The Origins of Civic Life

A Global Perspective

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Contents

Abstract

Comparing early phases of urban development in four regions – the Indus Valley, Mesopotamia, China, and Mesoamerica – this essay offers a global perspective on the origins of civic life. While we may never be able to reconstruct the unwritten constitutions of these earliest cities, or the reforms undergone in their first centuries, we can hardly doubt that these existed. Consideration of archaeological and written evidence from across the four areas suggests in every case, that significant checks and balances were placed on the centralisation of power and wealth during the early development of urban societies. Increasingly, the burden of proof lies with theorists who argue for causal or evolutionary connections between the origins of cities and the rise of stratified states.

KEYWORDS – Urbanisation, Origin of cities, State formation, Eurasia, Mesoamerica.

In his (1966) *The Evolution of Urban Society*, Robert McCormick Adams set a benchmark for comparative research into the genesis of cities. His approach was explicitly anthropological in seeking to grasp general principles of social integration in the world's first cities, through a controlled comparison of Mesopotamian and Mesoamerican cases. This required him to analyse chronologically disparate sources side-by-side. Adams nevertheless succeeded in maintaining a historical perspective on developments in both regions, and a sensitivity to their respective source materials, resisting the lure of formulaic theories. In what I hope is a similar spirit, and as a humble tribute to an archaeological titan, I would like to venture some comparative observations on the state of research in urban origins today.

My examples are drawn from four main areas – Mesopotamia, the Indus Valley, China, and Mesoamerica – with asides to other regions. This is not intended as an exclusive or exhaustive list; but merely to provide grounds for comparison within the scope of a short essay. The focus in each case will be on early phases of urban development. 'Urban origins' could encompass many perspectives. The focus here will be on civic life, an area that might seem beyond reconstruction for the cases in question, where written sources, if present or deciphered at all, are silent on matters of citizenship. Nevertheless, I will try to demonstrate the possibility of such an analysis, if we take civic life to mean the basic forms taken by human social relations in urban settings: the building blocks, physical and conceptual, that held together the first cities, as reconstructed from the distinctive range of source materials available in each region.

Despite the diverse nature of the evidence at hand, such a comparison, I suggest, reveals more than the sum of its parts. Among other things, it points to the conclusion that the earliest known forms of civic identity placed important checks and balances on the centralisation of power and wealth. We may never be able to reconstruct in any detail the unwritten constitutions of these, the world's first cities; or the reforms, perhaps

even revolutions, undergone in their early centuries; but equally, we can hardly doubt that these existed. Increasingly, archaeological evidence places the burden of proof on those theorists who argue for causal, linear, or evolutionary connections between the origins of cities and the rise of stratified states, whether on the basis of "scalar stress" or some other *a priori* set of theoretical principles.

Recognising Early Cities

The Neolithic settlement of Çatalhöyük, in central Turkey, is sometimes described as a "city". At thirteen hectares, and with its 5000 or so residents, it surely seemed expansive by the standards of its time. Hunter-gatherers of the last Ice Age must have apprehended seasonal aggregation sites like Dolní Věstonice, in the Czech Republic, in similar terms. Still there are good reasons to reserve the term 'city' for a later chapter of human history, which relates to the appearance in Eurasia, and the Americas of settlements of an entirely different order. It is not simply that some, like Mohenjo-daro in Pakistan or Taosi in China, reached sizes in the order of hundreds, rather than tens of hectares. What distinguishes them is rather their *civic* identity. Even in the absence of written evidence, it is clearly detected in the coordinated arrangement of built environments according to a unified pattern or scheme, which may or may not be organised around a high centre.[1] Defined in such terms, the city appears in history as a boldly self-conscious creation, planned at the municipal level. Çatalhöyük, by contrast, remained always an agglomeration of residential units, clinging to one another like cells in an organism.

Cities, I suggest, were a *sui generis* development in human history, as were the particular forms of urban tribalism they brought into being. I use the term 'tribalism' to convey some basic continuities between ancient and modern civic forms, but also to maintain a sense of the sheer otherness of early cities. With the inception of cities, and wherever ancient texts shed light on such matters, we find large groups of people referring to themselves, not in the idiom of kinship or ethnic ties, but simply as 'the people' (or, often, the 'sons and daughters') of a given city. United by its founding ancestors, its patron saints and gods, wedded to its civic infrastructure, its particular calendar of rituals and tournaments, its signature crafts and industries, its folktales, habits of speech, cuisine, dressing, even walking or standing: the city is, and probably always has been, a special kind of tribe.

Our conventional, and much romanticised, notion of a tribe is of course that of a closed society, defined by strict ties of blood. The tribe of the city is different. What defines it is precisely its openness and permeability. It lives and grows through its capacity to absorb outsiders, and make them into citizens. Teotihuacan, as we now

[1] The fourth millennium BC "megasites" of Ukraine and Moldova, which I have discussed elsewhere in relation to early Mesopotamian cities (Wengrow 2015), provide an example of civic planning around an architecturally vacant core.

know from isotopic studies on ancient human remains, attracted residents from as far as Yucatan and the Gulf Coast (White et al. 2008). Immigrants from across the great floodplains of the Indus buried their loved ones in the cemeteries of Harappa (Valentine et al. 2015). Urban tribes, like all tribes, have their sub-divisions: district clans of modest size, with their characteristic rivalries, through which the life of cities retains a human scale. Often marked out by walls, gates, or ditches, ancient neighbourhoods of this sort probably shared important social characteristics with their modern counterparts (cf. Smith et al. 2015).

Still everywhere, the pristine emergence of cities defines a strange phase of world history, perhaps one of the hardest for us now to grasp, since it is at once so familiar and yet so alien. Wherever they first appeared, both in the Old World and the Americas, cities seem to precede the existence of systemic taxation, literate bureaucracy, standing armies, wage-labour, and permanent law courts or policing. Despite this, they are almost invariably distinguished by enormous outlays of collective work in carefully coordinated projects, and by the extended co-habitation of tens of thousands in close proximity, over timespans that would be the envy of many a recent metropolis. The challenge of grasping what made such societies tick is therefore formidable.

What leaps out from the standing remains of Harappa or Teotihuacan is not just the impressive quality of everyday housing and neighbourhood organisation, but also the care lavished by thousands of citizens in building and maintaining civic structures that served no obvious utilitarian purpose. Stone temples, walled citadels, grand plazas, and the arrangement of streets or canals into harmonious patterns are typical. How labour was mobilised and coordinated on such scales is a question I will return to. For the moment, we can simply restate a fact that was already evident to Adams in his 1966 lectures: by far the largest cities of the ancient world appeared, not in Eurasia, with its many technical and logistical advantages, but in Mesoamerica, without wheeled vehicles or sailing ships, animal-powered transport or traction, and much less in the way of metallurgy and literate bureaucracy.

The scale of pre-Columbian capitals like Teotihuacan and Tenochtitlan, in the Valley of Mexico, dwarfs that of the earliest cities in China or Mesopotamia by a factor approaching 10:1, and makes the city-states of Bronze Age Greece, like Tiryns and Mycenae, seem little more than fortified hamlets. These are simple but challenging facts. They suggest theories of urban development based on *a priori* assumptions about the factors limiting human aggregation, whether logistical or communicative, are unlikely to contribute more than negative examples. While this may be instructive, generalisations of a more positive kind seem most likely to arise from an inductive approach, informed – but not determined by – theoretical perspectives.

Urban Formation on a Global Scale: Some Salient, but Not Determining Factors

Underlying causes of urban genesis may be highly particularistic. The growth of Teotihuacan to a city of c. 150,000 residents, for example, owed much to a series of catastrophic natural disturbances, including volcanic eruptions, which around 0 AD drove entire populations out of their former homelands (Plunket and Uruñuela 2006). Elsewhere, we can point to factors that are more general. Notably, across various parts of Eurasia, and in a few parts of the Americas, the appearance of cities follows quite closely on a series of profound environmental changes that began around 5000 BC: perhaps the first major reshuffling of the ecological deck on a world scale, since the end of the last Ice Age.

At least two relevant environmental processes of global reach were at work here. First, the wild and unpredictable flood regimes of the world's major river systems were changing, giving way to more settled routines, and in the process creating wide and highly fertile alluvial plains along the banks of the Yellow River, Indus, Tigris, and so on. Second, the melting of polar glaciers was slowing to a point that allowed sea levels the world over to stabilise (Day et al. 2007). The effects of all this were most dramatic precisely where great rivers met the open sea, depositing their seasonal bedloads of fertile silt faster than the open waters could push them back. What resulted were great fan-like deltas that we see today at the head of the Mississippi, the Nile, the Euphrates, and so on (Pennington et al. 2016).

Increasingly favourable to colonisation, such environments must have been major attractors for human populations. In various parts of Eurasia, farming groups may have gravitated to them with particular enthusiasm, along with their crops and livestock, attracted by well-watered soils (annually sifted by river action) but also rich wetland and riparian environments, favoured by game and waterfowl; and then, just over the horizon, the bounty of the sea. Such settings offered an almost inexhaustible supply of wild resources to buffer the risks of farming, as well as a perennial abundance of organic binding materials (reeds, fibres, clay) to support construction and manufacturing industries. Hunters and foragers, fishers and fowlers, were no less fundamental to these early urban economies, and to the configuration of urban society as a whole, than farmers and shepherds.

Wetlands and floodplains are no friends to archaeological preservation, however. Early phases of human occupation typically lie buried deep under later deposits of silt, or beneath the remains of later cities that grew over them. Usually, the first available evidence relates to an already mature phase of urban expansion, revealing a marsh metropolis, or network of great centres, out-scaling all previous known settlements. Some of these cities in former wetlands have only emerged recently into historical view: virgin births from the bulrushes. In China's Shandong province, on the lower reaches of the Yellow River, settlements in the order of 300 hectares already existed by 2500 BC,

over a thousand years before the earliest named royal dynasty (Underhill et al. 2008). On the other side of the Pacific, and at around the same time, ceremonial centres of striking magnitude have been discovered in the valley of Peru's Río Supe, notably at Caral, with its enigmatic remains of sunken plazas and monumental platforms, four millennia before the Inca Empire (Shady Solis et al. 2001).

Such discoveries indicate how much still remains to be discovered about the distribution and origin of the first cities, and just how much older these cities may be than the systems of authoritarian government and literate administration, once assumed necessary for their foundation. This, in turn, raises the fascinating but often-intractable question of what actually held these primal centres together, other than reeds, fibres, and clay? What was their *social* glue? To confront this question is to confront the sheer messiness of urban archaeology. It may be best to start with a concrete example.

The Indus Civilisation – Caste Without Kingship?

The archaeological site of Mohenjo-daro lies on the banks of the Indus, in Pakistan's Sindh Province. Around 2600 BC, people founded a city here on virgin soil. It was the boldest realisation of a new form of society, known as the Harappan or Indus civilisation. This was South Asia's first urban culture. It lasted for around seven hundred years, before its decline (see Kenoyer 1998; Possehl 2002).

On first inspection, Mohenjo-daro appears to bear out its reputation as the most completely preserved city of the Bronze Age world. There is something staggering about it all, a brazen modernity, which was not lost on the first Europeans to excavate these sites, who quickly designated 'high streets', 'police barracks', and so on, among the remains. The great majority of the city's residents appear to have lived comfortable lives in the brick-built houses of the Lower Town, with its grid-like street arrangements, long boulevards, and remarkable infrastructure for drainage and sanitation. The latter included terracotta sewage pipes, private and public toilets, and bathrooms in the majority of houses. Above the Lower Town loomed the Upper Citadel, a raised civic centre, also known as the Mound of the Great Bath. Both parts of the city stood on massive artificial foundations of heaped earth, lifting them above the floodplain. A casing of baked bricks, made to standard dimensions, extended all the way round the Citadel, affording further protection when the Indus broke its banks.

Within the wider ambit of Indus civilisation, Mohenjo-daro has but one rival: the site of Harappa, of similar magnitude, located almost 600km upstream on the Ravi River, a tributary of the Indus. Other sites of the same cultural family, ranging from large towns to hamlets, existed over most of the area of modern-day Pakistan, well beyond the floodplain, and extending into northern India. Colonial outposts of Indus civilisation reached as far as the Oxus River, in northern Afghanistan (Wright 2010). The Indus script appeared and vanished with these settlements, showing little development in between. It is not deciphered. What survives is mainly abbreviated captions,

stamped or incised on storage jars, transport vessels, and copper tools, and the remnants of a lonely piece of street signage from Dholavira, in the Great Rann of Kutch (Subramanian 2010).

Short inscriptions also feature on tiny stone amulets, captioning pictorial vignettes or miniature figures of animals, carved with striking precision. Most of these figures are realistic depictions of water buffalo, elephant, rhinoceros, tiger, and other local fauna. The presence among them of fantastic beasts, most often the unicorn, may suggest a function for these amulets as heraldic insignia: totems, perhaps, of particular city-clans. Were they worn as personal identifiers, necessary for passage between the city's gated quarters and walled compounds, or perhaps to gain entry to ceremonial occasions? Or were they used, like Mesopotamian seals, for administrative purposes, to impress identifying signs onto commodities passing among unknown parties? Both sorts of function seem likely, and may have been complementary (Possehl 1996).

Quite aside from our inability to make sense of the Indus script, there are underlying problems with the interpretation of Harappa and Mohenjo-daro. Both were excavated in the early 20th century, when archaeology was a broad-brush affair, with sometimes thousands of workers digging simultaneously. Rapid work on this scale produced striking spatial exposures of street plans, residential neighbourhoods, and entire ceremonial precincts. But it largely neglected the chronological dimension of a site's development. Early excavators recorded just the baked brick foundations of buildings. Their superstructures were of softer mud-brick, often missed entirely or unwittingly destroyed in the course of digging, while the upper storeys of large civic structures were originally of fine timber, rotted or removed in antiquity. What appears in plan as a single phase of urban construction is therefore a false composite, made up of undifferentiated elements from various periods of the city's history, spanning more than half a millennium.

Experts cannot even agree on how to define the true size of Mohenjo-daro. Some include only the immediately visible areas of the planned Lower Town and Mound of the Great Bath, yielding a total area of 100 hectares. Others note scattered evidence for the extension of the city over a far greater area, perhaps as much as three times this size: the "Lower, Lower Towns", long since submerged by floodplain soils. The latter point may lead in directions that are more promising. For despite all its uncertainties, Mohenjo-daro, and its sister sites in the Punjab and beyond, does offer insights into the distinct nature of civic life in South Asia's first cities.

For example, and contrary to what we might expect, there is no concentration of material wealth or precious goods on the Upper Citadel. Metals, gemstones, and worked shell ornaments were widely available to households of the Lower Town. Assemblages of such items, cached under floors for security, are scattered across every quarter of the city, with one exception: the Mound of the Great Bath, where the main civic structures stood (Rissman 1988). So too are little terracotta figures of people wearing bangles, diadems, and other showy forms of personal ornamentation. Evidence for the use of writing, as well as standard weights and measures, is also widely distributed in the Lower Town. Crafts and industries, such as metalworking, potting, and bead

manufacture appear to have flourished down there with little central organisation. Yet objects made for individual display had little place, it seems, in the most elevated quarters of the city (see Kenoyer 1992; H-M. L. Miller 2000).

What instead defines the acropolis, or Upper Citadel, is the Great Bath and its adjacent facilities, all built to the finest architectural standards of the time, yet largely devoid of any traces of personal ostentation. The crowning focus of Mohenjo-daro's ceremonial life, raised twenty metres above the floodplain on an artificial mound, was not a palace or temple, but a facility for purifying the body. Brick-built bathing platforms were also a standard, if relatively minor architectural feature of most dwellings in the Lower Town. Citizens would have been familiar with certain basic notions of cleanliness, and daily ablutions, which formed a routine part of domestic life. The Great Bath was, at one level, an outsized version of these domestic washing facilities (D. Miller 1985). At another level, though, the social life of the Upper Citadel seems to have negated, and in some ways even reversed that of the Lower Town. So long as the Great Bath was in use, over a period of centuries, we find no evidence of industrial activities in its vicinity. Moreover, the narrowing lanes of the Upper Citadel would have prohibited the circulation of commercial traffic, including ox-drawn carts.

On its vaunted heights, it was the Bath itself that overwhelmed all other buildings, and became the ultimate focus of human life and labour. The neighbouring barracks and storerooms – the so-called Warehouse, College of Priests and Great Granary – seem designed as adjuncts to the Bath, housing a staff (attached or rotating, we do not know) and their supplies of daily necessities. What we appear to be seeing here is the existence of a "city within the city", whose inhabitants led a more or less permanent kind of "anti-life", reversing the ordinary principles of household organisation. Much of this, as others have noted before (Lamberg-Karlovsky 1999), is redolent of the caste system, with its hierarchical division of social functions on an ascending scale of purity. The top ranks belong to world-renouncers, whose abstention from the trappings of personal status raises them to a higher spiritual plane. Commerce, industry, and status rivalries all may thrive, but collectively they are played down, as belonging to lower functions in the total social system. Overarching distinctions thus rested less on material wealth, than on avoidance of contact with certain polluting substances, and the people who handle them.

Clearly, we cannot simply project the social world of the Rigveda, composed around a millennium after the decline of Indus civilisation, onto these much earlier societies. Yet the principles of social organisation described there do seem to shed some light on precisely those aspects of Indus civilisation that our conventional notions of "class stratification" and "aristocracy" (or indeed, "egalitarianism" and "democracy") fail most strikingly to account for. Residential structures most closely resembling palaces at Mohenjo-daro are located, not on the Upper Citadel, but crammed into the streets of the Lower Town – that bit closer to the mud, sewage pipes, and paddy fields – where such jostling over worldly status appears to have properly belonged (cf. Vidale 2010).

If the first cities of South Asia were indeed organised on caste-like principles, then we would also have to acknowledge an intriguing difference from the later social world of the Vedic texts, which reserves high status (just below Brahmins) for the warrior caste known as Kshatriyas. Nowhere in the Indus civilisation do we find any accommodation of Kshatriya-type values, which relate to personal sacrifice, heroic deeds, military prowess, and participation in tournaments for the winning of titles and treasures. There is no tradition of monumental representation or pictorial narrative, celebrating the deeds of charismatic leaders, lawgivers, war-leaders, or other great personages. The small, cloaked figure of yellow limestone, known as the Priest-King, is an isolated exception, and need not have represented any particular individual.

Nor are there any throne rooms, royal burials, or evidence of competitive mortuary rituals. None of this is to say that the Indus civilisation was some kind of commercial or spiritual arcadia. It is simply to point out that its civic values made no institutional provision for great warriors, heroes, or indeed self-aggrandising priest-kings.

Mesopotamia – *Corvée* Labour and Democracy

While in many ways unique, Mohenjo-daro illustrates some general principles of organisation that also apply to the first cities in Mesopotamia, Iran, and Turkmenistan; regions connected by 2000 BC through long-distance trade routes, maritime and overland. These principles are by no means universal, but they are at least common to this extended family of Bronze Age societies. Firstly, it is clear that these earliest cities were far more than just logistical hubs, providing goods and services to a population of residents. Additionally, they were the fonts of new kinds of identity, most clearly expressed by functional differences in their civic architecture. Where Mohenjo-daro has a Greath Bath, the early centres of Turkmenistan (like Gonur-depe, in the Murghab delta) have Fire Temples (Sarianidi 1990), while the Mesopotamians built Great Houses to shelter, feed, and clothe their all-too-human gods.

What we would now call the public sector seems to begin with such centralising of ceremonial functions at the heart of cities. In Mesopotamia, this seems to have involved ordinary households giving up certain ritual prerogatives and aesthetic values: everyday material culture, once so effusive, becomes bland and uniform; the physical remains of the dead, once so prominent in households, are banished from domestic spaces (Wengrow 2001). This did not lead, initially, to the development of kingship, empire, or the written codification of government; none of which are primordial features of urban life in Mesopotamia, any more than in the Indus Valley.

As far as we can tell, warring city-states, together with royal monuments and palaces, become a feature of Mesopotamian history around 2800 BC, the beginning of the Early Dynastic period. By that time, however, cities had already existed on the floodplains of the Tigris and Euphrates for well over half a millennium or more. So too, we must assume, had the basic elements of Mesopotamian citizenship: the real and enduring

building blocks of urban society. One such was the institution of *corvée*. Standard definitions refer to forced labour on civic projects (sometimes including military service), extracted by the state from free citizens on a seasonal or otherwise periodic basis, avoiding peaks in agricultural labour. The authors of ancient Mesopotamian literature would certainly have recognised this definition. *Atrahasis*, the Mesopotamian flood myth, recounts how the gods created people specifically to perform *corvée* that they themselves were tired of doing.

Rulers of later Mesopotamian cities still had to legitimise their status by heaving a basket of clay to the construction site of a temple, a solemn ritual duty, signifying the equality of all mortals before the gods. The original Sumerian word for *corvée* (dubsig) refers to this basket of earth, and is written with a pictogram based on the image of a person lifting it onto the head, just as kings are shown to do on their monuments. In later times, and certainly by around 2000 BC, royal scribes came increasingly to use another word (bala), meaning 'term' or 'cycle', to refer both to the succession of royal dynasties and periods of *corvée*. Even at the height of royal power, all free citizens were obliged (in theory) to perform this labour for a period of weeks or even months, included otherwise high-ranking administrators and clerics. In practice, kings could grant exemptions from such extended duties, and those well off enough could sometimes pay tax in lieu of them (or employ others to do it for them; Steinkeller 2015).

But the principle that all were expected to contribute in some way appears to have been maintained. We need not take completely at face value the royal hymns, which describe the "happy faces and joyous hearts" of those who laboured. Still, it is clear these seasonal work projects were undertaken in a festive spirit, supported by generous wages of bread, beer, dates, cheese, and meat. Such festivals also appear to have been occasions when the moral and political order of the city was effectively turned on its head. This is suggested by ancient sources like the hymns of Gudea, supreme governor (*ensi*) of the city-state of Lagash, composed towards the end of the third millennium BC. These compositions eulogise the restoration of the House of Ningirsu, patron deity of the city, recounting how conscripts and generals shared the work equally, with nobody giving orders; even mothers were forbidden to strike their children during the period of construction (ibid., 146–154).

No doubt, these are official and highly rhetorical (literary) representations of events. Yet it stretches credibility to believe all the manifold details of these long compositions were simply made up for reasons of state propaganda. Among them, we also find statements indicating that festive labour had lasting benefits for the populace at large, including cancellation of private debts by royal decree: a feature of Mesopotamian urban society confirmed by numerous other written sources, administrative and monumental, over some thousands of years. Reading between the lines of royal largesse, we can see how such occasions must also have served as pointed reminders, from the people to the kings, about who really makes a city, and who ultimately depends on whom for its functioning. Nor was this just a case of ceremonial "feather waving" or

letting off steam. Written evidence from nearly all periods of Mesopotamian history shows even the most autocratic rulers were answerable to a panoply of town councils, neighbourhood wards, and assemblies of elders (van de Mieroop 1997). "Sons and daughters" of a city could make their voices heard, holding the court accountable in matters of policy; and while it is inherently unlike that royal scribes would record such events, we also gain occasional glimpses of popular revolts (see Fleming 2009).

To participate in *corvée* was, it seems, a collective demonstration of what it meant to be a free citizen, as opposed to a slave or attached labourer in a temple or palace. It meant being able to share in the vision of a city where all, even kings, were equal before the gods. This raises the vexed question of how Mesopotamian cities actually *were* governed, or governed themselves, before the inception of kingship. Despite their considerable land-holdings, there is no evidence that urban temple-estates had executive political functions. Ever since Thorkild Jacobsen's magisterial (1943) statement on the matter, the answer usually given by historians is that Mesopotamian cities were originally democracies of some sort, albeit very different from those of the later Greco-Roman world. At least some feel that Jacobsen was not only broadly correct, but actually underplayed certain aspects of his own theory.

More recent studies, based on a much larger corpus of written sources, show that district councils, and assemblies of elders with the authority to represent large bodies of citizens, were not just a feature of the earliest phases of urban government. There is evidence from all later periods too of executive power in cities being distributed among a series of nested councils, with members drawn from venerable families, and also for plenary assemblies attended by a wider sector of the population. Sadly, there is an almost total lack of detailed information about how these groups were actually appointed or elected, and how they reached decisions. What nobody doubts, however, is the durability of the urban assembly (Akkadian: *puhrum*) as a feature of Mesopotamian urban government (Barjamovic 2004).

Some of the clearest evidence of this nature comes from the time of the Neo-Assyrian Empire, which accorded significant autonomy to such collective bodies in matters of local government. Official letters written by city-governors state the citizens of Babylon, Nippur, Uruk etc. reached decisions on some matter of concern to their imperial overlords, which might include matters of foreign policy. One has to assume murder trials, divorce, and property disputes were normally in
the hands of such local bodies. Given the long history of literacy in Mesopotamia, what is truly remarkable is just how rarely such matters were committed to writing. Marc van de Mieroop's (1999) conclusion that the basic responsibilities of urban government – sanitation, policing, property and family law, and so on – were mostly decentralised seems compelling.

Unlike Jacobsen, we are no longer completely reliant on later written sources to reconstruct the very earliest forms of urban life, in the fourth millennium BC. The key archaeological site is Uruk (modern Warka, in southern Iraq), whose later mythology inspired his search for "primitive democracy". Around 3300 BC, the built-up area of

Uruk was around 200 hectares, dwarfing its neighbours on the Lower Mesopotamian alluvium. Population estimates range between 20–50,000 inhabitants, but the city's original residential quarters are largely hidden from view by later urban settlement. The cuneiform writing system developed at Uruk in the late fourth millennium BC, its use at that time almost entirely confined to bookkeeping functions in the city's major temples (Liverani 1998).

This original, pre-dynastic city of Uruk took form around an acropolis: the raised district called *Eanna*. On it stood nine monumental buildings, of which only foundations of imported limestone survive, along with fragments of stairwells and columned halls with colourful mosaics, assembled by impressing thousands of painted cones into mud-plaster walls. The great ceilings of these civic structures, and many of their furnishings, would have been of imported timber, conveyed by river barge from the far north. *Eanna* remains something of a "strange fruit": a core, with no surrounding flesh, since its excavators had no interest in the residential districts beyond its walls. We have just the remains of the public sector, and no private sector against which to define it (Nissen 2002).

Most of the buildings at *Eanna* seem to have been great assembly halls, modelled on the plan of ordinary households, but constructed as Houses of the Gods, to an entirely different scale, and using different – often imported – materials. There was also a Great Court, comprising a sunken plaza, almost fifty metres square, with benches all around. A corpus of cuneiform tablets recovered from various parts of the complex affords some insight into the workings of this city-within-the-city. These inscriptions are almost entirely of an administrative nature: records of transactions in particular goods and services. Some historical threads can nevertheless be drawn out, and we can perceive in these administrative webs of people and things something like the seedbed of our own factory systems, public banks, and methods of timekeeping, including the 60-minute hour and 360-day calendar year (Englund 1998).

Human labour was quantified in standard work hours, and we find indirect evidence for *corvée*, with otherwise free households supplying seasonal service on public projects. Unsurprisingly, most documents concern remunerations and rations for the attached workforce of the temple sector, which later sources suggest is likely to have comprised a diverse assortment of the urban needy (widows, orphans, and others rendered vulnerable by debt, crime, warfare, disease, or poverty). Under the auspices of this mixed welfare-workhouse system, the first large-scale dairy and wool industries developed, as did mass production of leavened bread, beer, and wine, along with central facilities for packing and transport. From this, we might infer certain functions of the sector, such as coordinating labour at key times of year, and providing quality control for products outside the domestic sphere (Wengrow 2008).

Always, however, the main purpose of the temple sector was to feed and house the city-gods and goddesses by maintaining their temples, servicing their cult statues, and organising their festivals. If the overall character of this early urban system seems strikingly egalitarian, it is precisely because all human beings were equal in their

bondage to the gods: an ethos that seems to be captured in the decoration of the famous Uruk Vase (Bahrani 2002), where figures of identical nude males parade in registers with their yield of field, orchard, and flock to the House of the Goddess.

China – a Case of Urban Revolution?

No doubt, the picture just presented of early cities in western Eurasia is too static. Even in the absence of textual sources, we have no reason to believe their unwritten constitutions were immutable over periods of five centuries or more. In Mohenjo-daro's case, we know this was not so. At least two centuries before the city's demise its Great Bath had already fallen out of use. Industrial facilities and ordinary residential housing crept beyond the Lower Town into the heart of the Upper Citadel, even into the former site of the Bath itself. Within the Lower Town, we now find buildings of palatial dimensions with attached craft workshops (Possehl 2002: passim; Vidale 2010). This other Mohenjo-daro existed for a good many generations. Its archaeological description as the site's Late Period hardly does justice to the conscious transformation of a centuries-old pattern of hierarchy. Such loaded terminology hampers the interpretation of early cities elsewhere.

China, perhaps more than any other part of Eurasia, has struggled to reconcile the findings of prehistoric archaeology with traditional historiography. Since the discovery of inscribed oracle bones at Anyang, in the north-central province of Henan, political history in China has started with the rulers of the Shang Dynasty, established around 1200 BC (Bagley 1999). Most accept that its cultural roots lie in a fusion of local (Erligang and Erlitou) elements, extending back some centuries on Chinese soil, with other elements introduced from the Inner Asian steppe, among them techniques for casting bronze, forms of weaponry, and light horse-drawn chariots (Steinke and Ching 2014). Before all that was once supposed to extend a long and largely amorphous series of Neolithic periods, defined by technological trends in farming, and by stylistic changes among regional traditions of pottery, jades, and other grave goods.

Instead, modern archaeology has furnished China with a late Neolithic (Longshan) period of formidable complexity. Already by 2600 BC we find a spread of settlements with rammed earth walls across the entire valley of the Yellow River, from the coastal margins of Shandong to the mountains of southern Shanxi. Their sizes vary from cities of more than 300 hectares to tiny principalities, little more than the size of villages. Some of the smallest are to be found in Henan itself, the heartland of the later named dynasties. Wangchenggang, associated with the Xia dynasty (legendary precursor to the Shang) has a total walled area of no more than thirty hectares. The major demographic centres of the Longshan period in fact lay elsewhere, on the lower reaches of the Yellow River to the east; but also to the west of Henan, in the Fen River Valley of Shanxi province; and in the Liangzhu culture of southern Jiangsu and northern Zhejiang (Liu and Chen 2012).

Many of the largest sites are associated with cemeteries, containing remains of individuals buried with tens or even hundreds of carved ritual jades, and other forms of regalia. Accommodating such findings to the annals of later Chinese history has proved an uncomfortable task. Some evoke a period of high shamanism, echoed in the later myth of Pan Gu. Others associate the Longshan period with classical legends of *wan guo*, the period of Ten Thousand States, before power was localised to the Three Dynasties of Xia, Shang, and Zhou (see Chang 1999). The archaeological particulars of Longshan sites in fact suggest a much livelier political history for early Chinese cities; one which found no place in the courtly records of later dynasties. A striking example derives from the site of Taosi, near the modern confluence of the Yellow and Wei Rivers.

Between 2300 and 1800 BC, settlement at Taosi went through three phases of expansion (He 2013). First, a fortified town of 60 hectares was built on the ruins of a village, expanding in the later phases to a city of 300 hectares. In its early and middle periods, Taosi exhibits monumentality and stratification almost worthy of some later imperial Chinese capitals. Commoner and elite quarters were rigidly segregated, with craft workshops and a calendrical monument attached to what was most likely a palace. Massive enclosure walls, road systems, and large protected storage areas were constructed. Burials in the town cemetery fell into clearly differentiated classes, elite tombs being furnished with hundreds of lacquered vessels, ceremonial jade axes, and the remains of extravagant pork feasts. Then, around 2000 BC, everything seems to have changed.

As the excavator describes it:

> The city wall was razed flat, and ... the original functional divisions destroyed, resulting in a lack of spatial regulation. Commoners' residential areas now covered almost the entire site, even reaching beyond the boundaries of the middle-period large city wall. The size of the city became even larger, reaching a total area of 300 hectares. In addition, the ritual area in the south was abandoned. The former palace area now included a poor quality rammed-earth foundation of about 2,000 square metres, surrounded by trash pits used by relatively low-status people. Stone tool workshops occupied what had been the lower-level elite residential area. The city clearly had lost its status as a capital, and was in a state of anarchy (ibid., 269).

Two points seem worth noting. First, the 'state of anarchy' (or 'collapse and chaos' as elsewhere; He 2018) lasted almost as long as the entire duration of the earlier city. Second, the overall size of Taosi actually grew at this time from 280 to 300 hectares, suggesting prosperity, not collapse, following the removal of a rigid class system. There are clues, within the excavation reports, that this was a conscious and most likely violent process of transformation: a breaking of institutional cages. The elite cemetery was disturbed by an influx of commoner graves, and in the palace district was found a

mass burial, with signs of torture and grotesque violations of the corpses, interpreted as an 'act of political retribution' (He 2013, 269).

The archaeological data from Taosi are regrettably coarse; but they serve to advance a debate on the political dynamism of the world's earliest cities as places of large-scale experimentation, even of revolution. To enter further into this debate, we must leave the Old World behind, and briefly consider some aspects of early city life in the pre-Columbian Americas.

Teotihuacan – the Birth of Public Housing

At its height, between roughly 100 and 600 AD, Teotihuacan could have contained Mohenjo-daro or Uruk ten times over. The city's population was cosmopolitan, polyglot, and multi-ethnic, including Maya and Zapotec groups. Other immigrants from distant shores, as far as Veracruz and Oaxaca, formed their own quarters there, and nurtured traditional crafts and customs (Manzanilla 2015). We must imagine the city's various districts as so many "Chiapas-towns", "Yucatán-towns", and so on. At least some of these groups must have been familiar with the use of writing, yet something in Teotihuacan's social fabric did not lend itself to the promotion of literacy, at least not in the direction of genealogical reckoning or monumental display. If writing was used for administrative or commercial affairs, then it must have been on ephemeral reed or bark paper, while oral communication seems to have been highly valued, as indicated by the "speech scrolls" emanating from human mouths in domestic wall paintings (Colas 2011).

External visions and imaginings of Teotihuacan, even those firmly embedded in Mesoamerican antiquity, may be highly misleading. Our two primary perspectives – Aztec and Maya – derive from cultures suffused with monarchy, whose art and writing were devoted to glorifying the feats of kings and the deeds of courtiers. Despite sustained efforts to prove the contrary, it seems increasingly clear that civic life at Teotihuacan had a markedly different character. Specialist debate on this point sometimes revolves around the question of whether Teotihuacan's political system either was or was not a monarchy (e.g. Sugiyama 2005: 231–236). Taking into account the points raised so far, concerning the dynamism of early urban societies in other parts of the world, it seems reasonable to consider if these debates might be based on an artificially static view of the city's development.

Consider, for example, the standard architectural plan of Teotihuacan, pieced together from the most ambitious and exhaustive ground survey of an urban landscape ever undertaken by archaeologists (Millon 1970). Having gone to the lengths of recording a built environment on this scale, all 20 square kilometres of it, one quite naturally wants to see it all at once, in a single gasp. Modern archaeology thus often presents something like the chronologically collapsed plans that we also typically see of Mohenjo-daro, and other "first cities" elsewhere: centuries, even millennia of urban development

folded into a single dimension, visually stunning, but historically quite flat and artificial. In the case of Teotihuacan, the result is a strangely harmonious but also utterly misleading effect.

At the centre, anchoring the whole mirage, stand the great monuments – the two Pyramids, and the Ciudadela (Citadel) containing the Temple of the Feathered Serpent – and extending for miles all around them the smaller, but still impressively appointed residences of the city's population: some 2000 or more multi-family apartments, tidily organised on a vast orthogonal grid, aligned from end to end with the ceremonial core of the city. It is an almost perfectly functional image of civic prosperity and hierarchy, evoking More's *Utopia* or Campanella's *City of the Sun*. But it is also quite illusory, since the residences and pyramids do not strictly belong together. Their construction occupies, not just different spaces, but different phases of time. Nor is the temple quite what it seems on first inspection. To see what is amiss, some basic chronological reconstruction is needed.

Settlement at Teotihuacan began as early as 500 BC, but its first phase of urban growth started around the year zero. Startling population movements took place at that time across the entire Basin of Mexico and adjoining Valley of Puebla, triggered by seismic shocks on their southern frontiers, including an eruption of Popocatépetl. It is estimated that, from 50 – 150 AD, around 100,000 people funnelled into Teotihuacan, siphoning off most human life from the surrounding areas. At the Pueblan site of Tetimpa, 13km from Popocatépetl, houses excavated from under the ash are miniature versions of civic architecture later found at Teotihuacan: in particular, the standard form of neighbourhood shrine, or Three-temple Complex (Plunket and Uruñuela 2005). As Teotihuacan grew it incorporated these and other local traditions, village cults of the dead and maize goddesses rubbing shoulders with city cults for the great gods of fire and rain.

Very little is known about the residential areas of Teotihuacan until around 250 AD. Housing is thought to have comprised mainly small one-room structures, perhaps built largely of perishable materials (Millon 1993: 29; Smith 2017: 184). How the fledgling city divided access to arable land and other resources is still poorly understood (Manzanilla 2017). To what extent it even functioned as a single organism, as opposed to an agglomeration of makeshift districts, remains an open question. What seems clearer is that efforts to construct a more encompassing civic identity focussed heavily and perhaps almost exclusively on a central programme of municipal construction: the creation of a shared focus for grand ritual performances, a sacred city, within the wider urban sprawl (see Cowgill 2015). The whole affair has a strong millenarian flavour, especially when set against its proper backdrop of mass displacement, and the loss of former homelands to natural disaster.

What this involved, in practice, was the coordination of thousands of labourers to build an artificial landscape in the centre of Teotihuacan, with fabricated pyramid-mountains and rivers, laid out as a stage for the enactment of the 260-day ritual calendar. In a staggering feat of civil engineering, the population diverted the channels

of the Río San Juan and Río San Lorenzo, tying them to an orthogonal grid, and transforming their sodden margins into solid foundations (all without working animals or metal tools). That laid the basis for a grand architectural programme, a spatial realisation of cosmic time, which established the Pyramids of the Sun and the Moon, and the Temple of the Feathered Serpent. The latter faced a sunken plaza, built to capture the floodwaters of the San Juan, thus forming a seasonal lake (or perhaps a great ritual bath, as in later Tula), its waters lapping at the painted carvings of plumed serpents and shells on the temple façade, making them glisten as the late spring rains began to fall (Taube 1992).

The role of this municipal centre in unifying and blessing the city seems to have been predicated on the provision of offerings, not just of labour and wealth, but also of human life. Ritual killings are associated with successive buildings phases at all three of the major monuments. Some hundreds of burials are embedded in their foundations. The corpses of victims were laid down in pits or trenches, symmetrically placed to define the perimeter of the building that would arise on their remains. Offerings of infants lie at the corners of the Pyramid of the Sun. Under the Moon Pyramid were buried foreign captives, some mutilated or decapitated; while in the foundations of the Temple of the Feathered Serpent lay the bundled bodies of adult male warriors, arms tied back at point of death (Sugiyama 2005). One would think at this point, around 200 AD, the fate of Teotihuacan was settled: its destiny to join the ranks of "classic" Mesoamerican civilisations, with their strong traditions of warrior-aristocracy.

In fact, Teotihuacan seems to have chosen a different path. What came after the Old City was not monarchy or aristocracy, but a flow of resources back to the populace at large, in a truly prodigious project of social housing. We may not be able to say much in detail about *how* this happened – the lack of written sources makes this next to impossible – but archaeology permits us to say quite a bit about *what* happened, or at least to outline a basic sequence of developments. The reversal of the city's political trajectory seems to have started around 200 AD, or shortly after, with the desecration of the Temple of the Feathered Serpent. Thoroughly burned, and many of its gargoyle-like sculptures broken, the temple was covered on its open side, facing the Way of the Dead, by a stone-faced platform (the *adosada*). This rendered largely invisible the elaborate western façade of the temple, and what remained of its goggle-eyed gods and plumed snakeheads (Pasztory 1997: 116).

After 250 AD, there were no new monumental building projects on the scale of the Pyramids or Temple at Teotihuacan. Around the time of the Temple's spoilage, a remarkable flow of civic labour and resources began, away from the ceremonial centre, and into the provision of public housing. Within a short span of time some 2000 apartment buildings went up, covering the city from end to end, leaving the Pyramids of the Sun and Moon stranded in the centre, their staircases hidden behind by smaller *adosadas*. There can hardly be any doubt this was a carefully planned and comprehensive programme of municipal reform. Housing estates were laid out to a common grid, forming neighbourhoods defined on ethnic criteria and by craft specialisation.

Multi-ethnic neighbourhoods were also created, both near the centre and around the city margins.

The most remarkable feature of this new development is surely the housing itself. When first investigated by archaeologists, the apartment blocks of this "New Teotihuacan" were quite reasonably thought to be palaces; until later surveys showed how virtually the entire population lived in fine communal dwellings of this kind. All were built of masonry, had plastered walls and floors, and integral drainage facilities. Within every walled block of apartments lived a small number of families, each with its own multi-room complex, complete with private porticoes where light entered the otherwise windowless rooms. Residents encountered each other in shared internal courtyards, which also seem to have been the focus of domestic rituals. Most were fitted with altars in *talud-tablero* style, and some had pyramid-form shrines, apparently replicating in miniature the former civic monuments (Manzanilla 1993).

It seems the apartment blocks were initially established on a principle of equality, with the majority built to similar dimensions on plots roughly 60/60 metres. By the time of the city's abandonment, more than half were still arranged in this way, while others had grown markedly larger or smaller. Differences of wealth and status also took root within apartment blocks. Each seems to have had a founder family, which alone practiced a cult of the dead, reflected in its sub-floor burials (Manzanilla 1996). Only some families were able to decorate their homes with frescoes. But even the more modest apartments show signs of a comfortable lifestyle, with access to imported goods, and a staple diet of corn tortillas, eggs, turkey and rabbit meat, as well as the milk-hued *pulque* (an alcoholic drink fermented from the spikey agave plant).

One can see how the occupants of Teotihuacan in these later phases would have effectively developed two kinds of family life, one based on kinship – with ties of blood extending far beyond the apartment block and even the city – and another, based more strictly on co-residence. In their different ways, both types of extended family retained a human scale, a world away from our modern conception of the housing estate, where nuclear families are sequestered by the hundred in multi-storey monoliths.

Conclusions

It is often considered axiomatic that to study the origins of cities also means studying the origins of stratified states. In *The Evolution of Urban Society*, Adams was wary of eliding the two concepts, drawing attention to institutions like the Aztec *calpulli* or Mesopotamian *puhrum*, which formed axes of resistance to state interests. The 'limits of state power' remained a strong interest to the end of his career (Adams 2007). Today, the argument for decoupling 'city' and 'state' as analytical concepts is gaining ground in anthropological archaeology (Jennings and Earle 2016); as is the realisation that collective action played an important role in a wide variety of ancient urban cultures (Blanton and Fargher 2008).

The comparison undertaken here has extended these arguments for four of the earliest known cases of urbanism, respectively in the Indus Valley, Mesopotamia, China, and Mesoamerica. Albeit in different ways, each case presents strong evidence for limitations on the growth of monarchy, class stratification, and centralised power in early cities. Each also presents evidence – often, admittedly, indirect – for the cultivation of robust civic institutions, serving the interests of large urban constituencies, and working effectively at the level of neighbourhood councils (or 'parishes', as Adams termed them, conveying a fusion of administrative and ritual functions at the local level). In bringing the discussion to a close, it may be worth considering one area in which Adams may have found something to disagree with in these more recent studies of early cities: their strong focus on internal factors as the main drivers of change in urban societies.

What we now term the 'Uruk Expansion' – describing the extensive spread of southern Mesopotamian cultural elements that accompanied the growth of the first cities (Algaze 1993) – was largely unknown to archaeologists in the 1960s. Even then, however, Adams could already note the importance of inter-regional trade networks and external colonisation as integral features of early urbanism, both in Mesopotamia and Mesoamerica (Adams 1966: 154–169). In the case of Teotihuacan, connections extended as far as the Maya lowlands; in that of Uruk, as we now know, they reached as far as the Black Sea and the Zagros Mountains. In neither case, as Adams anticipated, can the development of urban centres be understood purely as a result of internal factors, such as population density or adaptation to local environmental circumstances. Similar points can undoubtedly be made for China and the Indus Valley.

In each case, the initial development of cities was closely connected to the growth of interregional systems for the acquisition of specific materials (e.g. coloured stones, metals, feathers, incense and unguents) that were integral to urban religious systems (see further, Wengrow 2010). 'States' emerged, according to Adams, where these interlocking patterns of trade and tribute became bound up with tendencies towards militarism. Perhaps the major difference between our own perspective and that of his generation is that we now know so much more about the kinds of societies that existed around the spatial margins of these early urban networks; the inhabitants of mountains, steppe, and adjoining coastlands, who often controlled traffic in such culturally essential materials. If recent developments in Mesopotamian archaeology are anything to go by (Frangipane 2012), then it may be there – among the smaller and more dispersed societies of the urban periphery – that we find the true origins, not just of militarism, but also of aristocratic values, and even the institutional basis of ancient monarchy.

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