2018). The lower costs and better returns are similar to those in more-cooperative communities, highlighting that living in close contact and specialization require sharing and cooperation. It is, perhaps, the dramatic returns of intensified collective action that lead to some cities being considered divine.

These advantages can also have negative impacts, such as poor health and increased disease and crime (Bettencourt and West, 2010). Lacking modern medical and waste-management technologies, ancient cities required constant in-migration to sustain their population size and promote economic development (Algaze, 2018). It is often the exchange of ideas and resultant creativity that attracts people, stimulating growth (Lucas, 1988, p. 38). As with the sharing of food in feasts, the exchange of ideas and knowledge can help bind people together. Cities' population densities mean that people in various occupations live in proximity, leading to exchanges of information and access to markets, offering advantages for marketing goods.

Communities seeking to further a city's growth can strengthen quality-of-place "pull factors" to encourage in-migration (Florida, 2014, p. 203). Amenities such as public goods help retain the existing population (Smith et al., 2018, p. 18) and tend to draw people, especially creative individuals (artists, engineers, philosophers, and academics) into modern cities (Florida, 2014; Batabyal et al., 2019). Artisans and their goods embellish the city with respect to technology, art, education, and economic vitality, enhancing daily quality of life, furthering the definition of social identities and statuses, strengthening creation of alliances, and supporting local and regional interactions. "The vibrancy of street life, café culture, arts, music, and outdoor activities" also draws new occupants (Florida, 2014, p. 203). In ancient cities, pull factors would include public goods, creative, economic, social, and religious activities, augmented by the social-reactor features of dense population and interactions, as well as resources.

## THE ANCIENT MAYA

Details that might illuminate ancient Maya philosophies of cooperation are long lost. The Popol Vuh, a Maya creation story committed to writing in the highlands during the Colonial period, makes it clear that true humans must work together to maintain the calendar and worship the gods, or face punishment (Tedlock, 1996, p. 67–71). Some modern Maya believe in a *k'u'x* soul: cosmic energy running through everything, but concentrated in people and important places. It is the spiritual bond that ties everything together, especially communities (Fischer, 1999). Cooperation in labor as well as participation in group rituals are said to reflect that a person's *k'u'x* soul is balanced. Persons who do not fulfill these obligations can receive social censure and they may lose part of their soul (Fischer, 1999, p. 483). The ancient Maya, of course, had no knowledge of Heavenly Jerusalem, but they did have their own concept of sacred cities (Davies, 1977, p. 48–49): *si'an-ka'an* "born of heaven." Merida (Yucatan, Mexico), ancient T'iho, was known, just before and after the Spanish conquest, as Ichcanzihoo, a variant of *si'an-ka'an*, heaven-born (*sih/zih*, to be born; *caan/ka'an*, sky, heaven).

Other important cities were known throughout Mesoamerica as *tollan* "place of reeds" (Davies, 1977). Tollan was a paradigmatic city, a mythic creation place where time and cosmic order began (Uriarte, 2006), thus its form directly reflected divine action. Designating a city as a tollan would have indicated that it had special qualities (Davies, 1977, p. 27). Many great Mesoamerican cities of antiquity were given the title of Tollan, the most famous (though not the most impressive) of which was Tula, outside modern Mexico City, occupied by a people known as Toltec (Kristan-Graham and Kowalski, 2011; Iverson, 2017). Classic and especially Postclassic dynasties often claimed that their ancestors were from a tollan. Tollans were not just replicas of a moment in deep history, but critical artifacts of group history and community formation.

Living in a Mesoamerican tollan or a Heavenly Jerusalem would have bounded inhabitants in a sacred, ordered landscape. These qualities were certainly public goods. Yet, as with all public goods, machinations were likely constant. Cities' sacred topographies were uneven, with some places, such as caves and springs, more sacred than others, and their re-creations in the form of temples, tunnels, and pools were also sacred. Pools/reservoirs are found in the Olmec area and at Middle and Late Preclassic Maya sites (Rice and Pugh, 2017; Inomata et al., 2020; Canuto and Estrada-Belli, 2022, p. 93).

The Maya generally encased old structures in new constructions, meaning that, over time, the sacredness of cyclically reused religious architecture—its *k'ux'*—likely accumulated. Such public buildings with cumulative sacredness and history were communal assets in more-cooperative societies. But this variability in sacrality presented the potential for restriction: persons living outside the sacred places may have enjoyed this good only when they visited—if they were even allowed to visit. Divine rulership may have been imported into the Maya lowlands from the Olmec area during the Late Preclassic period (Freidel, 2018, p. 372). During the Late Preclassic and Early Classic, formerly common areas came to be intruded by royal tombs, noble residences, and stelae depicting kings, signaling the exclusionary tactics of a more-competitive society (Doyle, 2017, p. 140–146).

## NIXTUN-CH'ICH'

Nixtun-Ch'ich', on the southwestern edge of Lake Petén Itzá, was the largest settlement in the lake basin during the Middle Preclassic period (cal 800–300 BC) (**Figures 1**, **2**). Earliest occupation and possibly construction on the tip of the eastward-extending Candelaria Peninsula were initiated before 1,000 BC (Rice, 2009), but pottery on the elevated mainland part of the site indicates early residence there, too. The city's most distinctive feature is a gridded urban core formed by intersecting corridors

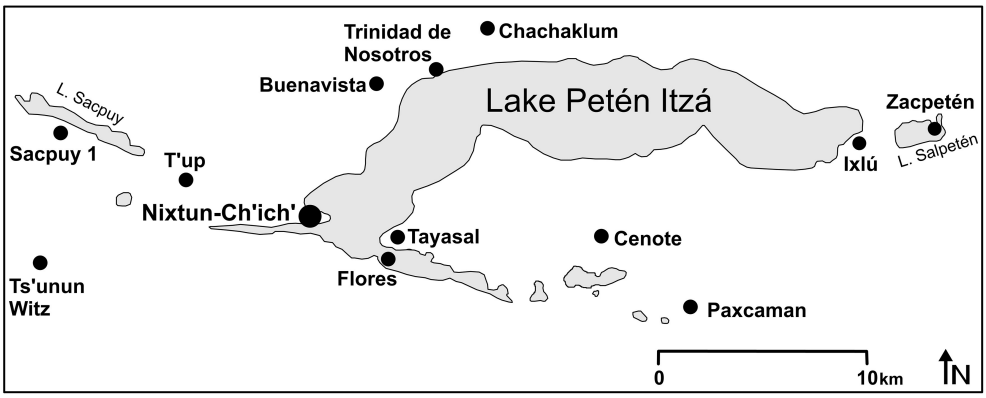
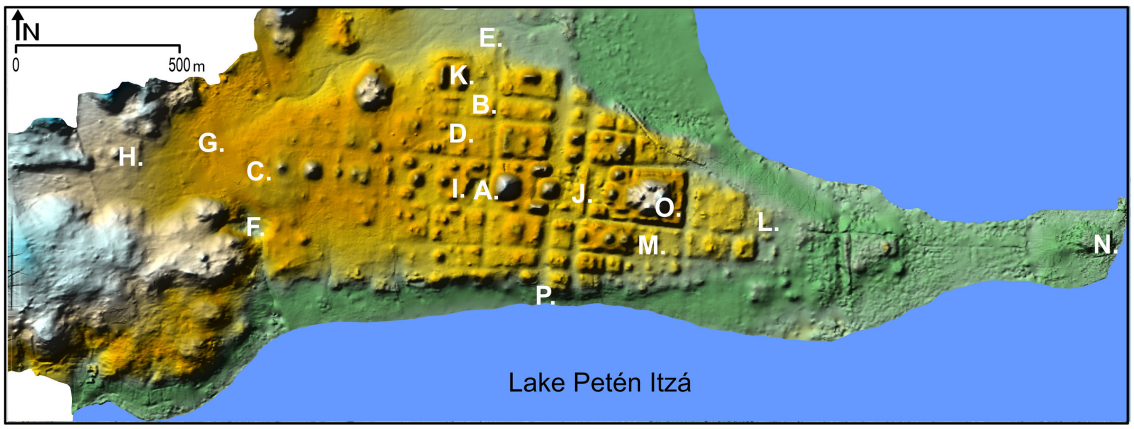



**FIGURE 1 |** Locations of sites with Preclassic occupations near Nixtun-Ch'ich'.




**Fosas**
A. Fosa Y
B. Fosa I
C. Fosa V
D. Fosa Q
E. Fosa C
F. Fosa B
G. Fosa U1

**E-Groups**
H. Group A1
I. Group Y1
J. Group AA1

**Ballcourts**
K. Ballcourt 1
L. Ballcourt 2
M. Ballcourt 3

**Other**
N. Structure ZZ1
O. Structure BB1
P. Avenue G, South Entrance

**FIGURE 2 |** Nixtun Ch'ich', Petén, Guatemala.

(**Figure 3**). The grid centers on a 3 km-long line of 21 buildings and two ponds, which established the city's axis urbis and bilateral symmetry. This axis generally follows the topography of the peninsula, and its orientation of 94°40′, slightly south of east, may have been roughly focused on equinoctial sunrise, or more precisely directed toward sunrise on a particular date. Emplaced between 800 and 500 BC, if not earlier, the axis urbis helped coordinate construction at the site for more than 700 years, with a massive Late Preclassic triadic group (Group BB1) as well as the remodeling of an early architectural complex known as an E-Group (see below) following its lead. Nixtun-Ch'ich' is immediately recognizable as a city because it looks like a modern city; that is, it was obviously planned and constructed according to the same principles: facilitating social interaction (Bettencourt, 2013).

Several other Middle Preclassic settlements stood nearby and suggest the existence of a site-size hierarchy (**Figure 1**). Primate settlement distributions are those with capitals markedly larger than secondary and smaller centers, ostentatiously impressive and monopolizing social activities, production, and trade, thereby stunting the growth of secondary centers (Jefferson, 1939; Blanton, 1976, p. 255–256). Our data suggest that Nixtun-Ch'ich' exhibits extreme primacy, as it is around five times as large as the combined size of its two largest secondary centers (following Short and Pinet-Peralta, 2009, p. 1,254–1,256). It has three E-Groups, whereas other nearby centers only have one each. A similar relationship is observed at Cival, which has five E-Groups and nearby centers have one each (Estrada-Belli, 2017, p. 303–308). We have proposed that Nixtun-Ch'ich' was the capital of an early primate state in the western Petén lakes region (Pugh et al., 2020; Rice and Pugh, 2021).

Nixtun-Ch'ich' was creatively planned to fit the natural topography and aquifer into the cityscape. Its design heavily emphasizes linearity and symmetry through the medium of


**FIGURE 3 |** Plan of corridors, Nixtun-Ch'ich'.

public works—roads, ponds, and ceremonial architecture. Public goods would have included these works as well as plazas (Norwood and Smith, 2021) and water management. Even if some of these goods were purely non-excludable among members of the polity, their concentration in the capital would have distanced them from the larger community. In this respect, the public goods of Nixtun-Ch'ich' were not completely pure.

## Road Grid

The most obvious public work at Nixtun-Ch'ich' is its gridded road system (**Figure 3**). The city has six east-to-west corridors that we call streets and identify by number, and at least 11 north-to-south avenues labeled by letter (Pugh, 2019). These were clearly centrally planned and required immense effort to construct, including stripping of old soils, vegetation, and debris (Obrist-Farner and Rice, 2019) and paving with stone and plaster. Road systems have varied functions, but most connect people and allow for easy navigation and efficient movement. Pedestrians and resident cattle still use the city's ancient grid to move easily across the landscape.

The city's highly symmetrical layout results from the coordination of the east–west streets: Third Street with Fourth and Second with Fifth, forming trapezoids. The avenues, by contrast, are all roughly oriented north-to-south, but are inconsistent in their precision. Avenue F, the longest, stands nearly perfectly perpendicular to the axis urbis, thus the avenues' plan was based upon these axes. We consider Avenue F to have been a second, lesser, city axis, differing from the axis urbis not only in direction but because humans could more easily walk its length.

Avenues G and H each have two parts leading into the city, one from the north and the other from the south, joining at the Sector AA E-Group (see below). Both parts of Avenue G, north and south, are wider than the other roads at Nixtun-Ch'ich' and were likely principal site entrances. The two parts of Avenue H were also likely entrances, but they are narrower and perhaps less important. The area of Avenues G and H and its E-Group appears very similar to a "Middle Formative Usumacinta (MFU) pattern" at La Carmelita (see Inomata et al., 2021).

Except for Avenues G and H, the Nixtun-Ch'ich' road system is largely non-focal—it does not emphasize particular landmarks (Pugh, 2019). Focal points within a largely non-focal grid system are also found within modern cities, as is clearly observed in Washington, DC. Most of that city's focal points are emphasized by diagonal corridors highlighting moments in national history. Besides acting as connectors, roads are also critical public spaces of social interaction, from simply hanging out to economic exchange to ritual events (Gehl, 2011). The intersections of some of the wider thoroughfares might have served plaza-like functions as gathering places and perhaps, like plazas, housed periodic market-like activities.

The Nixtun-Ch'ich' road system had still another function: it drained the city. For the most part, water drained down the middle of the corridors, though in some areas water was diverted into canals separate from pedestrian ways. The strongly inclined streets, avenues, and canals acted as a drainage system, channeled runoff from heavy tropical downpours north into the Ensenada San Jerónimo and south into a narrow arm of Lake Petén (Pugh, 2019; Pugh et al., 2021). The drainage at Nixtun-Ch'ich' would have rid the city of unhealthy standing water.

The Nixtun-Ch'ich' travelways could have been sources of conflict between public and private interests. From the Middle to Late Preclassic periods, the bordering platforms were gradually enlarged and expanded outward, narrowing the corridors (Pugh,

2019). Many platform uses were more private, as they supported residences, but the platforms of ceremonial architecture also expanded. The process seems to have occurred equally along the lengths of streets and avenues, so it appears to have been coordinated/planned. This privatization by encroachment seems to have benefited all occupants of the urban core at the expense of public goods.

## Symbolic Public Goods

Nixtun-Ch'ich' functioned as a ritual-religious center throughout the Preclassic period, and abounded with symbolic public goods. Its mythical creation-crocodilian layout (Rice, 2018a, 2020) would have conferred a number of qualities upon its occupants including sanctity, tollan-like or *si'an-ka'an*-like status, group history, identity, and collectiveness.

### Streets and Avenues

The road system was not only of practical benefit to the citizens of Nixtun-Ch'ich', it had symbolic value as well as being an emblem of order. Human labor transformed the entangled, dark, chaotic, natural world of the primordium into an orderly form (Taube, 2003, 2004), with straight lines, right angles, and white limestone-brightness of settled communities. The axis urbis and roads of Nixtun-Ch'ich' were not only very straight, the corridors were gridded, forming a woven mat- or *petate*-like design, a symbol of authority (Coe, 1965, p. 105; Robiscek, 1975; Hammond et al., 1992, p. 961–964). In Yucatec and Tzeltal Mayan languages, the word *toj* "straight" signifies truth, order, and morality, relating to space ordered as a rectangle and "the social wellbeing and harmony of communities" (Taube, 2003, p. 465).

The road grid of Nixtun-Ch'ich' had another symbolic function: modeling the layout of the city to mimic the dorsal surface of a crocodile facing east (Rice, 2018a, 2020). The corridors define and separate 50-some alphabetically named sectors comprising quadrilateral platforms and ceremonial structures that correspond to the raised scutes on a crocodile's back. The reptile was important in Maya (and Mesoamerican) Creation mythology because, according to one myth, a crocodilian slain by the gods rose from the primordial sea to become land (Taube, 1989). The bilateral symmetry of the city's construction around its axis urbis replicates the bilateral symmetry of the creature's back.

The gridded layout and ceremonial structures along the Nixtun-Ch'ich' axis urbis changed over time and expanded in size from the original Middle Preclassic construction through the Late Preclassic. Encased in each structure and platform were earlier versions built by previous generations back to the founding ancestors. Creating a tollan was not a single action solely of the founders, but a repetitive exercise of (re)production by each generation that built and rebuilt in the rhythm of a tollan. The axis endured and the gridded roads, while narrowing over time, remained straight. This tollan was not just a replica of the moment of Creation in deep history, but a critical artifact of group historical consciousness.

The streets and avenues, as well as the early platforms they link, emphasize horizontality rather than verticality (see Joyce, 2004). Temples elevated on high platforms tend to exclude, because the activities carried out inside are not visible to the public, whereas horizontal monuments are inclusive (Estrada-Belli, 2006, p. 64), being visible to, and usable by, the general public. Thus, they emphasize the collectivity that constructed and used them. The tallest building in the city, Structure BB1/1-1, the eastern edifice of a triadic group, currently stands at 27 m. However, the latest Middle Preclassic-period temple buried under the plaza of this triadic group stood only 17.5 m tall. The raised plaza of the BB1/1 group stood 18 m above the adjacent streets and was enclosed on four sides. Thus, this public work housed greater exclusivity in participation and exemplifies the Late Preclassic beginnings of exclusionary tactics by the leadership.

### E-Groups

Nixtun-Ch'ich' has three architectural complexes known as E-Groups lying along the axis urbis in Sector AA in the eastern part of the city, Sector Y in the center, and Sector A in the west. These long-lived complexes, often remodeled, consist of two structures, east and west, facing each other across a plaza. In their final iterations, which date to the Late Preclassic or Early Classic periods, the eastern building is an elongated north–south platform with structures at its ends and center, and the western building is a radial pyramid with stairways on the four sides. E-Groups began to be constructed in the early Middle Preclassic period and are widespread in the Maya area (Freidel et al., 2017) and beyond. The earliest radiocarbon-dated complex in Petén is at Seibal, built around 1,000 cal BC (Inomata et al., 2013), but others are relatively dated by pottery fragments to a similar age, including Nixtun-Ch'ich' Sector Y (Rice et al., 2019) and Tikal's Mundo Perdido (Laporte and Fialko, 1995).

The specific and general functions of E-Groups have been much debated. Specific functions have long been thought to be related to horizon-based, solar observational astronomy: viewing solstice or equinox sunrises (or other celestial bodies and dates). A connection with time's passage is suggested by early stelae celebrating the endings of 20-year *k'atuns* in front of the eastern building at some sites, such as Uaxactun.

Absent better information on functions, E-Groups are generally seen as having multiple uses: places for various rituals or performances (perhaps time/calendar/astronomically related) and gatherings (Fialko, 1988; Laporte and Fialko, 1995). These gatherings could have included periodic, local or regional, market-like fairs featuring exchanges of certain goods alongside ceremonial or commemorative activities. Such activities, along with the construction of monuments, established E-Groups as central collective places (Doyle, 2017, p. 37–38). They coordinated populations spatially and, if they had some calendrical functions, they coordinated temporally.

### Ponds/Fosas

Seven ephemeral ponds, which we call fosas, were incorporated into sectors of the city's urban core: Fosas B, C, I, Q, U, V, and Y. Some are natural, others are artificial; several appear to represent natural depressions that were modified—enlarged or sealed—by the ancient Maya. Some are fed from underground by the aquifer; others from rainwater. They are ephemeral because they vanish

during the dry season and re-emerge during the rainy season. Fosas C, Y, and I stood in a nearly straight line, evidencing the artifice. Each was several meters west of Avenue F, suggesting a role in processions. This line, almost perfectly perpendicular to a line formed by Fosas V and Y, highlights the relationship of Avenue F to the axis urbis.

E-Groups are often associated with pools of water (Reese-Taylor, 2017, p. 485), as at the Sector Y E-Group. Fosa Y, a deep reservoir, lies immediately east of the eastern platform, Structure Y1/1. A Late Preclassic stairway in the middle of the eastern side of the structure leads down to Fosa Y, signifying a strong relationship between the two. The Sector A E-Group, at the westernmost portion of the site, has no pool immediately next to it, but Fosa V stands 320 m to its east—the two separated by a large empty space. Farther eastward, the Sector AA E-Group has no known pool to its east unless one lies underneath the Late Preclassic period triadic group (BB1). Specific use-related ties between ponds and E-Groups are unknown, however.

Creation of artificial pools required management of groundwater by the planners and builders of Nixtun-Ch'ich'. The five fosas in the core are places where water was allowed to penetrate the surface in a controlled manner. The engineering that allowed the yearly cycle of renewal of those that filled remains unknown. Keeping groundwater in check prevented flooding during the rainy season, thereby increasing the quality of life in the city. Controlling floodwaters to maintain dry land reflects Maya Creation mythology and the orderly universe (Taube, 1988, p. 310; García, 2006). References to flooding may be present on the Late Preclassic murals of San Bartolo (Taube, 2012, p. 12). The annual formation of the ponds mimicked the natural cycles of birth, death, and rebirth, and likely projected beauty, an orderly city, and time.

Caches in the ponds indicate ritual activation: pools of water often represented entrances to the Underworld and are associated with ancestors, *k'u'x*, wind, and rain (Fischer, 1999, p. 482–483; Brady and Prufer, 2005; Saturno et al., 2005, p. 7–8). The ponds represent order and control, as Underworld water is held in balance and reemerges according to annual rhythms. The art and architecture of more-cooperative societies tend to emphasize myths of fertility, creation, and renewal (Feinman and Carballo, 2018, p. 10).

### *Fosa Y*

Fosa Y, east of the Sector Y E-Group, stands at the intersection of the axis urbis and Avenue F, the crossroads of the city. We believe that it is partially natural and helped establish the site layout, making it the most central place of the city (Rice et al., 2019). It measures 46 m north–south by 31 m east–west, and is 2.5 m deep measured from the unmodified edges. The deepest soils excavated in the depression were wet, dark clay and we assume they were deposited in a seasonal pond bed, but despite excavating 6 m, we did not encounter bedrock, sterile soil, or water. This led us to believe that the fosa likely began as a natural sinkhole, intentionally or unintentionally sealed in antiquity. A Middle Preclassic pottery vessel was cached 5 m below ground surface.

Above the dark soil, a series of terraces form an amphitheater-like ring around the interior of Fosa Y. On its eastern side, these steps or seats extend 10 m into the fosa, down to a plaster floor; the tiers also exist on the west. The terraces were covered with Middle Preclassic pottery sherds, many from reconstructible vessels, which appear to have been terminated by smashing. The vessels include decorative wares and exhibit very little erosion, so they were likely covered with fill after their deposition. One spouted vessel was modeled as a cacao pod (**Figure 4**). Some exotic objects, such as a fragment of a jade Olmec mask, were recovered.


**FIGURE 4 |** Golondrina modeled black slipped vessel, Fosa Y, Nixtun-Ch'ich'.

Significant amounts of faunal material with the Middle Preclassic ceramics imply food-sharing and feasting (Rice and Pugh, 2017; Rice et al., 2019). A preliminary study of faunal remains from Fosa Y counted 674 animal bones, of which 351 could be identified by species (**Table 1**). The sample included low frequencies of armadillo, agouti/paca, galliforms, and ray-finned fishes, but the most prevalent identified species were domestic dogs, followed by white-tailed deer, and turtle. Turtle remains included few limb bones and mainly carapace/plastron scute fragments.

Most parts of both deer and dog were utilized and discarded in Fosa Y. However, no deer skull elements, including dentition, were recovered and they may have been reserved for offerings (Pohl, 1983; Brown and Emery, 2008, p. 326). Canid/carnivore cranial and facial elements (dentition included) were usually fragmentary and/or numerous, such as teeth, increasing counts. Dog forelimbs and deer hind limbs and front limbs occurred in higher frequencies than expected relative to other anatomical regions; dog hind limbs may have been too fragmented to identify. The bias toward meaty limbs suggests that most were butchered elsewhere. Sacrifice does not explain the majority of deer and dog remains in Fosa Y.

Overall, 34% of the collection incurred some level of burning. The majority of turtle specimens were burned—a strong indication that they were probably roasted in their shells (Hamblin, 1980). Only 4% of the entire assemblage and 8% of identified dog bones showed signs of cut marks, but many

**TABLE 1 |** Fauna of Fosa Y, Nixtun-Ch'ich'.

| Taxon | Common name | NISP | MNI | MNE* | % Burned | % Cut marks |
|---|---|---|---|---|---|---|
| Testudines | Turtles | 154 | 10 | 4 | | |
| *Dermatemys mawii* | Central American River turtle | 14 | 1 | | | |
| *Kinosternon* spp. | Mud turtles | 8 | 1 | | 70.3% | |
| *Trachemys scripta* | Meso-American slider | 3 | 2 | | | |
| Dasypodidae | Armadillos | 3 | 1 | | | |
| *Cuniculus paca* | Lowland paca | 1 | 1 | 1 | | |
| Galliformes? | Ground-feeding birds | 1 | 1 | 1 | | |
| Actinopterygii | Ray-finned fishes | 3 | 1 | 3 | | |
| *Canis lupus familiaris* | Domestic dog | 111 | 13 | 90 | 28% | 8% |
| Canid/carnivore | | 14 | 3 | 6 | | |
| *Odocoileus virginianus* | White-tailed deer | 39 | 8 | 17 | 56.4% | |
| Mammal (small) | | 6 | 2 | 4 | | 16.6% |
| Mammal (small/medium) | | 28 | | 7 | | |
| Mammal (medium) | | 55 | | 18 | | 1.8% |
| Mammal (medium/large) | | 41 | | 6 | | |
| Mammal (large) | | 23 | 2 | 4 | | |
| Vertebrate | | 170 | | 16 | | |
| | **Total** | 674 | 48 | 175 | | |

**Only long bones, not including scutes.*

bones also suffered abrasion and root damage that may obscure cut marks.

Although Fosa Y has seen substantial excavation, the locus is far from completely understood. The encircling, stadium-style seating suggests that Fosa Y hosted some sort of performances in its center, but we do not know the nature of the performance. The seating would have accommodated a larger crowd and allowed better visibility than standing in a plaza. Feasts may have been sponsored to foment the social reactor of urban life for the greater good, in times of nascent social complexity, and perhaps between occupants of the city and outsiders. Middle Preclassic-period Fosa Y, the epicenter of Nixtun-Ch'ich', was an overtly public space.

### *Fosa I*

Fosa I stands west of the site's largest ballcourt, Ballcourt 1, in Sector I. Ballcourt 1 is an enormous, 137 m-long (north–south) and 85 m-wide, I-shaped court, its two parallel mounds standing 7 m tall. Mesoamerican ballcourts were public goods, serving as theaters for contests that were part sacred ritual and part recreational sport. Test excavations revealed that the majority of construction dated to the Late Preclassic period. Middle Preclassic-period construction was encountered deep under the eastern building, but, as with Ballcourt 2 (Rice, 2018b), we do not know if this earlier building formed part of a court. The deposits in nearby Fosa I suggest that the area had witnessed substantial Middle Preclassic ceremonial activities.

Fosa I filled with rainy season water during fieldwork until around 2013, and likely did so in the Late Preclassic period, when Ballcourt 1 was in use. Nevertheless, evidence of construction and ceremonialism in the pond bed dated from the Middle Preclassic and earlier periods, not from the Late Preclassic (Pugh et al., 2021).

The base of Fosa I was a dense (extremely fine), sterile, white clay, also found below some other archaeological deposits at the site. It held substantial water, as it began to loudly crack after a day's drying and shrinkage through exposure. White clay, lacking coloring contaminants, is a distinctive and uncommon, hence valued, resource, likely used to create certain figurines (Rice, 2019).

A fill layer with both Mamom and Pre-Mamom pottery fragments separated this sterile clay base from a plaster floor, which, like the three above, sloped downward and eastward to the center of the fosa. These were not typical fine plaster floors; instead, they were composed with greater amounts of sand, perhaps to facilitate penetration by the aquifer. The fill separating the first and second floors included large amounts of Middle Preclassic sherds and several offerings, including a cached Desvario Chamfered ceramic vessel, marine shell pendants, and a deer antler. The third floor rested immediately upon the second. The third and fourth floors were separated by fill with large amounts of Middle Preclassic sherds, faunal remains, a ceramic roller stamp depicting a reptile (**Figure 5**), ceramic figurines (**Figure 6**), and jade artifacts including beads and a tiny animal head. A similar fill lay upon the fourth floor, above which was collapse from adjacent buildings including Terminal Classic-period diagnostics.

The caches of Fosa I indicate ritual activation. Complete deer antlers are rare in the archaeological record in the Petén lakes region, as they are commonly modified to produce tools. Deer antlers and skeletal material, among other faunal remains, were found in Late Classic-period reservoirs at Cancuen and may have been the result of deer sacrifice during fertility and water rituals


**FIGURE 5 |** Roller stamp depicting reptile with artist's reconstruction of the stamp, Fosa I, Nixtun-Ch'ich'. Mandible area is missing (drawing by Kelly McLafferty).


**FIGURE 6 |** Examples of Figurines, Fosa I, Nixtun-Ch'ich'.

(Thornton and Demarest, 2019). Antlers also may be tied to rain. They occur seasonally, with male white-tailed deer tending to be antlerless between January and April—the dry season (Klein, 1982). In the Guatemalan highlands, deer skulls were placed in caves as offerings to the guardian of deer, but the antlers were removed (Brown and Emery, 2008). This point evokes another aspect of pools of water—they often represented entrances to the Underworld and are associated with ancestors, *k'u'x*, wind, and rain (Fischer, 1999, p. 482–483; Brady and Prufer, 2005; Saturno et al., 2005, p. 7–8).

An extremely high number of ceramic sherds was found in Fosa I, but they differed from Fosa Y as they were smaller and did not form as many reconstructible vessels. However, the unusually high frequency of faunal remains suggest feasting. The ceramic figurines included several heads, which are rare elsewhere at the site and may have been offerings. The roller stamp may represent elite participation as several stamps were found in an elite burial at Cuello (Hammond et al., 1992, p. 957). Similar stamps have been found elsewhere at Nixtun-Ch'ich', including with Middle Preclassic feasting refuse in Structure ZZ1 (Rice, 2009, p. 407).

### *Other Fosas*

Fosas Y, I, and C all border Avenue F and stand roughly in a straight line, reiterating the centrality of Fosa Y. Fosa Y and Fosa V form part of the axis urbis of Nixtun-Ch'ich'. Excavations into a platform (Structure W1), midway between Fosa V and Fosa Y, struck the aquifer during the rainy season of 2016 (**Figure 7**). The aquifer had been sealed by a 25 cm-thick layer of heavy, gray clay, its base at the same elevation as the water level in Fosa V. Similar clay was used elsewhere at Nixtun-Ch'ich' and other Maya sites as architectural mortar, footing, and coating (Rice et al., 2018; Pugh, 2021). In the base of Structure W1, the material appears to have been used as a sealant to contain groundwater. Fosa V has not been excavated, but it completely desiccates during the dry season and fills with a few feet of water during the rainy season.

Fosa C stands adjacent to the northern end of Avenue F—the northernmost of the avenues and likely one of several site entrances. It is possible that Fosa C and Fosa V marked boundaries of the urban core of the city. Fosa C is roughly centered on the northern edge of the urban core and Fosa V is similarly positioned on the western edge. Lake Petén Itzá formed the southern boundary. Excavations along the southern shore of the city revealed a number of cached Middle Preclassic ceramic vessels. The Sector A E-Group stands 320 m west of Fosa V, outside the urban core, and no eastern fosa, like that of the Sector Y E-Group, was discerned.

Fosa Q stands between Fosa Y and Fosa I, but offset slightly to the west. Like Fosa I, it is visible without excavation, as the grass planted for cattle grazing does not thrive above it—presumably the soil retains too much water. A ring of stones protruding above the ground surface also defines its edges (Pugh et al., 2021). Excavations tested the interior of Fosa Q and found that its edges were composed of large stones and its base was lined with smaller stones. The feature was devoid of de facto artifacts, but the soil that filled it contained Late Preclassic-period diagnostic ceramics. Middle Preclassic-period deposits, including a number of marine shells and figurine fragments, were found in a refuse deposit to the south of Fosa Q.

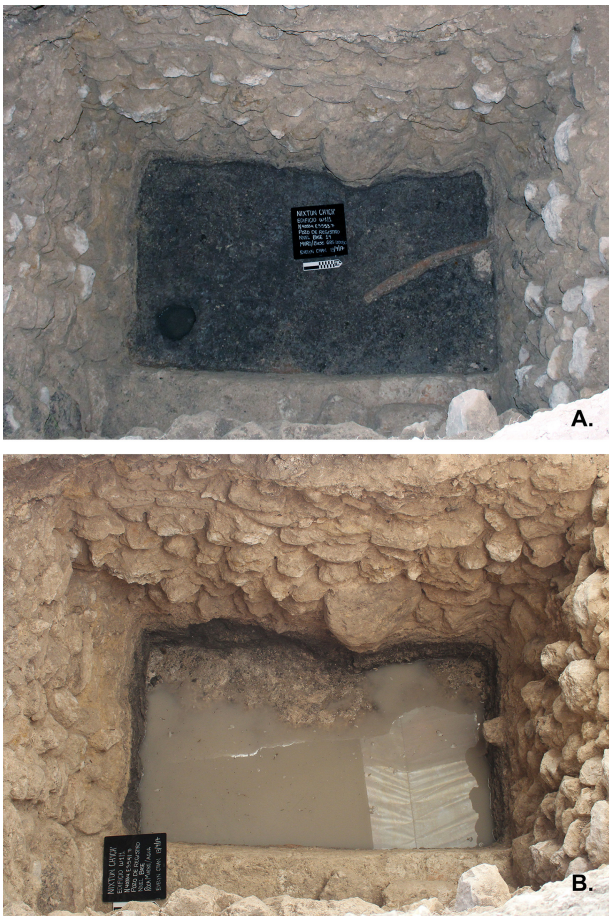


**FIGURE 7 |** The removal of the clay sealant, structure W1, Nixtun-Ch'ich' (**A** Before sealant removal. **B** After sealant removal).

### Figurines

Fragments of anthropomorphic and zoomorphic hand-modeled, fired-clay figurines and musical instruments (whistles, ocarinas) were recovered in varied contexts throughout Nixtun-Ch'ich' (Rice, 2019), including 65 in the fosas. The paste color of 29.9% (74 of 247) percent of them was white-to-cream and it was proposed that they were produced at Nixtun-Ch'ich', a prescient observation preceding the recent discovery of light gray and white clay deposits at the site. Those of other colors, varying from gray to tan to brown to red, along with the NAA findings of varied chemical compositions, raise the possibility that persons from throughout the lakes region or even outside it attended rituals or other festivities at this regional capital.

Middle Preclassic/Formative figurines throughout Mesoamerica are generally unclothed but rarely were modeled to depict anatomical sexual traits. At Nixtun-Ch'ich', fewer than 10 torsos were judged to be female on the basis of delineation of breasts, vulvas, or pregnancy, and only one—from Fosa I—depicts male genitalia (**Figure 6**, left). Social differentiation was indicated by headgear: a fan-like headdress, braided headbands, or bands of large beads or shells. One head from Mound ZZ1 was modeled with the "tied headband" of authority, hinting that some figures may be modeled on actual leaders. Perhaps, as in the Pre-Pottery Neolithic B in the Levant, the general lack of conspicuous markers of individuality signaled an emphasis on "collective, community identity" (Kujit and Chesson, 2005, p. 176–178).

How might figurines be construed as symbolic public goods? Although these objects are often considered items of domestic culture, perhaps representing family ancestors, their recovery in fragments in public or civic-ceremonial contexts at Nixtun-Ch'ich' suggests a broader role. Perhaps they were the proto-human clay people of Creation stories, used in ritual re-enactments. The Maya viewed the human body as partible, with vital essences (perhaps *k'u'x*-like) contained in the legs, arms, and especially the head and torso. Given this, it is not surprising that figurine heads and torsos were more commonly recovered in excavations in the city's monumental core, compared to other locations (Rice, 2019, Table 14.4). The most powerful essences of these figures were thus embedded in ritual spaces, infusing them with sacred/cosmological power and authenticity. This was a common good.

## DISCUSSION: COMPARISONS

Nixtun-Ch'ich' did not stand alone in the Middle Preclassic Maya lowlands in its lack of aggrandizing leaders, so that criterion by itself does not define its status as a more-cooperatively organized early city. Certainly not all Middle Preclassic (or Middle Formative) communities in Mesoamerica, or even in the Maya area, were organized in this way. But Nixtun-Ch'ich' appears to be an exception to many generalities about the characteristics and processes of early cities and emergent states, and it is the presence of varied public goods, including symbolic public goods, that support our contention. That is, we believe that the investments in public goods/works or services, such as the grid of roads, civic-ceremonial architecture (E-Groups, ballcourts), and water management systems, testify to joint production, and good government. We conclude by comparing Nixtun-Ch'ich' to two better known early centers of societal complexity, the Gulf Coast Olmecs and highland Teotihuacan. Scoring of 26 pre-Columbian Mesoamerican urban centers on a scale of more- or less-collective organization placed the Olmecs, with a score of 0, at the less collective end and Teotihuacan, with a maximum score of 3, at the more-collective end (Feinman and Carballo, 2018, p. 9–12, Table 3). In general, more-collective centers were earlier and larger than less-collective ones (Feinman and Carballo, 2018, p. 13).

The Olmec culture, beginning as early as the late Early Formative period (ca. 1,500–900 BC) with San Lorenzo (Veracruz), was characterized by centralized political authority, evidenced by monumental sculptural art depicting humans, especially rulers and their power (Pool, 2007, p. 100–120). These objects include colossal heads, thrones with low relief, and smaller busts, masks, and figurines, all made of imported stone (e.g., basalt and jade), probably by specialists with elites or rulers as patrons. The landscape was modified by terraces and

causeways, some for flood control, but it is not known if these works were commanded by coercive elites or built independently by commoners. San Lorenzo was succeeded by Middle Formative (ca. 1,000–400 BC) La Venta (Tabasco), continuing many of the same principles of "ideological and economic sources of political power, manipulating similar concepts, materials, and goals as their predecessors" (Pool, 2007, p. 176). But displays were more ostentatious, especially seen in the circulation of prestige goods such as jade, and civic-ceremonial architecture including E-Groups. The refuse of festival and feasting activities at San Andrés included large serving vessels, faunal remains, greenstone plaque fragments, and a roller stamp decorated with possibly the earliest written text in Mesoamerica. The seal may have been a symbol and tool of leadership (Pohl et al., 2002). The Olmec utilized aqueducts and incorporated pools of water as central ritual spaces, but these facilities were strongly connected to rulership (Cyphers, 1999).

The enormous Classic-period primate city of Teotihuacan, a tollan, is visually similar to Nixtun-Ch'ich' in having an ordered, gridded layout. Beginning with small farming villages in the well-watered valley of the Río San Juan in the northeastern Basin of Mexico, the area experienced explosive growth in both population (in-migration) and construction beginning about 100 BC. The city's two major structures were built: first, the Pyramid of the Moon then, a century or so later, the Sun (Cowgill, 2015, p. 55). Both anchored the Street of the Dead, which runs northeast–southwest at 15.5° azimuth. The swelling population resulted from a pull factor: creation of grid blocks of apartment compounds of uniform size, covering 4.5 square miles (Millon, 1964). These structures were built using a standard measurement unit of 83 cm, multiples of which corresponded to calendrical cycles and intervals based on cosmology (Sugiyama, 1993, 2004). The façade of the Feathered Serpent pyramid, built ca. AD 200–250 (Nichols, 2016, p. 22), is decorated with the head of a primordial Creation crocodilian, which is also Cipactli, the first day of the central Mexican calendar. We once thought Teotihuacan's urban grid was the inspiration for that of Nixtun-Ch'ích', but because it was probably established around AD 150–250 (Sugiyama, 2004), it is obviously much later. The grid and the standardized measurements, together with repetitious, geomantic assertions of the supremacy of the calendar, strongly suggest centralized and authoritarian planning.

As at Nixtun-Ch'ích', the nature of leadership at Teotihuacan is opaque, as there is no portraiture or other depiction of rulers at the city, nor are there royal tombs. Elites, and maybe rulers, might have lived in the apartment compounds of the Ciudadela or elsewhere along the Avenue of the Dead (see Cowgill, 1997, p. 151). New interpretations of the city's political organization are favoring more cooperative, corporate action and collective rule. This might have been initiated with the termination of the Feathered Serpent Pyramid in the Ciudadela, as a "rejection of a rulership cult and change to more depersonalized, corporate bureaucrats" (Nichols, 2016, p. 19). A "mundane civic consciousness, a sense of the virtue of 'good citizenship,' rather than elite exploitation, might have been a factor in the city's stability and florescence (Cowgill, 1997, p. 152–155; see also Graeber and Wengrow, 2021, p. 328–336).

Teotihuacan's public goods and services would have included water management (e.g., diverting the San Juan River through center city), ease of movement along the grid corridors, the equitable housing of the apartment compounds, the large open gathering areas of major plazas along the Street of the Dead and the Street itself, and interceding with the gods and cosmos by materializing the calendar. As at Nixtun-Ch'ích', Teotihuacan's layout, emphasizing straightness and social and cosmic order and morality, was a symbolic public good. But in the AD 600s Teotihuacan witnessed fiery destruction, perhaps indicating the elites were becoming increasingly exclusionary, no longer practicing good government, and could no longer guarantee the well-being of the city's residents.

## CONCLUSIONS

Were ancient rulers really the foundations of social complexity? Were they invariably self-serving? Such Rand-like heroes (Montmarquet, 2011) seem more a romantic reflection of modern capitalism than the ancient world. While seemingly scientific, this psychological egoism is an unverifiable armchair-assumption about human nature (Feinberg, 2013, p. 168–169). Instead, studies have shown that cooperation is a far more cogent arrangement, even from an egoistic perspective.

As mentioned, in the Middle Preclassic period, lowland Maya leaders were typically invisible and anonymous (Freidel, 2021), memorialized neither in portrait sculpture nor named in texts: hieroglyphic writing was not yet known. Such is the case at the early primate city of Nixtun-Ch'ich', where we have detected no monuments, tombs, palaces, or art hinting at personifications of governance. Instead, public places, goods, works, and services provide strong support for a collectively organized urban center. Of course, gridded cities can reflect symbolic action for elites rather than public goods meant for the collective (Blanton and Fargher, 2011, p. 515). Nevertheless, the axis urbis, gridded streets, and fosas made Nixtun-Ch'ich' an orderly city both horizontally and vertically, draining the city and enhancing social interaction. These works were planned, so they stand as secondary indicators of leaders, who instead of advertising their own existence, strove for the greater good. Roller stamps and jade artifacts suggest that leaders also likely coordinated festivals and feasts. Feasts such as those evident in Fosa I, Fosa Y, and Structure ZZ1 exemplify good government, as they would have helped to bond participants and tie them to the city.

Three E-Groups provided the politico-religio-administrative foundations of Nixtun-Ch'ich'. They were central places that coordinated the population both spatially and temporally, and reflect the city's sources of supernatural power. They may also reflect districts or neighborhoods within the city. However, they are all ordered by the axis urbis, centered on Fosa Y. Likewise, the fosas may have represented ceremonial places of factions, but their placement around Avenue F suggests processions and the involvement of the larger community. Like the dispersed open areas of Teotihuacan, the fosas and E-Groups were likely critical aspects of the social infrastructure

enhancing inclusion and a sense of community as well as resilience (Carballo et al., 2021, p. 572).

The *petate*-like roads of Nixtun-Ch'ich' interwove these features and the people and water that they carried, as well as the pools and platforms, into an orderly city. The *petate* was coordinated by the axis urbis, with the pools and artificial mountains, places of immense *k'ux'* reticulated into the structure of the city. The axis was, in turn, ordered by the east–west path of the sun. The city was overtly and redundantly *toj*: it was a tollan, imbued with sanctity, a spiritually safe place with respect to the poorly known and dangerous other worlds. It was a microcosm that reflected the orderly universe, the balance of earth and water, and the cycles of rain and fertility. These features were symbolic public goods that added to the quality of life of Nixtun-Ch'ich' and helped establish it as the Creation place—the world as created by the gods.

Early rulers at Nixtun-Ch'ich' sought to govern by emphasizing the greater good. Collective works helped build solidarity, bonding members together performatively though labor, fostering a sense of accomplishment and group history, and celebrating the origins of the community. These works—from the temples to the streets—were also monuments to cooperation. Like war monuments and the twentieth century space race, they celebrate the virtues and power of group efforts. The gridded layout of Nixtun-Ch'ich', established by the streets and avenues emplaced by 500 BC, has survived, largely intact, into the twenty-first century through Classic, Postclassic, and Colonial-period occupation. It stands as testimony to the powerful, enduring *k'ux'* of this collectively built sacred landscape.

## AUTHOR CONTRIBUTIONS

TP wrote most of the manuscript. PR composed about 30%. EC wrote about 10% of the manuscript. JG about 5% of the manuscript. All authors contributed to the article and approved the submitted version.

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CONCEPTUAL ANALYSIS
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# Collective Action, Good Government, and Democracy in Tlaxcallan, Mexico: An Analysis Based on Demokratia

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For nearly 200 years, Western social science has argued that good government, embodied in democracy, originated exclusively in Western Europe and was introduced to the rest of the world. This Eurocentric vision has profoundly shaped social science's approach to the non-Western World (and pre-modern Europe). Importantly, distinct theories (e.g., Oriental Despotism, Substantivism, etc.) were developed to address premodern state-building in Asia, the Near East, Africa, and the Americas because "normal approaches" could not be applied in these areas. Regardless of the approach and the geographical area, Europe inevitably appears at the pinnacle of social evolutionary change. However, recently, Eurocentric theories have been subject to reevaluation. In this paper, we pursue that critical agenda through a comparative study of demokratia's original formulation and ask: would a 5th century B.C.E. Athenian recognize democratic attributes in 15th century C.E. Tlaxcallan, Mexico? We answer this question by first summarizing literature on Classical Athens, which concludes that among the key values of demokratia were *isonomia* and *isegoria* and then explore the evidence for similar values in Tlaxcallan. Our response is that an Athenian would see strong parallels between his government and that of Tlaxcallan.

**Keywords: Athens, demokratia, good government, isonomia, isegoria, Tlaxcallan, Eurocentrism**

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## INTRODUCTION

In this paper, we examine the late pre-contact state of Tlaxcallan, located in the Central Mexican Highlands, through the lens of Classical Athenian political philosophy to challenge Eurocentric thinking on the evolution of political strategies in human societies. Western social science has repeated for nearly 200 years that good government, embodied in Western European democracy, originated exclusively in the West through the transition from the Medieval feudal order to the modern nation state. Then, as Tilly, 1975 expressed it (1975, p. 608), democracy "moved from the West to the rest of the world" (where it has a decidedly mixed history of providing good government, e.g., Rothstein, 2011) (see also Chou and Beausoleil, 2015, p. 1).

In this Eurocentric discourse, the philosophical roots of democracy are traced ultimately to political reforms enacted during the 6th to 4th centuries B.C.E. in Athens. Yet, although the Athenians came to call their radical political experiment δημοκρατια (demokratia)—rule by common people—it is not always regarded as "really" democratic, lacking political parties and competitive elections, and not everyone was allowed to vote (e.g., Hadenius and Teorell, 2005). In this argument, it has only been through the superior social evolution originating in Europe that "true" democracy could be realized (cf. Holland-Lulewicz et al., 2022).

While we see Eurocentric ideology in studies of democratic origins (Blanton and Fargher, 2008, p. 294–299), it has been marshaled repeatedly and continues to be a way to deny that non-Western peoples have ever been capable of constructing good government based on democratic principles or of exhibiting other features that are associated with modernity (Goody, 2006; see also Niaz, 2014; Chou and Beausoleil, 2015; Youngs, 2015; Economou and Kyriazis, 2017; Duindam, 2018; Putterman, 2018; Daly, 2019; Abbas, 2020; Weede, 2020). For example, Economou and Kyrizis as recently as 2017 assert that, "The emergence of property rights and their protection and security is now accepted as one of the basic elements for economic development and one of the basic differences in economic development that took place in some 16–17th century European states, such as England and the United Provinces (Dutch Republic) *vis-a-vis* the great Asian empires like the Ottoman, the Indian Mughal, and China under the Ming and Qing Dynasties (North, 1981, 1990) [emphasis added]" (p. 53). Accordingly, some Western social science continues to use liberal democracy, as it is understood in countries like the US (circa 1970), England, and Scandinavia, as the benchmark for critiquing other political formations (e.g., Hadenius and Teorell, 2005; Berman, 2007; Mainwaring and Bizzarro, 2019). In this vision, premodern Asian states and those in the Islamic Mediterranean have been viewed as mired in despotism, while, in the eyes of some, in sub-Saharan Africa states never did develop (as Scott (2017), p. 21 put it: "no cassava states", cf. Blanton, 2019).

Yet recently anthropologists and anthropological archaeologist have begun to increasingly challenge Eurocentrism through comparative research (e.g., Blanton and Fargher, 2008; Blanton with Fargher, 2016; Carballo and Feinman, 2016; Feinman and Carballo, 2018; Blanton et al., 2020, 2021; Graeber and Wengrow, 2021; Blanton with Fargher see also the collection of papers included in this research topic). As part of this effort, in this article we present the case of Tlaxcallan, a late pre-contact state located on the Central Mexican Plateau. We do this because Tlaxcallan was among the most collective states in human history and possibly represents a polity comparable with the polis of Attica, with respect to the development of democratic values. To do this, we take a comparative approach that begins with a study of demokratia's original formulation in Classical Athens and then look for evidence of institutions in Tlaxcallan that materialized political philosophies comparable to those that were key to Athenian demokratia (especially isonomia and isegoria) with analogous outcomes (e.g., rights, political participation).

Cross-cultural comparison is a well-developed and empirically valid anthropological approach that allows for juxtaposing completely different cultural frameworks. Therefore, it differs from more traditional approaches in political science, where comparison is limited to modern nation states that in most cases feature similar governing structures and for which there are highly standardized data sources (e.g., UN, World Bank, WHO, Freedom House, etc.), as well as limited comparison with or among Medieval/Renaissance states. However, our method has also been influenced by political scientists (especially Coppedge, 1999 on the large-N, small-N problem). We agree entirely with Munck and Verkuilen (2002) that it is necessary to "balance the goal of parsimony with the concern for underlying dimensionality", and with their comment that comparativists "should not define a concept with too many attributes" because of the way it will burden the potential for comparison. Thus, our focus here is on the key values that underlie demokratia in Classical Athens and not particular institutions or structures (such as juries or the Boule, etc.). As Hansen (1999), p. 85 points out, "The constant interplay of the two concepts is characteristic of Athenian democratic ideology and shows, once again, the close affinity between modern democracy and Athenian *demokratia* looked at as a political ideology rather than a set of political institutions [emphasis added]." Thus, we do not hold that demokratia is defined exclusively by the highly particular institutions developed in Athens, or any other democratic polis. Defining it as such serves to only to uphold the supposed uniqueness of Europe and defend Eurocentric arguments.

Accordingly, we first investigate the underlying values of demokratia as it developed during the 6th and 5th centuries B.C.E. in Athens and the materialization of these values in Athens' urban landscape (including Piraeus) and in the Athenian colony of Thurii. We then look for these attributes in the political system and urban landscape of Tlaxcallan. We conclude that while we cannot directly confirm that Tlaxcallan had a general assembly where all male citizens gathered in one place to vote (comparable to the *ekklesia*) (though we have strong circumstantial evidence), many other features consistent with demokratia's philosophy were materialized in its political institutions and structures, and some were far better developed than in Athens. Accordingly, we think that a Classical Athenian would consider Tlaxcallan to be comparable to δημοκρατια (demokratia) and would see it as much unlike either government by a τύραννος (tyrant) or an ὀλιγαρχια (oligarchy).

# THE ROOTS OF DEMOKRATIA

## Historical Background

The emergence of the democratic experiment in Classical Athens, as well as other Greek poleis, was a century-and-half long process in response to the unpopular Archaic period aristocracy and the growing marginalization of commoner households (e.g., Hansen, 1999, p. 32–34; Wallace, 2007, p. 49) who agitated for political and legal reforms. In the specific case of Attica, Drako's extremely harsh and elitist law code mostly likely contributed significantly to this marginalization in Attica (Tangian, 2020, p. 7–8). Thus, in many *poleis*, like Attica, populist strongmen

manipulated discontent among the poor, gaining their support, which they used to rise to power as tyrants (Gouščhin, 1999; Wallace, 2007, p. 51–52). They came to power with a mandate to bring the aristocracy under control and alleviate the plight of the poor, however, many ignored the mandate and concentrated power, becoming authoritarian dictators that played the poor off against the aristocracy (Wallace, 2007, p. 73, 75). In the face of social discord, the Athenian people turned to a forward-thinking, liberal aristocrat named Solon (although whether Solon was real and responsible for these reforms is less important than the changes that were enacted) to institute reforms. Rather than mobilizing the people to make him tyrant through violence (Wallace, 2007, p. 58), he followed a path of establishing rule of law (institutions) to realize good government (Wallace, 2007, p. 58).

According to the later accounts, Solon liberated debt slaves and made debt slavery for Athenian citizens illegal, including buying back citizens sold abroad (Wallace, 2007, p. 59). Extremists were calling for equal distribution of land, but Solon did not heed them (Wallace, 2007, p. 65). Instead, he "redistributed land" by returning plots lost by farmers who were indebted and liberated public lands from elite monopolization and reopened them (Wallace, 2007, p. 59). He established equality under the law for all citizens, setting in motion a series of changes that would eventually limit, if not end, special treatment for the wealthy (Wallace, 2007, p. 59). He also established the right for all citizens, including the poor, to appeal decisions made by elite justices to the *Ηλιαία* (*heliaia* or public court) (Wallace, 2007, p. 60). He structured (male) citizens into four classes based on landholding and military services. He expanded membership in the ekklesia (people's assembly) to include all four social classes [Drako may have contributed to the formation of the ekklesia, but no evidence remains of his laws making it difficult to assess his contribution (Tangian, 2020, p. 7–8)]. There is debate as to the degree of free speech in Solon's reforms. Some scholars argue that the lowest class, *thetes* (smallholders and landless citizens), could vote, but could not speak or propose laws (Wallace, 2007, p. 61). Others argue that they did in fact address the assembly, thus, free speech was an early development; while other historians have argued that thetes were excluded until reforms were made in the 5th century (Raaflaub, 2007, p. 150). Based on our experience with social class in premodern states, we think that Raaflaub (2007) overstates the ability of the state to distinguish easily between social classes, especially with a growing urban population (cf. Ober, 2007, p. 97; Vlassopoulos, 2007). Regardless of institutional frameworks at this time, in practice the economic burden for poor individuals was probably so significant that it limited the ability of many to participate in the ekklesia and juries.

Individuals from the upper two or three classes were elected by the *demos* (the people) to serve as archons, treasurers, "sellers" of public contracts (tax collectors), prison officials, and *kolakretai* (state financial administrators) (Wallace, 2007, p. 61). This reform removed control over these offices from the hereditary aristocracy. The four tribes of Attica selected 10 candidates each for the position of archon, from the two highest social classes (*pentakosiomedimni* and *hippeis*); and from them, nine were selected by lot to serve (Wallace, 2007, p. 62). At the end of their terms, they were subject to scrutiny by the demos for their conduct. The *boule* (senate) with 400 members (100 representatives from each of the four tribes of Attica) was created at this time [it is possible that it was created earlier as part of Drako's reforms, but direct evidence is absent (Tangian, 2020, p. 7–8)]. The members of the boule were drawn by lot from among the members of the two highest social classes (pentakosiomedimni and hippeis) (Wallace, 2007). It prepared motions to be heard by the ekklesia and oversaw various political officials. These changes enfranchised an expanding section of Athenian citizens and were the first steps to reducing the power of a high council (the *areopagus*) made up of hereditary elites who were life-time members of that council (*archons* and ex-archons).

Despite these reforms, problems persisted, and, around 560 B.C.E., Pisistratus violently installed himself as tyrant (Morris and Powell, 2010, p. 217). After 19 years as the ruler of Athens he died and by 511 B.C.E. his heirs were either killed or exiled (Morris and Powell, 2010, p. 217). Athens was in disarray and Isagoras, with the backing of the Spartan king, made his bid for tyranny, but as the story goes something unexpected happened. The boule refused to disband impeding the installation of 300 elites selected by the Spartan king to support Isagoras. In this moment the people (demos) rallied to the boule's support, forcing the Spartan king and his supporters first to retreat to the Acropolis and then to leave the city (Ober, 2007, p. 88). They then recalled Kleisthenes, an extremely wealthy politician, from exile to lead reforms in 508/07 (Ober, 2007, p. 85). Before his exile Kleisthenes had, unexpectedly, thrown his lot in with the lower classes. Upon his return, instead of using their support to make himself another tyrant, he held true to his promises to the demos, especially the poorest citizens (sub-*hoplites)* (Gouščhin, 1999, p. 17; Ober, 2007, p. 85, 87, 88). Kleisthenes and the coalition he headed undertook a series of major reforms that further increased the power of commoners and reduced the power of the wealthiest class, proposals approved by a majority vote in the ekklesia, which, according to many scholars, was, at this point, dominated by the lower classes (Pomeroy et al., 2012, p. 206). Thus, the demos took charge of the government, making it a true democracy (Ober, 2007, p. 86; Raaflaub, 2007; Vlassopoulos, 2007, p. 150; disagrees and sees limits to participation by sub-hoplites).

Kleisthenes proposed a reorganization of the population of Attica into 30 *trittyes*, and ten tribes consisting of 3 trittyes, doing away with the traditional four tribes that had been a factor in political unrest (Wallace, 2007, p. 76). Each tribe then included one trittys from the coast, one from the interior, and one from urban Athens. Thus, each trittys contained several *demes* (villages or urban neighborhoods), and bound citizens together from across Attica and not just neighbors, creating a national identity (Morris and Powell, 2010, p. 219). He also strengthened the demes, making them democratic and partially self-governing. He established ∼139 demes throughout Attica (Paga, 2010, p. 1; Wallace, 2007, p. 76). The deme became the backbone of the democratic reform. Deme authority was vested in a general assembly where all members voted (Whitehead, 2014). Each year the assembly elected a *demarch* as an administrative

head and reviewed the financial statements of the previous demarch. The deme assembly selected the individuals who could potentially serve on the boule for 1 year (Whitehead, 2014). It also engaged in a range of other activities, including establishing local (deme-level) laws and norms. Each deme built a meeting place and maintained membership rosters (Wallace, 2007, p. 77; Whitehead, 2014). Importantly the reorganization of the demes removed elite control over local politics and placed that control in the hands of citizens. These reforms significantly increased local social capital as well as promoting shared service in the army and the boule, and collective participation in deme festivals (Raaflaub, 2007, p. 145). Social capital refers to the networks, institutions, and structures that encourage social actors to engage in specific behaviors or actions (Coleman, 1988, p. S98). The building of social capital, in the form of robust social networks based on repetitive interaction and local institutions backed by sanctions, has been demonstrated to be fundamental to the collective activities necessary to achieve democratic processes, because they build trust among local social actors (Blanton and Fargher, 2008; Ahn and Ostrom, 2009; Fargher and Blanton, 2021).

The Kleisthenic reforms intentionally mixed individuals that did not know each other or their families, thus family name and history could no longer be used to exclude people from political participation, a strategy long used by the aristocracy to control politics (Raaflaub, 2007, p. 145). The mixing of individuals from different regions of Attica ensured that members of demes and trittys did not know each other, which also blurred the distinction between hoplites and thetes (as well as some *metics* (foreigners) and slaves, and, thus, would have increased political participation at all levels (Ober, 2007, p. 97; Vlassopoulos, 2007).

Kleisthenes also proposed that the boule be reformed to include 500 members, 50 representatives from each of the 10 tribes selected by lot (Ober, 2007). Eligibility for selection was expanded to include more citizens. Free speech was increased in the ekklesia, making it in Athenian eyes a truly democratic assembly (Ober, 2007). While the exact number of members is unknown, and would have varied, the quorum was set at 6,000 members and attendance at its sessions was considered mandatory (Pomeroy et al., 2012, p. 245). Some powers still held by the areopagus and the archons were transferred to the boule, while the archons were left only with administrative duties (Pomeroy et al., 2012, p. 206). "The principal functions of the boule were to engage in deliberative decision-making regarding matters of state finance, religion, public works, and the army and navy, and to draw up the *probouleumata* (proposals) to present to the ekklesia" (Paga, 2021, p. 116). Ostracism was also introduced as a mechanism to limit the power of wealthy individuals seeking to consolidate their personal power and disrupt institutional processes (Ober, 2007, p. 85). The democratic and institutional changes enacted under Solon's and Kleisthenes' leadership are clearly visible in 465 B.C.E. when the archon Kimon was impeached on corruption charges and tried (Pomeroy et al., 2012, p. 238). Although he was acquitted, this process demonstrates that although the archons had great administrative powers, they were subject to control by the demos. However, a few final reforms were needed to fully bring the aristocracy under control.

These reforms came between about 460 and 450 B.C.E. First, the ekklesia approved a series of reforms, proposed by Ephialtes, that stripped the areopagus of the few functions it still retained, transferring them to the ekklesia, boule, and heliaia; this left the areopagus with jurisdiction only over homicides and some religious matters (Pomeroy et al., 2012, p. 241). Shortly thereafter, aristocratic conservatives, angered by the policy proposals of Ephialtes, arranged for his assassination, which left his ally Perikles as the demos' spokesman (Pomeroy et al., 2012, p. 241–242). Afterwards, eligibility for service as an archon was extended to members of the hoplite class, which effectively ended the aristocratic monopoly on the highest offices (Wallace, 2007, p. 80). Finally, Perikles proposed pay for citizens serving on juries, which was later expanded to other forms of political service (e.g., serving on the boule and as a magistrate, as well as attending ekklesia meetings and voting) (Pomeroy et al., 2012, p. 248). This pay made it possible for many poor citizens to fully participate in the government, which completed the transfer of power from the aristocracy to the demos. Some scholars have argued that participation in juries by a large number of citizens drawn from across social sectors would have provided an important element of democracy (e.g., McCannon, 2010).

## Philosophy

From Solon's reforms, through Kleisthenes, to the final reforms proposed by Perikles and approved by the assembly, Athenian democracy developed around two basic principles: *isonomia*, or equal rights among citizens, and *isegoria*, free speech (Raaflaub, 1996, p. 143–145, 2007, p. 146; Ober, 2007, p. 95; cf. Hansen, 1999). Initially isonomia was applied by Solon in the area of legal rights, especially protections from debt slavery, equal legal rights, and the right to appeal legal decisions to the public courts. Over time, participation in public juries was expanded to ensure legal isonomia for all citizens, including instituting pay for jury duty so even the poorest citizens could fulfill this democratic duty. In terms of political rights, access to the ekklesia was extended to sub-hoplites (thetes) by either Solon or Kleisthenes, and rights to occupy other political offices, as well as serve on the boule, were gradually extended down the social hierarchy; as well, pay for these services was instituted during the mid 5th century. By the end of our focal period (600–450 B.C.E.), wide access had even been opened to the areopagus (which had been arguably the most elite body in Athens).

Equality was never totally achieved in the economic sphere, because not all Athenians had equal access to land or other revenue producing activities (Ober, 2007, p. 125). Thus, economic inequality persisted throughout the democratic period, despite high levels of equality in the political and legal spheres. However, comparative work by Ober (2007) has demonstrated that inequality decreased from the Archaic period into the Classical Period and by the end of the democratic period the poor and middle classes were better off as compared to their counterparts in Medieval Europe and Imperial Period in Rome (see also Morris, 1998; Kron, 2011; Patriquin, 2015). Despite these changes, quantitative analyses by Ober (2007) and Morris, (1998, p. 235–239) of inequality, using diverse methods, arrived at a Gini index for Classical Athens of roughly 0.38. This value

is moderate when compared with more global studies, which demonstrate that wealth inequality was more strongly developed in Eurasia than North America and Mesoamerica (Kohler et al., 2017). More specifically when compared with the Gini value of 0.12 for Teotihuacan, a Central Mexican city that reached its apex between 400 and 600 C.E. with a population of 125,000 people, Classical Athens appears comparatively unequal (Kohler et al., 2017, Supplementary Table 2; Millon, 1973).

Coupled with isonomia, the democratic state protected isegoria. Again, with the reforms of Solon and Kleisthenes, it is not entirely clear if all citizens had equal rights to speak in the assembly or introduce legislation (Ober, 2007; Raaflaub, 2007; Wallace, 2007, p. 65–66). However, by the peak of the democratic period in the late 5th century to the middle 4th century (with some minor interruptions), all citizens were afforded the right to speak in the ekklesia (e.g., Raaflaub, 2007, p. 149; Wallace, 2007, p. 79). Given the anonymity afforded by the size of the assembly (6,000+ individuals) and the complexity of Athenian society, Vlassopoulos (2007) has argued that non-citizens (metics, slaves) may have masqueraded as citizens, addressed the ekklesia, and possibly voted (he even includes women disguised as men, but some scholars might question this). Overall, the implementation of this political philosophy produced a society marked by, "… the generalized feelings of trust and good faith between social classes, between mass and elite, between hoplites and thetes" (Ober, 2007, p. 101).

## The Materialization of Democratic Ideas in Athenian Cities and Countryside

The transition to democracy in Classic Athens, not only required major institutional reforms that transferred power from aristocrats to commoners, but it also required reform of urban and rural landscapes to create a built environment suited to their new governing system. Within Athens, this involved moving the center of civil and political life to an open space adjacent to and below the Acropolis, Pnyx, and Areopagus (Ober, 2007, p. 98; Paga, 2021) which became the agora. It was anchored by the construction of a massive drainage canal, followed by erection of the structure that housed the boule (*bouleuterion*), along with other important public buildings and temples including the Stoa Basileiso (Paga, 2021). The bouleuterion was constructed as a nearly square hypostyle hall to provide intervisibility and to encourage participation (Paga, 2021, p. 97). Both the bouleuterion and the Stoa Basileiso were constructed using the ancient Greek Doric order, which served to sanctify and legitimate democratic political processes and governing (Paga, 2021). When the central market was also officially moved to the agora (Paga, 2021, p. 95), it concentrated political, economic, and some religious activities, making it the heart of the city. The mixing of the mundane, the political, and the religious that came to define the Athenian agora was reviled by conservative pundits (Vlassopoulos, 2007, p. 40). The nearby Pnyx Hill, located about 1,000 m from the agora, was selected as the seat for the ekklesia and new construction there created a flat space for the meetings of the assemblies (Kourouniotes and Thompson, 1932; Joyner, 1977). Its first construction phase created an open-air assembly space that could hold several thousand citizens, although later the space was significantly expanded in two additional construction phases during the 4th century (Kourouniotes and Thompson, 1932; Joyner, 1977) to accommodate increasing participation as the lower classes increasingly took control of the government.

Together the agora and the Pnyx Hill formed the spaces in which democracy played out at the polis scale. In the agora, where crowds of Athenians frequently gathered in shops, workshops, and open spaces, politicians would make speeches and engage in discussions to promote diverse policies and the people themselves would have discussed, debated, and deliberated on them and the tidings of the day Vlassopoulos (2007, p. 40–41). Paga (2021, p. 102) notes that, "An Athenian citizen could easily conduct his business in the agora, attend a meeting of the boule or read the announcements and pre-posted agenda, and then make his way to the Pnyx for debate and voting." A citizen also could also see and hear activities like, "…trials, oaths, display of laws…" at the Stoa Basileios, which faced onto the agora Paga (2021, p. 106). Thus, as Vlassopoulos (2007, p. 42) concludes, "… in this non-institutional setting [the Agora], one can imagine poor, common Athenians speaking their own minds, presenting their grievances, even suggesting courses of action that might be subsequently taken up by the assembly." Accordingly, it was in the agora that Athenians were informed and made up their minds concerning important policies that they would later vote on, influenced by one another, as well as politicians and the multitude of non-citizens (e.g., women, metics, slaves) that frequented this "free space" and participated in political discussions. The agora was such an important political space that Paga (2021, p. 94) contends that barring entrance of citizens from it effectively eliminated them from participation in the political system.

Although the data are thin, there are tantalizing tidbits in the historic and archaeological records that point to the fact that open and accessible spaces were also the focal point of deme political activities (Thompson, 1971, p. 73; Jones, 2011, p. 45, 294; Apostolopoulos and Kapetanios, 2021). Like the polis, demes were governed by assemblies that included all citizens that were registered members (Whitehead, 2014). In the case of at least one rural deme, we have documentary data indicating that an open space was donated by a wealthy citizen to be used as the deme's agora (Whitehead, 2014: passim). Documents also mention an urban agora associated with a deme of Athens (Osborne, 2007, p. 198). In other cases, demes constructed theaters dedicated to the Dionysus that were used for deme assemblies and other political activities (or even tribe assemblies) (Ober, 2008, p. 205–206; Paga, 2010). These spaces were key to social capital building activates that were part of the everyday democratic life of the deme, making it the backbone of Athenian democracy (cf. Fargher and Blanton, 2021). These activities include, for example, the deme assemblies, collective law making, evaluation of demarchs at the end of their terms, and the festival of Dionysus, etc.

Our best evidence for democratic landscapes comes from town planning attributed to Hippodamus (Castagnoli, 1971). In the limited writings of Hippodamus that have come down to present, we know that he consciously linked town planning with political strategies and that he considered establishing order and standardization in town planning as key aspect of

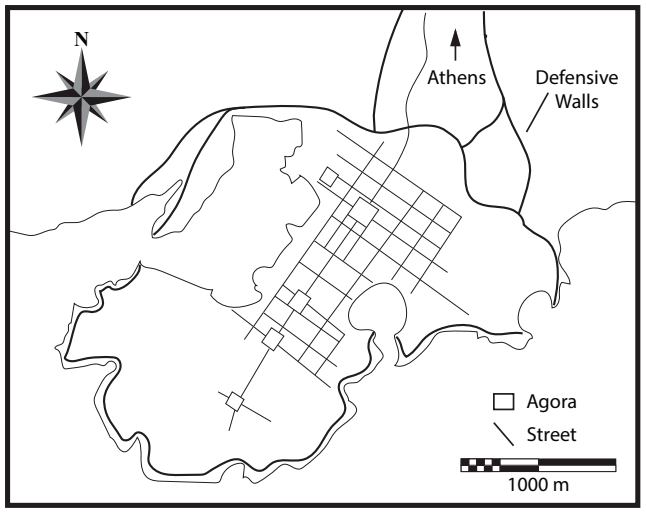


**FIGURE 1 |** Map of Ancient Piraeus (Adapted from Dicks, 1968: Figure 2 and Google Earth).

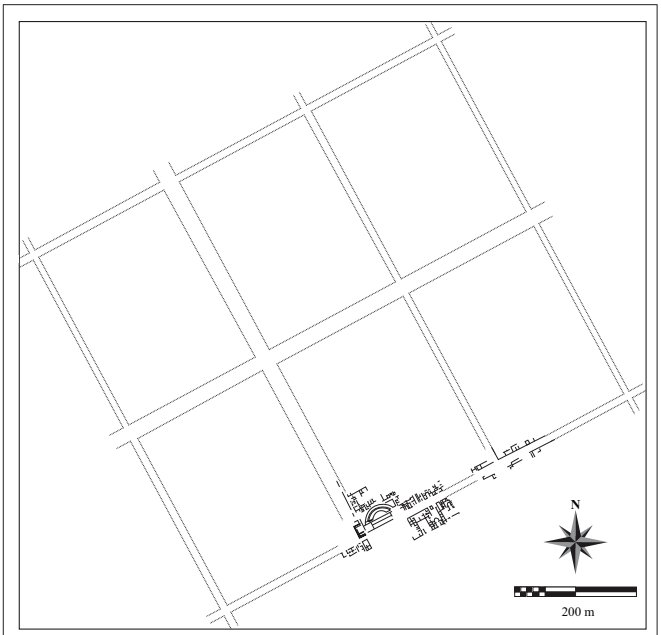


**FIGURE 2 |** Map of Ancient Thurii (Adapted from Greco, 2009, Figure 9.4 and Google Earth).

democratic processes (see Paden, 2001; Fleming, 2002; Mazza, 2009). Formally, Hippodamus divided urban space into public, private, and sacred and considered respect for these divisions key to establishing the social order necessary for democracy to flourish (Mazza, 2009). He also, in practice, apparently merged agorai and gridded street plans into the settlements that he planned (Paden, 2001, p. 43). Thus, agorai and orthogonal road systems became the recognized materialization of democracy in urban landscapes (Paden, 2001; Fleming, 2002; Mazza, 2009). The best examples of this style of town planning are visible in the construction of the Athenian port at Piraeus (we note that the palimpsest of Hippodamus' plan is still visible today in the modern city) and the colony of Thurii (known from archaeological excavations), which was promoted by Perikles as the ideal example of democratic order (**Figures 1**, **2**) (Dicks, 1968; Paden, 2001; Fleming, 2002). Either consciously or unconsciously, the combination of agorai and orthogonal streets projected an ideological abstraction of order, freedom, and equality, because these planned towns ordered private, public, and sacred space, provided equal access to free spaces, and cut up residential spaces into highly standardized and uniform house lots that limited the degree to which any wealthy individuals could signal their importance through monumental residential architecture (Paden, 2001; Whitley, 2001, p. 359; Mazza, 2009). In both cases, we see the construction of multiple open spaces, linked with sacred precepts through temple construction where major streets crossed. This pattern is clearly visible in Piraeus with a line of agorai running along the central avenue, which formed the terminus of the highway that linked the port with Athens (Dicks, 1968: **Figure 2**). Temples and/or public buildings were constructed in several of these squares, as well as theaters at other important intersections (**Figure 1**). Thus, the Hippodamian city became a materialization of many aspects of Athenian democratic philosophy relating to equality.

# THE TLAXCALTECAN POLITICAL FORMATION

## Historic Background

The pre-Hispanic, indigenous state of Tlaxcallan (C.E. 1300–1521), located in central Mexico about 100 km east of the Basin of Mexico (the large interior drainage basin that surrounds modern Mexico City), we argue, provides analogs to the political participation, isonomia, isegoria, and built environment we described for Athenian democracy. Tlaxcallan was a small, independent state, comparable in scale to Classical Attica, that was founded around 1300/1400 based on radiocarbon dating and ceramic cross ties. Previously, we argued that Tlaxcallan emerged in response to imperial threats emanating from Aztec polities centered in the Basin of Mexico (Fargher et al., 2010). While city-states in the vicinity of Tlaxcallan fell under the expanding domination of the Aztec Triple Alliance (known colloquially as the Aztec Empire), especially after 1428, Tlaxcaltecan political architects instituted or strengthened collective political strategies, building a multiethnic confederation of settlements spread over ∼2,500 km$^2$, with a population of ∼250,000 to 300,000. This confederation was able to withstand onslaught after onslaught by the Aztec and remained independent (Fargher et al., 2010, 2011).

The political integration of the Tlaxcaltecan confederation resulted in the emergence of a large, dense urban occupation at the newly founded eponymous city of Tlaxcallan. This city grew in an area of unoccupied hilltops to become a terraced city covering ∼4.5 km$^2$ and with a population of ∼35,000 by the time of the Spanish Conquest in 1521 (Fargher et al., 2011). Surprisingly, although the city of Tlaxcallan was the largest, most important settlement in Tlaxcaltecan territory, it did not house

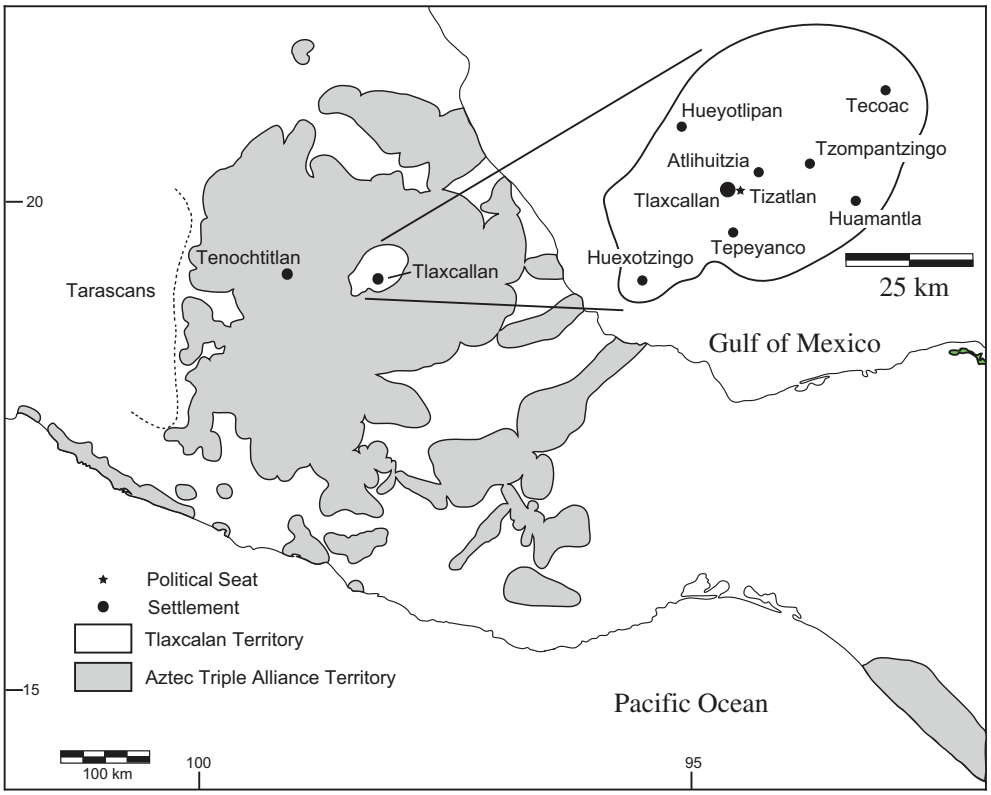


**FIGURE 3 |** Map of Central Mexico showing Late Pre-Hispanic Tlaxcaltecan Territory Settlements.

the political capital (**Figure 3**). Tlaxcaltecan political architects instead built a disembedded capital on an isolated hilltop called Tizatlan, about 1 km beyond the limits of the city (Fargher et al., 2011). In what follows, we first describe Tlaxcaltecan political philosophy as it would have been in 1519 when Cortés and the other Conquistadores arrived in Tlaxcallan, and then examine the materialization of this philosophy through the results of various archaeological projects in Tlaxcallan and Tizatlan.

## Documentary Evidence

When Cortés arrived in Tlaxcallan he was struck by the political formation that he encountered. In his second letter to the Spanish Crown, he reports that the city was approximately the scale of Granada when it was retaken from the Moors (Cortés, 1963). He also points out that it did not have an overarching ruler, a king, and the closest political analogies to it in 16th century European political experience were the Italian republics (*señorías)*, such as Venice, Genoa, and Pisa, among others (Cortés, 1963). Based on his descriptions and reports, along with those of other Conquistadores and early Colonial period documents and chronicles, we have been able to reconstruct Tlaxcaltecan political architecture prior to significant changes brought about by Spanish intervention (e.g., Fargher et al., 2010, 2011; Fargher, 2022).

Pre-Contact Tlaxcaltecan society was divided among three principal status categories: *pilli* (roughly translatable as "nobles"), an intermediate status (*teixhuahau*), and a peasantry (*macehualli*) (Gibson, 1952; Anguiano and Chapa, 1976). Interestingly, the indigenous (Nahua) term typically used for "slave" does not occur in Tlaxcaltecan documents, and another obscure term than may have referred to some type of attached/dependent or only part-free laborer is only rarely used (Anguiano and Chapa, 1976). Nobles headed four principal "house" types - *teccalli* ("lord's houses"), *picalli* ("noble houses"), *huehuecalli* ("old houses"), and *yaotequihucali* ("warrior's houses") (Gibson, 1952; Anguiano and Chapa, 1976; see also Castillo Farreras, 1972). Surprisingly, only two of these house categories and their political positions were hereditary, picalli and huehuecalli. The other two, teccalli (the highest household rank in the Tlaxcaltecan state) and yaotequihucali were bestowed on individuals, from any social status, based on merit acquired through exceptional service to the state (Fargher et al., 2010). The most common pathway was through decorated military service, but religious service and providing wise "council" in the assembly were other pathways (Motolinía, 1950; Muñoz Camargo's, 1986). Importantly, even the hereditary heads of picalli and huehuecalli had to provide service, or they would lose their status (Fargher et al., 2010; Fargher, 2022). Individuals that had lost their status as nobles were called *pillaquistiltin*; the widespread use of this term in early Colonial Tlaxcaltecan documents indicates that downward social mobility was very common (see Anguiano and Chapa, 1976). Based on early Colonial census data, Fargher (2022) estimated that these four categories consisted of ∼4,000 households (of a total of ∼28,000

to 29,000 households). Thus, the heads of these 4,000 households would have served in some capacity as political officials (e.g., tax collectors, corvée directors, military leaders, police, judges, legislators, administrative heads, etc.).

We have argued previously that the highest-level political officials in Tlaxcallan, *tecuictli* (holders of teccalli), formed a ruling council or senate consisting of somewhere between 50 and 200 members (Fargher et al., 2010). This body had the power to act as a supreme court, to declare war and peace, propose alliances, appoint, monitor, and punish political officials including tecuictli, and appoint ambassadors. Decisions were made through speechmaking and debate until a consensus was reached. Membership on this council was earned, and after elevation to the title of tecuictli, an individual was assigned an administrative/revenue producing district called a teccalli (lord's house). These districts provided revenue to the state and paid the salaries of the tecuictli. However, the lands associated with a teccalli remained state property and revenue flows were closely monitored. The early Colonial period mestizo-Tlaxcalteca chronicler Muñoz Camargo's (1986) noted that if a tecuictli accumulated too much wealth, he was executed and his properties and other assets were redistributed (it is unclear from Muñoz Camargo's writings if these actions were state sanction or an act of the people).

Diverse documents indicate that the teccalli districts were subdivided into smaller administrative units called *tlaca* (Fargher et al., 2010, 2011; Fargher, 2022). For example, an early Colonial period will from Ocotelulco (a district of the city of Tlaxcallan), indicates that this urban district was subdivided into five tlaca (or wards/neighborhoods)—Tlamahuco, Chimalpa, Contlantzingo, Tecpan, and Cuitlixco (García Sánchez, 2005, p. 113). Apparently, these wards were assigned to lower-level political officials such as *pilli* (heads of picalli) or *yaotequihua* (heads of yaotequihucali) (Muñoz Camargo's, 1986). Importantly, one pathway to tecuictli status, as we mentioned, was through providing valuable advice or council, which would indicate that these political officials and even other individuals attended and participated in the ruling council's sessions. Thus, for certain important decisions like declaring war, broader general assemblies including thousands of participants (e.g., lower-level administrators and possibly teixhuahau and macehualli) may have been called.

The documents also indicate that to Tlaxcaltecans, legal equality, comparable to the Greek concept of isonomia, was an important dimension of their collective political strategies. For example, Fray Toribio de Benavente Motolinía, (1971, p. 321), a Spanish friar who was among the first Europeans to live in Tlaxcallan, sometime around 1532–1533, detailed how no Tlaxcalteca was above justice and the law was applied equally to all. Especially visible in the chronicles is a focus on demonstrating that nobles did not receive special or distinctive treatment with respect to the law as compared with commoners. In one case, a high-ranking individual (the brother of Maxixcatzin, who was one of the most prominent politicians in 1519) was brought to trial for adultery and convicted (de Zorita, 1994, see also Motolinía, 1971, p. 321). Importantly, neither his status nor his brother's influence protected him from being sentenced to death. In another incident, Xicotencatl el Mozo (the younger), among the most important and successful military leaders of his day and a tecuictli, was indicted and convicted of treason when he defied the Tlaxcaltecan-Spanish alliance and attacked Cortés and his men (cf. the failure to convict Kimon of corruption). Interestingly, these high crimes are described as having been tried in the Tlaxcaltecan "senate" and the tecuictli acted as jurors (cf. Athenian juries).

We also note that Tlaxcaltecan citizenship was extended across diverse ethnic groups (e.g., Otomí and Pinome, etc.) and not limited to the dominant Nahuas (Fargher et al., 2010). This extension included the incorporation of immigrants, especially Otomí refugees fleeing oppression in the Basin of Mexico (cf. Athenian treatment of metics). This is not to say that some temporary residents or ambassadors did not retain their distinctive political and ethnic identities while residing in Tlaxcallan. We also know from Muñoz Camargo's (1986) writing that tecuictli-status was extended to important Otomí leaders, including immigrants, based on service. In at least one case, the Aztec Triple Alliance attempted to bribe Otomí-Tlaxcalteca leaders to turn against Nahua-Tlaxcaltecas. These Otomí refused and proudly affirmed that they could not be bribed because they were Tlaxcalteca and could not turn on themselves (Muñoz Camargo's, 1986). We also know that the most important military hero of the Tlaxcaltecan state was an Otomí named Tlahuicole. Tlahuicole was the most highly revered Tlaxcaltecan citizen at the time of contact with Cortés, even by Nahua-Tlaxcaltecas. To put this into perspective, we note that ethnic conflicts and oppression of minority ethnic groups, such as the Otomí, was widespread in other parts of central Mexico at this time.

## Philosophical Underpinnings of Tlaxcallan

The Tlaxcaltecas revered Tezcatlipoca (Smoking Mirror) as their principal deity (**Figure 4**). According to indigenous (Nahua) mythic history, Tezcatlipoca is a powerful trickster that continually antagonized the god Quetzalcoatl, a mythic king and founder of royal Nahua lineages, and by extension the hereditary nobility and especially monarchs (Nicholson, 1971, 2001; Mónaco, 1998). As part of the mythic history of a lost kingdom called Tollan, Tezcatlipoca had a series of encounters with Quetzalcoatl, as well as other rulers, that illustrate key egalitarian aspects of Nahua morals (cf. Greek concepts of isonomia). In one encounter, Tezcatlipoca urged Quetzalcoatl to look into his magic mirror (Nicholson, 1971, 2001; Mónaco, 1998). When Quetzalcoatl looked, he was horrified by his reflection. The obsidian mirror had revealed his true nature, as a corrupt and wicked ruler. In another encounter, Tezcatlipoca encouraged Quetzalcoatl to go on a drinking binge (summarized in Nicholson, 2001, p. 47). Quetzalcoatl, intoxicated, made his sister drink with him, and then fornicated with her. Finally confronted with these transgressions and unable to manage his guilt, Quetzalcoatl fled his kingdom. Tezcatlipoca also influenced Huemac, a warrior and another ruler of Tollan. In this incident, Tezcatlipoca convinced Huemac to engage in human sacrifice and to include his sons and heirs in these rituals (Mónaco, 1998, p. 142–146). By sacrificing his heirs, Huemac was transformed

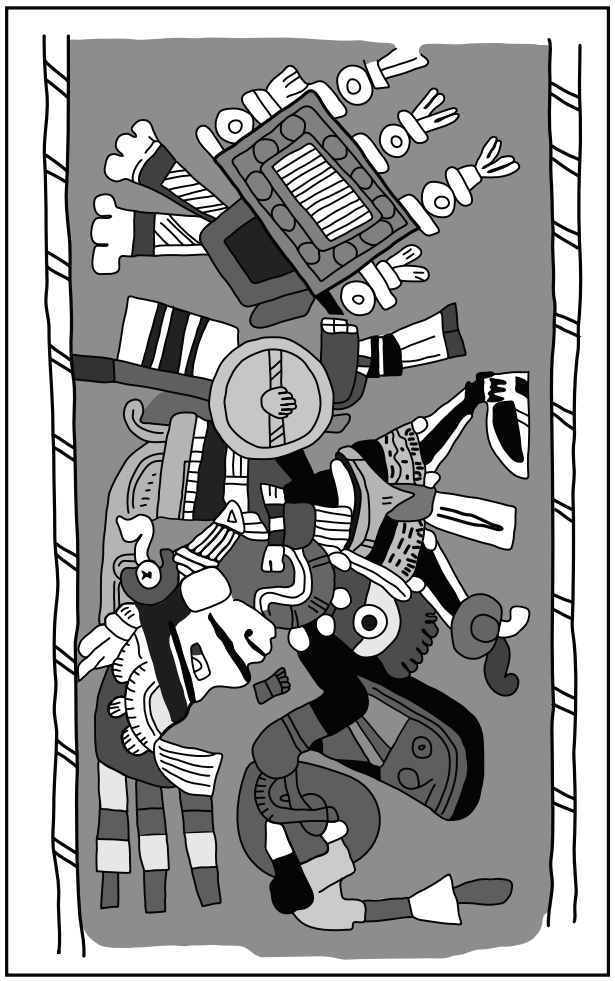

**FIGURE 4 |** Tezcatlipoca, Mural A, Tizatlan (Adapted from Noguera, 1929: p. l.1).

into the god Atecpanecatl, the enemy of Quetzalcoatl and the destroyer of royal lineages (Mónaco, 1998, p. 144).

Tezcatlipoca, with his special vision and magic obsidian mirror, possessed the ability to see the true nature of individuals, regardless of ascribed status, or even entire societies. As we pointed out previously, "We relate this kind of visual wisdom to the ability to see the potential for virtue in persons regardless of social standing, including the idea that success can be the product of achievement, not just noble birth …" (Fargher et al., 2010, p. 241). Accordingly, Tezcatlipoca was feared by the hereditary nobility among the Aztecs because he would appear and change the fortunes of the rich, demoting them to commoner status, as well as promote macehualli to the highest levels of society, thus blurring the distinction between elite and commoner. His egalitarian ideals (similar to isonomia) were played out in his diverse personifications, including as the god Moyocoyatzin (he who creates himself), as the god Ixquimilli (as a judge who symbolized blind justice), and as the god Tepeyollotl, the heart of the mountain, a jaguar figure linked to warriors and sacrifice through military service (**Figure 5**) (Seler, 1963, p. 112–113; Heyden, 1991, p. 189). Consequently, linking the state with this deity made equality a sacred political ideal that provided supernatural justification for the participation of individuals from any social status, including commoners, in the political system including serving as chief governing officials (cf. Hansen, 1999, p. 81–85). Moreover, as part of this ideology, both highly placed political officials and other individuals, including commoners, were afforded the right to speak before the governing council. Tezcatlipoca's egalitarian morals (cf. isonomia) promoted freedom of speech (cf. isegoria) as a fundamental tenant of Tlaxcaltecan political philosophy. It is of interest for purposes of this paper to note the similarities between Tezcatlipoca and the Classical Athenian god Dionysus, following authors such as (Connor, 1996, p. 222) who argued that: "Dionysiac worship…inverts, temporarily, the norms and practices of aristocratic society [and makes it possible]…to think about an alternative community, one open to all, where status differentiation can be limited or eliminated, and where speech can be truly free" (cf. Blanton with Fargher, 2016, p. 231–233).

## Urban Landscape

From the study of the architectural remains of Tlaxcallan and Tizatlan (**Figure 6**), we find patterning consistent with both the political strategies and ideologies we have described. Our mapping project (see Fargher et al., 2011) documented that the city of Tlaxcallan was divided into three principal districts (teccalli) that were in turn subdivided into ∼20 neighborhoods (tlaca). Each district and each tlaca was centered on a plaza bounded by a single temple-mound or multiple buildings. These plazas range in size from 500 to 12,000 $m^2$, but no plaza stands out as a central place in the city. Analysis of artifacts recovered from plaza-mound complexes indicates that commercial, political, and sacred activities were hosted in them. The plazas were highly accessible, allowing for intermingling and collective participation in a range of everyday, special, and sacred activities. We imagine (as Vlassopoulos, 2007, p. 42 does for the agora) that Tlaxcaltecans discussed, argued over, and proposed policies in response to current political policies and tidings from other lands. Importantly, political officials were required to be present in the plazas, especially during important activities, for example, during market days to provide security, during religious rituals, and during significant political events like induction ceremonies (Cortés, 1963; Motolinía, 1971; Muñoz Camargo's, 1986). In an essential example, individuals elected to high-level governing positions were required to appear before the people in the plazas (Motolinía, 1971, p. 339–343). During this rite of reversal, the people stripped the candidate of his clothes, shoved, slapped, and hit him, and hurled insults upon him, testing the candidate's ability to maintain his composure under extreme stress. The rite also reminded the individual that regardless of his status he was a servant of the people. These plazas, like the Athenian agora, formed the backbone of social, political, economic, and religious life of Tlaxcaltecan society.

The individuals that frequented these free spaces lived in densely packed residential terraces that covered the hillslopes around the plazas (**Figure 6**). These terraces are extremely

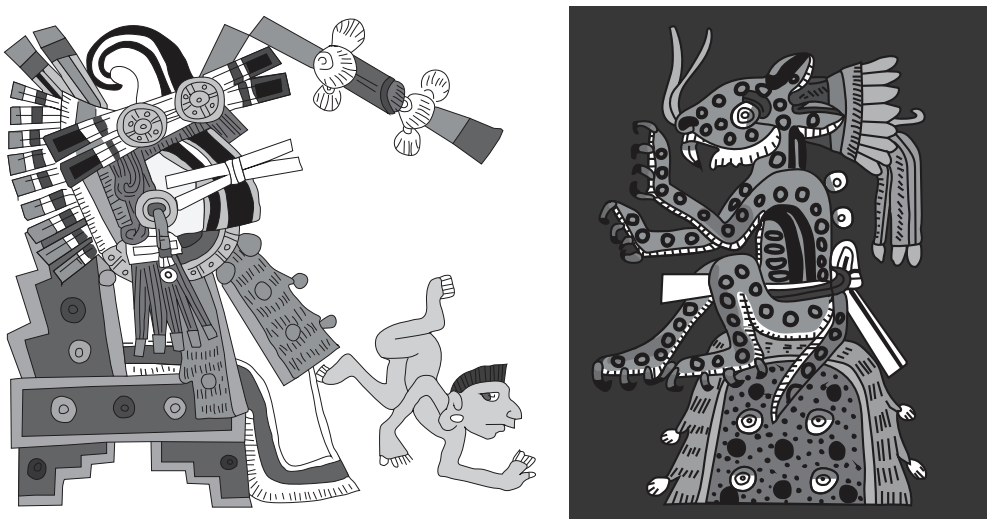

**FIGURE 5 |** Avatars of Tezcatlipoca: (1) Ixquimilli and (2) Tepeyollotl (Adapted from Codex Borgia).

uniform ranging in size from about 500 to about 3,000 $m^2$, with a median area of 1,700 $m^2$ (Fargher et al., 2011). Our excavations on several terraces, plus excavations by other projects, have demonstrated that the largest ones were subdivided between domestic and public areas or among multiple households (Fargher et al., 2020). Such use of terrace space means that the largest house lots in the city covered no more than about 2,000 $m^2$ and the houses of even the richest members of Tlaxcaltecan society would have been well-under 1,000 $m^2$. These data suggest a Gini index for residential land of ∼0.23. In fact, the largest house excavated to date only had about 265 $m^2$ of roofed space (**Figure 7**) (Fargher et al., 2020). Comparatively, the richest members of neighboring pre-Hispanic societies in Central Mexico and Oaxaca (Aztecs, Mixtecs, Zapotecs, etc.) lived in sumptuous palaces, often elevated on platforms, covering 8,000–20,000 $m^2$ (Fargher et al., 2020). Furthermore, flooring, house foundations, and portable material wealth were highly uniform among households within the site. These data indicate that within the city of Tlaxcallan, political policy and ideology were materialized in a high degree of economic equality, a result consistent with descriptions by the Conquistadores that indicate that even the residence of Maxixcatzin, considered to be among Tlaxcallan's wealthiest citizens, was extremely modest (Fargher, 2022). Qualitative comparison with Aztec villages and Teotihuacan, shows that Tlaxcallan was more economically equal than both cases.

On a hilltop within a municipality now called Tizatlan, Tlaxcala, the Tlaxcalteca built a massive civic-ceremonial complex on a terrace or platform (Fargher et al., 2011). This complex covered at least 16,000 $m^2$ and possibly as much as 24,000 $m^2$ (modern construction has destroyed the northeastern boundary of the complex) (estimated using Google Earth Pro). This space apparently consisted of an open plaza covering at least 10,000 $m^2$, as well as a religious sanctuary consisting of a number of small temples and auxiliary structures built around a patio. Like the Pnyx Hill, this complex acted as the most important political space in the Tlaxcaltecan state. It was a neutral location where the ruling council met to discuss and vote on important issues. The principal altar here depicts Tezcatlipoca along with other important deities (Caso, 1927), sanctifying the democratic political processes that took place there. Importantly, the scale of this complex indicates that many more individuals than just the 50–250 tecuictli met in this space for politico-religious ceremonies. The space was built to hold thousands of individuals. As we noted earlier, one pathway to tecuictli status involved providing sound advice or recommendations to the ruling council. Thus, the documentary and archaeological data indicate that many more individuals than just the tecuictli, possibly as any as 4,000 or more individuals, attended the most important assemblies and participated in their discussions.

## DISCUSSION

We think the data presented here indicate an extremely high degree of coherence between the political philosophies and policies of Classical Athens and Late pre-Hispanic Tlaxcallan, despite variation in the particular institutions and structures developed to materialize them. Both states upheld a philosophy of legal equality (isonomia in Greek terms) and developed structures and institutions that sought to make it a reality for all citizens. While neither state created a legal-rights utopia, we think the Tlaxcaltecan state was much more thorough in its legal policies, given the very limited role of slavery and the full incorporation of diverse ethnic groups and immigrants into its political and legal systems (Motolinía, 1950; Gibson, 1952; Anguiano and Chapa, 1976; Muñoz Camargo's, 1986; Aguilera, 1991a,b). All political officials were carefully monitored, and malfeasance was punished. Moreover, there is evidence for specialized judicial officials, as well as formal police (Cortés, 1963), which suggested that civil and criminal justice systems


**FIGURE 6 |** Map of the City of Tlaxcallan and Political Seat of Tizatlan.

in Tlaxcallan were comparable to those of neighboring Texcoco, and thus among the most sophisticated legal systems in the premodern world (see Offner, 1983). We also have documentary evidence of even the highest level and most respected political figures being punished, following due process, for violating norms or orders issued by the ruling assembly (Cortés, 1963). In terms of political equality, we think an Athenian would have been highly impressed by the degree and nature of citizen participation in Tlaxcallan's government. Again, we think Tlaxcallan exceeded Athens in this area. No citizen was excluded from participating fully at all levels of the government, including being elected to tecuictli status. While the pathway was different, through meritorious service and election by the council to achieved status in Tlaxcallan, vs. election at the deme level and selection by lot, the outcome was more egalitarian in Tlaxcallan when we consider that sub-hoplites were excluded from very high office in Athens during most if not all of the democratic period.

From the vantage of economic equality, Tlaxcallan far exceeded Athens. The degree of social inequality in the city of Tlaxcallan was compressed to an unprecedented degree as compared with other pre-modern states we are aware of in Mesoamerica or elsewhere. Our surveys and excavations demonstrate that the richest and most important Tlaxcaltecans resided in domiciles that were no more than 200–400 $m^2$ for

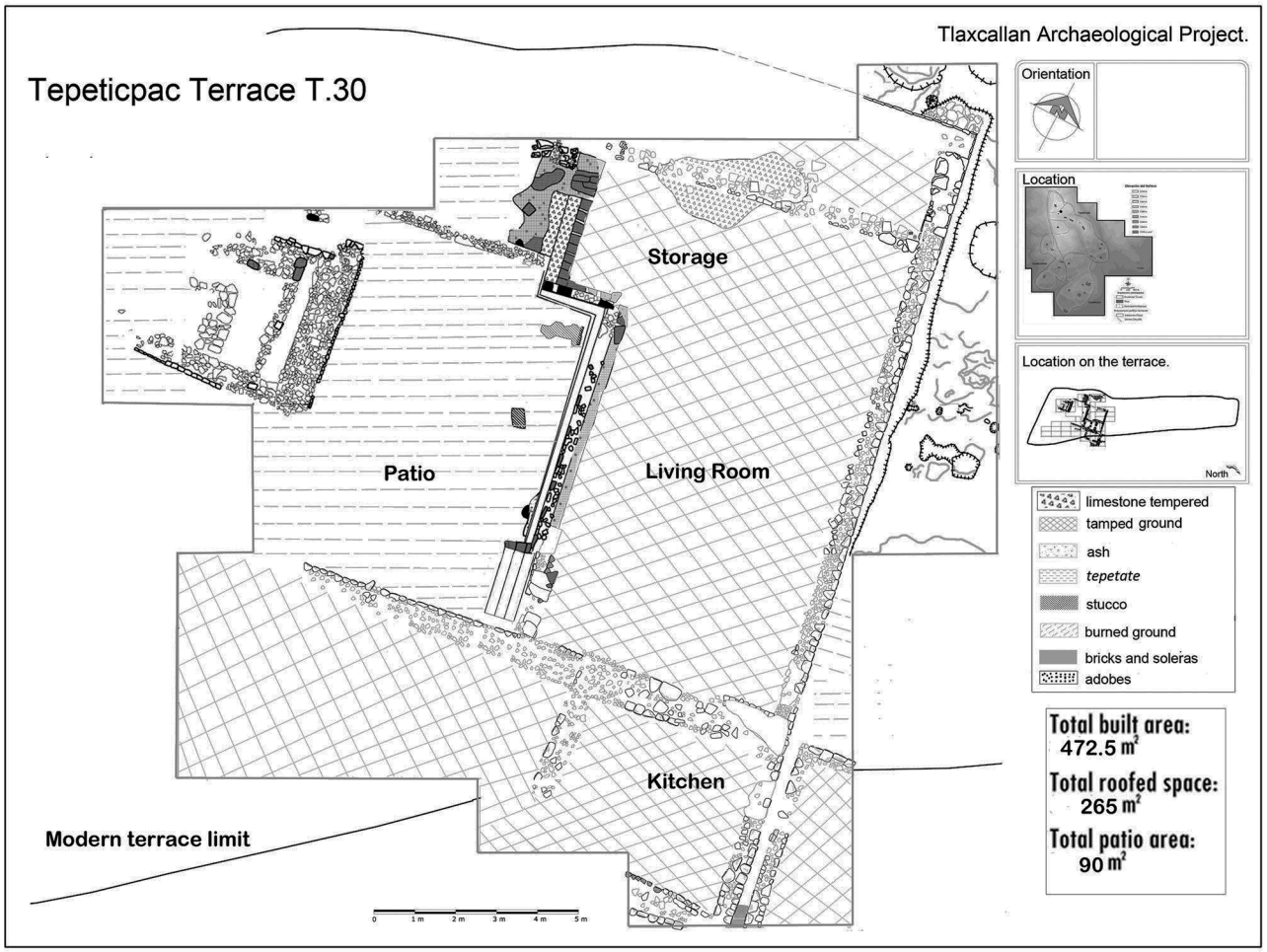


**FIGURE 7 |** Dwelling on Terrace T.30, El Fuerte, Tepeticpac, Tlaxcallan.

the most part while the poorest residents resided in dwellings that were 50–150 $m^2$ (Fargher et al., 2010, 2011, 2020; Marino et al., 2020). Rich or poor, houses were constructed with stone foundations and adobe/cut *tepetate* (hard subsoil) block walls. Exterior foundations stones were faced, but interiors were rough. Floors were packed earth with whitewash. All residential space was uniformly organized around two spaces, a patio bounded by roofed rooms and an open area adjacent to the dwelling. Portable material wealth, including codex polychrome pottery and imported obsidian, was uniformly distributed among all households. In simple terms, there are no material identifiers that distinguish rich and poor Tlaxcaltecans within the city. Quantitatively, rough measures using the Gini coefficient indicate that Tlaxcallan was more economically egalitarian that Athens. To contextualize this, qualitatively Tlaxcallan equality far exceeded that of Teotihuacan, the most equalitarian case in the Kohler et al. (2017) database. As we pointed out previously (Fargher et al., 2020), these findings challenge the core of Eurocentric theory on non-Western, pre-modern states.

Free speech (comparable to Greek isegoria) was a fundamental aspect of Tlaxcaltecan political policy and practice. Not only was free speech exercised by all citizens in Tlaxcallan, but it was also the basis for political decision-making during assemblies of the governing council. During legislative sessions, diverse individuals attending assemblies would propose various policies, strategies, or projects (Muñoz Camargo's, 1986; Cervantes de Salazar, 1991). These proposals were debated until consensus was reached and proposals became law or policy. According to Muñoz Camargo's (1986), individuals that were not among the highest titled political officials provided advice or council during these sessions. Thus, they would have made proposals or argued for or against other proposals. We also believe that free political discussion was part of quotidian activities in the city of Tlaxcallan's numerous plazas, on market days as well as during other political and religious gatherings. These discussions would have included, as well as targeted, both local and central political figures. During specific political and ritual occasions, the people would have been able to exercise their right to make known their discontent with immoral/dishonest/corrupt political officials, as

well as to punish them in various ways if they were unsatisfied with other measures implemented by the state.

In the city's built environment, much of the order envisioned by Hippodamian urban planning that was considered a fundamental aspect of democratic processes is visible. First, Tlaxcaltecan urban design materialized a division among private, public, and sacred space. Public spaces served political and economic functions and were sanctified through the construction of ritual buildings adjacent to them. Much like the Athenian Agora, Tlaxcaltecan plazas were places where politics, religion, and commerce intermixed. They were the "free spaces" where everyone participated in politics. As part of indigenous cultural traditions, women participated in market transactions throughout pre-Hispanic central Mexico (Berdan, 1975). So, plazas were foundational places for free speech (cf. isegoria), where political discussions and debates crossed gender lines. Second, much like Hippodamian design of Piraeus, plazas were distributed throughout the city of Tlaxcallan (Fargher et al., 2011: **Figure 1**). These plazas were the nodes of a road system that integrated the city. Moreover, neighborhood-scale plazas would have played a role akin to the agorai and Dionysian theaters in rural (and possibly) urban demes, as the focal point of sub-polity (local) scale political action. Third, much like the gridded road system in Athenian planned settlements, like Piraeus and Thurii, Tlaxcallan's residential terraces were highly standardized, resulting in a highly ordered and uniform urban landscape (Fargher et al., 2011). The uniformity of domestic space would have contributed strongly to ideologies of shared identity and equality that were crucial to equality and social integration that provided Tlaxcallan the capacity and will to deploy an essentially unstoppable homeland defense (Fargher et al., 2010).

## CONCLUSION

While we do not imply that pre-Hispanic Tlaxcaltecans would have conceptualized their political philosophy in terms of isonomia and isegoria (or that Nahua equivalents existed in C.E. 1519), we argue that there were important points of comparability of these philosophies, political institutions, and urban landscapes. Thus, we can no longer discuss the global origins of democracy and good government while excluding non-Western political change. We also suggest that in philosophy and in practice, a Classical Athenian would conceptualize Tlaxcaltecan government as more comparable to demokratia than to either tyranny or oligarchy. If the Athenian were a conservative pundit, he would reject the strongly egalitarian aspects of Tlaxcaltecan politics, especially the elevation of commoners to the highest political offices. Conversely, a radical thete would have praised the Tlaxcaltecas for widespread political participation, as well as their unprecedented degree of economic equality. While neither our Classical Greeks nor pre-Hispanic Tlaxcaltecan political actors would have found it out of the ordinary, we note that lack of institutionalized political participation by women was a major shortcoming of both cases.

## AUTHOR CONTRIBUTIONS

LF developed the article concept and was responsible for writing original draft. LF, RB, and VH participated in writing review and editing and supervised the Tlaxcallan projects and acquired funding. All authors contributed to the article and approved the submitted version.

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# The Collapse of a Collective Society: Teuchitlán in the Tequila Region of Jalisco, Mexico

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Cross-cultural research on ancient societies demonstrates that collective social formations tend to experience a more sudden collapse with relatively catastrophic effects compared to formations low in collectivity. The demise of collective formations often involves more pronounced social unrest and a more complete disintegration of the agrarian and sociopolitical systems. This article further probes this general finding using the case of Teuchitlán, in the Tequila region of Jalisco, Mexico, which lasted for ∼700 years, from 350 B.C.E. to about 450/500 C.E., when it suddenly disappeared. It was characterized by power-sharing among multiple groups whose leaders employed varied political strategies. Structurally, Teuchitlán aligns with some of the precepts of collective action and good government, as it was inwardly focused and placed great emphasis on the joint production of the polity's resources, especially agriculture, as well as the equitable distribution of benefits, such as community feasting and ritual, and some form of political participation or voice (e.g., power-sharing). Scholars working in the area have invoked various environmental factors, demographic movements, natural disasters, the collapse of central places, and a breakdown in trade connections, among others, as causes of Teuchitlán's disintegration—and the answer may indeed lie in a combination of these phenomena. This article explores the major shifts in the institutions that comprised Teuchitlán, thereby presenting an alternative view of its nature and disappearance. Settlement patterns, architectural differences, ceramic decoration and vessel forms, and lithic technology from the period following Teuchitlán's collapse suggest major changes in ideology, economy, and politics. The placement of large centers along trade routes, coupled with increased control of interregional exchange, indicates a shift toward direct, discretionary control of polity revenues by political leaders with little benefit for the populace. As part of these changes, the human landscape became more ruralized. Teuchitlán is comparable to other well-known cases in the world where more collective forms of political organization met a similar fate, such as Chaco Canyon (Southwest USA), Jenne-jeno (Mali), and the Indus Civilization.

**Keywords: power-sharing, collective society, institutions, collapse, complexity**

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## INTRODUCTION

Archaeology's view of the evolution of complex ancient societies is still heavily engrained in ideas stemming from Marx's Asiatic mode of production (Lull and Micó, 2011; Rosenswig and Cunningham, 2017; see also Blanton and Fargher, 2008, pp. 6–10), an approach which assumed that all non-Western societies are led under the authority of (sometimes) ruthless rulers who *naturally* acquired goods and services from the subaltern population free of any questioning. This theory presumes the existence of a political structure in which 90% of the population was ignored, instead focused on the actions and material remains of the few; that is, those who wielded power to control the people and an area's natural and ideological resources, with no limits on the scope of their rule and authority. Their almost supernatural powers influenced the forces of nature and allowed them to legitimize their positions of power and status. Furthermore, the origins of complexity (e.g., states) were interpreted as the result of the genius and "true" consciousness of those few, as opposed to the false consciousness of the masses. Archaeological research guided by these assumptions thus concerned a select group of people (elites, leaders, rulers, kings), their accomplishments and failures, and their lives and deaths. Anthropological archaeologists are correcting this myopic view of the evolution and nature of ancient societies by focusing on the interplay between leadership groups (perhaps 10% of the population) and the rest of the people. They now place greater consideration on people's agency and their role in the organization and structure of societies (Dobres and Robb, 2000; DeMarrais and Earle, 2017, p. 184), sustaining that elites are not self-made.

Fortunately, significant advances in theory (Blanton et al., 1996; Blanton and Fargher, 2008, 2016; Carballo, 2013; Fargher and Heredia Espinoza, 2016; Feinman, 2018), have moved away from the quest to find the rich and famous in all complex formations, and instead focus on the multiple avenues that lead toward complexity. Commoners now are more visible and are the focus of discussion as political, economic, and ideological actors. Thus, overwhelming amounts of archaeological evidence for a diverse array of ancient sociopolitical formations, however, can no longer be ignored, and any attempt to explain complexity with a "one-size-fits-all" model will be flawed. Numerous societies do

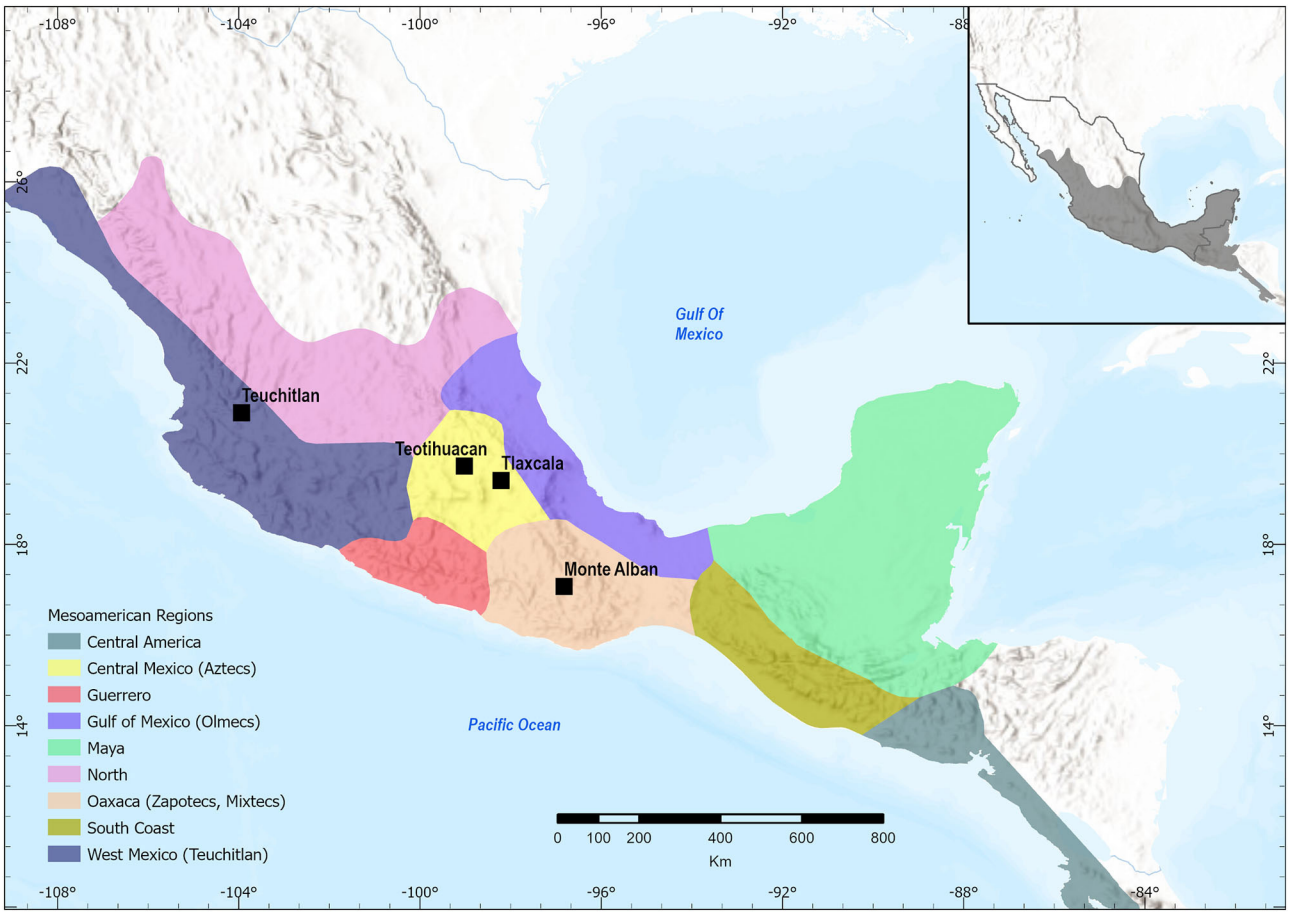


**FIGURE 1 |** Regions and places in Mesoamerica mentioned in the text (map modified from Solanes Carraro and Vela Ramírez, 2000:16).

not conform to the Asiatic mode of production (Blanton and Fargher, 2008; Fargher et al., 2010, 2011a; Carballo, 2013; Fargher and Heredia Espinoza, 2016; Heredia Espinoza, 2020, 2021), and new theoretical developments in anthropological archaeology are illuminating a fuller spectrum of our ancient heritage.

In Mesoamerica (**Figure 1**), Teotihuacan and Tlaxacallan in central Mexico (Fargher et al., 2011b; Manzanilla, 2015; Carballo, 2020), Monte Albán in Oaxaca (Joyce et al., 2001; Fargher, 2016; Feinman et al., 2021), the Gulf region (Stark, 2016), and the western reaches of this area (Heredia Espinoza, 2016, 2020, 2021; Beekman, 2020), all offer cases that defy deeply-held notions of past sociopolitical structure. This article describes Teuchitlán in the Tequila region of Jalisco, Mexico (350 B.C.E.−450 C.E.), a singular cultural phenomenon that was large in scale (its core developed region covered roughly 2,500 km$^2$), had a population of at least 20,000, was urbanized, relied on intensive agricultural practices, and specialized craft production, and displayed outstanding architecture (Weigand, 1996; Heredia Espinoza, 2017). Yet Teuchitlán was so distinctive that it cannot be described as similar to any other Mesoamerican state. In fact, Teuchitlán aligns with some of the precepts of collective action and good government, including power-sharing among multiple groups, the presence of public goods and a public voice, all manifested in public spaces, cooperation, and reciprocity (Beekman, 2008; Heredia Espinoza, 2020, 2021). But Teuchitlán disappeared suddenly around 450 C.E., giving way to smaller, wholly new, and non-Teuchitlán-like material cultures and institutions.

Blanton et al. (2020) suggest that collective societies tend to experience more sudden collapses with relatively catastrophic effects than formations characterized by low collectivity. These effects include more pronounced social unrest and a more complete disintegration of the agrarian and sociopolitical systems. The moral collapse of state authorities (i.e., the failure to honor their commitments to the people, thus undermining confidence in political leaders and institutions) is cited as the primary cause of such disruptions. These conclusions are based on a previous article by Blanton (2010) in which, setting out from resilience theory, he explored "the degree to which the dynamic properties of adaptive cycles reflect, in part, the influence of political factors associated with collective action in state formation" (p. 41). In ecology, "ecological transformations result when ecosystems collapse and then are reorganized through a process they call adaptive cycles" (Blanton, 2010, p. 41). Using a cross-cultural study of premodern state formation in 30 societies, Blanton sought to apply resilience theory to sociopolitical transformation. The results revealed that collective action as a political process impacts cross-cultural variation in the properties of adaptive cycles. The results of his analysis indicate that collective societies crash harder or collapse more drastically due to hypercoherence or overconnectedness because they require "an increase in the centralized control of flows of information and materials across the social system as a whole" (Blanton, 2010 p. 44). Findings also indicated that collective societies tend to last longer than societies that are low in collectivity.

Adopting the primary premise that collective societies collapse in a more turbulent manner proposed by Blanton et al. (2020), I explore the Teuchitlán debacle of *circa* 450 C.E. Briefly, local and regional changes in administrative hierarchies, in the distribution and size of rural and urban settlements,[1] in the relative scale of civic-ceremonial architecture, and in productive infrastructure (e.g., agricultural terraces, raised fields, etc.) lead me to argue that people shifted from a more collective formation to one more individual-centered or authoritarian.

## SETTING THE STAGE FOR THE TEQUILA REGION

For most readers, ancient Mexico was the land of the Aztecs, Maya, and, perhaps, Olmecs, Zapotecs, and Mixtecs (**Figure 1**). The area around Tequila, in contrast, conjures up images of a famous alcoholic beverage, for the indigenous culture that evolved in this region is not so well-known. What we call Teuchitlán society was centered in the Tequila region (**Figure 2**). Its material trademarks, which turn up repeatedly as a set in the architectural record, are shaft tombs, patio groups, ballcourts, and circular platform complexes called *guachimontones* (**Figure 3**). There is evidence of intensive agricultural practices (e.g., terracing and raised fields) and craft specialization (e.g., obsidian) from excavations and surveys, both older and more recent. To date we have surveyed thousands of square kilometers in search of ancient sites (Weigand, 1996; Anderson et al., 2013; Heredia Espinoza, 2017).

## TEUCHITLÁN AND ITS INSTITUTIONS

### Political Institutions

The political structure from 350 B.C.E. to about C.E. 450 is the most widely discussed and debated topic in the Tequila region (Weigand, 2007; Beekman, 2008; Heredia Espinoza, 2017). Specifically, discussions have dwelled on whether it represented a state or some other type of political formation, perhaps a chiefdom. Debate has raged for years: what type of polity[2] was Teuchitlán?; did a state develop there?; was it an endogenous development or did it emerge through interaction with other "more developed" areas in Mesoamerica?; or did the people in this region live in a longstanding chiefdom condition (Mountjoy, 1998; López Mestas and Montejano, 2003; López Mestas, 2011) where powerful chiefs/leaders governed by birthright and through their prowess in manipulating ideology and supernatural forces?

Weigand (2007) recognized the eccentricity of the archaeological remains from this region and suggested that Teuchitlán could be understood as a segmentary state. Southall (1988, p. 52) defines this kind of state "as one in which the spheres of ritual suzerainty and political sovereignty do not coincide. The former extends widely toward a flexible, changing periphery. The latter is confined to the central, core domain." In a segmentary state, the core of the political structure is tightly

[1] Locations with remains of human habitation.

[2] Autonomous (i.e., self-governing and, in that sense, politically independent) sociopolitical units situated besides, or close to, each other within a single a geographical region, or in some cases more widely (Renfrew, 1986, p. 1).

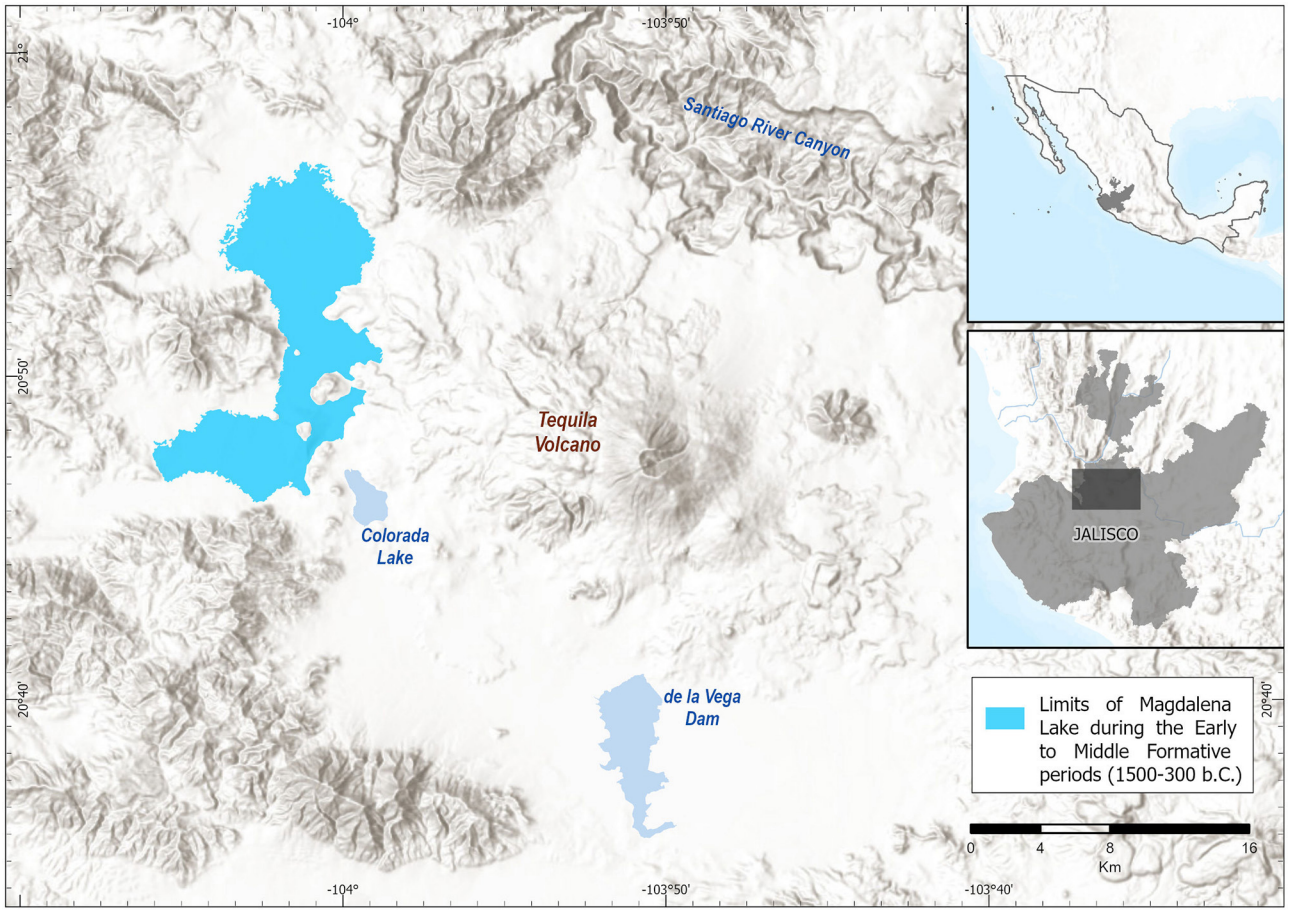


**FIGURE 2 |** Map of the Tequila region.

unified as a single political entity, while political authority dissolves in the periphery, though ideological suzerainty is maintained. These political structures are marked by fluid political and ideological boundaries where factional competition and political instability prevail. In Southall's model, however, the term "state" is misleading since these are not like the states we know from archaeology, which exhibit at least three levels of administrative hierarchy (Wright and Johnson, 1975). The segmentary state model is also inadequate for explaining the archaeological evidence from Teuchitlán because segmentary states tend to be low on collectivity and align best with autocratic governments (Fargher and Blanton, 2012; Heredia Espinoza, 2020). Teuchitlán, in contrast, exhibits notable collective and cooperative features that are difficult to fit into this political structure.

More recent work has attempted to avoid the typological trap. Beekman considers multiple fields (built spaces) where political leaders employed varying political strategies (some more individualized, others more group oriented) to attain distinct goals (Beekman, 2016a, 2020). He proposes that multiple lineages shared power and ruled over the several polities in the region. Based on evidence of sequential interments and genetic relatedness of the deceased in shaft tombs (López Mestas and Ramos, 2000), Beekman (2008) infers the presence of lineages. Tombs often contain thousands of luxury objects from distant places, and they also differ in size and form (Beekman, 2016b; Mountjoy and Rhodes, 2018). The deepest ones consist of a vertical shaft that links to one or more burial chambers (Ramos de la Vega and López Mestas, 1996; Beekman, 2016b, p. 85). Unfortunately, these tombs are highly-coveted by looters, so the largest and—possibly—richest ones have been vandalized. The location of tombs varies as well since some are isolated, but others are associated with architectural features (Beekman, 2016b). The widespread destruction of these contexts impedes our understanding, for only one intact tomb has been excavated to date, located in what appears to be a private residence adjacent to public architecture (Ramos de la Vega and López Mestas, 1996). At Los Guachimontones, the largest and most complex Teuchitlán site,[3] a modest (in size and offerings) shaft tomb was located underneath public architecture. It included multiple individuals placed in the cardinal directions. Other

[3] An arbitrary term that archaeologists use to define bounded cultural remains.


**FIGURE 3 |** Aerial view of guachimontones and a ballcourt **(a)** at the Los Guachimontones site (photograph courtesy of Sebastian Albachens). Landscape view of Los Guachimontones' main civic ceremonial area **(b)** looking south toward the de La Vega dam (photograph courtesy of Lic. María Ramírez Ramírez and Dra. Estefanía Hurtado Llanes @DroneTuVuelasYoVoy 01.11.2020).

elaborate (alas, also looted) shaft tombs are known to be located underneath mounds (Beekman, 2016b).

While the sample of scientifically excavated shaft tombs is meager, the single intact, rich excavated shaft tomb at Huitzilapa indicates that the individuals interred there were related by kinship (Ramos de la Vega and López Mestas, 1996). Based on osteological analysis, five of the six individuals revealed a congenial hereditary malformation known as Klippel-Feil (López Mestas and Ramos, 2000, p. 62). Archaeologists in the area interpret these data as indicative of ruling lineages. In addition to these tombs, the governing groups are visible in a distinct style of architecture that is more group oriented than individual.

The *guachimontones*, the most pervasive architectural form, suggest that collective rather than autocratic politics prevailed. These are circular architectural complexes comprised of a central temple or altar and a circular patio with a series of rectangular, usually even-numbered, platforms, 4, 6, 8,10, or 12, around them that form several concentric circles (**Figure 3**). Our current understanding is that each platform around a circle was occupied (temporarily) by a power-sharing group that sponsored and conducted festivities. The circles represent cooperation both individual and collective in nature as they are a form of public architecture built by different sources of labor. Analysis of construction methods and labor investments point to both crews and communal labor at a single guachimontón (Weigand, 2007; Beekman, 2008; DeLuca, 2019). Excavations on the platforms show differences in the construction skills required to build them and the quality of the raw materials used. Numerous ceramic models show each platform with subtle differences in roof decoration (von Winning, 1996). The size of individual buildings, however, is restricted by the overall shape of the circular complex itself (Beekman, 2008), hindering any overt dominance of one over the rest that is suggestive of commensurable power and authority among constituent groups. The construction techniques and materials of the central patios and altars suggest collaborative building (DeLuca, 2019). Interpretations thus posit that the guachimontón symbolically and materially represents a political institution that consists of several social groups which shared power and collaborated in decision-making.

The guachimontón complexes were not exclusive to one group of individuals (e.g., leaders) but were meeting places for a broader set of people. Spatial analyses of several circles indicate that they had fairly open access and, hence, were accessible to the average person (Sumano Ortega and Englehardt, 2020). The guachimontón embodies the basis of a political life in which cooperation among diverse groups and individual and group effort all converged, while serving as a meeting place where people and authorities assembled. It was the location for opining and participating, one where authorities displayed their commitment to collective endeavors while simultaneously fostering trust and unity among the people (Heredia Espinoza, 2021).

The distribution of the guachimontón architectural complexes shows that this political institution was widespread in the Tequila region. In an area surveyed systematically north and west of the Tequila volcano, 90 guachimontones were identified in 63 settlements (**Figure 4**), while south of the volcano there are at

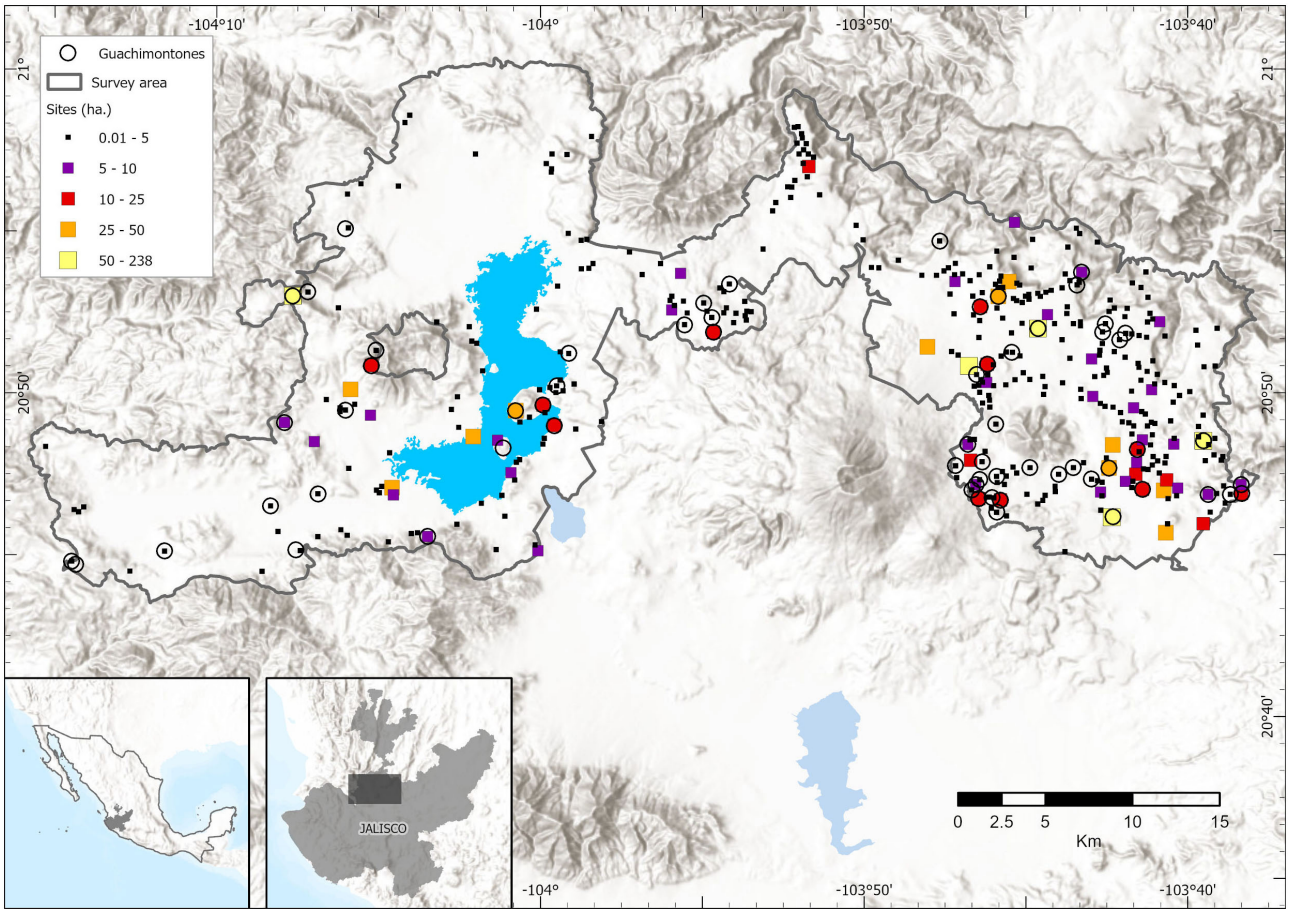


**FIGURE 4 |** Late Formative to Classic settlement patterns.

least 38 more settlements that contain this type of architecture (Weigand, 1985, p. 83; Ohnersorgen and Varien, 1996). There is a hierarchy of guachimontones by size (i.e., area) and by number per site (see Heredia Espinoza, 2021). Clusters of settlements, each containing a hierarchy of as many as 17 guachimontones, have also been observed. I have interpreted this pattern as a series of multiple small polities that acted both independently and semi-independently in economic, ideological, and political matters (Heredia Espinoza, 2017; see also López Mestas, 2011).

While this circular architecture is widespread around Tequila, it is not the only type of public architecture where political and social institutions intersected. Ballcourts were a prominent feature of the Mesoamerican built environment for millennia (Hill and Clark, 2001) and are ubiquitous in the Tequila region as well (**Figure 3**), even being portrayed in ceramic models. Interpretations as to their function and meaning range from political to sportive (Blanco Morales, 2009; Beekman and Heredia Espinoza, 2017). It is not completely clear who used them or for what specific purposes, yet their location within settlements indicates that they had public functions in which the community participated and promoted festivities. They may also have played a role in each of these settlement clusters as places for social negotiation and identity (following Fox et al., 1996; Beekman and Heredia Espinoza, 2017).

Figures of West Mexican ballplayers and ceramic models display distinctive paraphernalia (Day et al., 1996; Butterwick, 2004, p. 17; Oliveros Morales, 2013). It is possible that they were members of a particular group with a set of duties (i.e., an institution, following Holland-Lulewicz et al., 2020). Elaborate shaft tomb offerings sometimes include figures of ballplayers that may allude to the deceased's connection to, or participation in, ballgames (Ramos de la Vega and López Mestas, 1996). In other places in Mesoamerica, ballplayers belonged to a privileged group that played to acquire wealth and status (Hill and Clark, 2001). Thus, the ballcourts around Tequila may have constituted an institution in which the political and religious realms intersected. But the game also acted as a social lubricant and vehicle through which people, or entire communities, regulated internal competition (Fox et al., 1996; Hill and Clark, 2001). The ceramic assemblages from two ballcourts excavated at Los Guachimontones revealed a high frequency of coarse, closed ceramics (e.g., jars) rather than open (e.g., bowls), decorated, finely-made pottery, pointing to integrative public events rather than competitive status competition activities (Beekman, 2020, p.

86). Researchers have devised a series of archaeological correlates related to types of feasting events and ceramic forms and decoration. Briefly, open, decorated, fine pottery is associated with food serving at events geared toward status distinctions and competitiveness (but see Mills, 2007, for an example of the use of decorated pottery supra-household commensalism) whereas coarse and/or plain serving vessels, along with large, but small-mouthed, vessels for cooking large amounts of food are associated with integrative events that involved transport, supply, and food preparation assemblages (Hayden, 2001).

To summarize, circular guachimontón complexes and ballcourts were prominent public architectural features of the built environment in Tequila. Broadly speaking, tombs and private residences are generally modest in comparison, highlighting the importance of the public over the private sphere. The prevalent political institution of Teuchitlán at the regional level can thus best be conceived as some sort of alliance among several corporate groups[4] that shared power. This political institution was closely related to religion as well.

## Religious Institutions

Ritual architecture –that is, "temples"– is another integral feature of these circular complexes. The central altar, specifically, represents the earth and sky (Beekman, 2003, p. 12). The altars vary in volume and form (Ohnersorgen and Varien, 1996, Table 4), as only some are square. But the largest ones (volumetrically) served community or region-wide ceremonies in which a pole was erected in the center and a priest specialist balanced himself on his abdomen atop it. This ritual may have been related to a wind deity yet we have no indications of specific deities for this time. However, for some time Weigand (1993, p. 224) suggested a proto-Ehecatl as the supreme deity for the area, but Teuchitlán is not contemporaneous with this iconography. Depictions of these temples in ceramic models represent ceremonies performed in public spaces with popular participation, events that involved food, drink, music, and dance (Day et al., 1996; von Winning, 1996). Temples, of course, require personnel, but we have yet to learn about who those people may have been. May they have been a group of specialists dedicated to these rituals only? Did they come from specific families, and did they have specific training? The celebrations and spectacles reproduced in clay art certainly suggest that some of the participants must have had special training, knowledge, and skills. These participants would have been members of other formal and informal institutions that I describe next.

## Social Institutions: Households, Intermediate Sociospatial Units, and Rural Communities

Households are groups of people who may share an identity or have kinship ties and who share a dwelling or a residential compound (Blanton, 1994, p. 5). Economically they work together in production and reproduction and can partake in decision-making in political matters (Carballo, 2011). Households are detected archaeologically by the remains of structures (e.g., houses or house foundations). Teuchitlán household arrangements took many forms: some are isolated while others constitute more formalized patio groups (Ramos de la Vega and López Mestas, 1996; Herrejón Villicaña, 2008; Smith Márquez, 2009). Patio groups consist of 3–4 structures that share a patio or open space for daily activities. Households are commonly represented in ceramic models that depict an array of activities and the presence of both genders that suggests their social composition. Groups of houses may cluster in such a way that they could constitute higher-level, more formal social institutions.

The leading scholar of Teuchitlán studies, Phil Weigand, argued that the settlements with circular architecture clustered near each other in ways that resembled neighborhoods (2010). The settlement at Los Guachimontones was subdivided into intermediate sociospatial units (neighborhoods and districts), each focused on a circular complex (**Figure 5**, Heredia Espinoza, 2021). These units may have functioned as nodes between government authorities and the people. Groups of households (neighborhoods, see Arnauld et al., 2012) that shared public spaces were embedded within larger districts that contained the full range of services (ritual, economic, political) (Heredia Espinoza, 2021). The residential clusters that surround public architecture indicate that services (religious and political) were widely available and easily accessible to the population. We have yet to determine whether the clustering detected at Los Guachimontones is replicated elsewhere in the area, but we can identify groups of households away from districts and neighborhoods.

Such is the nature of rural communities, which are collections of households that lack larger functions and at least some basic services (Kowalewski and Heredia Espinoza, 2020, p. 506), though they participate as entities in higher-level activities for a neighborhood or district. In the area surveyed, degrees of "ruralness" are based on measurements of the distance from residential settlements to the nearest civic-ceremonial place (e.g., *guachimontones*, ballcourts, plazas). A nearest neighbor analysis of sites with guachimontones did indicate such clustering (ratio: 0.681104, $z$-score: $-4.842$, $p < 0.001$) and an average distance among them of only 1,458 m, a distance easily walkable in about 15–25 min. Moreover, almost everyone −98% of the population– lived within a 2-h walk of a central place. This means that central services were available to almost all rural settlements from multiple centers within a walkable distance (see Anderson, 1980; Ligt de, 1990, pp. 31–32).

## Economic Institutions

Among the services available to people were various basic goods such as ceramic vessels and obsidian tools, some of which presumably could be obtained through exchange systems such as markets. Archaeologists have devised ways to infer the potential and optimal physical places where markets can be located. Open markets, where people from multiple communities and social sectors meet to buy and sell (Marino et al., 2020), tend to be held in accessible spaces (Garraty, 2010, pp. 9–10; Kowalewski, 2012; e.g., formal plazas or similar open areas). They appear

[4]Groups of people who may share residence, kinship ties, occupational specialization, and property.

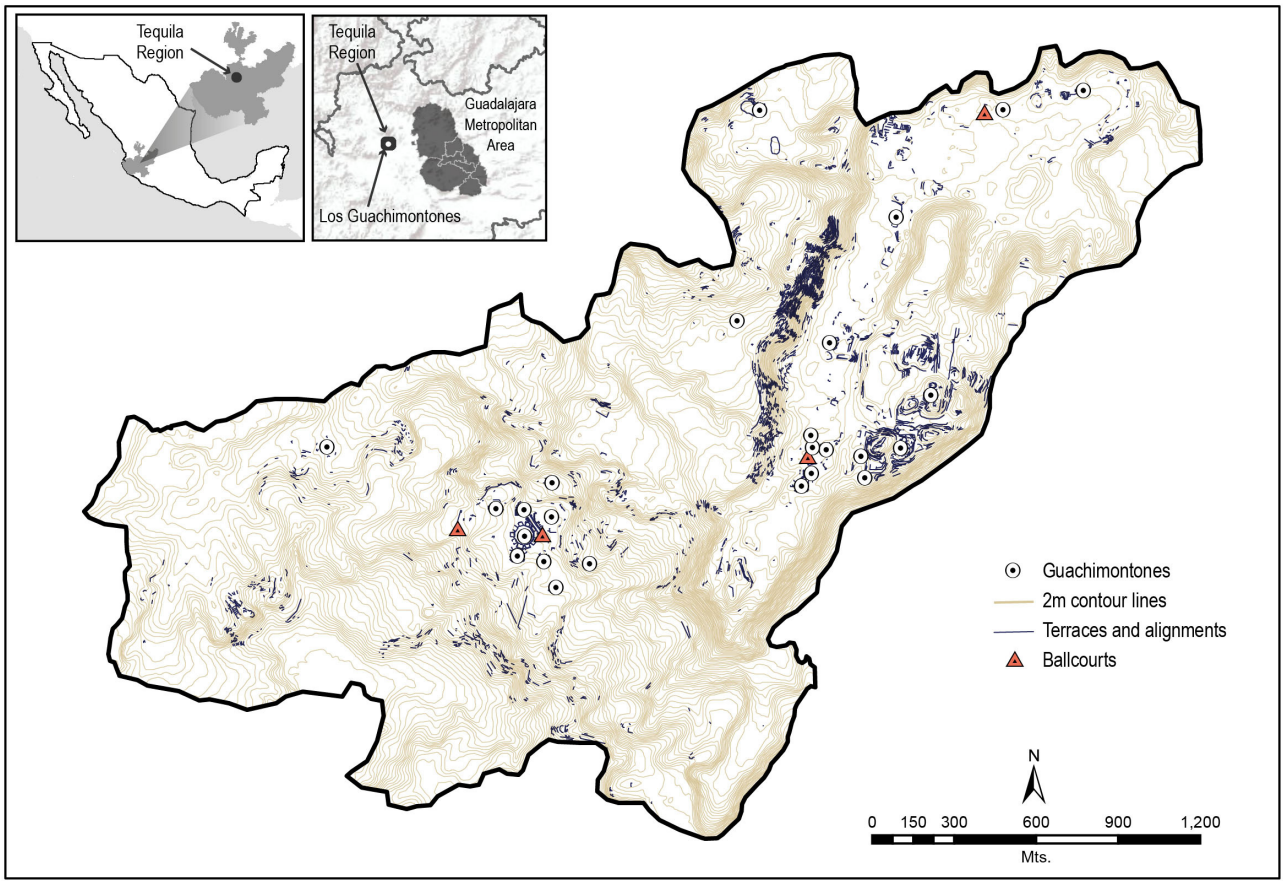


**FIGURE 5 |** Map of the Los Guachimontones site showing location of guachimontones by size.

more frequently in cities and towns where there are more people and greater demand for goods and services (Blanton, 1976; Kowalewski, 2016). Hence, settlements that exhibit an array of other services (administrative, ritual, etc.) are more likely to offer market services as well. There are numerous examples of this phenomenon in the study region, which is relatively flat, has few natural barriers, and is easily traversed on foot (**Figure 2**). Formal open spaces like plazas are scarce, but open areas adjacent to civic-ceremonial and residential zones are relatively abundant (Muñiz García, 2017). While market exchange is not well-researched in this region, some data point to its presence in the Teuchitlán economy.

Archaeometric analyses of samples of ceramics and lithics provide evidence of open exchange systems and multiple production locales. Petrographic analyses (a technique employed to identify different types of rocks) of ceramics from several sites point to multiple production locales north of the Tequila volcano (Heredia Espinoza, 2019). Results of these analyses indicate that there were at least seven production locales. These locales supplied consumers in three main geographical/geological locations suggesting that, even though some ceramics moved across the region, some were distributed in a more localized clustered manner.

An additional key economic resource in the region is obsidian, which form from lava ejected from volcanoes. Over 50 obsidian sources are known in the Tequila region (Spence et al., 2002). For a time, it was proposed that obsidian mines, the production of obsidian goods, and internal and external[5] exchange of those goods took place under elite supervision (Spence et al., 2002, p. 70; Esparza López, 2015), but such control or long-distance exchange of obsidian is yet to be proven. Because it is widely available, controlling obsidian acquisition would have been a costly undertaking. Broad obsidian scatters, interpreted as large-scale workshops, are more likely the result of continuous use over millennia or the residue of more intensive obsidian production from C.E. 900 to 1600, a few centuries before the arrival of Europeans. Obsidian chunks without modification and cores with cortex recovered from residential structures point to households as the main actors in the production of obsidian goods (Mireles Salcedo, 2018, p.166). Further, pXRF analyses (also known as portable X-ray fluorescence, a technique that measures elemental concentrations) of samples of obsidian

[5]Revenue sources owned and/or controlled directly by the state (not synonymous with non-local) (e.g., landed estates, monopoly on long-distance trade; control of serf-like laborers) (Fargher et al., 2011b, Table 1).

artifacts from numerous sites showed that they originated from multiple mines associated with specific volcanic sources, with no indication of localized distribution (Carrión, 2019). In other words, the distribution of obsidian objects throughout the valleys derived from different sources and moved some distance, suggesting exchange mechanisms that may have resembled market exchange, which is characterized by a standardization of raw material sources across social sectors (based on household's artifact categories). In markets people can acquire diverse types of goods, regardless of their status (Hirth, 1998), and allow common people to produce for profit—not just subsistence–while also providing opportunities to adopt new economic pursuits and diversify economic activities. Again, most of the obsidian objects manufactured were used primarily for domestic tasks, and many were employed in subsistence activities like agriculture and plant-processing throughout the pre-Hispanic period (Heredia Espinoza and Mireles Salcedo, 2016; Mireles Salcedo, 2018). It is now evident that obsidian as a potential source of external funding is highly unlikely from 350 B.C.E. to 450 C.E. Agriculture, however, was an important economic endeavor relating to subsistence and an internal source of revenue[6] for the polity.

In fact, the people who inhabited the Tequila region before contact with Europeans invested heavily in agriculture. Based on field surveys and interpretations of aerial photographs, Weigand argued that there were ∼300 $km^2$ of raised fields (Weigand, 2001, p. 406) throughout the region, but only a fraction of these have been corroborated in the field (Stuart, 2005, pp. 187–188). Dating these features is especially challenging because organic residues do not preserve well in these contexts. Two, out of nine, radiocarbon dates (Stuart, 2003, Table 6.1, 2005, p. 189), produced dates that fall within Teuchitlán. Based on the Oxcal report, the one date is from A.D. 200 to 380 (90.8% probability) and the other A. D. 418–577 (95.4% probability) though the latter year extends well beyond the end of Teuchitlán. There is, however, a positive correlation among the distribution of settlement clusters, soil types, hydrological resources, and agricultural productivity based on site catchment analysis (Trujillo Herrada, 2020, pp. 181–185; Weigand, 2007). Iconographic analyses of symbols depicted on fine vessels provide additional support for the importance of agriculture (López Mestas, 2005, 2007; Heredia Espinoza and Englehardt, 2015). Beekman (2003, Figure 7) has proposed that the guachimontón architectural plan may depict the cross-section of a corn cob.

In summary, the regional economy centered mostly on the production of foodstuffs and the tools necessary to produce them. These products and items were for immediate use and largely destined for circulation within the region. Hence, as I have argued elsewhere, during the study period Teuchitlán was inward-looking (Heredia Espinoza, 2017) with a focus on internal resources, especially intensive agriculture with some obsidian manufacturing, both likely carried out on a household scale. This mode of production would have been difficult for potential autocrats to appropriate. However, by the end of the fifth century, Teuchitlán's institutions had collapsed, leaving few traces behind. What came after was an entirely new set of institutions.

## A WHOLE NEW WORLD

The changes *ca*. C.E. 450 were dramatic and definitive, as is reflected in settlement patterns, architecture, and material culture. Without doubt, they represent major shifts in the nature of the new institutions. There are no more circular complexes, ballcourts, shaft tombs, or patio groups. Whereas before, circular architecture was found at sites both large and small, after C.E. 450 there are few places with architecture beyond domestic functions (**Figure 6**). Indeed, the landscape appears to have become ruralized (Heredia Espinoza, 2017) as it is dotted with small villages and hamlets. The Los Guachimontones site, once the most important center, lost its prominence and was reduced to small, occupations.

These transformations were further accentuated by a change in scale, as can be seen in the data recovered from an area covering some 900 $km^2$. **Table 1** contrasts these changes in size, occupation, and population between the two time periods. The total occupied area and population estimates both shrink to less than half compared to the previous period. Population estimates, in low ranges, were calculated in single component settlements with their residential structures and groups. Based on the smallest structures and compounds, we established minimum and maximum populations, respectively, to finally determine a range per hectare. The largest site in the earlier period extended over some 238 ha vs. only 60 ha in the ensuing period. The number of sites also decreases, and average site size falls by over a hectare. Populations plummeted 52%, from 33 to just 16 persons per $km^2$, as did the total occupied area. The number of settlements decreased by roughly 32% and mean average site size also decreased. There was also a decrease in number of settlements with extant civic-ceremonial architecture from 15% to just 2%. If we take into consideration that in the previous time period there were 63 settlements with a total of 90 guachimontones, then 331 persons had access to at least one guachimontón. After C.E. 450 the pattern is clearly distinct. If we take the total number of sites that had public or special architecture (20), the number of people serviced by each one is 722. If, however, we consider only the six sites that had clear functions beyond the domestic sphere, that number increases to 2,406.

People from 350 B.C.E. to 450 C.E. clearly had easier access to civic-ceremonial spaces *per capita*; that is, the number of civic-ceremonial places was greater and more readily accessible to the average person. After C.E. 450, there were few central places, and they were more dispersed with indications of a more centralized landscape in some areas and an acephalous pattern in others. The appearance is that of a fragmented political-economic landscape with some areas better serviced than others, perhaps an open system with permeable boundaries (Heredia Espinoza, 2017). These changes are observed in both the settlement pattern and

[6]Revenue collected by the state from free constituents or taxpayers (not synonymous with local) (e.g., income tax, sales tax, land tax) (Fargher et al., 2011b, Table 1).

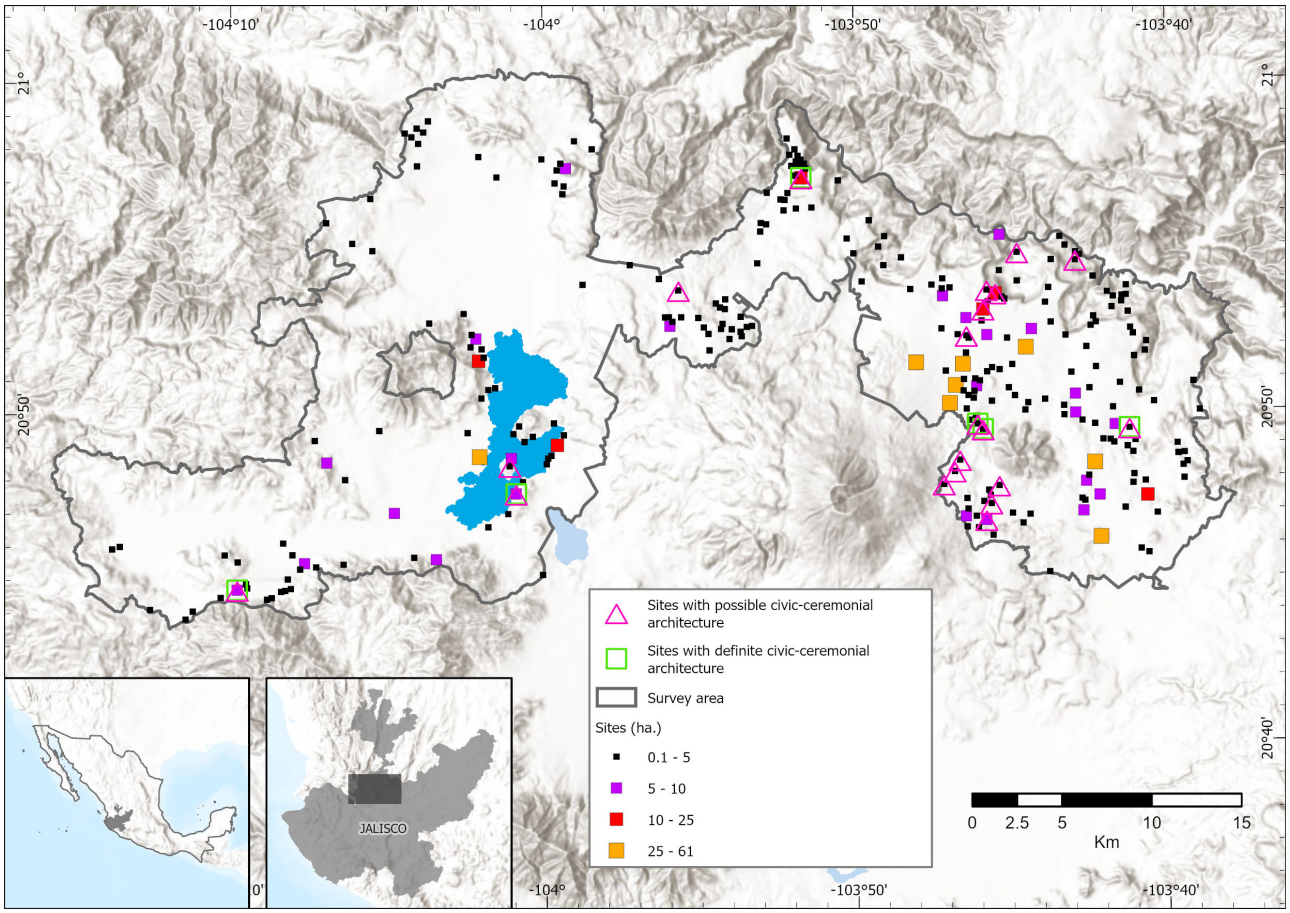


**FIGURE 6 |** Late Classic settlement pattern showing sites with civic-ceremonial architecture.

**TABLE 1 |** Comparative settlement pattern data.

| Time period | Total occupied area (ha) | Population Estimates | No. sites | Mean site size (ha) | Civic-ceremonial architecture | No. sites with civic-ceremonial architecture | Persons per km$^2$ |
|---|---|---|---|---|---|---|---|
| 350 B.C.E.–450 C.E. | 1704 | 29820 | 423 | 4.02 | 90 (guachimontones) | 63 (sites with guachimontones) | 33 |
| 450–900 C.E. | 825 | 14438 | 289 | 2.85 | 20 (sites with some kind civic-ceremonial architecture) | 6 (sites with clear civic-ceremonial architecture) | 16 |

the influx of new material culture and ideas (Beekman, 2010, p. 71, 2019).

New architectural forms, such as rectangular, "L"-, and "U"-shaped structures come on stage. Sunken or enclosed patios, typical of nearby regions in Mesoamerica, also make the scene (Beekman, 1996; Weigand, 2015, p. 57). Significantly, the form of civic-ceremonial architecture changed from round to rectangular or square structures. In the surveyed area, 20 sites contain special types of architecture (e.g., L- or U-shaped structures, enclosed patios, large platforms supporting multiple structures), but only six have multiple buildings or edifices substantial in volume and scale (**Figure 6**). The largest two are in the southern Magdalena basin (Ocomo and San Juanito 03). They have large platforms that support multiple structures and enclosed patios (for Ocomo see Smith Márquez, 2018). The platform at Ocomo supported a large, enclosed space surrounded by several structures. Its architectural plan resembles the Mexica palaces of central Mexico a few centuries before European arrival (Weigand, 1993, pp. 147–148). Both sites extend for six hectares, taken up mostly by the platforms. The other four sites have modest architecture ranging from 270 to 1,500 m$^2$. The question of how much authority these centers wielded in the region is still unexplored, but the settlement pattern around them is light and there are no large concentrations

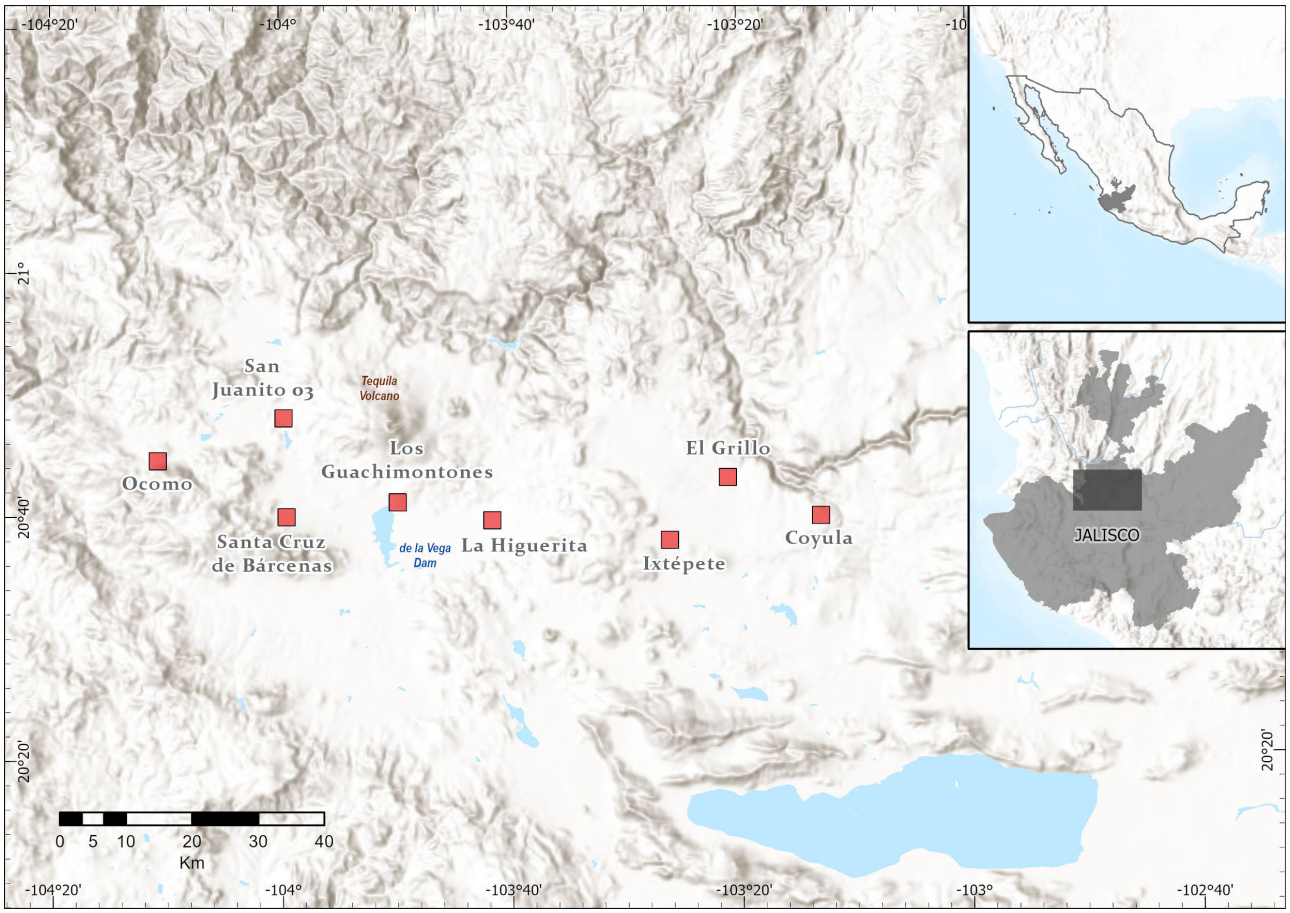


**FIGURE 7 |** Late Classic prominent sites mentioned in the text.

of people, indicative of a ruralized, deurbanized landscape (**Figure 6**).

Another important difference is the disappearance of ballcourts. These architectural features were presumably associated with conflict resolution, so their absence suggests several possibilities. One, perhaps fewer services of the kind they had offered earlier were required; two, methods of conflict resolution changed, or three, a reduction in the frequency of conflicts made them unnecessary. Alternatively, it is possible that conflict resolution was concentrated in the few centers with the largest architecture.

Gone as well are the shaft tombs where multiple individuals were buried, replaced by individual box tomb burial chambers as the typical type of interment (Aronson, 1993; Galván, 1993). A large platform at La Higuerita (**Figure 7**) yielded elaborate burials and offerings in box tombs (López Mestas and Montejano, 2003). The individuals interred there are believed to have been members of the elite whose power and authority were based on the control of exchange networks of exotic goods (López Mestas et al., 2020). It appears, moreover, that the power-sharing groups that led the political institutions embodied in the guachimontón were replaced by a more autocratic political system.

Evidently, public temples also decreased in importance, given the diminished number of civic-ceremonial centers. Sunken or enclosed patios represent one of the key architectural forms after 450 C.E. They originated in the region of the Bajío (another area within West Mexico, **Figure 1**). Excavated contexts suggest that they may have had both political and religious functions as some display central shrines or altars (Cárdenas García, 2008).

Changes in neighborhood composition—or the lack thereof—indicate that whatever caused these dramatic shifts penetrated deeply, right down to the household level. The guachimontón had been an organizing component of neighborhoods (Weigand, 2010; Heredia Espinoza, 2021), so its disappearance transformed the built landscape. The concentration of civic-ceremonial architecture in so few areas is suggestive of a weakening of the communication nodes (e.g., administrative places) that once connected people to government officials. Nevertheless, a nearest neighbor analysis suggests that sites show clustering (ratio 0.596, $z$-score: $-13.145$, $p < 0.000$). However, the average distance to civic-ceremonial places increases for most of the population.

Outside the Tequila area only a handful of central places emerge at a distance from the ancient seats of government (**Figure 7**). Large centers established in the southern part of the valleys and others also followed a linear path (Beekman, 2019). That was a time when information and prestige goods networks were expanding from eastern and northeastern Mesoamerica into West Mexico (Aronson, 1993, p. 358; Jiménez, 2020, Ch. 4). Hence, their establishment may be attributable to long-distance trade networks (López Mestas et al., 2020). Given the cultural transformations within and outside the region, it appears that leaders shifted to external funding to achieve their goals, controlling the flow of prestige goods.

To summarize, what we see in the Tequila region are quantitative changes in diverse institutions and a qualitative transformation of their content. The number of institutions decreased, as can be seen in the associated architecture, while the political and religious institutions that had been embodied in ballcourts and guachimontones vanished. Intermediate sociospatial units like neighborhoods also dissolved, suggesting the disappearance of connections between the common folk and higher-order political offices.

## WHAT EMERGED POST-COLLAPSE?

Collapse studies, like the present one, "are important, not only because they deal with significant, though often poorly understood sociocultural phenomena, but also because they provide excellent points of entry into the social configuration of the societies that were collapsing" (Yoffee, 2005, pp. 131–132). Teuchitlán, a rather collective political structure, collapsed completely, giving way to various types of institutions that archaeologists are familiar with. Extant data suggest that after 450 C.E. the area became more autocratic as revealed by the shifts in institutions, the decrease in public goods (accessible civic-ceremonial spaces), and a likely turn toward external sources of funding. Carballo and Feinman (2016, p. 293) state that

> Early cases of urbanization in Mesoamerica generally appear to have followed more collective lines, but the disintegration of these systems led to balkanized political landscapes and power vacuums which, in many cases, were initially filled by smaller kingdoms. The leaders of these smaller polities, in contrast to their predecessors, frequently drew power more from external or spot resources, coercive military practices, and interpersonal networks, expressing the trappings of nobility without returning many public goods.

This extract accurately summarizes the transformations that occurred in the Tequila region.

A likely change from internal (e.g., agricultural and craft production) to external funding (e.g., prestige goods and interregional exchange) is supported by the evidence currently available. Jiménez (2018) argues that the presence of Teotihuacan exotics—like Thin Orange ceramics and green obsidian—in West Mexico mark the spatial extent of prestige goods networks (2018, p. 82). The smaller amounts of public goods also point to a turn toward external sources of revenue and the disintegration of institutions that could potentially foster cooperation (e.g., intermediate sociospatial units, plazas, public ritual spaces). Corporate groups or families that balanced each other politically apparently gave way to fewer groups that monopolized power. It is also possible that certain factions were able to draw upon external sources of wealth and ideological support to withdraw from the moral contract with the people. In this regard, a parallel can be made with the Maya at Piedras Negras, where the authority of dynastic rulers was progressively weakened as they ceded prerogatives to non-loyal elites and were increasingly forced to shore up their authority through warfare (Houston et al., 2003).

I recognize that this article does not address the causes of the collapse of Teuchitlán society, but the data point largely to external forces, since there is no evidence of burning, large-scale destruction, termination rituals, or crisis architecture (Zuckerman, 2007) that would correlate with internal causes of collapse. However, it is important to note that more arid climatic conditions were gradually creeping into the valleys. Three radiocarbon dates from charcoal collected in stratigraphic layers interbedded with tephra in the Magdalena Lake basin (**Figure 2**) indicate that a volcanic eruption occurred sometime between 540 and 660 C.E. That event must have contributed partially to the social disruption and destabilization we observe in the archaeological record (Anderson et al., 2013). To date, however, we have been unable to chemically match the burst to a specific volcano. Lake sediments from the Magdalena Basin revealed a drop in the water level from 1,363 m around 350 B.C.E. to 1,361 m after 450 C.E. (**Figures 4**, **6**). The extension of the lake was thus reduced from 53.08 to just 24.91 $km^2$. These major changes would certainly have altered agricultural cycles and the entire array of ritual enterprise associated with them.

Similar examples to Teuchitlán and its fate are known cross-culturally. In the next section, I will briefly describe three examples from different places in the world that have historically raised controversy due to the absence of archaeological correlates that point to more individual- (or group-) centered societies. These cases come from North America (Chaco Canyon), Africa (Jenne-jeno) and Asia (Indus Valley civilization).

## COMPARATIVE DISCUSSION

Chaco Canyon, Jenne Jeno, and the Indus Valley civilization differ in many ways among themselves and with respect to Teuchitlán, but they all depart from typical forms of sociopolitical complexity since there were no palaces, disparities in wealth and prestige were narrow, public goods abounded, and power and authority were diffused, among other features that point to alternative sociopolitical formations. Their downfall was in some cases abrupt and what followed was more readily recognized archaeologically.

### Chaco Canyon

Chaco Canyon in the southwestern United States has long challenged archaeologists because it does not conform to standard models of sociopolitical complexity (Renfrew, 2001; Mills, 2002). The Chaco macroregional system extended

over most of the Colorado Plateau, while its core was at Chaco Canyon. Chacoan elements included widespread architectural features such as great houses and kivas, irrigation systems, road networks, high populations, and interregional integration (Gregory and Wilcox, 2007). At Chaco, there were multiple great houses, including temporary multistory residential infrastructure, great kivas (circular subterranean ceremonial structures), roads, plaza areas, and mounds (Mahoney and Kantner, 2000, p. 3; Mills, 2002, p. 68).

Great houses are multistory masonry buildings that contained hundreds of rooms (Mahoney and Kantner, 2000, p. 3). The exact function of these buildings is still controversial, even though they may seem like obvious residential constructions, the lack of clear indications for this, continues to puzzle archaeologists. There are many great houses, clustered in proximity in the canyon, and while a hierarchy is apparent, it is difficult to demonstrate that power and authority were concentrated in one single center. Great houses also include kivas, semi-subterranean, circular structures, and plazas that have yielded exotic goods, artifacts from distant places, and objects that were used in ceremonial events (Mattson, 2016). The sheer size of the great houses testifies to their importance in the region, while their repetitiveness in the San Juan Basin speaks of a shared worldview.

Despite this grandeur, no palaces have been recorded to date and evidence of ranking is fleeting at best. However, interpretations vary between researchers who see indications of a ruling elite and other authors who conclude that they were just ritual specialists (Mahoney and Kantner, 2000, p. 4). Most scholars agree that there is no evidence for autocratic governance, yet just how to properly characterize the Chacoan system is still a subject of lively debate.

Other researchers are currently investigating the degree of inequality that existed within the population of Chaco Canyon. Ellyson et al. (2019) have identified wealth inequality based on house size. Overall, they see that these differences are greater within clans than among households. Further, recent archaeogenomic work by Kennett et al. (2017) indicate that an elaborate crypt that contained several genetically related individuals provide evidence for hereditary leadership. These findings may have some implications for the political structure as it refers to degrees of inequality and its political structure.

Chaco Canyon was abandoned after the mid-twelfth century, its fall accompanied by violence and the construction of new settlements in clearly strategic, defensive locations (Ware, 2014, Ch. 6; Sedig, 2015, p. 248). New clusters of villages were established along what had been the peripheries of the Chacoan system, but many were abandoned in the following centuries, with further consolidation leading to the fifteenth-century and historically-known societies such as the Rio Grande Valley pueblos, Zuni, and Hopi. These pueblos had their own distinctive architecture and were also organized collectively with institutions such as kachina cults, plazas, and smaller kivas, but none had the singular Chacoan architecture.

## Jenne-jeno

Africa seldom figures in discussions of complex societies (e.g., states and empires) or urbanism (McIntosh, 1999a; Dueppen, 2012, Ch. 1; Davies, 2013), but our conviction that complexity can come in many forms and varieties allows us to modify our view of this continent and the complexities it presents. Jenne-jeno (250 B.C. to A.D. 1400), a large city in the Middle Niger Delta in Mali, for example, features a clustered settlement pattern (i.e., urban) with a site hierarchy consisting of three tiers (McIntosh, 1999b, p. 154). At its height, Jenne Jeno reached a maximum population of 10,000 people in an area that extended over almost 33 hectares, though its urban complex and networks of physically distinct communities across a 4-km radius probably reached 50,000 souls (McIntosh and McIntosh, 2003, p. 119). Inhabitants enjoyed a high standard of living (McIntosh, 2000, p. 21). Status and ranking differences are not evident in residences or burials, and there are no clear indications of a prestige goods economy in which elites controlled highly-valued goods (McIntosh, 1999b, p. 161) as an instrument to solidify their positions and acquire wealth. The only monumental architecture identified is a wall around the perimeter of the site. This case has a distinct archaeological imprint because other monumental architecture, kings, and elites are all absent (McIntosh, 2000, p. 21).

Rather than a single, well-defined settlement, Jenne-jeno was made up of several clusters of densely-populated settlements, none of which appears to have dominated the others (McIntosh, 1999b, p. 161). The multiple clusters were not organized into a hierarchy; rather, the people of the Middle Niger Delta opted for solidarity and cooperation among multiple and diverse corporate groups that resisted centralized authority (McIntosh, 2000, pp. 21–22; McIntosh and McIntosh, 2003). The urban cluster at Jenne-jeno included various corporate groups that engaged in diverse craft specializations including iron-working, fishing, and hunting. Specialists clustered according to their craft specialization to preserve their identities. Those corporate groups created horizontal economic links with no single overarching political authority. Heterarchical arrangements of this kind constitute, in fact, a strategy to circumvent and resist centralization (McIntosh, 2000, p. 23). Finally, there is some evidence of long-distance exchange organized by commoners (McIntosh and McIntosh, 1986, pp. 437–438).

Jenne-jeno's demise has been attributed to the expansion of Islam (McIntosh and McIntosh, 1986, p. 428; Dueppen, 2016, p. 251) as the conversion of local leaders to the new faith led to the expansion of the Mali empire (McIntosh, 1999b, p. 161), in addition to the growing importance of the Saharan trade (Chipps Stone, 2015, p. 46). Jenne-jeno began declining in A.D. 900 (2015, p. 46) and was abandoned sometime around A.D. 1400 (LaViolette and Fleisher, 2004, p. 334), leaving behind what had been a successful heterarchical structure in which multiple groups created innovative means that did not include centralization, social hierarchy, or any monopoly of decision-making (McIntosh, 2000, p. 22).

## Indus Civilization

The Indus civilization in Pakistan and India extended for over 1,000,000 $km^2$ and lasted for 600 years, from 2,500 to about 1900 B.C.E (Possehl, 1998, p. 261). It represents another case in which leadership was based on an egalitarian ethos

with faceless rulers or kings and a homogenous material culture that has long puzzled archaeologists (Miller, 1985; Possehl, 1998; Green, 2021). Despite its obvious sociopolitical complexity, a century of research has not yet unveiled the hallmarks of autocratic leadership embodied in palaces, sumptuous tombs, and other clear manifestations of aggrandizement (Possehl, 1998).

Harappa and Mohenjo Daro are the two largest cities, with substantial populations of perhaps 30,000–60,000 inhabitants (Dyson, 2018, p. 29). Those cities were organized on a grid pattern with citadels and warehouses (Miller, 1985, p. 47). There is also abundant evidence of public infrastructure goods, such as public drains, baths, and waste management systems (Wright and Garrett, 2017). In contrast, there is no indication of any significant disparities in wealth and resource distribution, as material culture tends to be rather standardized. Burials were modest for the dead were interred with few personal items. There is little evidence of violence either, as warrior or warfare imagery is absent and weapons few and far between (Miller, 1985).

The people of Harappa and Mohenjo Daro engaged in long-distance trade with Mesopotamia, Africa, and Central Asia (Possehl, 1997, pp. 435, 450; Wright and Garrett, 2017, p. 291). Craft specialization was widespread, but there is little indication that it was controlled in any way. Rather, those economic activities seem to have occurred in diverse spaces, including small workshops and households. Ceramic vessels often bear the potter's signature (McIntosh, 2008, pp. 391, 396). It seems, therefore, that important economic matters remained beyond the control of a selected group of people, and that the economy was largely in the hands of commoners.

The Indus civilization wound down after almost six centuries. Dramatic changes abandonment of cities, establishment of new settlements in sometimes marginal locations, reorganization of trade networks (Wright, 2012, p. 102) a proliferation of settlements but a decrease in the occupied area and average site size and a process of deurbanization that signaled important transformations in settlement and subsistence linked to changes in political and economic institutions (Possehl, 1997, pp. 429, 450). At Mohenjo Daro, the quality of houses declined and the maintenance of infrastructure, such as drains, ceased. Treatment of the dead became careless as "bodies were given perfunctory burial in disused houses or streets" (McIntosh, 2008, p. 396). There is also evidence that people hoarded and hid valuables, often a sign of a highly volatile social environment. The causes of the collapse of the Indus civilization are still not completely known but contributing factors may have included a decline in the health and conditions of the environment, changes in long-distance trade, violence, new settlers, and the monsoon season (McIntosh, 2008, pp. 396–400; Giosan et al., 2012). After the collapse, each former component of Indus society became self-sufficient, relying on its own resources and local trade networks. Regional cultures emerged with many material similarities to the earlier local cultures (Possehl, 1997, p. 450).

### Cross-Cultural Recap

There are many cases of collective formations in different areas of the world that have been historically difficult to type or fit into the traditional models; the cases just discussed, and that of Teuchitlán, are all good examples. Those societies were horizontally and vertically complex, exhibited little or no conspicuous consumption, provide no clear signs of palaces, and had narrow gaps of wealth. Therefore, it is difficult to identify privileged groups in their archaeological remains, though settlement patterns indicate high populations, and we know that agricultural intensification had an important role in Chaco and Teuchitlán, while Jenne-jeno and Mohenjo Daro seem to have placed greater emphasis on long-distance exchange, though that exchange was in the hands of the common people, not a select group of individuals. These examples indicate that complexity comes in different forms and that there are differences within such collective formations that merit greater, in-depth scientific inquiry.

## CONCLUDING THOUGHTS

Blanton et al. (2020) proposed that more collective societies collapse abruptly, and this paper set out to probe whether Teuchitlán, an at least somewhat collective society, collapsed catastrophically as their model predicts. Teuchitlán was an atypical polity that lasted for seven centuries before suddenly disappearing, leaving few traces for subsequent developments. This shift in complexity entails the transformation of institutions both formal and informal. A view from the perspective of institutions shows the complexities of past sociopolitical structures that far exceed the simplicity attributed to the Asiatic mode of production.

In another aspect, the development of the power-sharing institutions that materialized in the guachimontones and ballcourts indicates the nature of the political structure of Teuchitlán society and the prevalence of a more inclusive, collective ethos committed to cooperation between people and governing authorities. A reliance on agricultural intensification and obsidian production for overwhelmingly local and regional consumption points to internal revenues, a variable strongly related to collective endeavors. The collapse of Teuchitlán concurs with Blanton et al.'s proposal that collective societies tend to suffer drastic, even catastrophic, effects at the time of collapse. While the causes of these upheavals may be diverse, the inability of leaders to cope with changes and continue to provide necessary services may well have led to the collapse of institutions. People readjusted to a new reality marked by a shift toward institutions that centralized power and authority, while religious institutions adopted distinctive pan-regional qualities. The new political institutions that were established developed a greater reliance on external revenues and, it can be assumed, less commitment to local populations. The institutions that had made Teuchitlán society so distinctive never reappeared and, although other collective formations emerged later, their material remains are clearly dissimilar (Heredia Espinoza, 2016). Teuchitlán thus represents an example of a society that does not conform to theoretical models about past ancient societies. Indeed, its study encourages us to eschew

inflexible perspectives and, instead, analyze the complexities (institutions, structures, and organizations) of social formations through time.

There are many cross-cultural examples like Teuchitlán that are similarly difficult to catalog, and whose complexities require additional fieldwork, testing, and comparisons to more autocratic formations that tend to be relatively simple and are more familiar to archaeologists. Atypical formations like the one examined herein thus urge us to develop a new language and models capable of explaining the intricacies of such ancient societies.

## AUTHOR'S NOTE

In this article, I present Teuchitlán, an atypical society in prehispanic Jalisco which has been hard to categorize using traditional models of sociopolitical complexity. I argue that it displays features of collective societies and as such, the demise of Teuchitlán was dramatic as proposed by Blanton and colleagues. The institutions that comprised Teuchitlán underwent major changes which resulted in a new set of institutions. New settlement pattern data is presented to support the statement that collective formations tend to collapse rather drastically compared with other formations. The article provides cross-cultural examples of societies that are also difficult to describe. Finally, it adds to a growing understanding of the diverse ways in which past societies organized themselves.

## AUTHOR CONTRIBUTIONS

The author confirms being the sole contributor of this work and has approved it for publication.

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# Of Revenue Without Rulers: Public Goods in the Egalitarian Cities of the Indus Civilization

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The archaeology of collective action addresses a widespread myth about the past–that premodern societies were despotic, and only produced public goods when everyday people convinced a separate and distinct ruling class to provide them. Archaeological evidence from the Indus civilization (~2600–1900 BC), home to the first cities in South Asia, reveals that Indus cities engaged in a remarkably egalitarian form of governance to coordinate different social groups, mobilize labor, and engage in collective action, thus producing a wide range of public goods. These public goods included, but were not limited to, water infrastructure, large public buildings, and urban planning–all of which helped Indus cities invent new technologies, grow, and thrive. Many intersecting institutions contributed to Indus governance, including civic bureaucracies that gathered the revenue necessary to mobilize labor in pursuit of collective aims, as well as guild-like organizations that coordinated the activities of numerous everyday communities and ensured the equitable distribution of information within Indus cities. A wide range of large and small public buildings, information technologies, and protocols for standardized craft production and construction attest to this egalitarian governance. Through these institutions, Indus governance incorporated the "voice" of everyday people, a feature of what Blanton and colleagues have described as good governance in the past, in absence of an elite class who could be meaningfully conceptualized as rulers.

**Keywords: archaeology, collective action, governance, South Asia, revenue, bureaucracy, urbanism, egalitarianism**

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## INTRODUCTION

Political theorists often assume that the benefits of governance only accrue to people who sacrifice their political and economic power to a permanent ruling class. This assumption can lead the people of otherwise democratic societies to tolerate political strategies that turn leaders into autocrats and shut everyday people out of the political process. This is a "tripwire" that is well-known to political scientists (Waldner and Lust, 2018) and has also been addressed by archaeologists interested in the diversity of human political systems (Blanton et al., 2021). Despite the efforts of these researchers, however, it remains a pervasive myth that many transformative features of human economies come about only through the canny largess of political-economic elites.

Archaeological evidence from the Indus civilization (~2600–1900 BC), home to the first cities in South Asia, reveals that public goods emerged long before a ruling class. Indus cities supported a sophisticated Bronze Age political economy, where growth was driven by diverse groups of

people who practiced different economic specializations, including intensified agropastoralism and craft production (e.g., Kenoyer, 1997a; Vidale, 2000; Meadow and Patel, 2003; Madella and Fuller, 2006; Wright, 2010; Pokharia et al., 2014; Ratnagar, 2016; Petrie and Bates, 2017). It would be naïve to assume that the interests of these communities were always aligned. It is not hard to imagine herders negotiating for better access to land, artisans disagreeing over how many ornaments to make, or farmers debating a planting sequence that distributes the demand for harvest labor. And yet, considering the range of potential conflicts that could have atomized them, Indus communities nonetheless adopted forms of governance that allowed them to accomplish extraordinary feats of social coordination, standardizing construction techniques and planning urban development, assembling and maintaining drainage systems, constructing massive city infrastructures that required the labor of thousands and creating systems of materializing information that extended from the foothills of the Himalaya to the Arabian Sea.

The archaeology of the Indus civilization therefore challenges the widely-held myth that public goods–those that benefit everyone who invests labor in their production as well as many who do not–must be provisioned by rulers who are forced to accommodate citizen demand. Debate surrounding this assumption has long shaped the interdisciplinary study of collective action and public goods (e.g., Olson, 1965; Levi, 1988; North, 1990; Ostrom, 1990). Evidence from the past in fact reveals that there are many pathways to collective action (Blanton and Fargher, 2008; Carballo, 2013; Feinman and Carballo, 2018), reinforcing Ostrom's (1990) critique of the conventional argument that societies only produce public goods when everyday people place pressure on the elite (e.g., Levi, 1988). People have in fact engaged in collective action, often at very large scales, in societies where there are no elites to speak off. With access to data from many such premodern societies, archaeologists are particularly well-positioned to address the origins of public goods. Often, the publicness and privateness of goods can be inferred from the material constraints on their use. The high accessibility of public goods contrasts with the restricted accessibility of private goods, those that were constrained to a subset of people. Given that the people of the Indus built their cities in absence of all but trivial inequality (Green, 2021), it is worth asking: how did they coordinate governance beyond households? How did everyday people make and implement political decisions that resulted in forms of collective action that traditional political theories hold must be imposed from above? In this article, I argue that civic deliberation and bureaucracy, as well as guild-like organizations, were prominent features of Indus governance, incorporating significant proportions of urban populations into collective decision making and implementation, allowing them to engage in collective action without investing political authority within a fixed social stratum. The result was "good governance," that which responded to the needs of everyday people (sensu Blanton et al., 2021), over much of the Indus civilization's urban development.

## WHAT IS EVIDENCE FOR GOOD GOVERNANCE IN THE ANCIENT PAST?

Governance is the way that a society directs its collective affairs. Across disciplines, many theorists hold that governance is produced by the institutions that emerge from and cross-cut social groups, creating rules, norms and practices that shape a society's distribution of power and resources (e.g., Olson, 1965; North, 1990; Ostrom, 2000; Levi-Faur, 2012; Bondarenko et al., 2020). Research on governance is often biased toward contemporary or recent historical social contexts, however governance is a human universal. It takes place within households and between nations. Different forms of governance produce drastically different societies. When governance admits only a small number of people into decision-making, it tends to constrain the benefits collective action toward a small minority, a vicious cycle that is enabled by and creates predatory and extractive social institutions (Acemoglu and Robinson, 2013). By contrast, "good governance," a concept that began as the stated goal of international development, now describes institutional arrangements that produce public goods, such as civic infrastructure, sanitation, transportation, and other things considered essential for economic prosperity (Rothstein, 2012). This duality, as well as the key role governance plays in generating and dispersing political and economic benefits–makes collective action theory a key tool for investigating it.

Collective action theory is concerned with identifying the conditions under which people coordinate their labor to solve common problems. Public goods often involve substantial labor investment, so making them tends to require collective action. However, collective action is often implemented from the "top-down" by people who command considerable control of a society's political and economic resources, such as the agents of a state administration. There is therefore significant debate about what kinds of agents and institutions are most likely to achieve collective action within collective action theory. Some theorists have focused on how "predatory" leaders muster revenues for collective action (e.g., Levi, 1988), while others argue that sustainable collective action is the product of institutional arrangements that draw upon knowledge and action at appropriate social scales (e.g., Ostrom, 2010). The latter theory builds on the observation that public goods emerge through coordination between a diverse range of intermediate and local institutions that often have non-hierarchical relationships to one another and to the broader "state" (Ostrom, 1990). In other words, good governance can emerge through interactions enacted from the "top-down," or through interactions from the "bottom-up" (Rothstein, 2009, 2012). What seems to be essential is *wide participation* in the institution-formation process. Societies are therefore most likely to produce public goods when governance is inclusive, incorporating many everyday people into directing collective affairs (e.g., Dahl, 1989; Ostrom, 1990, p. 45).

Evidence from the past reinforces these insights and offers a wide comparative frame that draws on archaeology to more fully addressing variation in political

forms (e.g., Blanton et al., 1996, 2020, 2021; Blanton, 1998, 2010; Blanton and Fargher, 2008; Carballo, 2013; DeMarrais and Earle, 2017; Feinman, 2018). Initially, collective action theory helped advance critiques of neo-evolutionary theory within the discipline of archaeology, contrasting the impact of corporate political strategies–those that incorporated commoners in governance–from network political strategies that excluded commoners and forged connections between elites (Blanton et al., 1996). As archaeological debate proceeded, it became apparent that the evolutionary distinction between "commoner" and "elite" was not always useful to understanding past social changes (Blanton, 1998). Collective action theory offered an alternative framework, revealing a political variable that had gone understudied in past societies, even though it was clearly responsible for explaining many phenomena that were central to neo-evolutionary theory (Blanton and Fargher, 2008). Strong indicators of collective action included public goods–things like transportation and water management infrastructures–but redistributive economies, equitable taxation, institutional accountability, and bureaucratization (Blanton and Fargher, 2008, p. 133–248). These phenomena were not mutually exclusive and have been used to characterize the degree of collectivity apparent in past societies (Feinman, 2018; Feinman and Carballo, 2018). This reframing has led to several important insights. For example, it is clear that one of the long-term patterns that has emerged over the millennia has been steady increases in different human societies' capacity for collective action (Carballo, 2013). Another insight is that collective societies–those characterized by corporate political strategies–appear to have been more dependent on "internal" sources of revenue like agrarian taxation, while less collective societies appear to be those more dependent on exclusionary political strategies that focused on "external" resources (Blanton and Fargher, 2008; Feinman, 2018; Feinman and Carballo, 2018). Past societies that draw on internal revenues to engage in collective action are more likely to produce public goods and can be predicted to have developed institutions that enable wide participation and accountability in the political process (Blanton et al., 2021).

But what kinds of institutional arrangements create good governance? A focus on institutions is adaptable to evidence from the past because it eliminates the need to assume that governance was public, private, market or state based. An institutional approach thereby helps archaeologists compare different kinds of integrative, cross-cutting institutions that facilitated the mobilization of labor in the past without imposing assumptions from the present (Bondarenko et al., 2020; Holland-Lulewicz et al., 2020). Traditionally, archaeologists have theorized that such institutional arrangements were limited to "states," a social type used by neo-evolutionary theorists to describe a combination of extractive social classes and predatory institutions thought to emerge alongside one another: institutions like militaries, big and impersonal administrations, and long-distance exchange networks (e.g., Childe, 1950; Flannery, 1972; Service, 1975; Wright and Johnson, 1975; Weber, 1978). This definition of the state has been subject to decades of critique by archaeologists, who must square it with evidence that different features commonly associated with the state materialized in different social contexts at different times for different reasons (e.g., Yoffee, 2005; Pauketat, 2007; Jennings, 2016). Archaeologists now take pains to document the different ways features of the neo-evolutionary state have been combined in the past (e.g., Wright, 2002; McIntosh, 2005; Smith, 2009; Feinman, 2013; Jennings, 2016). One recurring insight is that many of the political interactions between the political institutions within "states" were often "heterarchical," or unranked, institutions (sensu Crumley, 1995). This is not to say that political hierarchies were precluded by heterarchical institutional arrangements, or that all political interactions were horizontally distributed. Rather, heterarchical arrangements require archaeologists to think more broadly about political organization. Like all complex systems, premodern societies often incorporated many intersecting institutions that were not always ranked or could be ranked in different ways. This flexibility probably made some premodern societies more sustainable in the past (e.g., Scarborough, 2009). Good governance is not necessarily more heterarchical, but heterarchical institutional arrangements could certainly have played a role in inclusive political decision-making and collective action in the past.

There have been many surprising instances of increases in political and economic scale that unfolded without incurring more than trivial inequalities. Egalitarianism has therefore appeared in many large-scale premodern societies that would have surprised neo-evolutionary theorists. This claim was foreshadowed by Blanton (1998, p. 151), who argued that some early states employed egalitarian political strategies. Egalitarian here does not mean perfect equality in all spheres of life, but rather a prevalence of firm limits on exclusionary political power. Building on these points, I reiterate that elites or ruling classes are not prerequisites to collective action or the production of public goods, but epiphenomena associated with a restricted range of political-economic trajectories. Thus, rather than search for elite agency to explain past social transformations, like the emergence of public goods, it is often more fruitful to investigate the range of political arrangements people have made to engage in collective action (Carballo, 2013), examine connections between collective action and political economy (DeMarrais and Earle, 2017), and explore articulations between collective action and other indicators of governance (Feinman and Carballo, 2018). Governance activities in many past societies were often dispersed and emerged from the bottom-up (Thurston and Fernandez-Gotz, 2021). In fact, I would add that by distributing political and economic benefits among everyday communities, good governance can further be predicted to contradict the expectations of neo-evolutionary theories of state formation by producing egalitarianism in societies with coordinated governance and large-scale collective action. After all, if inequality and the scale of governance always increase together, then there would really be no such thing as good governance.

One advantage of this theoretical frame is that it can be used to make a range of predictions regarding how good governance materialized in the past. In addition to reconstructing evidence of public goods from past societies, I would suggest that good governance can be inferred from deliberative spaces

that help incorporate everyday people into political decision-making processes. There are other archaeological indicators of governance as well. Blanton and Fargher (2008) argued that collective action in the past is associated with a process called "bureaucratization." This concept of bureaucratization diverges from Max Weber's (1978) evolutionary type, which holds that bureaucracy replaced tradition-based systems of administration only in the 19th century AD due to rising capitalism. Bureaucratization, rather, can be conceptualized as the expanded implementation of governance into new spheres of a political economy by specialists working on behalf of institutions that crosscut different social groups–what Blanton and Fargher (2008, p. 166) call "government by office." An indicator of bureaucratization is therefore the construction of institutional spaces set aside to facilitate the implementation of coordinated governance and collective action. Thus, good governance is associated both with the creation of deliberative spaces for accommodating citizen voice, and with "offices," spaces that help specialists coordinate the activities of multiple social groups by facilitated activities like planning, organization, monitoring, and execution.

The initial formation of cities represents a profound challenge for good governance. Urban life is defined by regular interactions amongst strangers (e.g., Jacobs, 1961). The defining trait of many of the world's first cities were population aggregation that required novel forms of political and economic organization (e.g., Smith, 2003; Birch, 2014; Jennings, 2016; Gyucha, 2019), as well as unprecedented technological innovation and economic growth (e.g., Ortman and Lobo, 2020), especially in their initial periods. Initial urban governance is therefore demanding because urban communities faced a wider range of social and economic conditions than their pre-urban predecessors, and cities needed public goods to prosper (e.g., Childe, 1950; Fletcher, 1995; Sherratt, 1995; Wright, 2002; Smith, 2003, 2019; Cowgill, 2004; Bettencourt et al., 2007; Feinman, 2011; Ortman et al., 2016). The demand for technologies that enable exchange amongst strangers–itself a public good–is also closely associated with changes in governance. The first urban communities needed new tools to effectively keep track of credits and debts amongst strangers. The tools and techniques employed to materialize and represent information, or a society's "means of specification" (Green, 2020), can be distributed in different ways, and have major implications for governance. In egalitarian urban societies, we find the means of specification distributed amongst everyday households, while in stratified societies with predatory institutions, these same technologies were monopolized to create extractive forms of interest-bearing debt (Green, 2020). Likewise, collectivity produced a more widely distributed form of collective computation, while authoritarianism limits the flow of information (e.g., Feinman and Carballo, 2022).

## WHAT IS THE EVIDENCE FOR GOVERNANCE IN THE INDUS CIVILIZATION?

One of the world's first great urbanizations produced the Indus civilization, whose settlements emerged over an extensive area that extends from the Himalaya to the Arabian Sea (**Figure 1**). The geographical extent of the Indus civilization eclipsed that of its contemporary societies in Mesopotamia and Egypt (Possehl, 1999). People built Indus settlements within a wide range of environments, from the semi-arid coasts of Gujarat to the well-watered plains of northwest India. Life in these contrasting regions required a flexible and diversified agropastoral economy that responded to a wide variety of local contexts (e.g., Weber, 1999; Madella and Fuller, 2006; Chase, 2010; Wright, 2010; Petrie et al., 2016; Bates et al., 2017; Petrie and Bates, 2017). Five Indus settlements are often identified as cities due to their size, sophisticated Bronze Age technologies, numerous houses, and range of different kinds of structures. Four of these sites, Harappa, Mohenjo-daro, Rakhigarhi and Dholavira, have been subject to extensive excavations (see Lahiri, 2005; Wright, 2010; Petrie, 2013a; Ratnagar, 2016; Green, 2021). Archaeological surveys have also produced substantial data pertaining to the spatial organization of the smaller sites immediately surrounding Harappa (Wright et al., 2003, 2005) and Rakhigarhi (Singh et al., 2010, 2011, 2018a,b, 2019; Green and Petrie, 2018). Establishing the maximum extent of these sites is a matter of ongoing debate, as there are many formation processes that impact area estimates. However, it is clear that Indus cities were more extensive than the pre-urban settlements that emerged before them in the same region. The extent of many of these pre-urban settlements cannot be established due to the overlying remains of settlements that date to the urban phase. However, at Harappa (e.g., Meadow and Kenoyer, 2005) and Rakhigarhi (e.g., Nath, 1998, 1999, 2001), pre-urban material culture is reported from only around a quarter of the total site area. Moreover, settlements that were abandoned prior to urbanization tended to be relatively small. For example, Kot Diji, a type-site of the pre-urban phase, appears to have extended over less than three hectares (Khan, 1965). Most scholars would agree that the most densely built part of each Indus city encompassed a core area that (often greatly) exceeded 50 hectares. Much of this settlement area was dedicated to houses–domestic residential structures that incorporated courtyards, wells, hearths, and sometimes specialized craft production areas (Sarcina, 1979; Cork, 2011; Green, 2018). The growth of Indus cities coincides with substantial evidence for changes in governance.

Indus governance can be inferred from different categories of archaeological evidence. For example, substantial brick walls and platforms provide direct evidence of collective action, an outcome of governance, because there would have been no way for a single household or social group to mobilize sufficient labor on its own. Other forms of evidence are less direct. A hypothetical ledger detailing labor obligations may record actual accumulations of past revenue *or* the aspirations of a presumptive government whose desire for revenue was greater that its capacity to gather it (e.g., Richardson, 2012). Rules and protocols that crosscut social groups, and the institutions that form them, are perhaps the most basic indicator of governance. However, unless such rules are written down, they do not leave direct material evidence. At the same time, the repeated adherence to a standard of production can indirectly attest to shared rules and protocols. And indeed, standardization has long been recognized as a basic concept for the analysis of archaeological datasets (e.g., Rice,

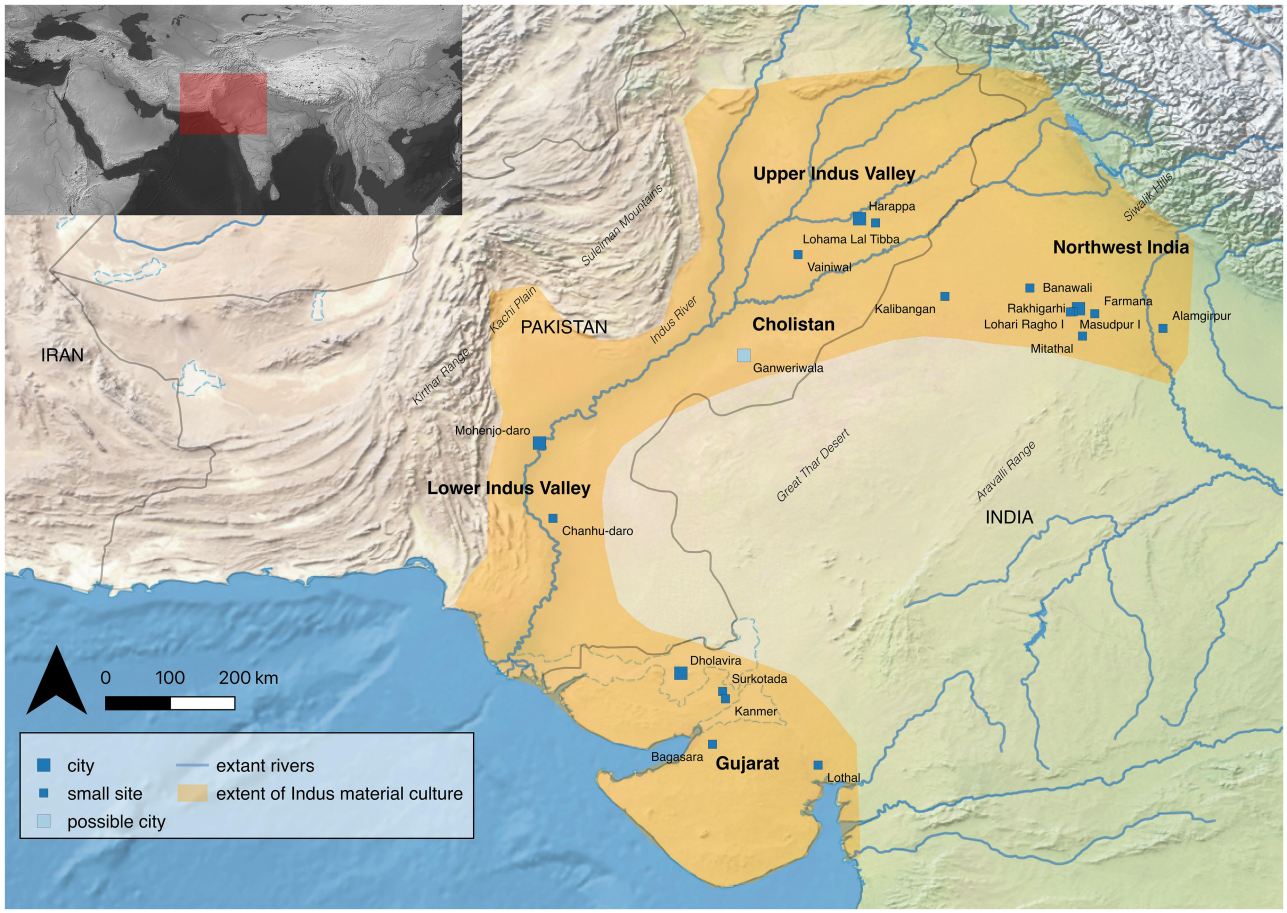


**FIGURE 1 |** Map of the Indus civilization during its urban phase. Included are the sites that are often presented as cities, as well as smaller settlements that are discussed in this article, where archaeologists have found substantial evidence of collective action. Map assembled using QGIS 3.16 (www.qgis.org) and employs a Nature Earth basemap (www.naturalearth.com).

1991; Eerkens and Bettinger, 2001; Roux, 2003). The production of standardized artifacts is often taken as evidence that they were produced by a subset of specialists to meet the demands of a larger population of users. However, multiple groups of specialists also often adhere to common standards, a pattern that we can use to infer governance of production, especially when it co-occurs with evidence of collective action.

Indus cities are recognizably "Indus" because the people who lived in them produced a shared material culture. Indus assemblages include a wide range of shared ornament types, pottery styles, bronze metallurgy, and stamp seals–technologies that have been subject to considerable study (Wright, 1991, 1993; Kenoyer, 1992, 1997a; Vidale, 2000; Vidale and Miller, 2000; Menon, 2008; Agrawal, 2009). While assemblages from Indus cities tend to receive the most attention, they actually represent only a small subset of the settlements that contributed to the Indus civilization's material culture (Fairservis, 1989; Wright, 2010; Sinopoli, 2015; Parikh and Petrie, 2019). Extensive archaeological surveys have uncovered hundreds of small archaeological mounds across a very wide area (e.g., Singh, 1981; Joshi et al., 1984; Possehl, 1999; Wright et al., 2003, 2005; Kumar, 2009; Rajesh, 2011; Pawar, 2012; Chakrabarti, 2014; Dangi, 2018; Green and Petrie, 2018; Green et al., 2019). Indus cities therefore did not hold a monopoly on these technologies, which were widely distributed across the civilization's extent, and employed alongside many local forms of craft production (Possehl and Herman, 1990; Meadow and Kenoyer, 1997; Wright, 2010; Chase et al., 2014; Parikh and Petrie, 2016; Patel, 2017; Petrie et al., 2018). Many of the pottery and ornament styles that have been found in urban contexts have also been identified at these smaller settlements, which were, in some cases, dozens of kilometers from the nearest urban center (Wright et al., 2003, 2005), a characteristic that Parikh and Petrie (2019) have characterized as "rural complexity."

Governance is evident in the shared styles that permeated the production of many different Indus crafts. Indus artisans made a lot of different kinds of things, from elaborate stone pillars to tiny steatite microbeads (Wright, 1991; Kenoyer, 1997a; Vidale, 2000; Miller, 2007a). Though these crafts were produced by multiple groups of artisans, many common standards patterned

their production–shared ideas and practices about how to make things, regardless of material (Miller, 2007b; Wright, 2010). For example, Indus artisans often incorporated the same materials into different technologies, many of which had to be acquired from locations far from the point of production (Lahiri, 1990; Kenoyer, 1997a; Ratnagar, 2003). While the use of exotic materials in urban contexts is not particularly remarkable, it is striking that Indus artisans did not use all of the different sources of raw materials accessible within their civilization's broad extent. Artisans preferred–or were perhaps even constrained to–a limited number of specific sources of stone, like steatite, even when local materials were more readily available (e.g., Law, 2006, 2011). Likewise, shared protocols for production patterned different crafts, resulting in a range of cross-craft "technological styles" (Lechtman, 1977; Wright, 1993). For example, Indus assemblages were marked by considerable "technological virtuosity," or crafts that incorporated very high levels of skill, knowledge, and labor and invested these into small things, like portable beads and ornaments (Vidale and Miller, 2000). Likewise, a "talc-faience industrial complex" is evident across different crafts, a common set of materials and techniques used produce exceptionally large quantities of artificial ornaments, such steatite beads, and faience bangles, which were widely distributed amongst everyday people (Miller, 2007a). Indus artisans also shared a proclivity for radically transforming raw materials, such as steatite and carnelian, into new forms, and creating entirely artificial materials like stoneware or faience. Wright (2010, p. 239) has called this technological style a "transformative mindset." Though many different groups engaged in craft production, the technological styles that linked these groups reveals substantial integration and suggests a degree of coordination among artisans that indirectly attests to a particular form of governance.

Indus seals (**Figure 2**) are a hallmark category of artifacts from the Indus civilization's urban phase (Mackay, 1931; Rissman, 1989; Franke-Vogt, 1991; Parpola, 1994; Law, 2006; Kenoyer, 2007; Kenoyer and Meadow, 2010; Green, 2016; Jamison, 2018). These small stone stamps had intaglio engravings that could be impressed into clay sealings on containers and doors, materializing information that could serve as a kind of record of socio-economic interactions, a practice that is attested across Eurasia beginning in the Neolithic (e.g., Jarrige et al., 1995; Pittman, 1995; Akkermans and Duistermaat, 1996). The production of Indus seals, themselves quite intricate, required high levels of skill and complex production sequences. They epitomized Indus technological virtuosity as well as adherence to common standards, with a range of standardized forms and images that were engraved on seal after seal (Rissman, 1989; Ameri, 2013; Frenez, 2018). Most Indus seal carvings depict an animal along with an inscription in an undeciphered script (e.g., Mackay, 1931). It has long been argued that such motifs served the emblems of different social groups, while the script records the name of a particular seal user (Fairservis, 1982; Kenoyer, 2000; Vidale, 2005; Frenez and Vidale, 2012; Frenez, 2018). Regional variation in the prevalence of particular seal motifs in an assemblage (e.g., Ameri, 2013; Petrie et al., 2018) suggest that different kinds of social groups–rural and urban–used seals to make sealings. And yet, the vast number of people who used Indus seals relied on a remarkably standardized tool–a square stamp ∼2.5 cm on each side with a restricted range of motifs–to specify things (Green, 2015, 2020).

Stone weights are also a prominent component of Indus assemblages (Miller, 2013). They formed a system a measurement which would not have worked unless the weights were highly standardized, incorporating weights that ranged from <1 g to well over 10 kg (**Figure 3**). Indus weights were made from a wider range of harder stones than seals, which nonetheless had to be sourced from the highlands surrounding the Indus civilization (Law, 2011). Many classic examples of Indus weights were cut from chert from the Rohri Hills proximal to Sindh (Kenoyer, 2010). Indus weights have been recovered from rural as well as urban sites, suggesting that a single authority operated throughout the Indus civilization. The spatial extent of the weight system has even been cited as evidence in proposals that the Indus civilization was an empire (e.g., Ratnagar, 2016), though it should again be noted that the Indus civilization lacks convincing evidence of an emperor (Green, 2021). Moreover, in contrast with the weight systems of the Indus civilization's contemporary societies in Mesopotamia–which *do* provide clear evidence of a ruling class–Indus weights were unmarked, suggesting that they comprised a single system that did not compete with any others across the Indus civilization's vast extent (Rahmstorf, 2020). Thus, in the Indus, it appears to have been unnecessary for weight users to specify which weight system they were employing. Indus weights were *the only* weights in many of the contexts in which they were used, suggesting very high levels of coordination amongst the artisans who created the weights.

A closer look at the architectural matrix of Indus cities reveals the degree to which common standards contributed to the growth of Indus settlements. While some Indus settlements were made of stone, the majority were comprised of structures assembled from thousands of mud or baked bricks. These bricks had to be produced outside of the settlements themselves, mined from favorable sediments, tempered, shaped, left to dry, and then sometimes fired in massive kilns. In describing the bricks of Mound F at Harappa, Vats (1940, p. 21) writes:

> *Like all other buildings of the various strata, this amazing complex is composed of well burnt bricks of fine texture which are laid throughout in good tenacious mud. The bricks measure 11 by 5 ½ by 2 ½ by 3 in., of which the chief interest lies in the scientific proportion of two widths to the length–a size of which makes for good structural bonding.*

The bricks at Mohenjo-daro adhere to the same ratio. Mackay (1931, p. 265) noted that comparable brickmaking techniques did not appear in Mesopotamia until nearly a 1,000 years after their debut in South Asia. The high quality and scale of Indus brick assemblages is clear evidence of mass production, which would have required substantial coordination among many brick producers. Adherence to common standards made it possible for Indus builders to employ header-stretcher masonry techniques, and create durable joints, tidy corners, and sharp lines (**Figure 4**). Bricks could also be subdivided to create a range of different kinds of platforms, staircases, vents, and other structural features. Common standards also made it easier to create


**FIGURE 2 |** A sample of seals from the Indus civilization. Reprinted from Green (2020) with gratitude to the Archaeological Survey of India. **(A)** Unicorn (M-143|63.10/23, DK 10323), **(B)** buffalo (M-128|63.10/18, DK 8390), **(C)** rhinoceros (M-276|63.10/149, DK 4812), **(D)** elephant (M-279|63.10/27, DK 7675), **(E)** short-horned bull (M-251|63.10/44, DK 5791), **(F)** figure in tree with tiger (M- 310|63.10/184, DK 5969), **(G)** seated figure (M-305|63.10/62, DK 3882), **(H)** zebu bull (M-261|63.10/133, DK 8390), **(I)** human/animal composite (K-50|68.1/8). All of these seals are curated in the Central Antiquities collection of the Archaeological Survey of India and were photographed by the author.

wedge-shaped variants that interlocked with other bricks and were essential for the construction of waterproof wells (Jansen, 1993a; Wright, 2010). The high quality of Indus brick masonry is one of the reasons so much of Mohenjo-daro's architecture remain standing to be studied by archaeologists today (e.g., Jansen, 1993a).

The production activities considered thus far involved the coordination of labor from many different households

**FIGURE 3 |** Weights from the Indus civilization. These weights were excavated from Mohenjo-daro and are curated by the British Museum. 

(e.g., Wright, 1991). Guild-like organizations, which have been inferred from evidence of technological virtuosity and decentralized production, likely contributed to the coordination of different groups of artisans (e.g., Wright, 2010, p. 327). Such organizations would have comprised an integrating institution capable of producing, reproducing, consolidating, mobilizing, and preserving the knowledge and skill necessary to engage in different production activities. A similar model of Indus craft organization was first suggested by Rissman (1989), who posited that the restricted range of seal motifs found at different Indus cities revealed that multiple workshops operated independently of specific locations of production. This model holds that production activities were undertaken by multiple specialist groups who accumulated resources for the production and reproduction of the craft apart from households, while also standardizing production practices. Groups of artisans specialized in different techniques and shared their skills with one another, applying knowledge gained from the production of one kind of craft to a range of different materials (Miller, 2007a,b). The result was a wide range of highly standardized craft objects produced in very large numbers by many different groups of artisans. In nearly every study of the spatial distribution of finished craft objects in Indus settlements (e.g., Vidale and Balista, 1988; Miller, 2000; Wright et al., 2003, 2005), they are most often found in everyday households–they were not meaningfully restricted. Interactions among guild-like organizations may help explain how different technological styles emerged heterarchically or from the bottom-up.

Collective action leaves a robust material footprint. Detecting archaeological evidence of collective action is straightforward–the archaeological record is full of big things that simply could not have been built without the labor of many people. Prominent examples include the temple complexes at Teotihuacán (e.g., Cowgill, 2015), the monumental platforms in the early settlements along the Andes coast (Pozorski and Pozorski, 2018), Pepys' pyramid in ancient Egypt (Wenke, 2009) and the Temple Oval at Khafajah in Mesopotamia (Delougaz, 1940). Large non-residential structures were also built in the Indus, providing direct evidence for collective action (e.g., Smith, 2016; Wright, 2016). Archaeologists have identified many examples of such buildings, along with large-scale investments in infrastructure in Indus settlements (Wright, 2010). Examples include the massive structures of the Western Mound at Mohenjo-daro, such as the Great Bath, and the erroneously named "Stupa" at Mohenjo-daro (Marshall, 1931, 23). Detailed discussions of these structures are available in a

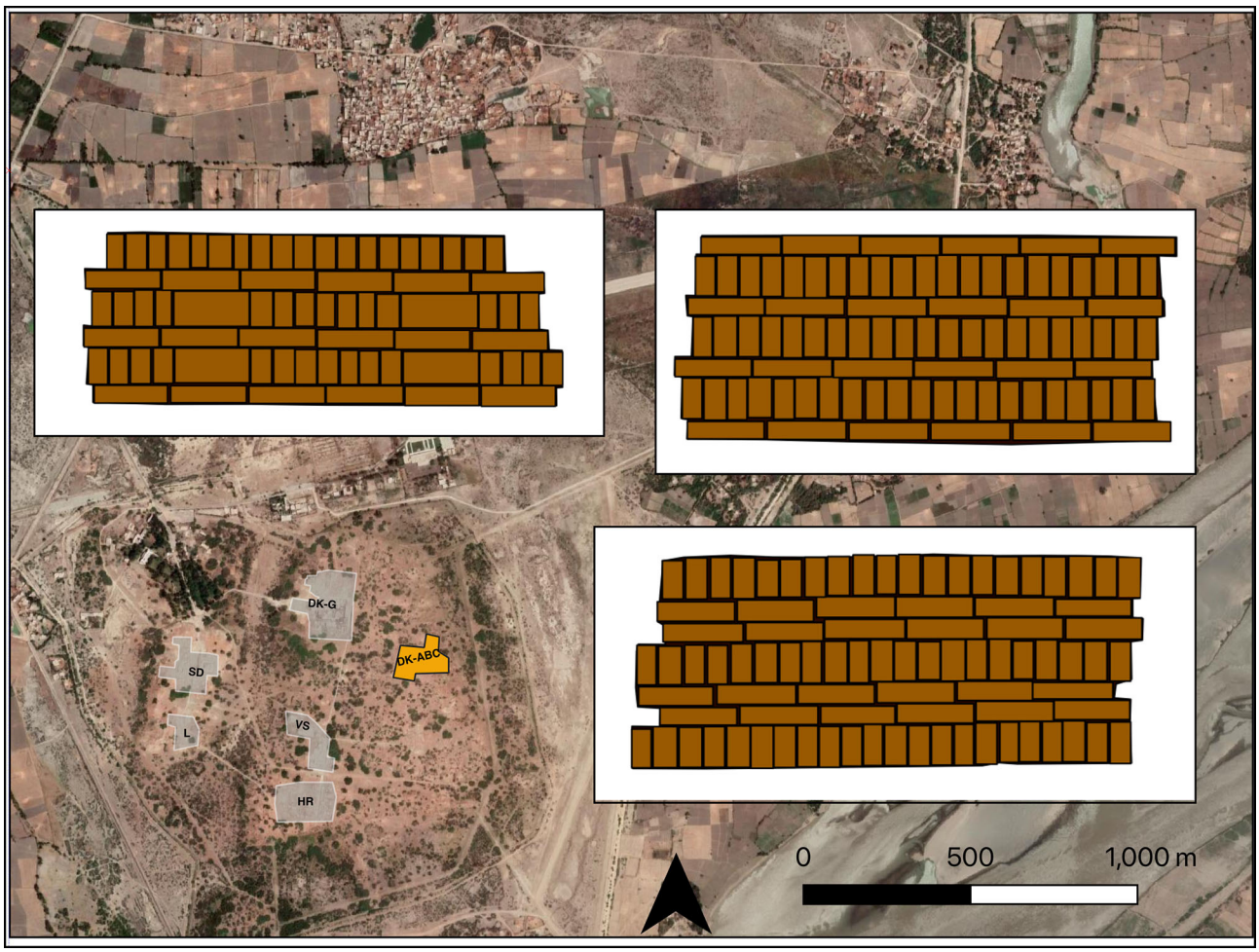


**FIGURE 4 |** Masonry techniques employed at Mohenjo-daro that highlights the sophistication of the brick-making technology. Illustration redrawn from Marshall 1931: LXVII. Plans from Marshall (1931) and Mackay (1938) were digitized and extrapolated in three dimensions using QGIS 3.16 (www.qgis.org). Images is projected over Google Earth Satellite Imagery (accessed 2021).

range of studies (e.g., Fentress, 1976; Jansen, 1993b; Verardi and Barba, 2010; Vidale, 2010). Like many of the large non-residential structures of Mohenjo-daro, the Great Bath was built atop a massive brick platform (e.g., Jansen, 1993a; Mosher, 2017), which would have demanded the investment of many hours of labor from many people. Possehl (2002, p. 103) speculated that a single platform would have required 4 million days of labor. Even at Harappa, where British colonial brick-mining activities destroyed much of the city's architecture (Vats, 1940, p. 17; Lahiri, 2005), excavators reported substantial foundation platforms that could have supported large non-residential structures (Vats, 1940, p. 12–17). The Harappa Archaeological Research Project has revealed that massive, gated walls surrounded each of Harappa's neighborhoods (Meadow and Kenoyer, 1997, 2005; Wright, 2010; Kenoyer, 2012). Evidence of collective action has also been reported in plans of excavations at Dholavira, which reveal the construction of city walls, gateways, and a series of interconnected reservoirs that were cut deeply into the bedrock surrounding the city (Bisht, 2005, 2015).

Archaeologists have also found large non-residential structures in the Indus civilization's smaller settlements, indicating that cities were not the only settlements that could muster substantial labor for collective action. Thick walls surround the smaller-scale sites of Surkotada (Joshi, 1990), Kalibangan (Lal et al., 2015) and Kanmer (Kharakwal et al., 2012); and internally divided different parts of Banawali (Bisht, 1987) and Bagasara (Bhan et al., 2004). A massive structure that could have served as a dock and another that could have been used as a warehouse were constructed at Lothal (Rao, 1973, 1979). Excavators have identified smaller buildings dedicated to specialized production at Chanhu-daro (Mackay, 1943; Sher and Vidale, 1985), and the brick platforms have been reported at the Harappa-satellite sites of Vainiwal (Wright et al., 2003) and Lahoma Lal Tibba (Wright et al., 2005). Some of these structures rivaled those constructed in the cities in terms of size

and complexity and would likely have required the coordination of labor from neighboring settlements.

Revenue is income expended through governance to undertake collective action. While buildings with substantial storage capacities may serve as indirect evidence, direct inferences about past revenues can rarely be made using archaeological evidence alone. Due to the vagaries of preservation, it is rare that accumulations of resources can be directly associated with forestalled instances of administered collective action. Most examples of storage spaces provide better evidence of household provisioning (Bogaard et al., 2009) or agrarian risk buffering (Halstead and O'Shea, 2004), though these activities may not easily be distinguished from past efforts to mobilize revenue. Seals and sealings can be used to make indirect inferences about revenue. This is because seals and sealings were used to monitor claims on resources held by different social groups (Green, 2020), allowing resources to remain physically distributed throughout society in the form of reciprocal obligations amongst everyday people and other corporate groups (e.g., Hayden, 2020). This form of "virtual" revenue would have been predicated on the widespread availability of information, which would only have been accessible through the means of specification. Caches of materialized information–in the form of clay "sealings" impressed with seals–attest to efforts to record information about resource accumulation and expenditure. Similar technologies have been recovered from other early contexts in the Middle East and South Asia, where they are often considered evidence of "administration" (e.g., Ferioli and Fiandra, 1983; Frangipane, 2007; Duistermaat, 2012; Ameri et al., 2018). Indus assemblages reveal a clear concern with such forms of revenue. A cache of approximately 90 sealings attest to their use in a system of monitoring access to different kinds of lockers, containers, and structures at Lothal (Frenez and Tosi, 2005). This capacity to materialize information was remarkably widespread. Thousands of Indus seals, tools that allowed people to make sealings, have been recovered from sites located throughout the civilization's extent (e.g., Joshi and Parpola, 1987; Shah and Parpola, 1991; Parpola et al., 2010). More than 1,000 seals were recovered from the excavated areas of Mohenjo-daro alone (e.g., Mackay, 1931, 1938), and the vast majority of Indus seals were recovered from everyday households, not large non-residential structures (Franke-Vogt, 1991; Green, 2020). The distribution of seals likely reflects the distribution of control over resources, especially the internal resources of concern to everyday households, clearly situating the Indus on the collective side of the governance continuum and deeply embedding the "voice" of everyday households into its governance.

Indus weights similarly reveal a strong concern with revenue. They have been recovered in smaller numbers than seals, and they may have been employed in taxation. At Harappa, weights have been found in association with the gateway to one of the city's neighborhoods (Kenoyer and Miller, 2007). This association has only been preliminarily reported and does not appear to prevail across Indus sites, some of which did not have neighborhood walls or gates. What could have been taxed, and by whom, remains an open question. Still, seals and weights both reveal a common concern with monitoring economic transactions and keeping track of resources, and both would clearly have been useful in mobilizing revenue for collective action.

Deliberation is a key element of governance. Here I use the term in its widest sense to refer to a full range of group decision-making practices; everything from discussions among leaders to public rituals designed to build collective consensus. It is easier to deliberate when there are spaces available in which people can meet. Thus, the more space a society sets aside for deliberation, the more people can participate in its governance, and the greater the likelihood that everyday people will be able to agree to a particular course of collective action (e.g., Carballo, 2013; DeMarrais, 2016). Excepting palaces and temples, the wide range of different kinds of common spaces that past people have built to accommodate deliberation has not received adequate attention. Archaeologists argue that many societies incorporate public spaces that facilitate governance activities like deliberation. Drawing on settlement scaling theory (e.g., Ortman et al., 2016), Norwood and Smith (2021) hypothesized that "urban open space" may increase at a higher rate than population, though add that the kinds of open spaces established may be culture specific. Blanton and Fargher (2008) have long argued that large public buildings associated with deliberation are an indicator of collective action in a premodern society, and of good governance (Blanton et al., 2021). Feinman and Carballo (2022, p. 101; see also 2018) have further specified that communal or large-scale "…architecture that fosters access (e.g., open plazas, wide accessways, and community temples)" is a strong indicator of collectivity. As good governance is implemented at increasing socio-economic scales, so too does demand for deliberative spaces.

Mohenjo-daro's large non-residential structures were largely unwalled, widely accessible, and featured large open spaces. As a result, many scholars have argued that they served a range of "public" purposes (e.g., Jansen, 1993b; Possehl, 2002; Vidale, 2010; Wright, 2010; Smith, 2016). Their accessibility, enhanced by their numerous entrances and location on wide public streets, fits the criteria for public spaces defined by Hillier and Hanson (1984). Such spaces provided fertile ground for many people to engage in deliberation. The "Pillared Hall" at Mohenjo-daro (**Figure 5**) is one of the only structures that is regularly included in speculation about the Indus civilization's political process (e.g., Possehl, 2002), including by authors who suggest that Indus palaces have simply so far evaded the trowel (e.g., Kenoyer, 1998; Ratnagar, 2016). The structure was spacious, measuring more than 30 meters to a side, and boasted at least 20 brick pillars that could have supported a high ceiling (Mackay, 1931; Marshall, 1931, p. 159–161). It had paved brick walks and walls that were interspersed with gypsum, which would have brightened the space. Confounding early excavators, who compared the structure with courts from later Buddhist periods (Marshall, 1931, p. 24), it lacked benches, simply providing a large, enclosed space that could have accommodated hundreds of people. Indus cities are full of other clearings, yards, and similarly open spaces that could have provided places to deliberate. Such a clearing fills the northeast quadrant of Harappa (Meadow and Kenoyer, 2005), and Mohenjo-daro's mounds are separated by spaces that

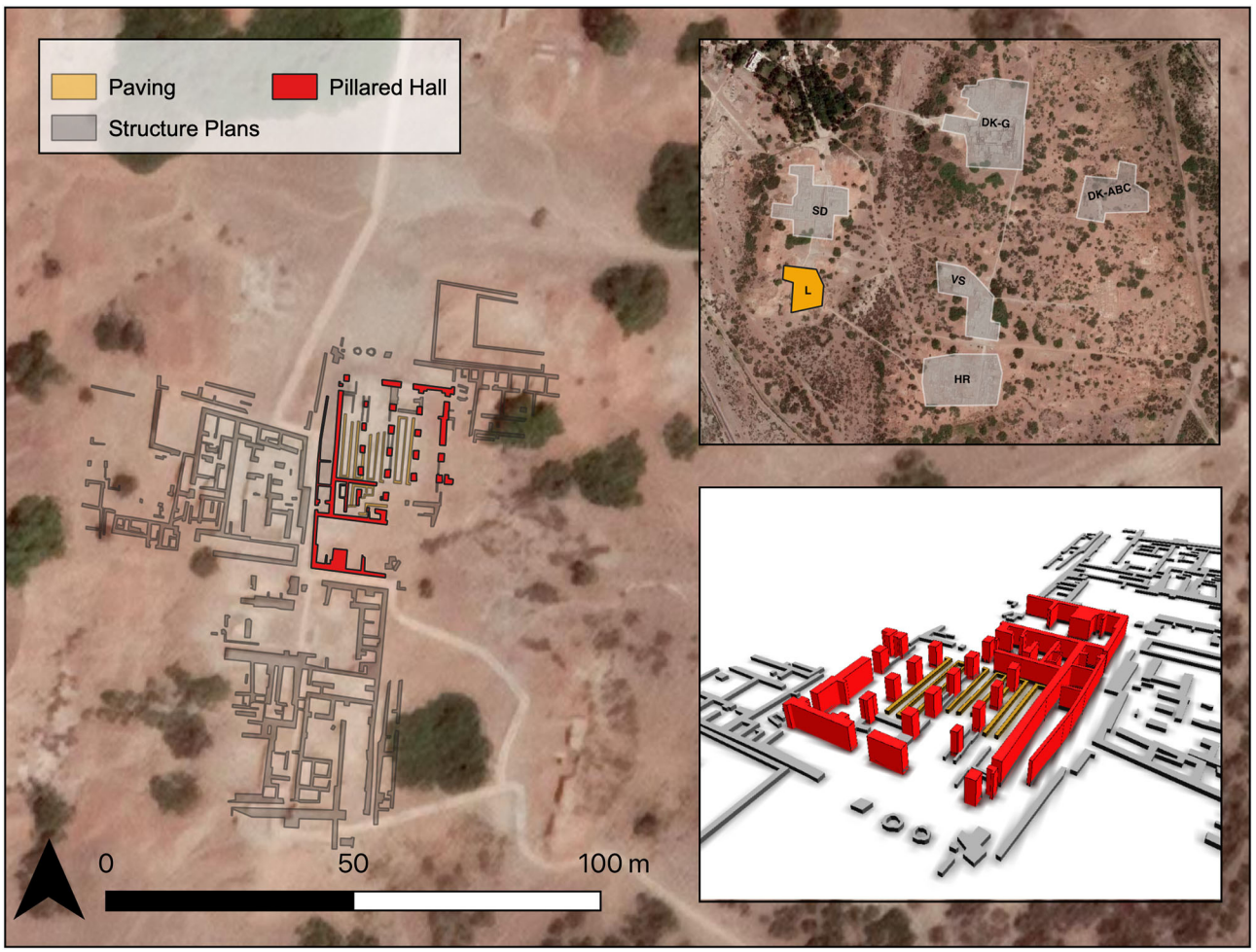


**FIGURE 5 |** Map and reconstruction of the "Pillared Hall" from Mohenjo-daro. Plans from Marshall (1931) and Mackay (1938) were digitized and extrapolated in three dimensions using QGIS 3.16 (www.qgis.org). Images is projected over Google Earth Satellite Imagery (accessed 2021).

appear to have been deliberately left unoccupied (Wright, 2010). Dholavira has an extensive clearing enclosed within its walls (Bisht, 2015). Open spaces within urban settlements may also, of course, result from site formation processes. Unfortunately, such spaces rarely attract the attention from excavators that would be needed to narrow down our understanding of their use. Future geophysical investigations at Indus sites could help address this problem. For now, such features remain good candidates for deliberative spaces, even if we are unsure of the specific form that deliberation took.

Bureaucratization also impacts the way people use space. I argued above that it leads to the construction of "offices," here defined as institutional spaces that facilitate administrative activities that crosscut and integrate social groups. Such institutional spaces are distinct from deliberative spaces in that they are dedicated to the implementation of governance and not necessarily the production of consensus. Interspersed among the houses of Mohenjo-daro were small structures that clearly were not houses. Two examples are the "hostel" and "letter-writers' office" that were reported in Mackay's (1938, p. 76, 92) excavation campaign at Mohenjo-daro. In a previous study, I argued that these were "small public structures," constructed, further opened to the public streets in later construction phases, and expanded over the course of Mohenjo-daro's urban development (e.g., Green, 2018). These small public structures could have facilitated bureaucratic activities that could not be undertaken within houses. They were widely accessible and positioned adjacent to a major public intersection, indicating these activities were likely public in nature. Small public structures are undertheorized in archaeology, and there are understudied analogs in other archaeological contexts (e.g., Seibert, 2006). They could have played important role in implementing governance. Offices allow people to monitor, regulate, and shape activities at an institutional scale. This is why the small public structures of Mohenjo-daro had good access to the streets but were not constrained by a particular household or neighborhood (Green, 2018).

Infrastructures–road networks, city plans, walls, common storage facilities–materialize collective aims (e.g., Wilkinson, 2019) and thus provide convincing, if indirect,

evidence of different forms of governance. Good examples of infrastructure are the terraces surrounding Monte Albán (Feinman and Nicholas, 2012), water transport systems among the Maya (Halperin et al., 2019) or Mesopotamian communities (Jotheri et al., 2019). So too was evidence of widespread faithfulness to street plans (**Figure 6**). Infrastructures are built up through many episodes of construction, each of which builds on and adapts to the standards applied in previous episodes, back to initial construction. Such sequences of construction coordinated the collective action of people separated by time and by space. Mohenjo-daro's neighborhoods, each atop a substantial brick platform, were arranged along wide streets that ran from north to south and were intersected by narrow lanes that ran from east to west (Marshall, 1931; Mackay, 1938; Jansen, 1978). It is striking that among the interconnected structures of Mohenjo-daro's neighborhoods, which changed dramatically through time (e.g., Mackay, 1938; Jansen, 1993a,b; Vidale, 2010; Green, 2018), the spatial integrity of many streets was nonetheless honored over the course of many episodes of building construction. Each episode of house construction re-established Mohenjo-daro's infrastructure. As Indus communities built and renovated their houses, they often remained careful not to impinge on streets, which presumably served the transportation needs of their settlements. In contrast, smaller lanes, which physically constrained access to houses, faced no such restriction, shifting in location from building episode to building episode. The episodic maintenance and modification of houses is important because Indus scholars generally agree that house construction was not carried out by civic authorities, but by the members of individual households, or by neighborhoods (Jansen, 1993b; Wright, 2010; Kenoyer, 2012). The same pattern structured Mohenjo-daro's drainage system, which included wells, pipes, gutters, and "soaks" that drained water from private bathing platforms within individual households (e.g., Jansen, 1993a; Rizvi, 2011; Wright and Garrett, 2017). As with lanes, households likely constructed pipes that connected their bathing platform to the city's drains, which were located at regular spatial intervals in the wide public streets. Open streets and drainage both comprised public goods

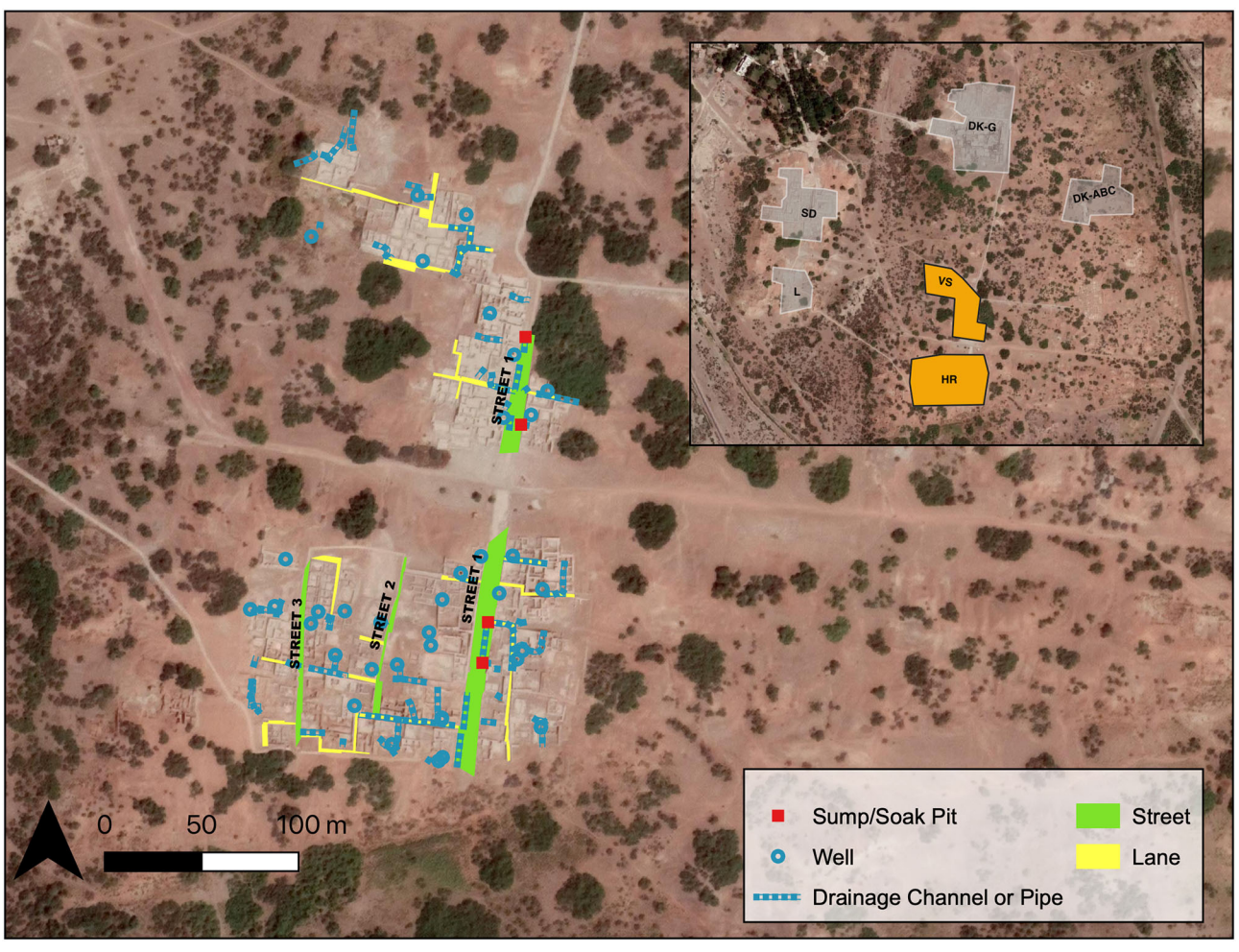


**FIGURE 6 |** Map of Street and Drainage Plans from HR and VS Area at Mohenjo-daro. Plans from Marshall (1931) and Mackay (1938) were digitized and extrapolated in three dimensions using QGIS 3.16 (www.qgis.org). Images is projected over Google Earth Satellite Imagery (accessed 2021).

(**Figure 6**), and elements of both kinds of infrastructure have also been revealed at numerous smaller Indus settlements, such as Kalibangan (Lal et al., 2015) and Farmana (Shinde et al., 2011).

The interactions between Indus neighborhoods that would have facilitated these developments have often been labeled heterarchical. Indeed, the interactions between guild-like organizations, households, neighborhoods, and different Indus sites would likely have been unranked. With regard to urban growth, the thinking goes that different heterarchical social groups–neighborhoods, corporate groups, households–managed their affairs independently of one another (Possehl, 2002; Kenoyer and Miller, 2007; Vidale, 2010; Wright, 2010). Vidale (2018) offered an expanded version of this model, positing that Indus heterarchy was analogous to competition between groups of elites evident in Medieval Genoa. However, accepting this interpretation requires us to make the unfounded assumption that Indus cities were stratified, forcing Indus evidence into an outdated neo-evolutionary model, and obscuring the persistence of egalitarianism in the past (e.g., Green, 2021). Better to suppose that neighborhood and household groups likely exerted polycentric forms of authority on the urban environment (e.g., Petrie, 2013b) than make unwarranted assumptions. Moreover, it is also unlikely that heterarchical interactions between different institutions can fully explain the growth of Indus cities. Indus governance clearly incorporated institutional spaces capable of mobilizing large quantities of revenue and managing its use, mobilizing labor at large scales. However, there is no evidence that the specialists who occupied such offices belonged to a different class than the households from which they coordinated labor.

## WAS INDUS GOVERNANCE GOOD?

Most debate surrounding the Indus civilization's political organization has focused on whether or not the Indus civilization was a "state", and if it was, what kind (e.g., Fairservis, 1961, 1989; Wheeler, 1968; Possehl, 1982, 1998, 2002; Ratnagar, 1991, 2016; Kenoyer, 1994, 1997b; Lal, 1997; Dhavalikar, 2002; Agrawal, 2007; Wright, 2010, 2016; Petrie, 2013a, 2019; Chakrabarti, 2014; Sinopoli, 2015; Shinde, 2016). Scholars have variously described Indus political forms as city-states, domains, and some even suspect that it was an empire. Many of these interpretations hinge on the degree of elite agency a particular archaeologist is willing to infer from the archaeological evidence. Noting that the Indus lacked palaces, exclusionary temples, tombs, and aggrandizing monuments that archaeologists can use to infer the presence of a ruling class, I have argued elsewhere that we need to explain political and economic transformations in the Indus without invoking elite agency (Green, 2021). This position leads to the question: How do egalitarian urban societies govern themselves?

It is surprisingly straightforward to outline an answer. Egalitarian governance is likely to have incorporated many of the same institutional characteristics neo-evolutionary theorists would have confined to despotic states. Egalitarian governance mobilizes collective action that produces public goods, such as economic legibility, civic organization, or environmental management–all things that are broadly usable to most if not all of the people in a society. Examples of collective action in the Indus attest to the construction of buildings that served common goals that crosscut many social groups–public buildings or infrastructure that benefited everyone–not an exclusionary ruling class. Beyond collective action, Indus governance coordinated the activities of everyday households and was oriented toward producing public benefits. Street plans, drainage systems, and standards of recording and measurement all attest to the use of revenues to create goods in response to collective needs. Evidence from the Indus civilization therefore indicates that the governance of its cities was good, especially during the phase(s) that have left the most pronounced material footprints.

Potential revenues for funding public goods likely increased with the economic specialization and intensification that is well-attested in archaeological evidence from Indus cities (Wright, 2010). These economic resources were widely distributed throughout Indus society using weights and seals, not dissimilar to the patterns of craft production and use evident at Monte Albán (Nicholas and Feinman, 2022). Indus seals and sealings comprised a coherent and distributed system of monitoring information–one that was governed, but also emergent, and likely played a key role in making economic transactions legible across social boundaries, another public good. Indus seals would have facilitated the collection of revenues, which, by extension, may have existed in a state of social dispersal until needed for collective action, and episodes of revenue collection may have been task-oriented and ephemeral. However, the widespread availability of the means of specification, and thus access to information, prevented the monopolization of revenues and predatory extraction of value from one corporate group by another (e.g., Green, 2020). The political decision-making process necessary to set objectives for revenue expenditure likely occurred, at least in part, in deliberative spaces, which provided one potential mechanism for resolving conflicts, setting agendas, and making plans, through mass participation. This is not to say that every occupant of each Indus city weighed in on every collective decision, but such structures could have allowed a great many voices to be included in the discussion. Nor were deliberative spaces the only avenue to collective decision-making. Guild-like organizations and technological standardization almost certainly came about through many instances of interaction among craftspeople. The deliberative process no doubt benefited from the distribution of information within Indus society–seals and sealings effectively democratized revenue data.

Offices provided the capacity to implement political decisions. The small public structures of Mohenjo-daro's eastern mounds are a prime example of institutional spaces for the implementation of governance (Green, 2018), but platforms like those recorded at Lothal, Harappa, and even smaller sites like Vainiwal could have served a similar purpose. These institutional spaces were not under the control of a single household or neighborhood, and the people who mobilized

labor through them may have been temporary appointees from different households in place to carry out tasks. The sophistication of the projects they appear to have coordinated suggests they amassed considerable skill and knowledge while eschewing material benefits that exceeded those available to other people in the city. Here, too, a democratized means of specification likely played a key role. The wide availability of information could have served as a check on any effort to direct revenue toward projects that permanently increase the political or economic status of a subset of people. It is much easier to achieve the equitable taxation of internal resources if everyday people are in full possession of information about their contribution to collective endeavors. Offices likely helped develop the protocols required to produce and reproduce the physical matrix of Indus life, such as the brickmaking standards that were necessary to build the structures we recognize as Indus. This relationship between deliberative and institutional space outlines a potential comparative lesson for archaeology. Both deliberative and institutional spaces were (and are) essential to good governance, though the features of both will vary depending on the specific institutions involved. The ratio of offices to deliberative spaces may provide insights into how good a government was in the past. When deliberative spaces are as prevalent as institutional spaces, we can infer that governance was more responsive to everyday communities. Collective action, revenue, and deliberative and institutional spaces are therefore interlinked within systems of governance. Each of these elements of governance is attested to directly or indirectly by archaeological evidence.

The theory of egalitarian governance I have outlined here reinforces the idea that governance is fairest and most sustainable when it emerges from within the groups being governed. Ostrom (1990, 2009, 2010) has long held that the people who govern best are those closest to the resource being governed. The people who use a common resource must trust one another, set the rules for its governance, and monitor one another to ensure those rules are followed. What if the "commons" being governed is public revenue itself? Given that revenue emerges from all the constituents within a political system, does it not follow that collective action is best achieved through the widespread participation in governance? While Ostrom's model has long problematized the idea that "rulers" are the ones best positioned to govern revenue, the Indus extends collective action theory because it provides a concrete example of revenue without rulers, contradicting the myth that revenue only exists when it is captured by rulers.

Why is the potential that an early urban society governed itself without a ruling class so challenging to political theory? After all, democratic deliberation, inclusive political processes, and checks on the concentration of political authority are ideals to which many governments today aspire. Task rotations, elections, and term limits are used now to serve to limit the concentration of political and economic power within a specific social stratum. Rulers are non-essential to many of the supposed outputs of good governance, and "non-elites" or everyday people often spearhead political actions in later societies (Thurston, this special topic). Fiscal systems, which require revenue, are evident in politically decentralized as well as centralized societies (Tan, this special topic). Perhaps it is because many contemporary (and especially Western) narratives of political change are implicitly self-congratulatory and want to see them reinforced in the origin stories of today's nation-state (Blanton et al., 2020). It was by no means pre-ordained that a ruling class would come to monopolize political decision making. Indeed, the opposite would more likely be the case. After all reciprocity is a human universal (Mauss, 1925; Sahlins, 1972; Bowles and Gintis, 2013), so it is unsurprising that the archaeological record records a concern for fairness through deep time (Jennings, 2021).

## CONCLUSIONS

In this article, I have argued against the assumption that public goods can only be gained by surrendering political agency to a ruling class. Addressing this issue is essential if we want to increase our understanding of good governance, which coordinates collective action for the benefit of everyday people (Blanton et al., 2021). The archaeology of the Indus civilization supports this strong association between collective action and good governance, and between good governance and egalitarianism. In the Indus, there is evidence that many different social groups coordinated their activities from the bottom-up and top down. Indus communities adhered to common standards in craft production and construction, which likely emerged through interactions between different households, neighborhoods, and guild-like organizations. Access to information, such as that which could be materialized using seals and sealings, was democratized, allowing substantial revenues to exist in a state of dispersal ensuring that political decision-making took many voices into account. However, Indus governance also incorporated institutions that facilitated mass deliberation and implementation, such as structures and spaces that could have facilitated deliberation and the implementation of collective aims. Bureaucratic institutions, such as civic authorities, that likely organized collective action at large scales to produce certain public goods, like large non-residential buildings, foundation platforms, and street plans, that were necessary for Indus cities to grow and thrive. In conclusion, I reiterate the argument, also advanced by the other authors of this special topic, that good governance is not limited to modern societies. The archaeology of the Indus civilization encourages us to further question the agency of rulers to the creation of public goods and consider the implications of the apparent linkage between good governance and egalitarian social organization.

## DATA AVAILABILITY STATEMENT

Publicly available datasets were analyzed in this study. This data can be found at: www.archive.organdlt.

## AUTHOR CONTRIBUTIONS

The author confirms being the sole contributor of this work and has approved it for publication.

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CONCEPTUAL ANALYSIS
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# Mixed Governance Principles in the Gulf Lowlands of Mesoamerica

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With antecedents reaching back to the Olmec era (1500–600 BCE), complex societies from CE 300–900/1000 in the Gulf lowlands display architectural and material culture indications of both authoritarian and collective governance principles over two large areas, each with a distinctive version of a common architectural layout. The two areas include multiple polities adhering to particular layouts of structures providing key urban services. Our information derives from pedestrian surveys and mapping covering about 5,000 km$^2$, plus remote sensing over 53,000 km$^2$. Remote sensing reveals the extraordinary extent and consistency of the predominant architectural patterns. Starting with the Olmec era and continuing to CE 600 some sculpture glorifies individual rulers, but, at the same time, architecture shows the importance of corporate groups and public access to services that represent a more collective emphasis. Between CE 300 to 900, monumental platforms that supported palatial residences indicate powerful elites and rulers. Long mounds located on each side of the main plazas likely supported multiple rooms used by corporate civic groups. In some centers, multiple plaza groups attest to division of authority across several factions, as do chains of plazas in other cases. Thus, both authoritarian and collective principles are built into the design of urban centers. The replication of common architectural patterns across the study area suggests open networks of interaction consonant with low-density urbanism in the tropics. We concentrate our discussion of governance in south-central Veracruz during CE 300–900, for which we have more complete data, and we more briefly characterize the larger temporal and spatial framework. Eventually these urban networks collapsed due to a complex set of factors, but one ingredient may have been increasing disparities in wealth and corrosion of collective action.

**Keywords: governance, autocratic, collective, archaeology, Gulf lowlands, Veracruz, Mexico**

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## INTRODUCTION

Since Wittfogel's (1957) publication of *Oriental Despotism: A Comparative Study of Total Power*, many ideas about ancient states formed a compelling contrast to modern democratic governments. Wittfogel's ideas about hydraulic management and powerful government resonated with a class system in the history of European monarchies. Neoevolutionists in anthropology recognized both authoritative (Service, 1971/1962:151–152, 1975:16) and exploitative (Fried, 1967; Carneiro, 1970) relationships that concentrated power in a few hands. Nevertheless, research on ancient states increasingly has shown organizational variety.

Initial cracks in the conceptual bias emphasizing rulers over the ruled came from the exploration of heterarchies instead of hierarchies (e.g., Ehrenreich et al., 1995) and factionalism (e.g., Brumfiel and Fox, 1994). Ideas about the coherence of states and their centralization of power were reexamined (e.g., Yoffee, 2005). An important thread in recent work is the recognition of variety in governance principles (or "strategies"). Another thread concerns tropical low-density urbanism. We bring these two recent subjects together in our Gulf lowland case study of mixed governance principles. We address the half of Veracruz south of the Sierra de Chiconquiaco (**Figure 1**), encompassing the south-central and southern areas traditionally separated by the Papaloapan River (Arnold and Pool, 2008:4). In the case study both autocratic and collective principles coexist and operate simultaneously in a widespread and relatively stable manner (see also Pool, 2010:100) and provide some points of contrast with low-density urbanism seen with the Classic Maya in Mesoamerica (e.g., Isendahl and Smith, 2013) and Khmer society in southeast Asia (e.g., Evans et al., 2007). There is more to ancient states than autocratic principles, which have been overrepresented in many traditional studies.

Degrees of representation of the two principles are recognized in Blanton and Fargher's (2008) comparative scoring of historically documented states, but we assess archaeological traits related to governance in Gulf societies, rather than scoring numerous cases. Archaeological cases may vary considerably in available evidence, making large-scale comparisons difficult. We address whether both principles are represented as a mix and whether shifts occur in their prominence over time in purely archaeological contexts. Many criteria adapted to historic sources to evaluate pluralistic representation in governance and the provision of services to the general populace are not directly feasible for archaeological cases (Blanton et al., 2021).

We describe an extensive, long-lived record of mixed governance principles in part of the Gulf lowlands in Mesoamerica. There, the settlement record of low-density urbanism shows differences in governance compared to similar urban patterns in the Maya lowlands to the east, where there was an emphasis on authoritarian dynastic rule. Architecture and its arrangements, sculpture, tombs, and ritual activities in the Gulf lowlands form the primary data; inscriptions associated with leaders are few and do not provide the rich basis for decipherment that is the case for the Classic Maya. Gulf sculpture and labor mobilization point to authoritarian rulers, particularly during parts of the sequence. Collective principles in governance are attested by architectural layouts that include buildings likely associated with institutional or, more precisely, corporate groups, such as councils or lineages, and by other traits addressed below.

We briefly examine early and transitional periods (1500–600 BCE; 600 BCE-CE 300, respectively) as antecedents but concentrate on CE 300–900, particularly in south-central Veracruz, for which we have more data than southern Veracruz. The quantity of archaeological excavations in the Gulf area lags far behind many other regions of ancient complex society. Future research has a key role to play in confirmation or correction of our interpretations.

## BACKGROUND

Blanton and Fargher (2008) used a sample of historically documented states to argue for a range of emphases in governance depending on the primary source(s) of state revenue, drawing on ideas advanced by Levi (1988). They considered authoritarian and collective principles, scoring societies on several measures. Authoritarian principles involve a centralized government with autocratic powers, tending to rely on external revenues and/or valuable resources easily sequestered. The central government does not rely on the populace greatly for revenue. Little investment in infrastructure is one consequence, and local groups take care of a range of local affairs. Collective principles involve more participation by the general population in decision-making, whether through representative councils or assemblies. Internal revenues are important for the government, and, as a consequence, the populace has some leverage to demand more public goods or services from the state. In ancient states, corporate groups may play important roles in representing segments of the populace in collective governance rather than general enfranchisements seen in modern democracies. In an earlier treatment of Mesoamerican governance, Blanton et al. (1996) proposed analysis in terms of network vs. corporate governance principles, with oscillations in which one predominates over time. Autocratic leaders operate through patronage networks, but in corporate governance, a larger array of people is represented in decision-making through memberships in social, kin, and political groups.

With these two fresh looks at governance in premodern states, a greater political variety is evident than had been appreciated previously. In particular, collective action was not accommodated by schema in which ruling groups dominated the formation and maintenance of states. The latter are highlighted in neoevolutionary proposals for changes from egalitarian societies to chiefdoms (in some formulations) or to class-based societies (in others), and then to states (e.g., Fried, 1967; Service, 1975). We add to the understanding of ancient governance with Mesoamerican Gulf lowland societies that are particularly interesting for the longevity and scope of mixed principles in governance.

Scholars have begun to translate the principles of collective vs. authoritarian governance to archaeological contexts (e.g., Fargher et al., 2010, 2011; Carballo and Feinman, 2016; Feinman and Carballo, 2018; Stark, 2021). Many valuable measures used by Blanton and Fargher (2008) for historically documented cases do not translate well into archaeology and tend over-rely on information about the capitals of states and the upper classes. Archaeological data potentially compensate for information usually missing in historical documents. In our study, regionally-oriented systematic survey and mapping, as well as remote sensing, document varied sizes and ranks of settlements as well as patterns of civic architecture over time and across space. In another example that draws on architecture, Small (2009) uses accompanying inscriptions to assess corporate and networking avenues to power within a Greek city. This Greek case study contrasts with the Gulf regional scale we use, but, similar to our study, shows an eventual decrease in the strength

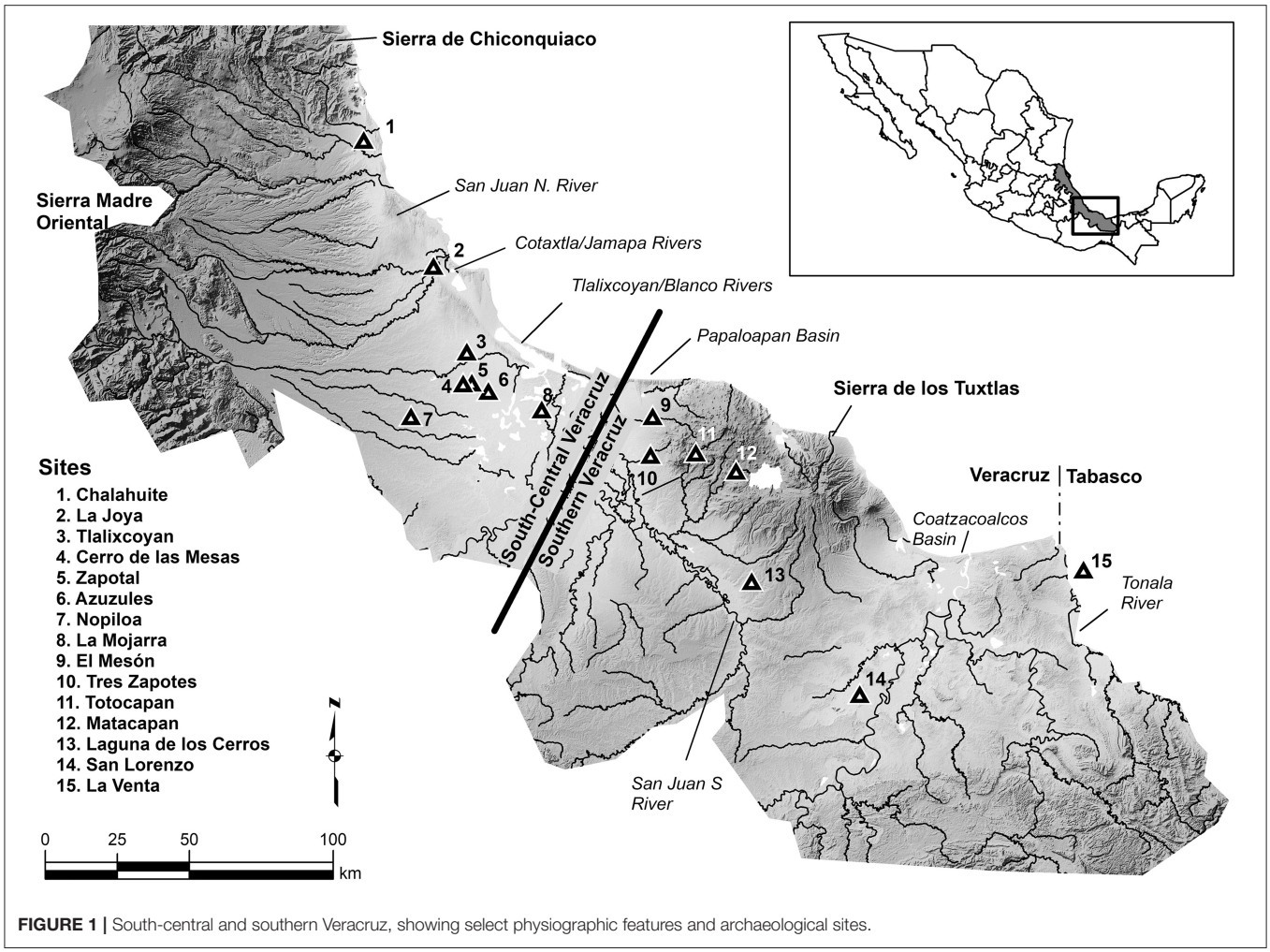


**FIGURE 1 |** South-central and southern Veracruz, showing select physiographic features and archaeological sites.

of corporate institutions. In both cases, a focus on mixed principles and their changing contexts is strategic for perceiving governance dynamically.

Subjects that we examine include (1) sources of revenue for polities (whether internal or external), (2) accessibility of plaza groups with key urban services (whether open or restricted), (3) placement of palatial platforms (whether part of urban cores or somewhat removed), (4) the presence and prominence of corporate architecture (whether present in the civic core), (5) ritual offerings in residences and in public structures (if rituals are distinct or similar), (6) sculptural and ritual themes (leaders vs. general cosmological principles), (7) investment in funerary temples (if temples commemorate leaders), (8) if exchange was open or socially restricted (the presence of a market system), and (9) the degree of centralization of resources, public services, and authority (whether concentrated at primary centers or more widely distributed).

Indications of authoritarian principles include tendencies to a reliance on external or sequestered revenue, more restrictive access to central services, palaces proximal to major public buildings, lack of prominent corporate architecture in the civic core, contrasts in state rituals and popular practices, imagery favoring leaders, funerary temples, highly restricted markets or lack of any market system, and highly centralized resources, services, and authority. Collective tendencies in governance, in contrast, are indicated by internal revenue, open access to civic plazas, palaces not amalgamated with civic plazas, prominent corporate architecture in the civic core, commoner ritual practices also present in major buildings, imagery emphasizing cosmological themes, lack of funerary temples, open market exchange opportunities for the general population, and more decentralized resources, services, and authority. Throughout, our essay about governance, evidence is presented for scholars outside our discipline; we keep archaeological details to a minimum but note sources providing more background.

## Brief Archaeological Overview

Initially, during the Gulf Olmec era 1500–400 BCE, sculpture and labor mobilization testify to strong rulers with important ties to ritual (see Pool, 2007 concerning the Gulf Olmecs). Apart from three major, partly sequential, Olmec centers and a few secondary centers (Cyphers, 2008), communal or corporate architecture takes similar but often simpler forms in the countryside and lacks leader representations and equally large-scale labor mobilization

(Inomata et al., 2021; Stoner and Stark, 2022). Later, CE 300–900/1000, two dominant architectural plans build upon Olmec era precedents and show great longevity until around CE 800. These two layouts show evidence of both authoritarian and collective governance principles and are our primary focus. See Ladrón de Guevara (2012) for an archaeological overview of the ancient Gulf coast.

Around CE 800, a process of collapse began that brought an end to the long-lived traditions. It changed the sociopolitical landscape profoundly, with a substantial reduction in Gulf population. Some localities witnessed settlement reorganization, and others, the immigration of highland groups (Stark and Eschbach, 2018). Since both the Maya lowlands and the south-central and southern Gulf lowlands experienced a collapse process at about the same time, yet each had different governance emphases, the demise of centers in these areas is not attributable entirely to governance but to a more complex set of interdependencies likely including resources and food production. Possible causes of collapse form a separate issue we do not address.

## Location and Data

Pedestrian surveys have generated comprehensive information on settlement patterns, from the largest monumental architecture to common residences (e.g., Santley and Arnold, 1996; Borstein, 2001, 2005; Killion and Urcid, 2001; Symonds, 2002; Symonds et al., 2002; Urcid and Killion, 2008; Stoner, 2011; Loughlin, 2012; Budar, 2016; Daneels, 2016; Stark, 2021). In areas not surveyed on the ground, satellite and lidar (light detection and ranging) remote sensing provide preliminary data on the distribution and configuration of monumental architecture (Stoner, 2017; Inomata et al., 2021; Stoner et al., 2021; Stoner and Stark, 2022). Remote sensing relied mostly on five-m horizontal resolution lidar scans flown across the entire southern half of Veracruz, publicly available from the Instituto Nacional de Geografía y Estadística in Mexico. In some instances, multispectral satellite images (WorldView 2 and 3) assisted in the recognition of architectural configurations, such as the presence of ballcourts. A data base was compiled that coded variables concerning structures and spaces of monumental plaza groups (Stoner and Stark, 2022). The database also drew on archaeological surveys covering about 5,000 $km^2$ of the 53,000 $km^2$ covered by remote sensing.

Through these data, we observe low-density agrarian urbanism forming a distributed urban network (Evans et al., 2007; Isendahl and Smith, 2013; Scarborough and Isendahl, 2020; Stoner and Stark, 2022). In low-density cities, occupation is interspersed with fields and gardens, and monumental epicenters are both widely and regularly distributed. Polities generally do not fit the model of relatively discreet city-state or kingdom territories. Settlement sprawls over a large area with monumental nodes distributed in a network that covers an entire region. Gaps in settlement are rare, but we can recognize cores of centers where the largest and densest arrays of monumental architecture are clustered.

Most of our study area comprises a tropical lowland environment laced with streams and rivers. Different landforms presented diversified agricultural opportunities. One basic agricultural pursuit for parts of the entire area involved extensive swidden fields. Swidden requires fallow periods and crop rotation to rebound from nutrient depletion. During the CE 300–900 period, however, many groups added more diverse and intensive agricultural techniques: raised fields in wetlands, limited terracing of hill slopes, and recessional planting in seasonal wetlands (Sluyter and Siemens, 1992; Heimo et al., 2004; Stoner et al., 2021). More intensive agricultural methods permitted somewhat larger population densities around some monumental centers (Daneels, 2020). Evidence of strategies to preserve wet season rain accumulations well into the dry season also dot the landscape. Stoner et al. (2021) identified canals linked to natural water catchment sinks. Several researchers have observed that the borrow pits excavated to obtain materials to build up earthen architecture were likely filled with water for much of the year (Daneels, 2020), and in some cases were also connected into networks of raised field canals (Stoner et al., 2021). In some areas, even common residential mounds are associated with small ponds that would have been useful for splash or pot irrigation (Stark and Ossa, 2007).

Preference was for residence close to agricultural fields. The horizontal expansion of this varied agricultural system, with activities shifting to different landforms seasonally, coincided with an equivalent sprawl of residences. Because settlement spread forced families farther from the monumental centers of public life, outlying people increasingly constructed smaller civic/religious plaza groups closer to their residences. Over the CE 300–900 span, this architectural proliferation led to a more decentralized pattern of interactions with new architectural nodes in the hinterlands duplicating key services formerly offered only in the older centers.

## Olmec Era Antecedents

Three partly sequential Gulf centers are renowned for the carving of multi-ton basalt monuments from stone blocks hauled up to 70 km from the Tuxtla Mountains, a low volcanic massif situated on the coast (see Pool, 2007 for synthesis about Olmecs). At the earliest center, San Lorenzo, massive leveling of a natural plateau represents a considerable mobilization of labor (Cyphers, 1997, 2012). Colossal heads carved in basalt show important individuals, linking these considerable labor investments to specific leaders. Other monuments feature supernatural themes, suggesting an important role for ritual in Olmec society. Later, at the center of La Venta, a tall earthen mound, buried offerings of mosaic pavements, and a tomb constructed of basalt columns, presumably for an important leader, constitute some of the spectacular remains. Tres Zapotes, a third Olmec center also produced sculpted heads and basalt columns, but it was especially active during the transition away from the Olmec style.

Recent discoveries show that when San Lorenzo and La Venta thrived, out in the countryside people were engaged in construction of extremely large public plazas, up to a kilometer long, but, with few exceptions (so far as known), without the investment in sculptures lionizing rulers. These long rectangular plazas are distributed across southern Veracruz and into Tabasco (Inomata et al., 2021) and show several

variants, but their proportions and plans resemble those of San Lorenzo and La Venta on a more modest scale of earth-moving. The plazas seem to represent a widespread mobilization of communities in construction of ritual places without all the trappings of centralized autocratic rule, although local leaders may have played roles in planning and coordinating the construction (see ethnographic Mapuche, Dillehay, 1990). Thus, the Olmec era now has evidence of collective activities represented by these countryside site plans, as well as the emergence of more autocratic leaders at a few big Olmec centers. Other archaeological evidence not detailed here contributes information about community- or household-scale ritual and economic activities not tied to authoritarian rule (Stoner and Stark, 2022).

The transition to later societies (CE 300–900) is not well-understood, in part because many of the centers built at that time continued in use with later rebuilding and additions. Tres Zapotes, though, provides helpful information. It had four plazas with a similar layout between 400 BCE and CE 300. The repetition of the Tres Zapotes Plaza Group suggests multiple segments in the settlement rather than a single centralized authority (Pool, 2008). Highly centralized authority seen in Olmec times had waned in favor of multiple groups with corporate functions—minimally the building and upkeep of structures.

## GULF POLITIES CE 300–900

In south-central Veracruz, by about CE 300, a distinctive architectural layout of structures around a plaza had appeared in south-central Veracruz. Daneels (2016:207–215) labeled the arrangement the Standard Plan because of its widely repeated canon (**Figure 2**). In her original definition a temple mound was positioned at one end of a roughly square plaza. Opposite the temple mound was a ballcourt for the Mesoamerican ballgame, a competition with cosmic symbolism of death and rebirth (sometimes a ballplayer or stand-in was sacrificed). Usually, long mounds were placed on both sides of the plaza, but occasionally only one with the opposite side left open. We refer to this as the Standard Plan Plaza Group (SPPG). Daneels includes in her definition the presence of a monumental palatial platform within 200 m, a subsidiary plaza, and often artificial ponds.

We concentrate on the main plaza, with its service functions: (1) temple rituals, likely in accord with the Mesoamerican calendar; (2) sport and ritual at the ballcourt, with an architectural court consisting of two elongate mounds with a narrow playing alley between them; and (3) an institutional role for long mounds, each likely representing a corporate group with rights to property and particular actions. Our analogy is multiroom long structures in the Maya highlands and lowlands, which provided locations for corporate groups, possibly important lineages or councils, to conduct affairs in a civic context. At Tres Zapotes, excavations on or behind three long mounds yielded some residential trash (Pool, 2008:129, 133, 138). SPPG long mounds may have housed permanent personnel and/or have been occupied periodically. (4) Plazas potentially hosted periodic markets, and evidence for market distribution of products is beginning to appear (Pool and Stoner, 2008; Stark and Ossa, 2010; Stoner, 2013; Ossa, 2021).

The SPPG arrangements, with little variation (Stoner and Stark, 2022), are spread across a large spatial extent, ∼7,500 km$^2$ in south-central Veracruz and across multiple polities (**Figure 3**). They endure until ca. CE 900. Typically, they are found at first and second ranked centers, but at lower ranked centers the strict canons of architectural planning are often relaxed or one or more ingredients of the SPPG may be missing, especially the ballcourt (Stark, 2021).

In most of southern Veracruz, a related arrangement is characteristic, the Long Plaza Group (LPG) (see **Figure 2**). It bears a close resemblance in its proportions to some of the Olmec era elongate plazas, but it is not as large and, typically, has an architectural ball court. A temple mound occupies one end of the plaza, and the opposite end may have a long mound, another temple mound, or a monumental platform. The sides of the plaza are occupied by long mounds (longer than the SPPG ones, and they extend to the ends of the plaza). The ballcourt is created by a mound flanking one of the long mounds outside the plaza (rather than the end of the plaza opposite the temple as with the SPPG). Not uncommonly, a chain of long plazas of diminishing sizes extends along the axial line, perhaps representing ranked groups or lineages. Some archaeologists have proposed a settlement hiatus between the Olmec occupation and the development of LPGs, assigning the LPG to the Late Classic period (Symonds et al., 2002; Borstein, 2005) but this time gap remains to be tested with a broader sample of radiocarbon dates. The total extent of the LPG group is hard to judge and, as with the SPPG, there are some variants, but the main concentration covers an area of ∼14,000 km$^2$ (**Figure 3**). Overall, fewer field investigations have studied the LPGs, especially excavations of key structures and documentation of surrounding habitations.

## EVIDENCE RELATED TO GOVERNANCE PRINCIPLES

We address each of the categories of evidence mentioned at the outset, noting whether it points to autocratic or collective principles in governance. Blanton and Fargher (2008) show that societies vary in the degree to which they express either principle. Polar contrasts are not typical.

### Sources of Revenue for Polities

Comparative studies indicate that revenues from internally produced wealth that is not localized and readily sequestered tends to promote more collective action in governance (Blanton and Fargher, 2008). We assess Gulf lowland resources valued in Mesoamerica and how localized they were.

#### South-Central Veracruz

South-central Veracruz was a major cotton producer in Aztec times according to ethnohistoric documents from the time of the Spanish conquest, and fiber processing implements suggest widespread production at commoner households during the period considered here (Stark, 2020). Cotton was in wide demand

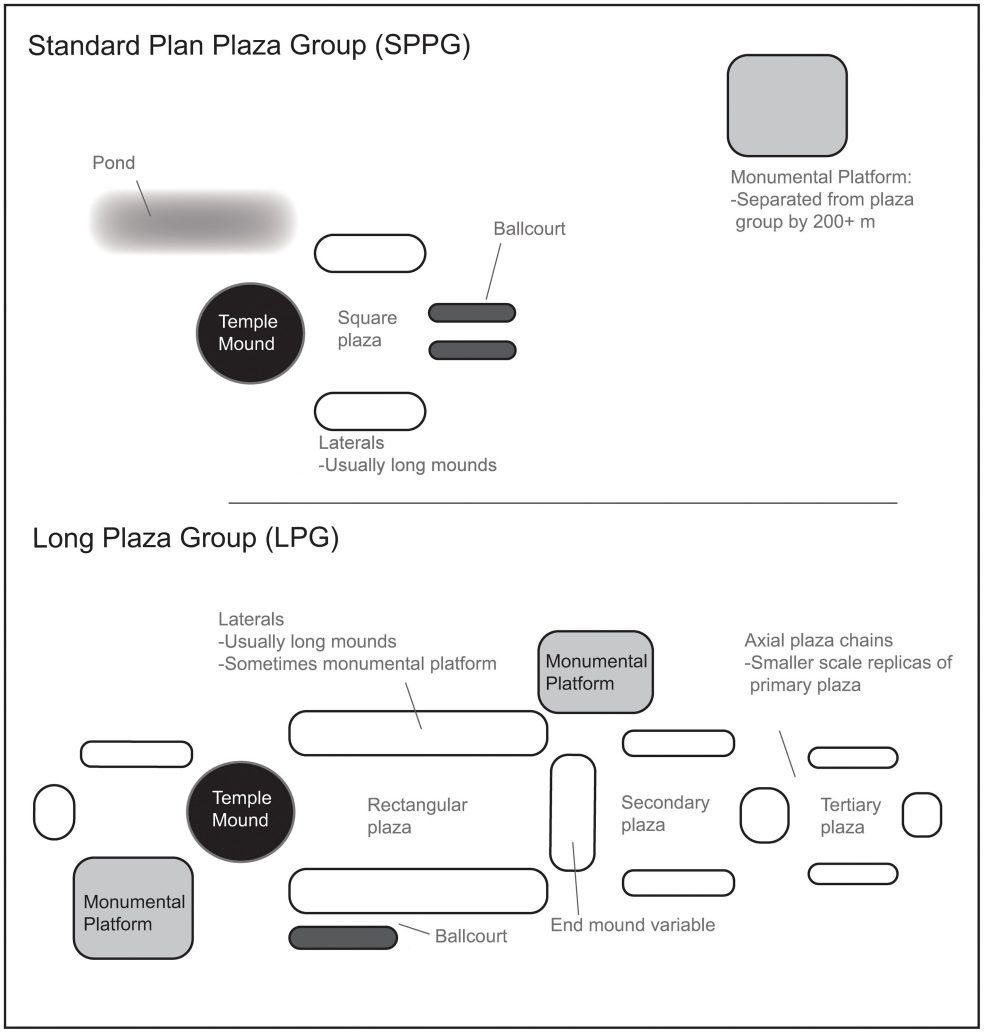


**FIGURE 2 |** The Standard Plan Plaza Group (above) and the Long Plaza Group (below) in idealized diagrams.

in highland areas where it did not grow, and it provided a basis for trade (e.g., exchange for highland obsidian for cutting edges and volcanic grinding stones to process corn into flour). Cotton was a basis for internal production of agricultural wealth in south-central Veracruz. Evidence shows that spinning cotton into thread took place in common residential contexts, evading centralized control. Other valued tropical resources for both south-central and southern Veracruz included feathers of colorful birds, jaguar pelts, rubber, cacao, liquidambar, honey, and seashells. Like cotton they were not highly localized and could be obtained by a variety of people. Because of reliable seasonal rainfall and possibilities for agricultural intensification in wetlands (e.g., raised fields), foodstuffs could be widely produced (Stoner, 2017; Stoner et al., 2021). In the Tlalixcoyan Basin in south-central Veracruz, Stoner et al. (2021) observed that maintenance and regulation of impounded waters and field drainage for raised fields appears to have been distributed among public plaza nodes representing localized cooperation among farmers rather than centralized control.

To an unknown extent, elites or rulers may have played a key role in arranging "foreign" exchanges with high-ranking people in highland polities or in arranging access to distant markets there. Nevertheless, it seems unlikely they had a stranglehold on long-distance exchanges in view of the widespread access to imported highland obsidian and metates used routinely by commoner households. Grinding tools for processing maize do not seem to have come to south-central Veracruz from the nearby Tuxtla Mountains. Recent Gulf research indicates open exchanges, such as would occur in market contexts (Pool and Stoner, 2008; Stark and Ossa, 2010; Stoner, 2013; Ossa, 2021). We presume that Gulf elites and rulers required in kind taxes and labor from commoners, but they also may have had their own lands with attached client farmers. A proliferation of polities, most of them not too different from one another in the amount of monumental construction, suggests that it was difficult for rulers in any one polity to amass wealth and power far beyond the scale of their neighbors, an indication that valued products could not be accumulated in an extremely disproportionate manner.

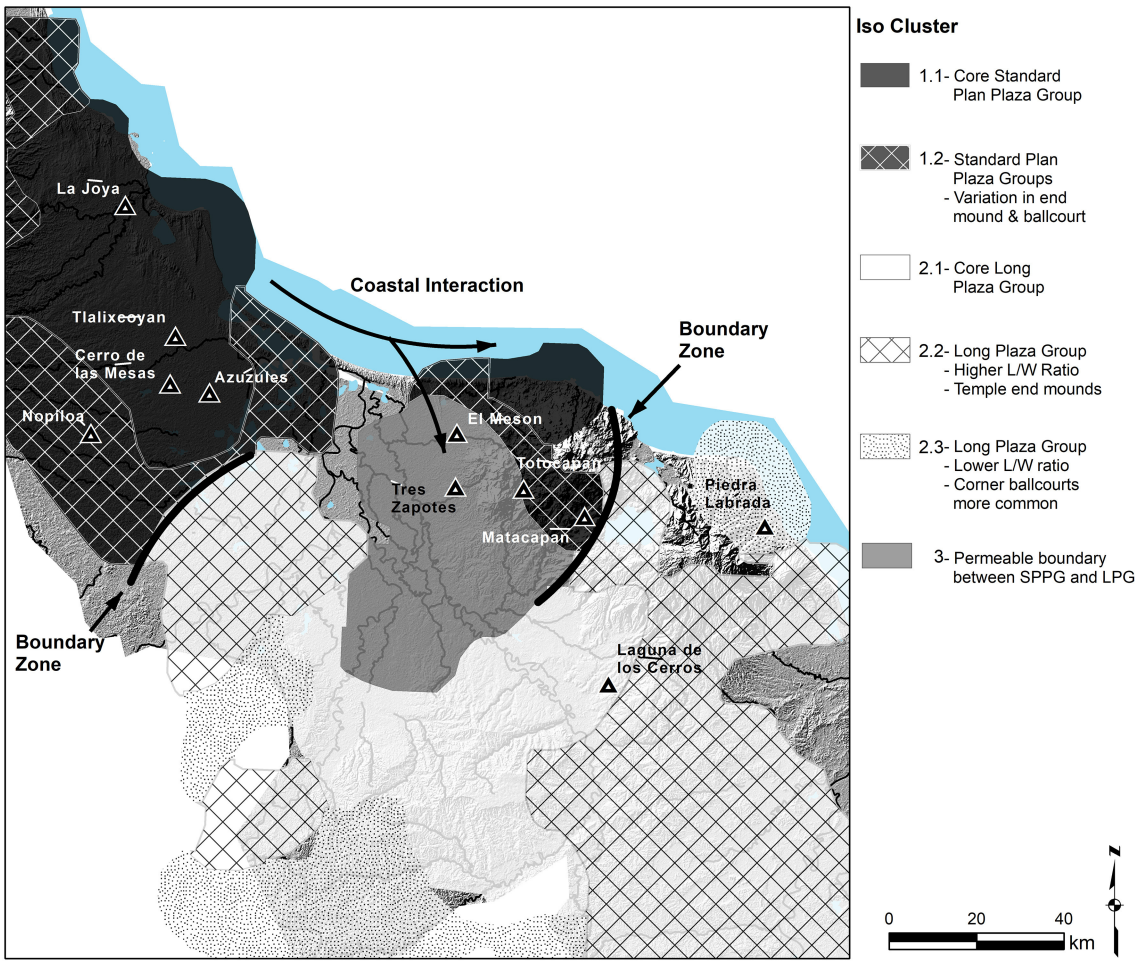


**FIGURE 3 |** The distribution of Standard Plan Plaza Groups and variants and of the Long Plaza Groups and variants in south-central and southern Veracruz.

### Southern Veracruz

We lack relevant archaeological data for most of southern Veracruz (Hall, 1997 is an exception), but cotton could have been grown there [although not as well as in south-central Veracruz, which has less winter rain (Stark et al., 1998)]. Some other traits are similar to south-central Veracruz, such as widespread agricultural production, widespread availability of valued fauna, and an extensive network of comparable centers.

## Accessibility of Plaza Groups

Whether public core buildings and services are readily accessible is one indicator of whether they serve the general population or are more exclusively controlled by privileged governing authorities (Feinman and Carballo, 2018:10).

### South-Central Veracruz

Particularly in the SPPG layouts, entrance to the plaza and its urban services is relatively unimpeded at the four corners of the plaza. The SPPG are not surrounded by walls, and residential mounds typically occur nearby. The vast majority of plaza groups in the region are in easily accessible on ground level in valley bottoms or on terraces overlooking floodplains. Very few are elevated on natural or artificial rises, which might restrict access to the populace. Thus, spatial patterns allow the populace access to the plaza to witness ceremonies or assemblies. Political strategies likely favored attraction of large gatherings: an inclusive rather than exclusive principle. The SPPG ballcourts have limited opportunities to witness the game because the court lies between two closely spaced flanking mounds which restrict viewership (Stark and Stoner, 2017). The number of people who could be accommodated with a good view of the game is only about 10% of those who could assemble in plazas to witness processions or ceremonies on a temple mound. Ceremonies and processions before or after the game may have been held in the adjacent main plaza, however, and widely viewed. Overall, the abundance and relatively close spacing of SPPGs points to convenient access to their services.

### Southern Veracruz

The LPG plazas have somewhat more restricted access because the long lateral mounds extend along the length of the plaza, but people could still file into the plaza at the four corners. The

LPG plazas also lack surrounding walls or other restrictions to access. As with the SPPG locations, the LPG are readily accessible in valley bottoms or on terraces. The LPG plazas on average are longer but narrower than the SPPG plazas, and thus have less area to accommodate people, but the differences are not great. Viewership of LPG ballcourts has not been measured but should be somewhat higher than for the SPPG ballcourts because one of the sides of the playing field is bounded by a long lateral mound, usually longer and taller than the opposing ballcourt mound. The use of a plaza long mound on one side of the court suggests that the group represented by the long mound had a particular role in construction or maintenance of the court and in viewing the game. If so, the position of the court reflects a more proprietary relationship than in the SPPG.

In cases of chains of LPG plazas, multiple plazas accommodated what likely were somewhat distinct crowds, perhaps representing different districts or lineages. In sum, both the SPPG and LPG arrangements provided urban services that were accessible to the population, but the LPGs are less open and the ballcourts are possibly sponsored by a particular corporate group. The profusion of centers offering similar services also suggests good access for the populace.

## Placement of Palatial Platforms

The centrality of palaces is a trait identified by Carballo and Feinman (2016:292) as sensitive in respect to the degree of collective action in governance. If palaces are not central in settlements, collective action is likely to be higher. We discuss the degree to which palaces are adjacent to or contiguous to the main plazas of centers.

### South-Central Veracruz

In the CE 300–900 interval, monumental palatial platforms are usually associated with rank 1 and rank 2 SPPG centers where pedestrian surveys have yielded a settlement hierarchy (e.g., Daneels, 2016; Stark, 2021). These platforms often have additional mounds constructed on top, usually including a long mound that may have supported a row of residential rooms. The structures on top of the platforms may have been used for residential, ritual, and administrative activities. Excavations at La Joya show diverse functions for rooms and spaces, some residential, some for audiences, and one room where maize was stored (Daneels, 2011:465). The SPPG monumental platforms vary in size but commonly are large, usually slightly longer than wide. Among 50 platforms mapped in one project (Stark, 2021), half were 90 m or more in length and 30 were 5 m or more in height. The scale of the earthen platforms indicates wider labor mobilization than the elite household. The residents may have been royals, collaterals, or other elite persons.

Monumental platform placement in the SPPG arrangement is at distances between 200 and 1,000 m from the main plaza. This physical separation from the nucleus of urban services indicates a degree of separation of wealthy families and/or authoritarian rulers from important civic life. Although it is likely that rulers helped commission and organize some of the construction around SPPG plazas, those spaces also hosted corporate groups with a prominent civic position. The two poles of authority provide evidence of a mix of governance principles.

At lower levels in the SPPG settlement hierarchy, 3rd and 4th ranked centers typically lack either ball courts or monumental platforms. They also tend to deviate from the rigid adherence to the SPPG layout principles. The long mounds that may represent key groups are still present along with temple mounds, but the lower-order settlements have little evidence of local authoritarian leaders because of the lack of carvings and monumental platforms in all but a few cases, and they likely operated on a more collective community basis.

### Southern Veracruz

As was the case in south-central Veracruz, monumental platforms are typically found at rank 1 and 2 plaza groups. LPG plazas differ from the SPPG arrangements, however, because monumental platforms are typically placed fronting the plaza or at its corners. This close association suggests a greater role for leaders in supervising and organizing public activities. Lidar imagery shows that in some cases of chained plazas, there are multiple monumental platforms, likely an indication of divided rule, with important persons in lower-ranked plazas playing some roles in decision making. We see this as a variant of the segmental patterns mentioned earlier for Tres Zapotes.

## Presence and Prominence of Corporate Architecture

A prominent position of structures representing corporate groups in civic centers is an indicator of the degree to which they played a central role in public affairs. This expectation is analogous to the one above concerning the placement of palatial residences. A few Maya centers have a possible council house fronting an important plaza in the center (if not the main plaza) and interpreted by Stomper (1996:246–294) as representing elite councilors to dynasts. In the most thoroughly studied example at Copan, Stomper (2001) notes the council house was created during a possible time of dynastic change, not a constant structure at the center.

### South-Central and Southern Veracruz

Interpreted as structures representing corporate groups, the lateral mounds in both the SPPG and LPG are among the defining structures for the plaza group arrangements. In the case of the SPPG, they usually are present as two lateral mounds, but sometimes only one, especially at low-ranked centers or in subsidiary plazas within some later settlements. In the western lower Papaloapan basin, single laterals are more common in the CE 600–900 interval than earlier, suggesting a decline in the representation of collective actions (Stark, 2016). In contrast, the LPGs rather consistently have two lateral long mounds, but one may have a ballcourt alongside (but outside the plaza), suggesting a role for people connected to that lateral in oversight or maintenance of the court. With chains of LPGs, the higher number of long mounds suggests factions but also a larger-scale integration of groups. Both the LPG and SPPG arrangements feature corporate group architecture consistently in prominent positions in the main civic plaza(s), and this key positioning holds

throughout the CE 300–900 urban tradition, contrasting with the patchier evidence of council houses with the Maya.

## Ritual Offerings in Residences and Public Structures

We lack a comparative analysis of patterns of ritual dedicatory or termination offerings at public structures in relation to governance, but, in the study region, differences in the distribution of popular vs. restricted offerings offer evidence about participation in events at centers. As with the ease of access to civic complexes, such patterns can help assess the exclusiveness or inclusiveness of civic structures, which in turn may signal whether autocratic or collection principles predominate.

### South-Central Veracruz

Information differs in two drainages in south-central Veracruz where the SPPGs are common, but we have no data concerning ritual offerings for the LPGs in southern Veracruz. In the Cotaxtla-Jamapa drainage, a particular kind of ceramic figurine (*dios narigudo*) is often buried in grouped arrangements, sometimes in a shallow vessel as dedicatory offerings in palatial platforms (Daneels, 2010). These offerings occur in ordinary residential contexts as well (Daneels, 2008:65–69). This figurine style is not found in the western lower Papaloapan basin, where the Tlalixcoyan, Blanco, and other rivers flow toward the lagoons and swamps at the mouth of the Papaloapan. Instead, other figurines are characteristic, such as the "smiling figurines" (*sonrientes*) (Medellín Zenil and Peterson, 1954). Sonrientes have been recovered from residential excavations (Stark, 2001:188) and from burials in monumental structures at the site of Zapotal (Torres Guzmán, 1972:5). Although the figurine styles are different, in both drainages the presence of particular figurines in residential and public monumental contexts indicates a degree of integration of commoner ritual practices in rituals connected with monumental structures. Such broad participation is in keeping with a degree of involvement of the general population in civic and ritual affairs and a collective emphasis in governance.

In contrast to the figurine evidence, Daneels (2017) notes from her excavations at La Joya and from published reports, mainly from south-central Veracruz, that human sacrifice in dedicatory deposits for monumental structures is almost entirely confined to rank 1 and 2 centers. She interprets this pattern as an indication of a state cult separate from the ones related to figurines. These sacrificial deposits suggest a dichotomy in ritual and a link to higher level authorities who likely played key roles in orchestrating the building labor. Overall, ritual evidence is split, with some aspects pointing to collective and others to authoritarian principles. The contrast does not conform exactly to a contrast identified by Brumfiel (1998, 2001) between Aztec state ideology and commoner ideology as expressed in figurines. Aztec commoner figurines were not incorporated into state rituals, and household rituals generally emphasized subsistence themes, not warfare and sacrifice that were prominent in Aztec state rituals.

## Sculptural and Ritual Themes

Sculpture or other public imagery that prioritizes individual leaders and their ancestry to legitimize rule point to autocratic principles in governance. Conversely the prominence of mythic and cosmic themes apart from rulers presents more universal messages that may underwrite the polity. These two emphases are distinguished by Carballo and Feinman (2016:292).

### South-Central and Southern Veracruz

In Olmec times, portrayals of leaders are prominent but other works feature sacred imagery of supernatural realms or creatures. The Formative plazas out in the countryside shown in remote sensing have not produced stone sculpture (widespread modern farming and ranching activities make it unlikely that stone monuments are common at these plazas because they have not been reported).

Monument carving continued from 600 BCE to approximately CE 1 in the Tuxtla Mountains at Tres Zapotes in the eastern lower Papaloapan basin (Pool, 2010) and later at other sites in the lower Papaloapan drainage, such as El Mesón, La Mojarra, and Cerro de las Mesas. The last center gained its greatest extent during CE 300–600 and continued to produce stone carvings, some of them showing leaders accompanied by Long-Count calendar dates and writing (Stirling, 1943; Justeson and Kaufman, 2008). This continuation of carvings lionizing leaders at Cerro de las Mesas is not typical elsewhere in south-central and southern Veracruz. By CE 600–900, two successor primary centers in south-central Veracruz each produced only one or two stone monuments (Nopiloa and Azuzules). Leaders are not shown (but the stelae from Azuzules are uncarved—perhaps stuccoed or painted surfaces have been lost). Elsewhere, stone monuments are not reported from the myriad SPPG centers, nor from LPG centers. Thus, for most of Veracruz, stone carving featuring leaders is not present CE 300–600 and, even in the area dominated by Cerro de las Mesas, it wanes after about CE 600. This signature of authoritarian power at major centers undergoes a marked process of decline following the Gulf Olmec era.

## Funerary Temples

In the Maya lowlands, some pyramidal platforms for temples were also funerary mounds containing the tomb of an exalted ruler (Coe, 1956). Lucero (2007) mentions the funerary temple mounds were not very common, however. Like the Maya carved monuments and inscriptions recording events in the lives of rulers, they point to authoritarian rule.

### South-Central Veracruz

The presence of funerary temples for exalted rulers is uncertain for the Gulf lowlands. Few Gulf temple mounds have been excavated by archaeologists with modern methods, so information is scarce. In one case, a burial of an important person was encountered at La Joya associated with temple mound construction (Daneels and Ruvalcaba Sil, 2012). In view of the amount of looting of monumental structures in the region (including southern Veracruz), the evidence is meager for a strong funerary mound tradition. Local people

often report looting, prompting investigation by personnel from national archaeological institute that governs archaeological and historical sites.

## Open or Restricted Exchange

Blanton and Fargher (2010; 2016:260) argue that a market system with open access for exchange is an economic asset to households and tends to occur with more collective emphases in governance. Open exchange in markets affords families flexible opportunities to exchange their products for other items. Marketplaces can be hard to locate because ephemeral stalls may be erected in a plaza, and meticulous excavation is required to obtain chemical or mineral residues or postholes to indicate market stalls (Coronel et al., 2015). Nevertheless, two categories of information suggest that market systems, likely periodic markets, existed CE 300–900 and continued to the Spanish conquest (CE 900–1521).

### South-Central and Southern Veracruz

One category of evidence is specialization in production. Obsidian tool manufacture, pottery manufacture, and salt production have been detected that suggest production beyond household needs coupled with a distribution system that supplied many households with utilitarian items (e.g., Santley et al., 1989; Stark, 1989; Barrett, 2003; Santley, 2004; Pool and Stoner, 2008). For the interval CE 300–900, some studies have examined fall-off patterns around centers in the incidence of products at households to argue for open exchanges in a market system (Stark and Ossa, 2010; Stoner, 2013; Ossa, 2021). Although less visible architecturally than temples and ballcourts, market activities would have been an important service at centers.

## The Degree of Centralization of Resources, Public Services, and Authority

Blanton and Fargher (2008) use the prevalence of public goods as one trait linked to more collective governance. Highly centralized services will not be convenient to the population in low-density urbanism because people are spread out. If the population is spread out to take advantage of agricultural resources but central authority and civic structures are nucleated, the latter will mainly serve commoners in the immediate vicinity of the capital and associated elite and ruling groups. Centralization concentrates services at the primary center and would be congruent with more authoritarian governance.

### South-Central and Southern Veracruz

Our remote sensing database shows that plaza groups, ranked by size of structures, associated secondary plazas, and service facilities such as ballcourts, are widely distributed (Stoner and Stark, 2022). The average distance between rank 1 plaza groups, the largest in each area that provide the full range of services as evident from the building inventories found there, is 9.8 km. If space is apportioned to each rank 1 plaza group according to Thiessen polygons, each encompasses a variety of lesser ranked plaza groups in the space allocated to them. The overall picture shows a proliferation of various ranks of centers and a relatively close spacing of plaza groups, affording families the opportunity to attend events not only at the higher-ranked plaza groups nearest to them but also those in neighboring areas. Buildings for key public services are repeated at multiple plaza groups, not centralized at one or a few centers.

Mesoamerica lacked draft animals and wheeled vehicles, and various studies identify a 30 km radius as the distance feasible to walk to a location and return the same day (e.g., Drennan, 1984; Hansen, 2000; Rosenswig, 2021). Gulf Classic period rank 1 plaza groups are more closely spaced. Across the study area, the average walk to the nearest rank 1 plaza group is $< 5$ km (roughly half the average spacing between them), and 1.25 km when plaza groups of all ranks are considered. Social and kin relationships were likely maintained across plaza group service areas. The standardized layouts would have promoted inclusion of visitors from neighboring areas by using recognized architectural patterns. Further, there are few signs of any defensive architecture or defensive site positioning, commensurate with an open network.

Agricultural fields also point to local controls. Tlalixcoyan and Blanco wetlands in south-central Veracruz have abundant raised fields. Lower-ranked centers are distributed through the area and could have provided local community coordination of canal and reservoir maintenance (Stoner, 2017; Stoner et al., 2021).

# DISCUSSION

Several categories of evidence during the CE 300–900 interval support the idea of both authoritarian and collective governance principles. From the Olmec era through CE 300–900, indicators of collective voice are fairly steady in their presence (with different manifestations) even though there are signs of shifting emphases over time according to parts of the study area. Governance strategies employed at and near the top of the settlement hierarchy do not correspond closely with those that are emphasized at lower levels, where less authoritarian activity is indicated.

Throughout the transition into and during CE 300–900, our most consistently available data are architectural and support the idea of corporate groups participating in governance—perhaps gaining ground as the sculptural investments focused on leaders declined. Nevertheless, palatial platforms continued to be built and renovated. They testify to the presence of wealthy powerful families, some of whom undoubtedly played important roles as leaders or rulers, perhaps partly sponsoring and also organizing some of the civic construction. In the SPPG case, palatial residences seldom front the main plaza and are located at varying distances away, but in the LPG arrangements monumental platforms were closely integrated, suggestive of a stronger role.

Eventually, during CE 600–900, there are indications that collective political action weakened. In survey in the western lower Papaloapan basin, plazas with a single lateral long mound, rather than two, became more common, possibly reflecting a drop in collective representation in civic affairs (Stark, 2016, 2021). Also, palatial monumental platforms proliferated, many of them likely representing headquarters of estates of important

families (Stark, 2021). A shift toward more authoritarian power (perhaps oligarchic) and increasing wealth differentials may have heralded social strains before the collapse of the urban network. Nevertheless, LPGs proliferated during CE 600–900. LPGs have palatial monumental platforms positioned facing the main plaza or in a corner of the plaza, allowing closer oversight. As noted, the plazas are not as open as in south-central Veracruz, and the ballcourt is positioned alongside one of the long lateral mounds, perhaps a sign that one public function had come under the oversight of corporate groups.

Key questions remain concerning how and why political and economic power tilted back toward elites (in at least some locations) late in the long tradition of a mix of principles. We lack the archaeological data necessary to address these questions, but one possibility is the acquisition of more land by prominent elites who relied on client farmers to produce food and valued products (see Klassen and Evans, 2020:4, for a related process in the Khmer Angkoran realm). Archaeologists will need precise building sequences and dates to assess the roles of monumental platforms as estate headquarters. All the categories of monumental structures, including at different settlement ranks, warrant careful excavations to assess their functions, any ritual deposits, building sequences, timing, and labor investments. Evaluation of the economic well-being of a range of households over time will also provide significant data to determine how commoners fared.

In terms of collective action as an important principle in ancient societies, the Veracruz archaeological record corresponds relatively well to a persistent mix of principles. There is no indication of inherent instability, but the balance is dynamic. Was the Gulf area an example of "good" government? We avoid the "good" label in general, but note that the centers show the presence of both elites and important corporate civic groups. The proliferation of a network of centers diffused autocratic power, rather than centralizing it, and produced a political and social mosaic of checks and balances and interdependencies. See Martin (2020:esp. 374–378) for an argument about a political balance of power among Classic Maya polities, but he includes a role for conflict and warfare that is not yet documented at the same scale in the Gulf area.

The profound changes starting around CE 800 seem to lend support to the suggestions by Blanton and Fargher (2010) that complex societies emphasizing collective principles are more vulnerable to collapse, but neighboring Classic Maya centers and their authoritarian royal dynasties also underwent collapse. Inversely, Pool and Loughlin (2015) attribute the earlier resiliency of Tres Zapotes, compared to other Olmec centers that declined, to a shift to more collective governance. Polities decline or collapse for many reasons, and as yet we lack sufficient data to assess these processes in relation to collective action. We suggest analyses of interactions among low-density urban centers across a broad regional framework to determine if these inter-dependencies rendered them more susceptible to a spread of problems across the network.

Although many of the criteria for evaluating collective action and governmental accountability mentioned by Blanton et al. (2021) as part of their essay about good government are inaccessible for a purely archaeological case, there is nevertheless striking archaeological evidence for a mix of principles. As yet there is no equivalent cross-cultural schema for evaluating archaeological cases to Blanton and Fargher's (2008) framework, but Feinman and Carballo (2018) advance several criteria, and some of the criteria we employed can be applied to or reformulated for other cases. The research question shifts in our case study, from scoring a sample of polities with the same criteria to asking what criteria can be applied to available evidence and for which governance principles is there strong evidence. We examined variation spatially and temporally (the SPPG and LPG patterns and their antecedents). With over 2,000 years of a mix in governance principles on the basis of architectural and other evidence, the Gulf record is not easily subsumed in traditional neoevolutionary schema. Our regional data contribute to the indications that substantial internal revenue corresponds with considerable collective action in governance because of widespread production of both foods and tropical items valued in external exchange. We also point to low-density urbanism as a particular framework for examining governance because at a regional scale it accommodates interdependencies and a degree of checks and balances among polities and powerful individuals within them.

Comparative data for Angkor in Cambodia and for the lowland Classic Maya are too complex to discuss in detail, but a few points show the challenges and potential for comparisons. The prevailing settlement patterns involve low-density urbanism, but there is more evidence from Maya and Angkor research for some particularly large and sometimes denser centers (see, e.g., Evans et al., 2013; Hutson, 2016). Nevertheless, in both cases population and smaller civic-religious centers spread out across the countryside. All three examples of low-density urbanism encompass important internal variation, which is still being actively addressed by researchers. Only the Gulf area is characterized by extensive repetition of architectural layouts, which may signal a greater intensity of cross-cutting relationships (but relevant lidar data about outlying nodes in the Angkor realm are not yet assessed).

Each comparative case has evidence of authoritarian principles (e.g., for Angkor, Carter et al., 2021; for the Maya, Freidel, 2012; Martin, 2020). Because of the amount of research focused on major centers and associated inscriptions, both Angkor and the Maya have well-documented powerful rulers and centers. Evidence for collective action has yet to be assessed consistently for them. Collective action is addressed indirectly for Angkor and the Maya by arguments in favor of a degree of local independent action. Both have more evidence of infrastructural investments in roadways or hydraulic features than we have detected for the Gulf area (greater infrastructural investments and other public goods have been argued by Blanton and Fargher (2008:133–164) to be associated with more collective action). In parts of the Gulf lowlands and in the Angkor realm,

smaller local nodes for water management likely contributed to the proliferation of collective representation, but not all the Gulf lowlands nor most of the Maya lowlands had a similar scale of water management for food production. All three display an important role for internal resource production, associated cross-culturally with more possibilities for collective action. In short, continued attention to interest groups and decision-making and actions at different levels is warranted. We suspect that the regional-scale interdependencies among communities and centers, characteristic in low-density urbanism and rooted in ecological conditions, contributed to a diffusion of authoritarian power that accommodated a degree of collective action. In the Gulf case, expressions of collective action can be detected over an extremely long time and with a relatively prominent role.

## AUTHOR CONTRIBUTIONS

BS designed the initial organization of the manuscript. BS and WS contributed relevant data and drafted sections of the manuscript. Both authors contributed to manuscript revision, read, and approved the submitted manuscript.

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# Reversals of fortune: Shared governance, "democracy," and reiterated problem-solving

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What can the deep past tell us about how "good government" is instituted, replicated, and maintained through time? After a comparative look at late prehistoric political formation in Europe, a case study from Sweden is examined. During the Iron Age, systems of participatory governance developed across Europe, perhaps in response to the autocracies of the previous Bronze Age. Heterarchical structures with systems of checks and balances provided voice for ordinary people, as well as leaders, but there were clear "reversals of fortune," as autocracy and more egalitarian structures were interspersed through time. The so-called "Long Iron Age" is consequently seen as an extended period of tension between different forms of government, different political ideologies, and the dynamic negotiation of socio-political norms, with repercussions that extend into recent times.

KEYWORDS

**democracy, contingency, Iron Age, medieval, Europe, Sweden, political violence**

## Introduction

> *"Whenever I want to make some sort of a change for the better in administration, they straightway take to their pole-axes, and send round the bidding stick*[1] *and most of all the Dalecarlians, who boast that they made me king, and are therefore entitled to immunities which no subjects should dream of claiming—they think that they ought to have the management of the State."*

What can the deep past tell us about how "good government" is instituted, replicated, and maintained through time? Feelings of what is fair—or "fair enough"—vary highly across societies, but in one form or another, seem to be a human social imperative

1 Budkavel (Old Swedish) were special torches, sent in all directions to rally people to assemblies, defense or rebellion. Magnus (2018) relates that those who did not bring the stick to the next village would be hanged and their homesteads burnt down.

(Ensminger and Henrich, 2014). How does a government reflecting—or tearing down—such culturally constructed notions come to be, and once in place, how does it persist?

To explore this question, this case study from Sweden will stretch back into the European Iron Age and forward into current times. The quote above comes from midway through this trajectory: a 1527 letter of Gustav Vasa, recently crowned king of Sweden. It might be imagined as the unremarkable complaint of a contemptuous ruler about some troublesome villeins. However, if carefully unpacked, it tells the story of over 2,500 years of political tension.

Vasa attained the throne, to which he was elected rather than born, only through the agency of these peasants, based on millennia-old social norms of shared governance. Soon after, Vasa seized them at traditional assemblies like the one where he had recently begged for their aid in throwing off foreign rule and avenging his murdered father, who had been seized at an assembly and killed by another king, who objected to the successful, long-term rule of Sweden's secular, non-royal administrators.

Throughlines of shared governance appear in many other ancient states, but a case study of Sweden is remarkably apropos; today Sweden is often held up to exemplify a model society with a responsive government and relatively little social stratification. This is of course more or less debatable (Syvertsen et al., 2014; Iqbal and Todi, 2015), but if we accept the general premise, we find that scholars trace the Swedish penchant for distributed power to various potential "beginnings."

One of these is *Folkhemmet,* the period (1932–1976) when modern social democracy was established (Hirdman, 1995; Stråth, 1996). Others say it began during the later nineteenth century's labor unionism movements (Schön, 1982). Or was it the eighteenth century era of parliamentary rule, 1718–1772, called the "Age of Liberty" (Alestalo and Kuhnle, 1986; Rojas, 2005; Árnason and Wittrock, 2012)? Or did it begin with the numerous charters and constitutional documents of the 1300s, which claimed liberties and limited royal power that continued to be tweaked and amended into the early modern period (Rojas, 2005; Hervik, 2012; Korpiola, 2014)? While these are all important waymarkers, none constitute a "beginning." If we seek something like a starting point, it is more likely traceable to the Iron Age, which, in this region, means 500 BCE—700 CE (Thurston, 2019a,b). Each waymarker was a response to a loss or erosion of rights in an extremely long, continuous political negotiation.

Shortly, we will look at the archaeological evidence for traditions of power sharing between rulers and ruled from the early Iron Age and into the so-called 'Viking Age' and beyond – the election of rulers, the existence of a common assembly, the primacy of law, the proscription of abusive leaders. The existence of these institutions in the Iron Age is not debated, they are common knowledge among historians, archaeologists, and the interested public.

What is rarely espoused is continuity between the deeper past and today, because, unlike historic and recent times, documentary transcripts are sporadic or lacking. There is archaeological evidence to fill in the gaps, but most archaeologists are unwilling to suggest such long-term continuities. Here again, Sweden, Scandinavia, and several other regions of Europe are among the global cases presenting optimal types of data, perhaps allowing us to extrapolate more widely.

This leads to the conceptual question at the heart of this offering. Once such governmental traditions and structures were originally won, can past people remember the history of their political struggles, or are they compelled to relearn the same lessons from scratch repeatedly, not for over a few generations, but for 1,000 years or more? Not a mythologized oral tradition, but a set of understandings about the rights achieved by their ancestors and their relationship with past leaders or rulers? Conceptually, it is not hard to reply that it can be achieved through the institutions of shared governance themselves, in which the issues and debates were *reiterated* over and over in a continuous cycle as each new challenge, coming in quick succession, was presented, especially where local or regional assemblies have deep histories and members maintain traditions of gathering regularly to discuss, debate, and/or legislate.

## Archaeological approaches to governance

First, I briefly contextualize the case study (but see Thurston, 2010 for a fuller discussion). In hindsight, twentieth-century archaeologists did not do well with the study of either power or government. While this article's title references shared governance and decentralized power, we might review more fittingly how archaeologists have understood *inequality* through time (Thurston and Fernández-Götz, 2021).

Euro-American archaeologists of the nineteenth and early twentieth-centuries believed in a biologically determined, step-like social-evolutionary ladder leading from inchoate "savages" to hierarchical "civilizations." If a political mechanism promoting equality was found in an ancient or traditional state society, it was deemed a "primitive" institution from the society's past. Euro-Americans' eighteenth and nineteenth-century attempts at constitutional monarchy, democracy, or federalism were excepted, with the a priori notion of Euro-American superiority. "Native" good government was uncouth, while Euro-American good government was leading-edge genius.

The entire notion of biologically determined stages of social evolution was being expunged by most academics in the 1920s and 30s, although, unfortunately, not always from the public consciousness. By the mid-twentieth-century, the bio-evolutionary ladder was replaced by a demographic "neo-evolutionary" ladder, where among other premises, the larger

the polity, the more distant political participation becomes, and leadership becomes institutionalized and exclusionary. This era introduced the terms "band," "tribe," "chiefdom," and "state" as ways of differentiating societies by scale. Monolithic and nearly obligatory until the late 1980s, this paradigm saw all large-scale societies as co-opted by powerful, managerially superior leaders, who made themselves absolute rulers by forcing, deceiving, or overawing their citizens into compliance or submission, using a variety of presumed legitimizing strategies. In fact, some archaeologists considered this an "achievement" (Chase and Chase, 1996, p. 803). The *demos*, or people, not only disappeared from theories of governance, but they also disappeared from existence in the archaeological literature.

Archaeologists, sometimes, call this phenomenon the "blob" effect; a term coined by Tringham (1991) in the late twentieth-century: the reduction of "masses" to mere implements for enacting the will of other, more important people. Archaeologists had long studied the detritus of ordinary people, but usually with the aim of saying something about their control, manipulation, undescribed, and/or generic use by elites. They could be divided into inhabitants of towns, regions, or provinces, or viewed as collective inhabitants of the nation. Tringham asked, "Why have archaeologists produced a prehistory of genderless, faceless blobs?"

Probably, the awe with which earlier archaeologists had viewed pyramids and palaces played a part in the willingness of mid- to late- 20th century archaeologists to maintain that the ancients apparently knew no other way to constitute the polity: only force or fear could produce state societies and magnificent cultural productions (Thurston and Fernández-Götz, 2021, p. 1).

However, by the 1990s, major paradigm shifts rocked the discipline with the realization that, as today, large-scale societies have always been organized in many ways. A century or more of accumulated archaeological data were re-examined and new data retrieved, little by little turning up many examples of less-hierarchical and less centralized policies where governance was shared.

## Ways of seeing

In prehistoric and protohistoric times, different types of evidence for political change are most discernable: large swings in the structure of governments can be detected in slow, shifting spatial and organizational patterns of settlement, institutions, infrastructure, and landscape over time (Fargher and Blanton, 2021). Evidence of unrest can be seen in quick, singular, and tangible events like the destruction of a city, the remains of a battlefield, or the defacing of state monuments (Fernández-Götz and Arnold, 2019). These often speak for the entire context—equivalent to seeing the twentieth-century through a handful of scattered newspaper headlines. Missing are the actions and reactions of multiple overlapping generations of ordinary people, the interspersed years of waning and waxing advocacy, and the decades of clashes and decades of quiescence between people and the state.

If we could "see" this record, it would tell the story of how various (perhaps opposed) culturally "cherished" or hard-won rights, attached to specific political and social ideologies, persist over time, even during periods where the rights or privileges of one group or another, are eroded or repressed. Even though we will never have the facility of modern historic sources, ordinary people constitute the polity, and even if it is difficult to detect, we can be sure they existed. Between the sporadic headlines of prehistory, archaeologists find ways to fill in what is missing.

New concepts appeared toward the end of the twentieth-century: *heterarchy*, adopted from the natural sciences, was introduced into archaeology (Crumley, 1979, 1984; Crumley and Marquardt, 1987), describing societies that, instead of a centralized hierarchy, had several different but equally powerful authority structures that acted as checks and balances on each other, a way of reconciling vertical and horizontal organization (Cumming, 2016). Before long, the concept saw global application (e.g., Crumley, 1995; Saitta and McGuire, 1998; Mclntosh, 1999; O'Reilly, 2000; Chirikure et al., 2018; Grauer, 2021). The idea of the *corporate state* was also widely embraced, where authority was less concentrated in the hands of a few (Blanton et al., 1996). Such a society might be recognized by the absence or lessening of visible elite aggrandizement and the bolstering of more collectivity, an idea also incorporated into case studies the world over (e.g., Cowgill, 1997; Feinman et al., 2000; Robertshaw, 2003; Small, 2009).

One of the most recent and useful ways of conceptualizing the organization of large-scale ancient societies has been through *collective action theory* (CAT), a body of thought with a long history throughout the twentieth-century, distilled from many social sciences (e.g., Kendrick, 1939; Allport, 1940; Buchanan and Tullock, 1962; Olson, 1965; Ostrom, 1990, 1994; Ostrom et al., 1992; Congleton, 2015). Collective action, retooled and modified specifically for non-Western and ancient cases (Blanton and Fargher, 2008, 2016; Fargher and Blanton, 2021), describes how societies are organized in terms of the provision, or non-provision, of three kinds of affordances: fair and predictable taxation, public goods, and "voice." The success of setting up a system capable of providing these affordances, termed *bureaucratization,* or the failure to do so, often predicts the level of stability and internal conflict within the polity. In this way, CAT explains both centralized, despotic autocracies and decentralized egalitarian democracies, as well as everything in between, equally well. Archaeologists, depending on the type of evidence recovered, usually have some methods for detecting these affordances.

Ironically, archaeologists long identified regimes bristling with internal enforcers and tax collectors, extracting high levels of labor and tribute, as "powerful" when their fundamental organization likely contained the stressors that caused their

dissolution (Blanton and Fargher, 2008; Thurston, 2019a, p. 61). Counter-intuitively, CAT tells us that the regimes that seem to be the most "powerful"—militarized, repressive, and tyrannical—are the weakest. The most stable and *easily governed* societies are those in which people do not experience constant reminders of discontent. They need not be *very* good governments but just "good enough," making them an apt tool of elite rulership, as well as a mechanism for at least a modicum of public wellbeing.

The payment of taxes or tribute can be seen through the organization of weights and measures, the location and context of coins and tokens, and non-defensive, administrative boundaries around sites of manufacture and trade, which often denote areas within which laws of the marketplace and protection from theft are provided by the state. Regularities in the sizes of house plots or fields over long periods are often interpreted as components of land-based taxation systems, as well as certain kinds of storage facilities and ancient toponyms referring to tithes or payments.

Tangible public goods and services can be seen in large-scale, transregional efforts, often with the hallmark of uniform state architectural styles or construction details, costly enough to be most easily attributed to rulers: road systems, bridges, port facilities, "built" marketplaces, monumentally defended borders, although care must be taken not to confuse "central" efforts with other large-scale projects that ordinary people are fully able to plan and carry out (cf. Fargher et al., 2019). Remarkably similar to modern public goods, these also benefited rulers, often through the long-term collection of use-fees, sometimes reasonable, sometimes not, as well as access to and taxation of whatever the *demos* were making, trading, or transporting.

"Voice," or institutional venues, in which, and through which, the public can communicate with government, and in doing such, negotiate the terms under which they are governed, is a public voice for some portion of the citizenry. In many societies, assembly and voting locales are apparent materially or through toponyms, and early legal texts in many ancient societies often refer to traditions of assembly – with the caveat that there are clear cases where rulers introduce new rules into old agreements.

The establishment of such bureaucratization creates effective infrastructural power for the state (Blanton and Fargher, 2008), rather than giving its rulers heavy-handed personal power, and has the incidental effect of limiting elite ability to coerce or command with impunity (Fargher, 2016). For the state, bureaucratization is expensive and time-consuming to set up, but eventually creates governance that is relatively easy and cost-effective. Conversely, non-bureaucratized systems are money pits rendered weak by the need for thousands of tax collectors, enforcers, constabulary and military responses to unrest, and institutions to try, sentence, and punish those who resist or rebel. Moreover, these officials are often mired in corruption and malfeasance, siphoning off much of the revenue from taxes and fines meant for state coffers and oppressing taxpayers. Eventually, the "exit" of taxpayers, fed-up with failed government, from the tax rolls, through concealment or migration, further erodes the tax base and the ability to conscript labor (Scott, 2010).

If a change toward (or away from) a bureaucratized organization can be detected in periods with little or no documentary evidence, we can use CAT to hypothesize something about the causes and consequences of political change through time. The case study of Sweden presents a productive medium for this, as we can connect historic and proto-historical times with the early periods that have little or no documentary evidence by using archaeological patterns and data to hypothesize something about long term processes.

## "Reversals of fortune" in Late Bronze Age and Iron Age Europe

*Reversal of fortune* is an old phrase that originally refers to "luck" and references the goddess of luck, Fortuna, whom the Romans characterized as capricious. It has older roots in the Greek concept of *peripeteia*, a sudden reversal. Other Iron Age peoples, who were actively trading and interacting inter-regionally and with the Greeks, also likely shared this concept. This can mean an unintentional fall from a better to a worse condition, or the intentional undermining or removal of status. In terms of this discussion, it does not refer to any particular faction but only to the diminishment of whoever is in power. Here, it is used in reference to Haydu's (2010) concept of *reiterated problem solving*: how societies solve the same recurring problems, over and over, in somewhat different ways and in somewhat different circumstances. I return to this concept below.

The context of Mediterranean and Atlantic Europe provides several good case studies for the "wheel of fortune" that rolls over every party in turn. Before the Iron Age began, the Bronze Age cultures in the Mediterranean—the Mycenaeans, Hittites, Assyrians, Babylonians, Egyptians, and others, were largely elite-driven societies, low in collectivity with more centralized structures and powerful heads of state. Their political toolboxes comprised many top-down institutions. Around 1200 BCE, these societies began to collapse, one after the other, for what ancient historians frequently describe as somewhat mysterious reasons. For much of the twentieth-century, archaeologists characterized this as probably due to war-related or environmentally related economic disturbances in a highly connected world system, which at the time was the most popular way of explaining a "wave" of disruptive change. Today, we could say that whatever tipped the balance may have differed from region to region but is likely to have brought on social and political unrest as complex as any current global or regional eventful cascade.

Further to the west, the wave continued between 1100 and 750 BCE (Figure 1). In the central Mediterranean, archaeologically visible Greek Bronze Age elite culture "disappeared," and based on material culture, society was transformed, marking the beginning of the Iron Age (Anderson, 2005; Kõiv, 2016). Between about 600 and 300 BCE, the system of governance called *demokratia* developed incrementally, also discussed by Fargher et al. (2022) in this issue, perhaps first in the Greek colonies of Sicily and from there spreading back to various Greek polities (Robinson, 2007). Despite the huge amount of political writing left behind by the Greeks, there is no explicit work dealing with democracy as a theory of government. Rather, in earlier periods there are treatises on *isonomia*, equal political participation, and *isegoria*, equality of speech, terms that became more important as democracy expanded over time (Raaflaub, 1983, p. 518).

In Athens, the most well-documented case, sometimes non-elite classes were pitted against tyrants and oligarchs, but often groups of elites battled each other (Forsdyke, 2005, p. 16) - those who believed in participatory government and those who believed that aristocratic intellectual and educational superiority made them the only group fit to rule - several thousand years before Madison and Jefferson. Thus, "the democratic notion of equality was under fire from the start... [many] noble, wealthy, educated, capable, experienced, and morally superior upper classes" (Raaflaub, 1983, p. 519) were strong critics of rule by "the poor, base, uneducated, incapable, and irresponsible masses" (Raaflaub, 1983, p. 519). Each side claimed that the opposing system was unequal, as it placed the rich over the poor, or the poor over the rich. Conversely, the earliest lists of Athenian *archons* show that great families with clear rivalries alternated their rulership. In other words, brief terms in office and electoral politics were devised mainly to create 'fairness' among the highest class and prevent violent squabbles – not solely to operationalize an ideology for the sake societal equality.

The role of inter-elite debates aligns well with CAT, as the collectivized government provides rulers the benefit of easier rulership over *all* classes. Greek democracy began with the noble, spread to the merely wealthy, then to agriculturalists who formed the warrior class, and lastly to the lowest class of the census: the *thetes* who rowed the ships of the Athenian fleet. Tellingly, they were described as the indispensable people without whom the city-state had no power or prosperity; here, perhaps, is a hidden transcript of enfranchisement negotiations through the affordance of "voice"—*isegoria*. Even at this point, only about 1 in 18 Athenian men were voters.

Beyond the ostensibly philosophical reflection of equal political participation, in practice, everyone was assigned certain civic duties: "the courts and the council, which supported the sovereign assembly in tasks of preparation and control, were manned by hundreds of citizens, thereby, truly representing the entire citizen body" (Raaflaub, 1983, p. 519). While this clearly spread power, it also spread effort and created a sense that service to the state was in one's own interest.

Talent, education, and skills were required for generals, financial administrators, and magistrates, so the law required that they be elected, and in early Athenian democracy, it was nearly always the aristocratic and wealthy classes that were most competent (Raaflaub, 1983, p. 519). Yet, in Athens at least, these leaders were elected by the people at assemblies (Stanton and Bicknell, 1987; Anderson, 2003) requiring a quorum of at least 6,000 citizens, which could be called by the public, or by leaders (Hansen, 1988, p. 53). Once in office, military and other leaders had to plead the case for their projects and initiatives. If the assembly did not support them, they did not go forward (Hamel, 1998).

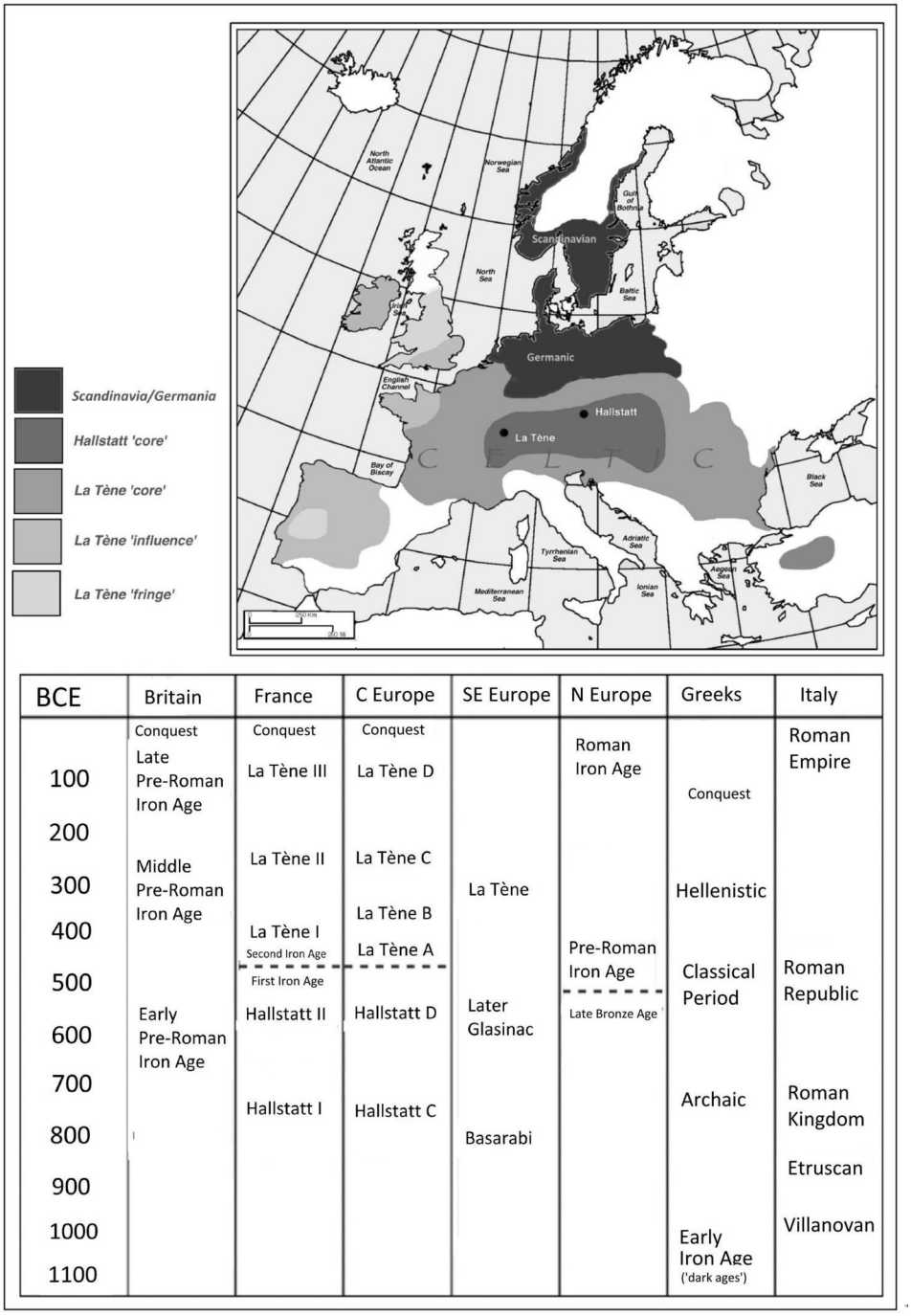
In this democratic model, elected elites held the positions of military and economic decision-making but gained their power from lower class supporters who filled the ranks of low-level government. Those who supported oligarchy enjoined sub-elites to exercise their superiority and revoke the co-governance rights of the *hoi polloi*. The emergent event sequence was the side effect of these struggles, making it an inter-elite issue and "the development of the early *poleis*...cyclical and discontinuous" (Forsdyke, 2005, p. 16).

This minimal review is included only to contextualize Europe west of the Greek peninsula, where the early Iron Age period is almost completely prehistoric. As elsewhere, but a little later, from about 800 to 500 BCE, society was reorganized away from many Bronze Age regularities, yet still displayed authority invested in a wealthy elite culture. This period, called the *Hallstatt* era and sometimes the "First Iron Age," saw numerous indigenous urban centers in Central Europe (Fernández-Götz and Krausse, 2013; Fernández-Götz, 2018) using Iron Age technologies, yet with spectacular Bronze Age-style wealth and a ruling class who were probably politically powerful. These polities were low in collectivity and, if they existed today, would be described as *failed states* (e.g., Rotberg, 2002).

Then, relatively abruptly, between 500 and 450 BCE, these elites "disappeared" in the archaeological sense, amid traces of violent internal conflicts, selective urban burning, destruction, and the cessation of elite construction and individualizing monumentality. A different kind of society emerged in the following *La Tène* period, sometimes referred to as the "Second Iron Age", marked by signs of higher collectivity and good government (see below).

Once, it was assumed that the people behind this transition (ca. 620–450 BCE) were, in fact, emulating the Greeks themselves, whose democratic system was falling into place by the late sixth-century BCE. We now know that the processes in the east and west may have been largely contemporary; signs of internal conflict are seen at the Heuneburg urban's princely seat in what is now Germany between 530/540 BCE, followed by 3 more such episodes, accompanied by burning, destruction of

A




B

| BCE | Britain | France | C Europe | SE Europe | N Europe | Greeks | Italy |
|---|---|---|---|---|---|---|---|
| | Conquest | Conquest | Conquest | | | | |
| 100 | Late Pre-Roman Iron Age | La Tène III | La Tène D | | Roman Iron Age | Conquest | Roman Empire |
| 200 | | | | | | | |
| 300 | Middle Pre-Roman Iron Age | La Tène II | La Tène C | La Tène | | Hellenistic | |
| 400 | | La Tène I | La Tène B | | | | |
| 500 | | Second Iron Age / First Iron Age | La Tène A | | Pre-Roman Iron Age / Late Bronze Age | Classical Period | Roman Republic |
| 600 | Early Pre-Roman Iron Age | Hallstatt II | Hallstatt D | Later Glasinac | | | |
| 700 | | | | | | Archaic | Roman Kingdom |
| 800 | | Hallstatt I | Hallstatt C | Basarabi | | | Etruscan |
| 900 | | | | | | | |
| 1000 | | | | | | Early Iron Age ('dark ages') | Villanovan |
| 1100 | | | | | | | |

FIGURE 1
The European Iron Age. **(A)** Simplified map. **(B)** Simplified chronology.

ancestral images, and selective desecration of certain kin-group's graves (Fernández-Götz and Arnold, 2019). Pope (2021, p. 52), writing about the post-Hallstatt, pre-Roman era, described these Celtic-speaking people as, "fractured communities that disowned their past, [representing] a move against materialism in fourth century BCE Greece (Plato, Theopompus, Ephorus) that may then have begun at 550/540 BCE in the west with the active rejection of Greek-derived wealth, as typified by Hochdorf's golden shoes, in a move to an austere, egalitarian, and equitable north and west." The golden shoes Pope refers to,

found in a monumental grave of the vanished elite class, are a common synecdoche for the flagrant inequality of the Hallstatt era (Figure 2).

Today, "the role played by non-elites in transformative transitions has become a deliberate focus of archaeological research...investigating how commoners contribute to the social negotiation of dominant discourses through overlapping forms of social interaction, including engagement, avoidance, and resistance...these categories can be further subdivided into overt and subversive responses to internal as well as external stress. Labile socio-political systems like those of Iron Age Europe are subject to cyclical upheavals" (Fernández-Götz and Arnold, 2019, p. 658).

In La Tène cities, evidence emerged for public goods, including assembly places with voting facilities and sites for communal feasting, and indications of a heterarchic or


FIGURE 2
The Hallstatt 'First Iron Age': **(A)** Hochdorf golden shoes (CC by 2.0 https://www.flickr.com/photos/rosemania/4120473429). **(B)** Hochdorf chieftain burial (CC by 2.5 https://www.flickr.com/photos/hagdorned/31711558200). **(C)** Heuneburg urban center (CC by 4.0 https://en.wikipedia.org/wiki/Heuneburg#/media/File:Heuneburg_600_B.C..jpg).

corporate governing structure (Crumley, 1995; Fargher, 2016) with separate but equal institutions that shared power; each one internally ranked and each having checks and balances on the others: military professionals, law-keeping sacred specialists, and an assembly who met to seek legal recourse, debate community concerns, and elect leaders. Roman textual descriptions of this society appear in the first century BCE, but, generally, the prehistoric rupture between the Bronze Age and Iron Age is seen as the marker of the earliest change.

## Theorizing democratic movements to inform the distant past

In the Celtic speaking regions, the strong, archaeologically visible break between 600 and 500 BCE, hinting at civil war or uprising, perhaps marks the beginning of a "democratic wave," not unlike those in historical eras. Given the strong connection between Iron Age Central Europe and the Greek world's *demokratia*, were they part of wider simultaneous or overlapping sociopolitical changes?

Even without knowing the eventful history of this prehistoric era, we may draw some inferences. First, different groups of elites may have been at odds with each other, as in Athens. Given the large wealth gap in Early Iron Age urban centers, and what appears to be political and religious domination by a small group of families, there may also have been internal civil unrest from the lower classes—evidence perhaps of state failure—in light of Stewart's (2014, p. 47) four broad dimensions of horizontal inequalities that cause excluded groups to mobilize against other groups: economic issues such land ownership and wealth, social issues including health, services, and support networks; lack of access to political power at many levels, including overt governance, administrative bureaucracies, and military participation. The fourth and last dimension is what Stewart calls "cultural recognition or status": the way one's group is treated within one's polity in terms of religion, language, and cultural productions like food, dress, arts, and other distinctions.

There is also evidence that spontaneous movements, running on anger alone, have great power to overthrow governments but ordinarily fail to effect lasting change (Weyland, 2014). The destruction in the "princely" towns at the transition from the early to the later Iron Age (Fernández-Götz and Arnold, 2019) might have been a spontaneous eruption after centuries of increasing elite-dominated inequality. Conversely, those led by experienced leaders with careful plans move more slowly but are far more successful over time (Weyland, 2014). The long-term erasure of elite culture and restructuring of institutions must have been well-planned: the overturning of the order succeeded, perhaps, beyond expectations, and the "checks and balances" remained for a long time.

For the study of such complex issues, then and now, critique has been leveled at researchers who confined their methods to atheoretical statistical models that are "unconvincing, schematic, and limited" (Weyland, 2019, p. 2,391). This might lie behind studies which, for example, inexplicably used statistical measures of *vertical* inequality between *individuals* to claim that there was no connection between inequality and internal conflict in societies (Collier and Hoeffler, 2004).

Certainly, vertical inequality, which means any poor person vs. any rich person, cannot explain or predict disruptive societal action. Even in nations (like modern Sweden) where there is a relatively egalitarian wealth and political structure, there are still substantial economic and political disparities (Buhaug et al., 2014, p. 424). Social scientists have acknowledged since the 1970s how groups use common identity (ethnicity, language, and religion) as instruments of mobilization (Barth, 1969), so, more recently, an ethnographic "mixed methods" approach has been taken for the "forecasting of conflict" (Ward et al., 2010, p. 364).

For example, Buhaug et al. (2014) created their own variables based on more narrative and ethnographic sources of data to measure *horizontal* inequality that explicitly refer to *social groups* within countries, establishing that there are indeed certain national or regional profiles associated with elevated risk for civil war, based on an outgroup's ethno-political and/or economic grievances, e.g., factors such as persistent inequality in the distribution of land between a specific subgroup and a ruling group.

This is good news for archaeologists. It would be difficult to create actual aggregate individual-level vertical data for a prehistoric period, but the position of an identifiable group relative to other groups or the larger society is something that archaeologists are good at identifying.

## A view from the North: Shared governance in the later Iron Age

As the Romans under Julius Caesar conquered and wrote about the Gauls and other Celtic-speaking people, interpretations from prehistoric evidence are generally borne out (Fernández-Götz, 2014, p. 113; Fernández-Götz and Roymans, 2015, p. 20). They also described Germanic-speaking societies (Wells, 1999, 2009, 2011), including Scandinavia, especially in Tacitus' 98 CE *Germania*, an ethnographic account that includes these distant northern islands and peninsulas. While nineteenth and early twentieth-century archaeologists took Roman authors too literally (Arnold, 1990, 2004), more sophisticated approaches now reveal numerous archaeological findings that match details that the Romans described (Hedeager, 1992, 2011; Semple and Sanmark, 2013; Sanmark, 2017).

High northern Europe was farther away yet was still connected strongly to western and central European and Mediterranean spheres. Iron Age society was similar, but there

were no first and second Iron Ages. Instead, after the Bronze Age collapse of elite culture came a "Long Iron Age," from 500 BCE until around 700 CE, but, often, the following Viking Age is included, up until about 1000–1100 CE. Iron Age political and legal traditions lasted well into the medieval era, which, in Scandinavia, extends to the early-mid sixteenth-century, and as noted earlier, these, in turn, impact current forms.

Over the first five centuries, 500 - 1 BCE, there were few indexes of elite culture. Beginning in the first century CE, the Roman Iron Age, so-named due to interactions rather than conquest, locally made elite status markers and Roman imports appear, some interpreted as part of diplomatic exchanges (Herschend, 2009, p. 72; Grane, 2011, 2015). Slowly, burials, artifacts, architecture, and monuments show increasing display of social differentiation that had been long absent.

A Roman Iron Age cemetery connected with a single household gives a good example of sociopolitical change over several centuries (Stjernquist, 1955). Each group of graves, even the earliest, is associated with a set of separated and unfurnished graves that probably represent laborers, slaves, and other low status members of the household.

In the first century CE, a warrior-class presence is represented by a single male with a sword and some iron fittings. In the second century CE, there are five similar graves but with added bronze ornaments, combs, and finer ceramics, status markers but little inequality. In the third century, one has a shield, spear, lance, fine ceramics, and not only bronze, but silver ornaments. The richest contains spear and lance, spurs, shield, a sword with a scabbard ornamented with silver, gold foil, glass and beads, a coffer, and glass gaming pieces. A woman was buried with a silver collar, or torque, silver and bronze clasps and hairpins, and a diadem or headdress composed of blue glass, gold leaf, lead, and tin. By the fourth century, a "princely" chamber burial is occupied by a man with two gold rings, two silver rings, bronze ornaments, gaming pieces of bone and a gaming board, a comb, fine ceramics, a knife, a spear and lance, a sword and scabbard with silver and bronze ornaments, and a shield. The other male grave contains lower-level warrior equipment: a spear, lance, and comb. Of two females, one has bronze materials, the other a silver torque and pins.

The rich burials of the third and fourth centuries closely parallel later historic descriptions of powerful elite women, especially religious specialists, and the hierarchy within the warband: mounted chieftains, members of the retinue, and common soldiers. Other princely burials are found at sites that are evenly spaced across the landscape, perhaps a network of local rulers.

Despite this renewed social differentiation, we *know* that the outcomes were the heterarchically organized states of the Viking Age and early Middle Ages: along with influential militaristic families came the law-codes, the assembly, and pacts of mutual obligation. The slow creep of materially expressed elite status did not seem to displace these institutions, likely because warlords retinues consisted of 200 or 300 fulltime soldiers, while the larger forces of thousands needed for war or conquest were drawn from the farming class who insisted, in historical times, during face-to-face meetings with kings, that their rights should be no more or no less than those of their ancestors (Pálsson and Edwards, 1986, p. 55). They outnumbered professional fighters by vast ratios, and Viking Age and Medieval documents show that they were adamant about the maintenance of checks and balances (Thurston, 2010).

## Historicism and contingency theories: Successes and failures

We now stand at the brink of where "pre-history" becomes "protohistory" and then "history." For many generations of scholarship, these terms stood like heavy curtains, through which no one could see, making it conceptually impossible to connect them. We can see that certain forms and traditions persist, but what are the links between them, if any? Archaeologists who suggested throughlines across these invisible boundaries were dismissed (Randsborg, 1980, 1991; Kristiansen, 2000), but today, these curtains have been drawn back somewhat.

In the later twentieth century, questions of long-term processes were often addressed through *contingency theory*. Plainly stated, this means that whatever decisions people make in the present, are predicated upon what has happened in their past, and decisions made today constrain or shape the future. While many scholars still favor contingency, it has seen much critique. Some have rejected it, others attempt to improve it, and some are trying to rethink of it.

> "The notion of contingency presents us with a quandary. We use it to designate what we do not know, what is outside the realm of an inquiry, or what eludes the grasp of an explanatory model...contingency has no fixed place and no content proper. Its boundaries are indefinitely extensible...It exists, so to speak, by proxy...Pointing to some form of indeterminacy lodged at the heart of the phenomena under consideration, it is supposed to tell us something about the nature of these phenomena" (Ermakoff, 2015, p. 64).

Contingency theorists look at long term chains of *events*, divided into *episodes* that might be single occasions, subtle series of minor events or trends, the actions of individuals or groups, or the creation of places or things. Tilly, in his discussion of mechanisms, processes, and episodes, identified episodes as "bounded streams of social life" (2001b, p. 26). Sewell noted that events are "unique and unpredictable sequences of happenings that must, by definition, be improvised on the spot"

(Sewell, 1996, p. 868). Yet, such spontaneous events, situated in culture as they are, "take on aspects of ritual episodes [that] transform chaotic and contested politics into civilization-defining events" (Sewell, 1996, p. 871). Some scholars call this "*event structure analysis*" (Corsaro and Heise, 1990; Heise, 1991; Griffin, 1993, 2007; Hesse-Biber and Crofts, 2008) and have developed methods of tracing the causal relationships that drive trajectories along timelines. Some have also developed software to perform this complex modeling (Heise, 1989).

The most frequently critiqued aspect of contingency theory is a framework called *path dependency*. Path dependency organizes events into causal sequences that specify "how contingencies that may have steered a given case, like regime or an institution, in a direction different from that taken in another, similar case" (Haydu, 2010, p. 26). This becomes *explanatory* by identifying critical junctures, which *foreclose options* and steer history in one direction or another (Haydu, 2010, p. 29).

Explicit problems with path dependency are its assertion that contingent decision-making leads to "locked-in" sequences, where courses, once begun, are irreversible. This makes it difficult to explain frequently seen historical reversals (Haydu, 1998, p. 341)! Simple path dependency also "obscures larger trajectories across periods" (Haydu, 1998, p. 341). Some authors use it to explain only stability and not change.

Once considered a breakthrough, it was even adapted by several archaeologists in the late 1990s and early 2000s (Adams, 2001; Lucas, 2008). Remarkably, archaeologists are still discovering this approach, even calling it "new" (Jung and Gimatzidis, 2021), and in just the last few years, dozens of papers have appeared using this concept. In archaeology, path dependency is sometimes used merely as jargon for "the intuition that 'history matters' without a clear and convincing account of decision-making over time" (Kay, 2005, p. 554).

Vergne and Durand (2010) provided a strongly worded rebuke: authors must strongly reveal a link between causal decision-making and outcomes: the need for "specifying the missing link between theoretical and empirical path dependence. In particular, we suggest moving away from historical case studies of supposedly path-dependent processes to focus on more controlled research designs, such as simulations, experiments, and counterfactual investigation" (Vergne and Durand, 2010, p. 736–737).

*Counterfactual investigation* refers to testing a hypothesis about a causal chain of events by analyzing what would NOT have happened if a decision had been made in a different way or had the actual sequence of events or circumstances been different, or if a decision not been made at all.

*Reiterated problem-solving* is one of the solutions to the problems of path dependency. In an endorsement of so-called mixed methods, which unify qualitative and quantitative work, Haydu asserted like many others (Mishler, 1995; Franzosi, 1998) that

> "Narrative has been widely prescribed as a cure...It promises to rejuvenate the study of class (and other group) formation, calling attention to how social actors construct meaningful stories of individual and collective identities by weaving together interpreted events... The analyst-as-storyteller identifies the 'inherent logic,' whereby, events alter the direction of social change and transform social structures, [and] event-structure analysis helps build the case that these connections are causal, rather than merely sequential connections, by using counterfactuals to 'test' assertions" (Haydu, 1998, p. 350).

Simply said, Haydu's concept allows that people have multiple options, that there is rarely a "lock in" because alternatives can always be found, minds and actions changed even at the last moment, resulting in significantly different outcomes. Figure 3 succinctly illustrates this difference.

Event structure analysis and similar frameworks are still considered emerging approaches within sociology (Hesse-Biber and Crofts, 2008) due to the many debates over the study of time and process, and battles between positivist empiricists and interpretive theorizers can get hot. "...We find intense interaction between historians and sociologists. We also find sharp disagreement. Questions of epistemology, ontology, and method align practitioners with competing answers to such questions as 'What is an event?,' 'Can we detect causes in history?,' and 'Do all social processes result from individual choices?'" (Tilly, 2001a, p. 6,757).

Tilly noted that among political scientists, those focused on democratization have worked hardest to find legitimately comparable episodes to establish generalizations (Tilly, 2001b, p. 26) and to eliminate assumptions, "… that episodes grouped by similar criteria spring from similar causes...." The use of political event structure analysis has continued to be a productive approach by examining "contentious acts" through sites of regime power, a regime's acceptance of new actors, the stability of political relationships, potential allies or challengers, and the regime's repression or facilitation of collective claim-makers (Tilly and Tarrow, 2015, p. 59).

## Medieval Sweden

What the archaeological record has revealed in Sweden is similar to the rest of northern Europe: strong heterarchical or corporate institutions powered by common people despite the redevelopment of more visible and more powerful rulers (Figure 4). Roman accounts tell us that the assembly was in continuous use from the Iron Age, medieval chroniclers and missionaries attest to it in the early and later Viking Age, and it was a codified feature of government into the sixteenth century and beyond (Iversen, 2013; Oosthuizen, 2013; Riisøy, 2013;

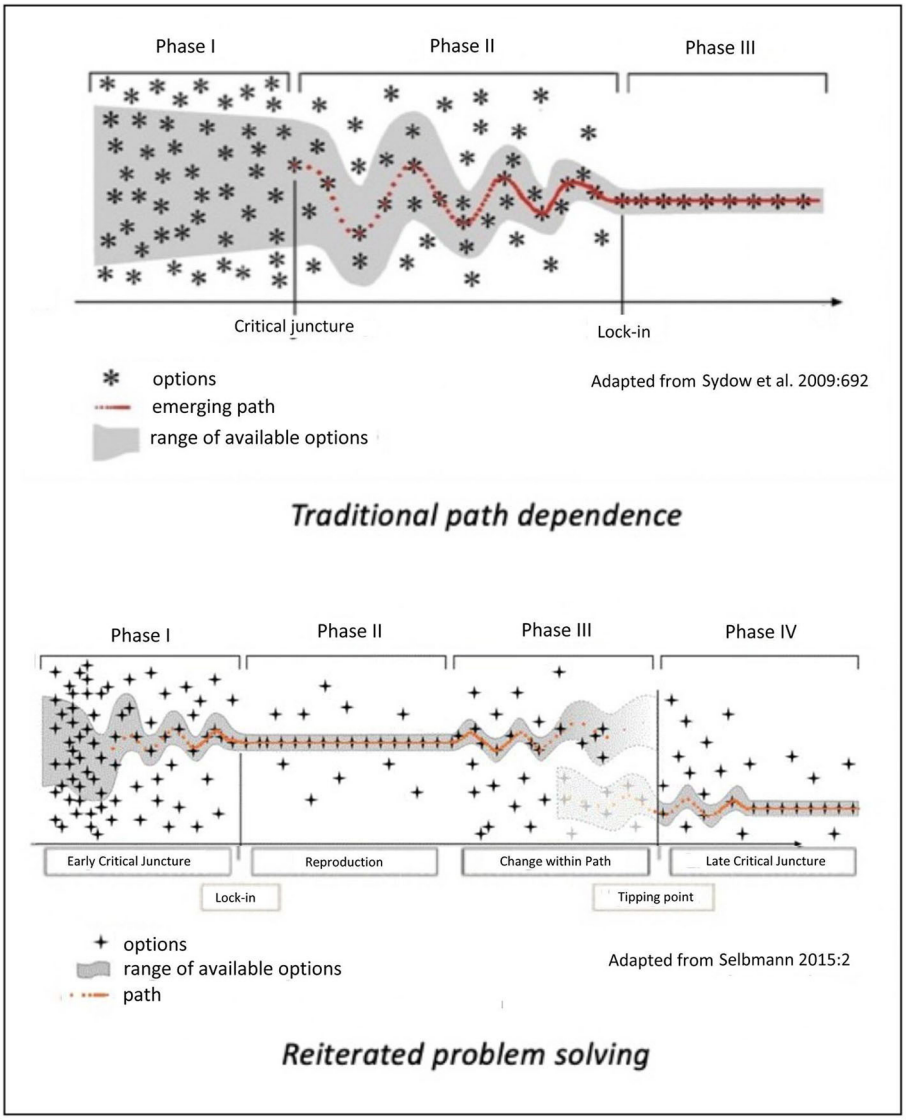



FIGURE 3
Two models of contingency.

Smith, 2013): local, district and national *thing*-places, where actions, policies and laws were debated, and kings were elected by popular vote. A mid-fourteenth-century Swedish law code recommended that a king be elected from the king's sons, but that any man born in Sweden could be voted in.

Not surprisingly, there were opposing agents. In 1296, for example, one province sent a letter asking the Swedish king to update a particular regional code. A lawman was put in charge, he, in turn, selected 12 men from the nobility, clergy, wealthy commoners, and peasants who had knowledge of law and who had to collectively approve the amendment. The farmer class took part in the controls on the king and formulation and preservation of laws. Yet, by the fourteenth century, it seemed necessary to enact the so-called Swedish Magna Carta, the 1319 Charter of Liberties, a more formal pact between the king and the nobles, who claimed to protect the peasantry (Korpiola, 2014, p. 109).

In 1327, an almost identical letter arrived at court. This time, the appointed lawman selected only secular aristocracy, without members who were experts in the law. And, while in 1296 the panel of 12, including peasants, approved the final document, in 1327 it was simply proclaimed at many local assemblies, something of a sham exercise meant to resemble traditional events (Korpiola, 2014, p. 110).

Hence, in 1330, a new written and spoken oath was created for the king to swear upon his election to obey the law especially regarding taxation. This oath was incorporated into national law in 1350. The first *Riksdag*, or parliament, in Sweden, was established in 1435, its first iteration an invention of the nobility as resistance to royal excesses. Under government authority in 1527, it was explicitly directed to once more represent four groups: aristocrats, clergy, merchants, and farmers and other producers.

Sweden's law differed substantially from the English Magna Carta and other simultaneous constitutions enacted in Europe due to the traditionally

> "electoral monarchy, the lack of true feudalism and serfdom, and the strong position of a landowning yeoman-type of peasantry…[and] lay dominance in the judiciary [that] came to be one of the cornerstones of Swedish legal cultural identity...[and] public territorial assemblies that formed the main venues for administration or legal affairs, resolving individual disputes, as well as making more general rules. Such traditions of 'participatory justice' continued at the local level until the High Middle Ages" (Korpiola, 2014, p. 96).

The linked chains of events in the protohistoric and historic eras, from the 800s to 1200s to 1500s, have self-referential mentions of how peasants referred to their own ancestors and ancient traditions, as well as complaints by *many* kings, in addition to Gustav Vasa's, whose response appears at the beginning of this article. Before this, there are "documentary gaps" between the era of the Franks and Roman times, and before the Romans, we rely solely on archaeological data and, perhaps, parallels with the Greeks, who were in regular trading and communication relations with the Celtic and Germanic-speaking peoples.

## Democratic diffusion and democratic waves

> *Tunisians had mass demonstrations and Syrians were like, "Hmm, interesting."; And then, Egypt started. People were like, "Resign already!" and then, Mubarak resigned. We thought, "Holy shit. We have power."—Syrian organizer, 2013, (cited in Gunitsky, 2018, p. 634)*

"...the clue to an understanding of causal disruption... lies in a systematic analysis of how factors affecting individual agency can bring about breaks in patterns of social relations...distinguishing four types of impact:... A *pyramidal* impact rests on the existence of a hierarchical system of power relations. *Pivotal impact* is the action that decisively shifts a balance of power. *Sequential impact* describes the alignment of individual stances on observed behavior. Impact is *epistemic* when it affects beliefs that actors presume they are sharing" (Ermakoff, 2015, p. 66). The case study of Sweden as it emerges into historic times will illustrate these factors.

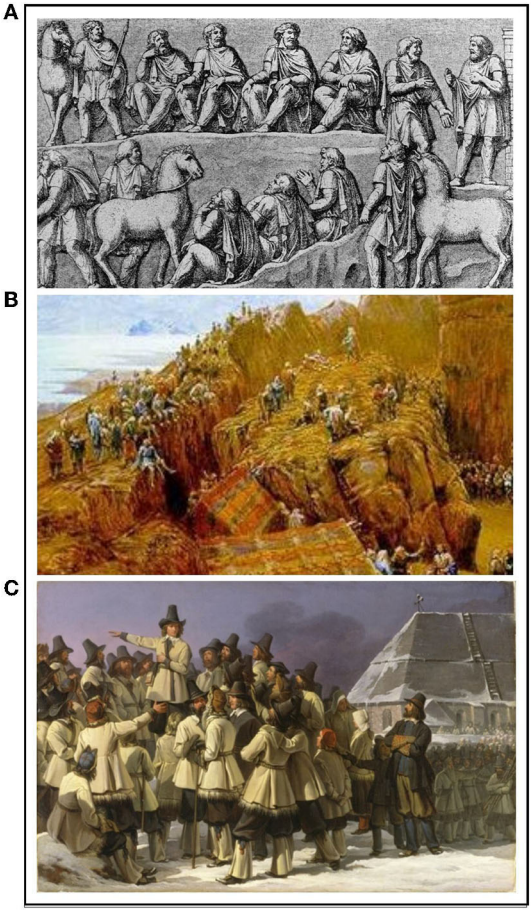



FIGURE 4
The 'Second Iron Age' assembly in three eras: **(A)** Germanic *thing*, after a relief on the Column of Marcus Aurelius, c. 193 CE (public domain - https://commons.wikimedia.org/wiki/File:Germanische-ratsversammlung_1-1250x715.jpg). **(B)** *Althing in Session* (W. G. Collingwood, 1897), the law speaker of the Althing and the Icelandic parliament around CE 900-1000 (public domain - https://en.wikipedia.org/wiki/W._G._Collingwood#/media/File:Law_speaker.jpg). **(C)** *On the church steps in Mora* (J. G. Sandberg, 1836), Gustav Eriksson (later King Gustav Vasa) recruits Dalecarlian farmers to his cause (National Museum, Sweden, copyright-free collection, image 2451, https://www.nationalmuseum.se/samlingarna/fria-bilder).

The utility of reiterated problem-solving lies in overcoming the domination of historical frameworks that cast a long record as a series of unrelated "ages" and a set of standard time periods defined by specific struggles. It is understandable that scholars examining a few decades to a couple of centuries view things in this way, yet with archaeological research, it becomes clear that they are part of longer and continuous cycles of conflict.

First, it appears that social memory has the potential to persist as long in pre- or non-literate societies as in those that are historically self-documented. In the absence of written records, practices for "remembering" are perfected. Many Iron Age groups eschewed written documents even when they could use them. The Celtic region's Druids used Greek script for ordinary transactions but would preserve law or religion only through memory. Germanic lawspeakers believed that written law could be corrupted by surreptitious amendments, which in historic times, it was! Once we imagine that the "ghosts of crises past" lived in minds of pre- and non-literate people, the reality of social memory is not so clouded.

More importantly, in the constant face of challenges between centralized and decentralized, authoritarian and democratic movements, the very act of affording oneself of "voice" in an assembly or other venue creates a continuous awareness of ongoing and long-term conflicts. Even in regions heavily disrupted by conquest or colonialism, this can persist; the value of a case where no such external disruption occurs, as with Sweden, is an object lesson in how this works.

The second argument is that many criteria used in the study of modern societies are equally present in all societies: rage at perceived injustice or atrocity, careful political plans made by leaders or through consensus, and understanding that vigilance is necessary to protect (any) sociopolitical ideals or systems from corruption.

At the close of the Late Bronze Age, when autocracies or oligarchies fell to more distributed governance principles, there were no instantaneous sources for news, but people *were* highly connected by continuous long-distance interactions flowing through professional messengers, long and short distance traders, and travelers. Additionally, while the cascade of prehistoric political collapses seems rapid, it is only *archaeologically* simultaneous, dated "together" with a +/− 100 or more years. This could be narrowed with Bayesian methods, but this has yet to be done for most sequences.

However, the *outcomes* of democratic diffusions are just as important for understanding how they occur than a precise timeline. Weyland summarized how such waves are observed to get underway: "1. protests surprisingly erupt after a long period of stagnation, 2. when participation in these protests quickly spirals to a large scale, and 3. when this mass contention achieves unusual success, especially the ouster of the incumbent ruler" (Weyland, 2019, p. 2,391).

## Reversals of fortune in early modern Sweden

The long sequence in our examples in Europe, stemming from the fall of highly stratified Bronze Age societies up to 3000 years ago, culminates here in the early modern era. I have not, and do not, claim to have performed an event structure analysis, as it lies beyond the scope of an article, but the following event sequence, especially when united with the late prehistoric, Iron Age and Viking Age record, awaits study and begs to be undertaken.

The historical archaeology of the mountainous Swedish province of Dalecarlia (modern Dalarna) and the province of Småland with its cold, high plateau has revealed that life for the people there was difficult but successful, fostering close-knit cooperative livelihood strategies. Communities were purposefully hidden in the folds of mountains and deep woods, making them difficult to surveil. Yet, they controlled many commodities (iron, wood, tar, charcoal) that were key to the state, especially to military supply (Cederholm, 2007; Thurston and Pettersson, 2022). In line with many ethnographic studies of people in such rugged regions, they relied on informal and formal mutual aid systems, and were fiercely protective of their rights (Cederholm, 2007; Thurston, 2018).

With the knowledge of the region's Iron Age and medieval traditions, we jump into the turbulent sixteenth century, 30 years of which are briefly outlined here to illustrate how ceaseless was the conflict between ideologies, and, hence, people. Sweden had been part of a triple alliance since 1397, nominally ruled by the Danish king, with regents in Norway and Sweden. In Sweden, there was a line of administrative caretakers, the Sture family, who had done a good job over several generations. The Stures dismissed the Danish diplomatic presence in 1470, but in 1513, a new Danish king, Christian II, aimed to take back full control of Sweden.

In early 1520 after defeating the Swedish army and causing the administrator's death, Christian proclaimed a full amnesty for the opposition, but after calling them to his coronation later in the year, "arrested ninety-six magnates, almost all of the nobles of the nationalist party, two bishops, and the burgomasters of Stockholm and other towns. They were all executed the next day after the semblance of a trial: this atrocity is generally known as the 'Blood Bath of Stockholm'. After handing the administration of Sweden over to a colluding Archbishop... He imagined that he had won a complete victory by the extermination of the whole of the leaders... and returned to Copenhagen in triumph" [Oman, [1936 (2018)], p. 113].

Between 1521 and 1523, 25-year-old Gustav Ericson of Vasa, who was tangentially related to the Sture administrators, returned to Sweden; "...Luckily for him, he was not at home at the time of the Stockholm 'Blood Bath,' or he would have been one of its victims. His father Eric of Vasa, his brother-in-law and several more distant relations perished on the scaffold that day" [Oman, [1936 (2018)], p. 115].

Vasa was both enraged and ambitious. He was not royal and had none of the ascribed rights to rule that recent generations


FIGURE 5
Vigilance and contingency: Five centuries of governance negotiation in Sweden.

had maintained and could only rely on the still-current notion that "any man in Sweden" could be elected king. When he returned, he went straight to the Dales-men of Dalecarlia, where he knew he could find support for insurrection against Denmark. Their continued support enabled him to eventually gather an army and be elected "administrator." As he prosecuted his war against the Danes, his forces swelled, he was victorious, and was crowned king in 1523.

However, the remnants of noble families taunted him with being the Peasant's King, "which was true enough, for it was with a peasant army that he had won his crown; the peasants looked upon him as their own man, whom they had made, and could possibly unmake if they grew discontented. Immense tact was required to keep them from being unduly casual, disobedient, and slow to pay taxes" [Oman, [1936 (2018)], p. 117]. "The Dalesmen had been Gustav's strongest and earliest supporters...they started grumbling about his actions... that he was becoming too strong and demanding too much of them [in] taxes and loans" (Satterlee, 2007, p. 95).

War necessitated taxes, and with so many nobles killed, many of the Dalesmen's old enemies were appointed to his administration. He also adopted Lutheranism, defying rural tradition. The Dalecarlians rose in rebellion three times: in 1524–1525, in 1527–1528, and in 1531–1533. In the first rebellion, the king persuaded them to stop by promising to meet their demands, but the leaders were extradited, tortured, and executed. In the second rebellion, Vasa called the Dalecarlian peasants to an assembly to negotiate, but then, demanded they turn over the rebels or every person in the district would be executed; this occurred and they were executed at the assembly. The third rising was similar, a tax rebellion where the king called them to an assembly to talk, but then forced payment, seized the rebels, and executed them instead.

The fact that, in a short decade, after calls to the assembly as part of an ancient and still active reciprocal arrangement, to then suffer arrest and execution rather than negotiation, was deeply shocking. They had acted on assumptions, without even thinking, that traditional ways were in order, and received entirely unexpected treatment. "These guiding assumptions are forms of tacit knowledge...these assumptions are not recognized as such. They are ingrained in how agents construct their situations, their decisions, and their actions. It follows that...the range of possible alternative courses of action that are scrutinized in the decision-making process is limited" (Kay, 2005, p. 564).

As noted above, movements that involve spontaneous emotion can at first have momentum, but usually fail. Weyland

asked (Weyland, 2015, p. 494), "Do decision makers learn from the success of front-runners and assess the benefits and costs of their reforms in systematic, thorough, and rational ways? Or do innovative experiences serve as models that exert strong normative appeal and raise the standards of appropriate behavior, pushing latecomers toward imitation?"

Perhaps there was now time to adjust expectations before Sweden's other troublesome province rose. In 1536 and 1542, a wealthy Småland farmer called Nils Dacke is recorded as paying a blood money fine after his conviction in court for the killing of royal sheriffs over the collection of taxes. Later in 1542, Dacke emerged in command of a farmer army, and the fight was now clearly between rulers with different views on democracy. Dacke's army was far more organized and successful than the emotional response of the Dalecarlians, and Vasa's German mercenaries were massacred by battalions of crossbow-armed farmers in the unfamiliar dark forests and steep, rocky terrain. Then, Vasa cut off supply lines to Småland and labeled Dacke a heretic.

The rebellion spread throughout southern Sweden and along the Danish border, and Vasa, who realized the serious threat, signed a peace treaty that tacitly acknowledged Dacke as ruler of Småland. Dacke restored trade, lowered taxes, and re-established Catholicism. He was then courted by foreign powers who hoped to use developments to their advantage, but Dacke turned down offers of support. Vasa soon broke the treaty, and the following battles were not in the forest landscape; Dacke's forces were defeated, he was wounded and died on the border in 1543. Vasa sent his head and various pieces of his body to display across Sweden and imprisoned his family.

Why did Dacke turn down aid from foreign powers? It is unlikely he trusted Vasa after the Dalecarlian uprisings. If I were to construct an event structure analysis, I would first hypothesize that it was because as a leader, unlike Vasa, he expected to follow an old form of rulership, in which leadership was a temporary position, that he did not wish to be called a "king" or accept aid toward permanent rule in order to assure his followers he had no ambition to further erode the old legal and social codes.

Vasa next took what might seem inexplicable steps for a would-be authoritarian. Blaming the abuse of peasants on bailiffs he had appointed, he accepted the Småland farmers specific complaints, personally reviewed them, and replaced the tax collectors with "better" appointees (Hallenberg, 2012, p. 564). Additionally, he amended the Riksdag, or parliament, to explicitly include a forum where the farmers could present collective complaints (Hallenberg, 2012, p. 565), in the spirit of a king in the Iron Age. Fighting and repression were expensive: the bureaucratized state and collective action traditions made it easier, not harder, to rule the fractious and dangerous peasants because they accommodated voice and provided just taxation: a reversal of fortunes, but also of policies. This did not stop Sweden from moving toward short-lived autocracy in the 1600s, followed by an "Age of Liberty" in the 1700s.

Holenstein (2009, p. 2) noted that when states are constructed from below, the result, in later times, is often federalism or communalism of some type, created from an intersection of "moral concepts, corporate entities, interest groups," and that this type of state building "no longer appears to be the exclusive achievement of dynasty members and their ministers, civil servants, and generals" (2009, p. 5). This is accomplished largely through institutions that constitute "empowering interactions." For Medieval Sweden, Hallenberg (2012, p. 558) characterizes the relationship between Swedish kings and farmers as "empowering interactions" because "the bargaining over taxes was the most important social ritual connecting local society with the exercise of public power at the national level…This was not an exclusive top-down process: the negotiations also put political instruments into the hands of local agents who wanted a share in the growing authority of the state."

> "In a comparative perspective the Scandinavian peasantry seems both well-organized and disciplined...Whereas French peasants could protest by burning down the house of the local government agent, Scandinavian peasants usually wrote a petition and then sat down to wait for an answer from the king or his representatives. These differences should not be explained in terms of 'national character' or other forms of folk psychology; rather they should be seen as products of different patterns of political socialization and organization over the centuries" (Löfgren, 1980, p. 198).

Vigilance is the best antidote. Consistent with CAT, Figure 5 illustrates the constant battle between peasants and kings over taxation, public goods and voice during the Middle Ages and Early Modern periods. We assume that prehistoric conflict was equally constant. This is what vigilance looks like, rendering unremarkable the notion that the same population could maintain ideological principles and pass on their imperatives to future generations. The process that began in prehistoric Sweden was a long series of continuous negotiations concerning older and newer institutions, laws, and roles, which went through periods of constructive change and others of violent chaos, a reiterated problem that needed solving.

This begs the question: if the Iron Age marked a period of change in reaction to the excesses of the Bronze Age, was that rejection couched within a kind of social memory of the pre-Bronze Age Neolithic, Mesolithic, and Ice Age models of more egalitarian societies co-evolving with the human species itself? Perhaps...but that is a question for another day.

## Author contributions

The author confirms being the sole contributor of this work and has approved it for publication.

## Conflict of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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