

Beyond State Formation: Mass Production and Commercialization in Shang China

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ABSTRACT

The topic of state formation has undergone radical change since the 1980's. In the opening decades of the twenty-first century many scholars came to doubt the utility of the concept of ancient "state" for archaeology even as focus changed from defining socio-evolutionary stages to detailing how particular ancient polities worked. This shift ushered in a renewed interest in the relationship between polities, their economies and urbanization. In this paper I will explore the relationship between political economy and urbanization in Shang China from the perspective of commercialization. I will argue that despite influential redistributive models, the Shang economy was significantly commercialized, especially during the Anyang period. This commercialization was part of a long process and it created a positive feedback loop between commerce, industry and urbanization. This process is exemplified in the explosive growth of gigantic bone workshops at the Shang capital of Anyang, mass-producing high-value added artifacts for wide distribution. This linkage between industry, commercialization and economic power laid the foundation for the thriving economy of the Eastern Zhou period.

KEYWORDS: commercialization, urbanization, political economy, Bronze Age China, Shang

Introduction

There have been many different answers to the question of when state formation began in ancient China, from Keightley's (1983, p. 558) argument that the Shang 商 became an incipient state at the end of the Anyang 安阳 period around 1100 BC, to Bagley's (1999, pp. 156–157) claim that Erligang 二里岗 was a state at around 1500 BC and Liu & Chen (2003, pp. 29–35) arguing that the first Chinese state was Erlitou 二里头 at 1800 BC. Even more recently, Shelach & Jaffe (2014, pp. 338–342) have argued for state formation during the Longshan 龙山 period at the end of the third millennium BC, while Renfrew & Liu (2018, p. 988) claimed that Liangzhu 良渚 was a state, pushing "Chinese" state formation back to early third or late fourth millennium BC. While archaeological discovery has helped bolster the trend toward ever earlier dates, a key reason for the multiplicity of opinions is the lack of consensus on what a "state" is. In terms of site sizes, concentration of population and labor, many early centers in what is now China do

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indeed look very impressive, but what do we actually know about how their institutions were organized or how their political economies functioned? I would argue that without more granular research and focus on specific processes, the game of determining what is and is not a state is meaningless. The process I wish to focus on in this paper concerns the relationship between commercialization, urbanization and political economy. The period in question will be the Central Plains of China during a period conventionally known as the Bronze Age, between around 1850–1050 BC. The reason for this focus is that until recently, the Chinese Bronze Age was assumed to have very little commercialization, while urbanization, political economy and polity formation were assumed to be entirely a matter of centralized control. I will argue that this view is incorrect and that commercialization and associated phenomena played a significant role in the development of the Central Plains Bronze Age polities and subsequent history.

Ancient Polities, Ancient Political Economies and Their Relationships

In the archaeological literature on complex polities, “the state” is used in two basic ways. The first is in the sense of “the government” or “the polity,” referring to an executive entity that that is made of many, often contradictory, parts but, for convenience sake, is being taken as a collective. The second use of “the state” is evolutionary, as in bands, tribes, chiefdoms and states (Sahlins & Service 1960), and, I would argue, as problematic as “chiefdom” (Yoffee 1993), for many of the same reasons (Campbell 2009, pp. 823–824). In addition to the increasing recognition of the variety of ancient complex polities, it could also be argued that the “ancient state” is an anachronistic oxymoron. “State” came to have its current, meaning as a political entity only in the seventeenth and eighteenth centuries in tandem with the theorizing of European absolutist monarchies and then nation states (Ferguson 2003, p. 84). As I have written in other places, prominent neo-evolutionary theories of the state based their definitions on authors (such as Max Weber) who were explicitly discussing the modern state and in doing so, smuggled Eurocentric and Modernist assumptions into the analysis of ancient political forms (Campbell 2009, pp. 823–824, see also A. Smith 2003, pp. 84–85). For this reason, the less freighted term of “early complex polity” is preferred.

Nevertheless, the issue with neo-evolutionary state theory was not just terminological. While the nature of the evolutionary pathway (linear or multi-linear) was debated in the 1970’s and 1980’s (e.g. Claessen & Skalnik 1978), by the turn of the millennium it had become clear that the great variety of early complex polities was frustrating definitional and developmental analytical goals. This recognition prompted a re-alignment of research toward the goal of understanding how ancient polities worked (e.g. Marcus & Feinman 1998, p. 3; Trigger 2003, p. 40). In practice this has meant a recognition of the complexity of social complexity and the need to disaggregate many of the aspects of ancient polities

that were once assumed to be parts of socio-evolutionary packages. Thus, in the decades of the twenty-first century, archaeologists of ancient polities have shifted focus to topics as diverse as political landscapes (A. Smith 2003), polity networks and boundaries (Campbell 2009), sovereignty (Smith 2011; Routledge 2014), urbanization (M.L. Smith 2003), political economy (M.E. Smith 2004), and so on.

The particular developmental aspect of early complex polities that I wish to focus on in this paper is political economy and, in particular, commercialization. While it was once thought that commercialization was a feature incompatible with early complex polities, archaeologists working in Mesoamerica have shown otherwise. M.E. Smith (2004, pp. 78–80) marks commercialization as a major variable in ancient political economies, while Feinman & Nicholas (2004, p. 170) suggest that major differences between highland Mesoamerican and Peruvian polity political economies had their bases in deep-time differences in the production and distribution of goods. In other words, the degree of commercialization in a political economy is a major variable with ramifications for various aspects of political and economic organization.

The Chinese Bronze Age

K.C. Chang, based on evidence available in the 1980's, famously argued that the Shang kingdom was built on the foundations of a stone age economy and that its great concentration of wealth was the result of political rather than technological or economic innovation (Chang 1983, p. 8; 1989, pp. 160–165). The cities of the Chinese Bronze Age were thought to be “king’s cities,” or even ceremonial centers, lacking the merchants and markets that would only come into being in the Iron Age (Chang 1985, p. 61; Chen 2003, p. 290; Falkenhausen 2006, p. 222). More recent work has complicated these assertions, though the question of how to characterize the relationship between urbanism, political institutions and economy in Bronze Age China remain.

Perhaps the first issue that must be dealt with is the changing understanding of the chronological and spatial definition of the Bronze Age in Mainland East Asia and its relationship to the development of complex polities (Table 1). In the sense that K.C. Chang (1983, p. 8) and other scholars have used it, the Chinese Bronze Age is significant for its differences from other Bronze Ages. The bronze of the Chinese Bronze Age, or more accurately, the Central Plains Bronze Age, was used primarily for ritual vessels cast via complex piece mold procedures (Chang 1983, pp. 101–106). The centrality of these vessels motivated Chang’s claim for the primary importance of ritual and politics over economy (Chang 1983, p. 8; 1989, pp. 160–165), inspired Wu (1995, pp. 1–6) to argue that they instantiated monumentality for the period, and Bagley (1999, p. 138) that they were indexical of civilization. At the same time, work of the last two decades has shown that not

only did bronze production begin centuries before the Central Plains in the northwest (Li 2005; Jaang 2015), but that metallurgy was introduced to geographical China along with a Eurasian package of domesticated ungulates, crops and possibly wheeled vehicles (Yuan & Campbell 2009; Jaffe & Flad 2018). Nevertheless, as the major Yangtze river centers of third millennia BC show, there is no necessary relationship between social complexity and bronze in East Asia. By focusing on the Central Plains Bronze Age (*ca.* 1850–600 BC) and especially on the Anyang period (*ca.* 1250–1050 BC), I am not asserting the claim that this was the time or the place of the earliest complex polities in mainland East Asia, only that it makes sense to trace political economic development within a single tradition and a time and place where the data is relatively robust.

During the Central Plains Bronze Age, the political landscape was characterized by strongly primate centers which show dramatic increase in size from Erlitou’s 300ha to Anyang’s 3 000 (ZSKY 2003; Campbell 2014; Shelach & Jaffe 2014) (Figure 1). That is to say, during the heyday of Erlitou (*ca.* 1850–1600 BC), Erligang (*ca.* 1600–1400 BC) and Anyang (*ca.* 1250–1050 BC), each of these centers was the largest site in the Central Plains and, in the case of Erligang and Anyang, up to 100 times larger than the next largest contemporaneous site. The political landscape thus appears to be more reminiscent of Teotihuacan with a single centripetal mega-center than Mesopotamian or Mayan city states or even later Chinese territorial polities.

During the period from Erlitou to Anyang, Central Plains mortuary hierarchy and ritual expenditure vastly increased while the scale and sophistication of production also grew by leaps and bounds (Campbell 2014, 2018). In terms of urban development, the major centers all began with a large site and heterogeneous population and then doubled or tripled in size over the two or three centuries of their occupation (ZSKY 2003; Campbell 2014; Campbell *et al.* 2021). These facts suggest initial colonization and, thus, top-down rather than organic, bottom up processes at the beginning. At the same time, if the initial settlement size suggests a coordinated movement of people, the subsequent explosive growth requires other explanations. In other words, why did Central Plains centers grow so large over the course of their occupation?

Table 1. Central Plains Bronze Age chronology.

Archaeological Period	Dates
Erlitou	<i>ca.</i> 1850–1600 BC
Erligang	<i>ca.</i> 1600–1400 BC
Xiaoshuangqiao-Huanbei	<i>ca.</i> 1400–1250 BC
Anyang	<i>ca.</i> 1250–1050 BC
Western Zhou	<i>ca.</i> 1050–771 BC



Figure 1. Map of sites: 1: Anyang; 2: Zhengzhou (Erligang); 3: Guandimiao; 4: Erlitou; 5: Sanmenxia; 6. Zhouyuan; 7: Taijiasi; 8: Liangzhu; 9: Panlongcheng.

An older, neo-evolutionary model of political economy would have explained the growth in site size, production and hierarchy as the natural outcomes of increases in specialization, standardization, centralization and control and all of the above as marking a transition to “states” at some critical threshold. As mentioned above, this sort of neo-evolutionary model has been largely abandoned in the anthropological archaeological literature in favor of more complex and nuanced approaches, even as the idea that early complex polities necessarily have redistributive economies has been rejected and the topic of commercialization has emerged as a major research agenda. Nevertheless, the best-known explicit model for Central Plains political economies and state formation, that of Liu & Chen (2003), begins with just these neo-evolutionary assumptions. In this model “the state” acts as a centralizing, expansionist, hierarchical, resource-hungry machine—with raw materials moving from the periphery to secondary centers which process and ship them on to the center where attached specialists manufacture prestige goods which “the state” then redistributes to loyal subordinate elites. As can be seen in Figure 2, there

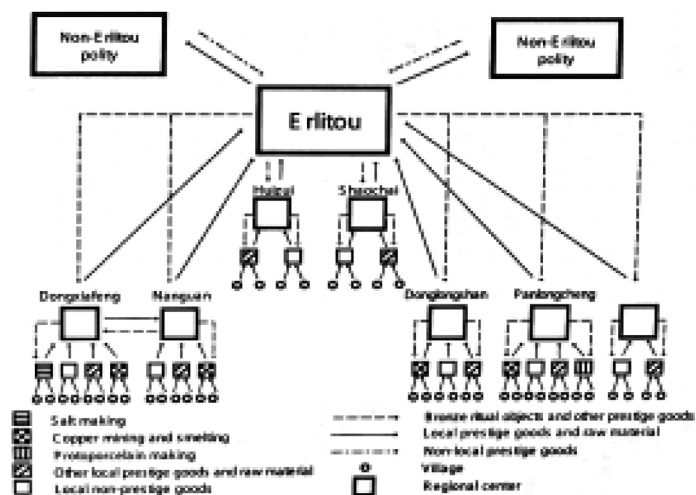


Figure 2. Erlitou elite-redistributive political economic model (Liu & Chen 2003, Figure 25, p. 138).

is no horizontal interaction between lower tier sites, the entire economy is based on nested vertical or tributary relations controlled by “the state.” The political economy is proposed to be entirely centralized, redistributive and lacking in commercialization.

The Liu & Chen (2003) model was largely based on evidence for bronze production in a single workshop near the palace–temple area at Erlitou and the presence of a nearby turquoise workshop. Given the location and type of production, these industries were argued to be instances of “state-controlled craft specialization” (Liu & Chen 2003, p. 64; Liu & Chen 2012, p. 268). Furthermore, the correlation of salt and metal resources with the putative Erlitou and later Erligang expansion suggested to the authors that the growth of the polity was largely motivated by resource acquisition and that its political economy was redistributive and focused on prestige goods. While this model can and has been critiqued on a number of grounds ranging from neo-evolutionary assumptions (Campbell 2018, p. 48), to the (mis)use of settlement hierarchies (Peterson & Drennan 2011, p. 87), to the assignation of political identity to sites bases on pottery (Campbell 2018, pp. 38–39), it is the empirical, economic critiques that matter to us here.

More recent work, including by Liu & Chen (Liu *et al.* 2007; Liu *et al.* 2013), has cast doubt on the Liu & Chen (2003) elite redistributive model. Firstly, research on a stone tool production site called Huizhui 灰嘴 has provided evidence of the specialized production of stone spades which circulated widely but were not under centralized political control (Liu *et al.* 2007, p. 101). Huizhui was located in the Erlitou hinterland and was a site specialized in stone tool production both before and after Erlitou’s rise. Not only did the type of production not change after the advent of Erlitou, the stone tools produced at Huizhui

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were widely distributed and not merely produced for use at Erlitou (Liu *et al.* 2007, p. 97). Secondly, the site of Nanwa 南洼 seems to have specialized in white prestige ceramics which were widely distributed in elite burials during the Erlitou period (Zhengzhou Daxue Lishixueyuan 2014, p. 781). At the same time, a study of white ceramics consumed at Erlitou has demonstrated that they derived from a number of sources—all suggesting a lack of centralized control over this prestige good industry (Liu *et al.* 2007, p. 99). Together these facts suggest that a number of sites were producing white ceramics and yet there is no evidence that either the production or distribution of this relatively widespread prestige good was controlled by the rulers of Erlitou. In addition, a recent study of bone workshops at Erlitou shows that even though some workshops were located near the palace–temple area, they were small-scale and produced a wide array of goods. The range of goods, from utilitarian tools to prestige combs and pins suggests the production was for a wide range of consumers rather than attached specialization for elite consumption. Taken together, these facts indicate that, contrary to Liu & Chen (2003)’s redistributive political economic model, there was a significant amount of non-centralized economic activity and some degree of horizontal economic exchange (Campbell *et al.* 2021). Indeed, there is evidence of regional specialization in craft production and trade even before the Erlitou period (Campbell *et al.* 2021). While none of this contradicts the idea that the rulers of the Erlitou polity attempted to monopolize certain forms of prestige goods production (e.g. bronze and turquoise), it minimally means that only a small part of the economy was organized this way and that it cannot account for the growth of the Erlitou polity or urban center. An alternative model to a centralizing redistributive political economy, analogous to the situation Feinman & Nicholas (2004) describe for highland Mesoamerica, sees a deep-time tradition of local specialization, trade and markets. In this model, centralizing political actors encourage, participate in, and tax, exchange rather than reorganizing it under a redistributive model. The evidence of elites participating in exchange, as well as non-elite craft specialization and exchange all point to the second model (Campbell 2021).

What does this mean in terms of commercialization? According to Feinman & Garraty (2010, p. 178), commercialization concerns the relative significance or breadth of market exchange (see ME Smith 2004 for a slightly different definition). Market exchange, in turn, is largely inferred contextually, ideally at multiple scales ranging from the household to the polity system (Feinman & Garraty 2010, p. 178; Campbell *et al.* 2021). In the Erlitou case, it is clear that non-redistributive mechanisms existed for some elite and non-elite craft goods. Given the evidence for the existence of horizontal, non-centralized exchange, it would be strange if those mechanisms were only used for stone tools, white pottery and bone artifacts. A more likely scenario is that there were traders and markets of some kind, and, in fact, these had pre-existed the rise of Erlitou.

While work on Erligang production sites is less advanced than even Erlitou, the presence

of at least two bronze workshops (Henansheng 2001, p. 384) and bronze casting beyond the capital poses problems for the argument that this industry was centralized. If the middle Yangzi center of Panlongcheng 盘龙城 (Figure 1) was part of the Erligang polity then bronze casting was not centralized at the polity level. A recent study showing that Erligang and Panlongcheng bronzes had substantially different metal sources not only demonstrates that ritual bronze production was not monopolized by the Zhengzhou 郑州 megacenter but that metal sources were not controlled from the center either (Liu *et al.* 2019; Pollard *et al.* 2017), despite early arguments that the Panlongcheng site was a colony of the Erligang state, emplaced to control the copper mines of the Middle Yangzi (Rawson 1982; Liu & Lu 1998).

Panlongcheng is also interesting for its potential role in the circulation of another prestige good—glazed and unglazed stoneware. It is widely believed that these high-fired ceramics were first (and perhaps only) produced in the Yangzi area. They are associated with elite burials in the Central Plains region and are considered a prestige good. The fact that Panlongcheng has greater quantities and more variety of stone ware suggests it may have served as a conduit for its circulation to the north (Zhang 2014, p. 57), while at the same time arguing against centralized redistributive mechanisms.

At the level of the settlement, Zhengzhou bronze casting occurred in two different areas and produced largely the same types of goods (Henansheng 2001, p. 384). The broad array of products, dominated by tools, also problematizes the idea that bronze production was focused on prestige goods. While work on Erligang bronze workshops is still preliminary, the remains are similar to Erlitou in that there were multiple sites, they were relatively small-scale and they produced a wide range of goods from elite to quotidian, again suggesting a wide spectrum of consumers (Henansheng 2001, p. 469). In short, there is nothing in the organization of Erligang craft production that can be definitively associated with a centralized redistributive economy, elite or otherwise.

With Anyang, the situation is much clearer. There are multiple industrial areas each containing bronze, bone and other industries (ZSKY 2003, pp. 299–300; Li 2007, pp. 194–195) (Figure 3). These industries are large-scale and redundant in that workshops in different industrial zones produce the same types of goods as those produced in other zones (Campbell 2014, p. 139). At the same time, the current understanding of site structure is that Anyang (or the Great Settlement Shang as it was known in the oracle-bone inscriptions) was a vast agglomeration of lineage settlements (Tang & Jing 2009). This and later textual evidence suggests the existence of multiple, competing crafting lineages all producing similar products. In the case of bronze production, the workshops were huge and many tens of thousands of mold fragments have been recovered (Li 2003, p. 206). The majority of these fragments were from ritual vessel castings although the workshops also produced a range of other bronze objects as well. The redundant production of bronze vessels, tools and weapons in multiple locations argues against centralized organization,

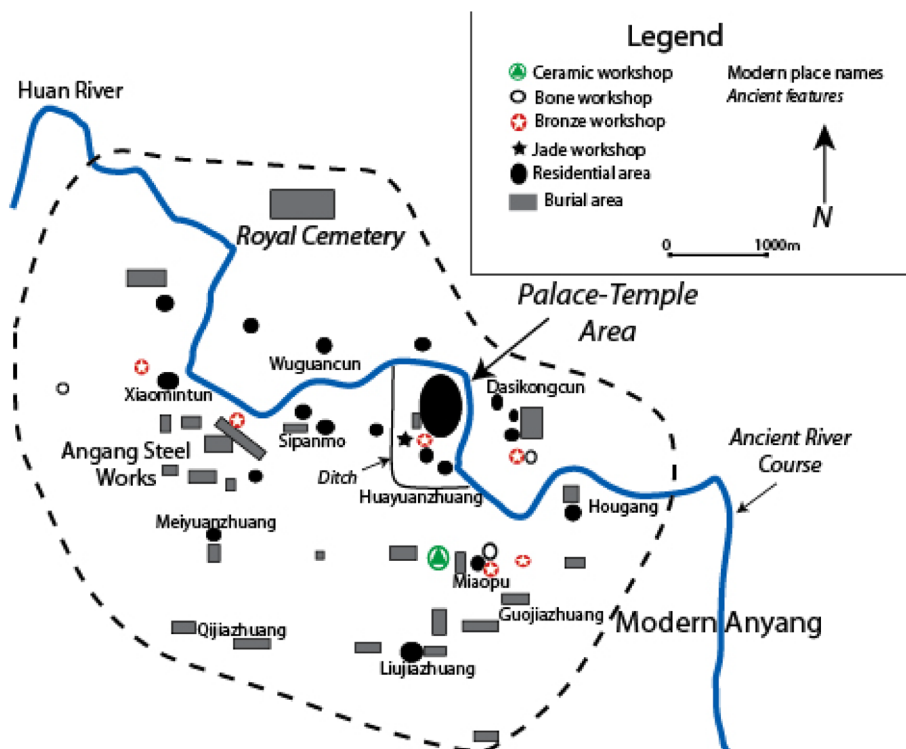


Figure 3. Map of Anyang.

while the workshop scale and range of products argues against its redistributive nature (Campbell *et al.* 2021).

In 2006 and 2007 a salvage excavation at Tiesanlu, Anyang 铁三路安阳 unearthed a massive bone workshop with 34 metric tons of animal bone recovered from a 10m wide trench (Campbell *et al.* 2011, pp. 1281–1282). Tiesanlu was one of at least three major bone working areas at Anyang and probably not the largest (Li *et al.* 2011, p. 7). Ongoing work commenced in 2009 by myself and my collaborators at the Chinese Academy of Social Science, Institute of Archaeology has been able to reconstruct the production process, demonstrate the scale of production and its specialization in hairpins (Campbell *et al.* 2011; Li *et al.* 2011). These were mass-produced in batches of standardized forms (Figure 4). Figure 4 shows a batch of quality control rejected pin heads in four different production stages all recovered from a single context. It was estimated that Anyang's workshops produced millions of hairpins, overproducing even the consumption of the capital by a factor of three (Campbell *et al.* 2011, p. 1294). This raises the questions of why the massive scale and where did all the pins go?

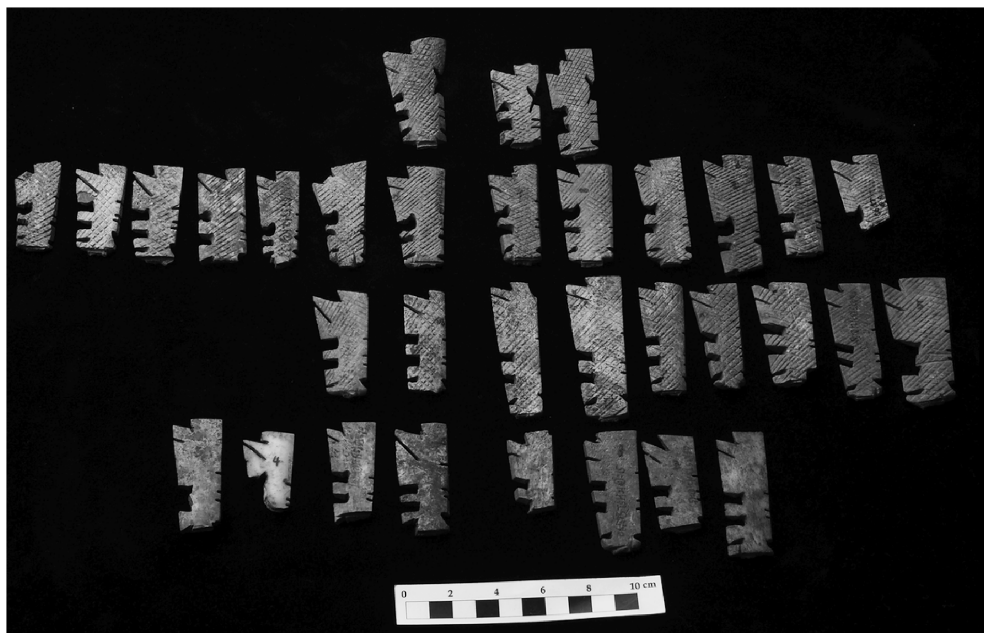


Figure 4. Mass-produced hairpin head wasters from Tiesanlu, Anyang.

In 2006 another salvage project uncovered the Anyang period site of Guandimiao 关帝庙—the only well-preserved extensively excavated Shang village. An estimated 75% of the original village was excavated including 22 houses and 23 pottery kilns, which, along with pottery production tools, kiln wasters and other production debris, suggests that the village was specialized in pottery crafting (Li *et al.* 2018, p. 1527). A zooarchaeological study of remains excavated from the site has likewise shown that the village raised pigs and possibly cattle for exchange—together demonstrating that Shang villages like Guandimiao were not autarkic but rather highly integrated into the larger economy (Hou *et al.* 2019, p. 10).

Also of interest is the discovery that that a significant portion of the worked bone assemblage at Guandimiao derived from the large-scale bone workshops at Anyang (Hou *et al.* 2018, p. 308). In Figure 5 the pins on the right are from Anyang, the ones on the left were from Guandimiao. Although they have all suffered damage from use and post-depositional processes, they share design, production steps, tool marks and evidence of mass production—all in distinction from the rest of the Guandimiao bone artifact assemblage, which differs in all of these characteristics (Hou *et al.* 2018, p. 307). This is all despite the fact that Guandimiao was a tiny village 200km from Anyang. This, in turn, testifies to the wide distribution of the products of the Anyang workshops but begs the question as to why the Guandimiao villagers did not produce their own hairpins.

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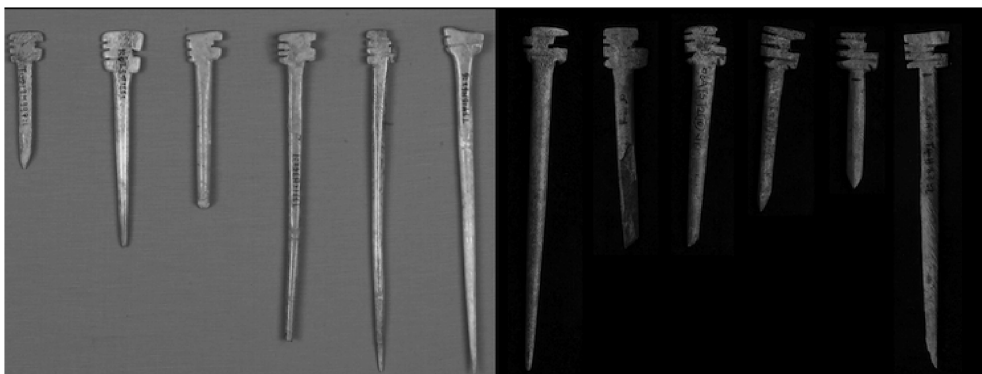


Figure 5. Comparison of Anyang and Guandimiao hairpins.

Returning to Anyang and the Tiesanlu workshop, we can see several features which contributed to the domination by workshops of the capital—these include the concentration of resources, consumers, skilled workers and advanced tools. Vast quantities of cattle bone were available due to elite sacrificial feasting (Campbell 2023) and the Great settlement Shang was a 30km² urban center, likely one of the great population centers of the world at the end of the second millennium BC (ZSKY 2003, p. 296). At the same time, there is evidence that advanced tools such as bronze saws were only available at Anyang during this period. Together these factors contributed to the creation of economies of scale allowing bone artifacts to be produced in large quantities much more efficiently in Anyang’s workshops than elsewhere.

Just how important was the invention of bronze saws to bone hairpin production was clarified during replication experiments performed at Shandong University in 2018. These experiments demonstrated that the efficiency of bronze saws for working large mammal bone was revolutionary—orders of magnitude more efficient than serrated bronze knives, and an even bigger improvement over stone or shell blades (Wang *et al.* 2022). This result and the fact that bronze saws seem to have been concentrated in Anyang during this period further clarifies the relative advantage that the large-scale bone workshops possessed. Bronze saws make high-quality raw materials like cattle limb bones relatively easy to work—and allowed the crafters of the capital to focus on high-value added products like hairpins, leaving categories of easier to make artifacts to local, small-scale craftspeople.

The significance of mass production at Anyang is as follows: The multiple redundant workshops suggest a lack of centralized control while the specialization in high value-added commodities suggests a concern for maximization of profit. The large scale of production and wide distribution indicate both economies of scale and efficient means of distribution. The concentration of raw materials, skill and technology gave the workshops

a comparative advantage, while the concentration of consumers in the capital reduced transaction costs and enabled the increase in scale. In short, these features, combined with the prior existence of non-centralized economic networks suggests that not only was the Anyang period Shang economy significantly commercialized, but that this commercialization drove technological innovation and dramatic increase in productive scale.

Discussion

Returning to the topic of complex polities, urbanization and commercialization, I propose the following relationship for the Central Plains Bronze Age—primary centers were founded by elites, their retainers and their associated lineages, some of whom were specialized crafts producers. These primate centers were centers of population, industry and ritual and attracted both commerce and skilled labor. The requisites of demand, skill, technology and resources fueled further technological and economic development, with major industries becoming an important source of wealth, further enhancing the power of the lineages who controlled them. This feedback loop not only served to increase power, commerce and industry, but also the size of urban centers which grew ever larger in the Central Plains over the course of the second millennium BC. The Anyang period marks a watershed in this developmental process, when workshops dramatically increased in size and, in the case of bone working, began to specialize in the mass production of high return products for wide consumption. This suggests a motivation that goes beyond elite provisioning and, in the wider context of commercialization, suggests profit seeking behavior.

According to Max Weber's urban typology (Weber 1968, pp. 1215–1219), the Central Plains capitals were mostly consumer cities, pulling in resources and sponsoring crafts for consumption by the political elite (see Finley 1977; Morris 2005 for a discussion of Greek cities). Nevertheless, from at least Erlitou times, production and probably trade were also important functions of these centers. A sense of the close connection between central places and certain types of production can be seen in the recently discovered site of Taijiashi 台家寺 in Anhui 安徽 (Wuhan Daxue Lishixueyuan Kaoguxi & Anhuisheng Wenwu Kaogu Yanjiusuo 2018). Dating to the Xiaoshuangqiao-Huanbei period the site appears to be the adaptation of the Central Plains Bronze tradition to local conditions with the site taking the form of an archipelago of mounds with different functions. Significantly, the mound with elite architecture also contains bronze and bone workshops, as if these forms of production were as essential to the status of the site as palaces. Combining these lines of evidence, it seems that elite centers of the Central Plains Bronze Age were not only locations for participation in ritual or politics but also for the acquisition of prestige and other craft goods. For those controlling the production of those goods, this was a source of wealth and thus power. This is the reason that by the Anyang period, the nature of some of the

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workshops had begun to change, mass producing quotidian goods for broad consumption. The association of commercialization, urban centers and craft production as a source of economic power created a feedback loop whereby each factor led to increases in the others.

The relationship between urban centers and large-scale craft production continued after the fall of the Shang dynasty. Work in the Zhouyuan has revealed a patchwork of elite estates and workshops spread over a 20 or 30km² area. These include multiple sites for bronze working, bone working and other industries as well (Zhouyuan Kaogudui 2011). Evidence for production for commercial exchange is evidenced not only in bone workshops similar to those at Anyang but also a stone workshop mass producing stone earrings for exchange (Zhao 2017; Sun 2008). In addition, over the course of the Western Zhou, formal workshops and mass production spread beyond the capital sites to relatively minor settlements such as Guo near Sanmenxia where a single midden produced thousands of wasters and debitage for the standardized production of a single type of pin (Ma *et al.* 2015). In the Western Zhou, the economy, much like politics, had a large de-centralized and multivalent component, but production and revenues from exchange seem to be a source of economic power for at least some aristocratic lineages. This early foray into mass production and widespread commercial exchange is the true basis for the Eastern Zhou economic expansion and the growth of commerce and manufacturing in Eastern Zhou cities. The flourishing economy of the Eastern Zhou period and early empires had a Bronze Age basis.

In a broader comparative perspective, neither Weber's typology nor categorization of commercial *vs* political or consumer *versus* productive cities is satisfactory since they do not account for developmental processes within these broad typologies—how the nature of production can change in tandem with commercialization and, in changing, alter the nature of urban centers. Commercialization is a spectrum and, as such, a variable in the development of urbanism, as well economic and political organization.

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