Southern Mesopotamia

Jason Ur

1 Introduction

The Bronze Age (c.3000–1500 BC) cities of southern Mesopotamia are not only critical for the development of urbanism in Mesopotamia and the Near East more generally, but for comparative early urban studies worldwide. Early archaeological work in southern Iraq caught the attention of the great archaeological synthesizer V. Gordon Childe, who included detailed descriptions of Sumerian cities in his books (e.g., Childe 1952). His Mesopotamian-influenced list of urban traits (Childe 1950) has served, for better or worse, as a template for what is or is not "urban" in the archaeological record globally.

This overview will consider urban places on the alluvial plains of southern Mesopotamia (southern Iraq; Figure 28.1) at the time of their first appearance at the end of the 4th millennium BC; their expansion and elaboration in the 3rd (Early Dynastic, Akkadian, and Ur III periods) and early 2nd (Isin-Larsa and Old Babylonian periods) millennia BC; and their reduction and dispersal under the Kassite Dynasty of the late 2nd millennium BC (Table 28.1).

The study of Mesopotamia can be approached archaeologically, epigraphically, or art-historically. This review will emphasize the archaeological evidence. Because temple and palace institutions were largely (but not exclusively) responsible for the written and iconographic record, epigraphic and art-historical studies tend to privilege elites in the operation and evolution of Mesopotamian society, but Bronze Age cities were also the product of the aggregate daily activities of their

A Companion to the Archaeology of the Ancient Near East, First Edition. Edited by D.T. Potts.

© 2012 Blackwell Publishing Ltd. Published 2012 by Blackwell Publishing Ltd.

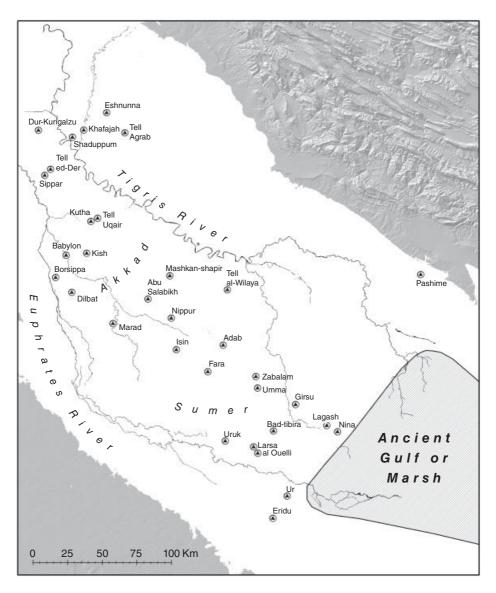


Figure 28.1 Southern Mesopotamia, with major Bronze Age settlements and modern watercourses indicated. Land over 100 meters is hill-shaded.

non-elite inhabitants. It would be irresponsible to disregard texts and iconography, which can illuminate social, political, and ideological aspects that are simply unobtainable via the rest of the material record, and they will be introduced when they contribute to a social history of Mesopotamian urbanism. The dataset for Bronze Age Mesopotamian cities has emerged over the last century and a half

Cal Years BC	Archaeological periodization	Historical periodization
3500	Late Chalcolithic/Late Uruk	
3000	Jamdat Nasr	
		Early Dynastic
2500	Early Bronze Age	
		Akkadian
		3rd Dynasty of Ur
2000	Middle Bronze Age	Isin-Larsa
	-	Old Babylonian
1500	Late Bronze Age	Kassite
1000	-	

 Table 28.1
 Mesopotamian chronology, 3100–1000 BC (calendar dates are approximate)

and is very uneven in time, space, and research focus. It can be subdivided generally into three groupings. The archaeological record consists of monumental and residential architecture, artifacts, ecofacts (plant remains, animal bones, and micromorphological data), and the spatial relations between them. Emphasis has been on the recovery of monumental architecture, tablets, and objects of arthistorical significance. The earliest excavations recorded the provenience of only "major" finds and stratigraphic control was highly variable. At the time of the cessation of most excavations in 1990, only a few projects systematically incorporated paleobotany, zooarchaeology, or micromorphology. The excavation dataset weighs so heavily in favor of large institutional households (e.g., palaces and temples) that reconstructions of daily life and social change are difficult or impossible to evaluate for many time periods. Furthermore, many excavations have focused narrowly on issues of architectural history and chronology, and, as a result, the finds and the methods used to record them are often insufficient to address the sorts of social issues emphasized here. Almost all of the excavations discussed in this chapter were undertaken prior to 1990, but Iraqi archaeologists have resumed excavation at sites under the threat of looting.

The *written record* consists mostly of clay tablets inscribed with Sumerian or Akkadian cuneiform, but also includes inscribed statuary and other objects of stone and metal. From an exclusive concern with economic matters in the late 4th millennium BC, the realm of subject matter was gradually expanded to include legal, epistolary, and literary subjects in the 3rd and 2nd millennia BC. Since the late 19th century inscribed material has been a favorite target of looters and collectors; as a result, most known texts lack provenience. Although even looted tablets can provide some information, the most significant studies for Mesopotamian social history recognize that inscriptions are artifacts whose archaeological context is meaningful, and these studies will be emphasized in this review. Finally, the record of the *archaeological landscape* is of particular importance in Mesopotamia, where human communities were closely attuned to the geographic distribution of water, soils, and other natural resources. Landscape studies include topography and the spatial distribution of artifacts at individual sites, the results of settlement pattern surveys, geoarchaeological studies of the alluvial plain, and remote sensing studies using aerial photography, satellite imagery, and other sources. Cities can only exist in relation to their hinterlands, both the cultural aspects (fields, canals, tracks, and other settlements) and the natural environment. The archaeological surveys of Robert McC. Adams and colleagues (Adams and Nissen 1972; Gibson 1972; Adams 1981; Wright 1981a) have mapped spatially the shifting constellations of early urban polities. New research using satellite imagery is reconstructing the dynamic alluvial landscape, and indeed this is the only realm of archaeological research that has flourished in recent years (e.g., Gasche and Tanret 1998; Pournelle 2003b; Stone 2003; Hritz and Wilkinson 2006).

2 Urban Origins in the 4th Millennium BC

Bronze Age Mesopotamian cities represent a direct evolution from the nascent cities of the later 4th millennium BC, most particularly Uruk (modern Warka), the source of the most abundant excavation and survey information. Although it is commonly referred to as the world's first city (e.g., Liverani 2006), an earlier urban center had developed at Tell Brak in northern Mesopotamia (Oates et al. 2007; Ur et al. 2007); the relationship between these developments is not understood at present. The southern Mesopotamian dataset is overwhelmingly biased by the extensive excavations at Uruk, and very little can be said about other cities of the time on the southern alluvial plains, aside from some indication of their scale via surface survey.

The urban core of Uruk (Figure 28.2) contained a group of monumental structures that had been heavily ornamented via niching and painted mosaic cones pressed into their plastered walls. Most were built according to a tripartite plan with a long central hall and rooms on either side of it and a T-shape at one end. In the western core, a tripartite structure (the "White Temple") was plastered in white and rebuilt several times according to the same plan, atop a high terrace; to its east, a shifting arrangement of tripartite structures was spread over a large area known as the Eanna Precinct. Their scale was greater than anything known previously, but their form was not new, having origins in houses of the Ubaid period (e.g., Roaf 1989). Several other structures do represent innovations, however. Building E was almost 50 meters square, with multiple exterior openings around an enormous central space that could have held large gatherings. For the excavators, the tripartite structures were temples (Lenzen 1974). Others emphasize their architectural similarities to earlier domestic houses, and interpret them as elite residences or palaces (e.g., Aurenche 1982).

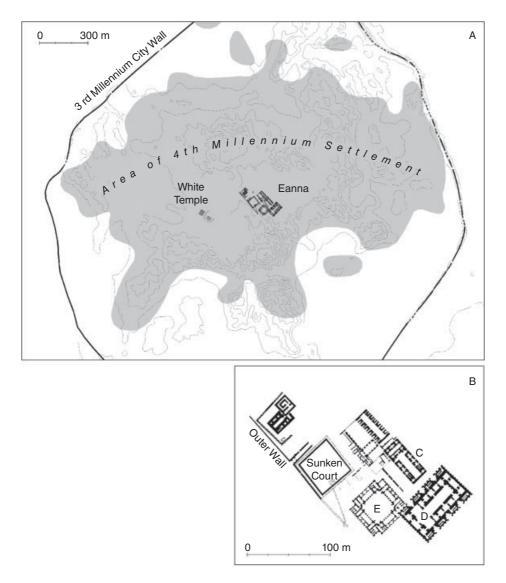


Figure 28.2 Uruk, c.3100 BC. A. Area of 4th millennium settlement. B. Monumental tripartite buildings and other structures in the Eanna area (based on Finkbeiner 1991: Beilage 23; Forest 1996: Fig. 91).

Despite the great volume of excavation at Uruk, not a single non-monumental domestic structure has been excavated there. A glimpse of what Uruk neighborhoods might have looked like comes from outlying sites of the so-called "Uruk Expansion," a phase in the mid/late 4th millennium BC when the bearers of Uruk material culture spread out across Mesopotamia and Iran (Algaze 2005a). At Habuba Kabira, on the Syrian Euphrates, monumental tripartite structures

were surrounded by a dense fabric of smaller residential structures. House complexes varied, but most were also tripartite in plan and had associated exterior spaces and sometimes large reception rooms (Vallet 1996). Structures were built along several streets, which articulated with gates in a massive city wall, the first of its kind.

Elsewhere, our knowledge of Uruk settlements is limited. Temples are known from great sequences at Eridu, Khafajah, and Nippur (Delougaz and Lloyd 1942; Hansen 1965; Safar et al. 1981), but they add little to our understanding of Uruk society. More holistically oriented research, such as the program at Abu Salabikh (Pollock et al. 1996), was cut short by the first Gulf War.

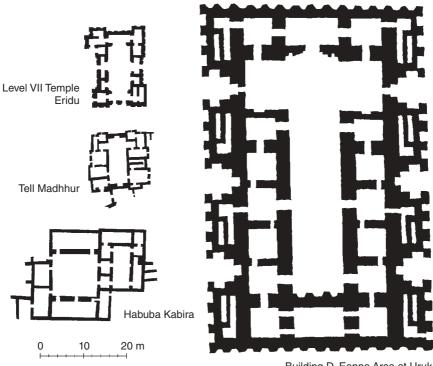
Unfortunately, almost all objects found in the great structures at Uruk were in a secondary context and cannot be tied directly to them. These include the world's first written documents, clay tablets (the so-called Archaic Texts) with a pictographic script (Englund 1998). The 5,400 tablets recovered are primarily concerned with economic matters and record great quantities of sheep, agricultural products, beer, and land. They are often assumed to be the economic records of temples, but this assumption is complicated by their secondary archaeological context.

The most significant artifact for many interpretations of Uruk society is also perhaps the least striking, at least from an aesthetic perspective. The bevel rim bowl, a coarse mold-made vessel with a distinctive rim, is the most frequently occurring type of ceramic from late 4th millennium BC sites. One influential hypothesis interprets it as a standardized vessel for state-based distribution of cereal rations (Nissen 1970; Johnson 1973), although its standardization has been questioned (Beale 1978). Alternative interpretations include bread-baking (Chazan and Lehner 1990; Potts 2009), which is supported by experimental archaeology (Goulder 2010). These interpretations are based on the qualities of the bowls themselves and their abundance; a consideration of their archaeological contexts led Forest (1987) to conclude that they served in elite feasting events.

At the regional scale, the urbanization process manifested itself in the growth of several true cities that exceeded dramatically the scale of their neighbors. Throughout the 4th millennium BC, towns across the alluvium expanded, some reaching as much as 40–50 hectares (Adams 1981). Uruk itself grew to 250 hectares, 10 times the size of any of its contemporaries (Finkbeiner 1991).

Within the limitations of this dataset, several models for Uruk society have been advanced. Some see the first cities as a development of a bureaucratic state administration that centralized many aspects of production and distribution (Johnson 1973; Rothman 2004). Algaze (2008) interprets the rise of Uruk urbanism as the unintended consequence of economic competition among settlements that took advantage of particular environmental niches across the alluvium. These models see urbanism as beneficial to the community because of the efficiencies of scale and hierarchical organization; other models suppose that elite households benefited disproportionately. For Pollock (1999), onerous tributary demands from urban institutions appropriated the production of otherwise autonomous households. Adams (1972, 1981) sees increasing social stratification, the rise of temple institutions, and the decline of kinship as elements behind urban growth. These models all connect urban origins to new institutions and a radical social break, particularly regarding kinship.

The archaeological evidence, weak as it is, allows for an alternative interpretation in which the social changes behind the earliest cities were less radical, changes in degree rather than kind. The large palatial or temple institutions, best known from Uruk, are architecturally elaborated versions of a house structure that had existed since the Ubaid (Figure 28.3). Evidence for bureaucracy is also ambiguous: the use of sealings for property control does not by itself signify centralized authority, since their use extends back into the Neolithic. Pictographic tablets are indeed an innovation, but a late one that postdated the origins of urbanism, and probably not a critical element of urban administration. Despite the extent of excavation at Uruk, the entire known corpus could have been produced in about 15 years at a rate of one tablet per day. In later times, palaces, temples,



Building D, Eanna Area at Uruk

Figure 28.3 Uruk period tripartite buildings from Habuba Kabira and Uruk, with earlier Ubaid tripartite buildings from Eridu and Tell Madhhur (based on Safar et al. 1981; Roaf 1989: Fig. 1; Kohlmeyer 1996: Fig. 3a; Forest 1996: Fig. 91).

and even kingdoms were organized under the metaphor of the household (Schloen 2001; discussed further below); the evidence from the 4th millennium BC, uneven though it is, suggests that the metaphorical extension of the household may have begun at this time, and was connected to the striking expansion of urban settlements.

3 Urban Expansion and Rural Abandonment in the Early 3rd Millennium BC

The process of urbanization reached an apex at the beginning of the 3rd millennium BC (Early Dynastic I). Despite its significance, our ability to derive a social history of the time is handicapped by an almost complete reliance on the results of archaeological survey. Excavations have been limited, and few tablets have been recovered.

The surface record, however, is abundant and unequivocal. Kish, for example, may have covered 60 hectares (Gibson 1972: 118–22). The city wall of Uruk enclosed 400 hectares, most of which was settled according to an intensive surface collection (Finkbeiner 1991). Other large cities included Zabalam, Umma, and Bad-tibira. Simultaneously, small sites were abandoned, suggesting that urban growth was at the expense of the countryside. In the region around Nippur, over 70 percent of the population lived in settlements of 10 hectares or more; around Nippur the percentage was even greater (Adams 1981: 81–94).

Little can be said about these cities. Excavations of long sequences of temples at several sites show that such religious institutions existed and were monumental in scale compared to adjacent residential architecture. Such structures are labeled as "temples" because of the presence of podia, statuary, and their positions in long sequences of rebuildings that manifest the sacred importance of the spatial location of the divinity. However, as in the 4th millennium, these structures share organizing principles with smaller domestic structures, in keeping with their identities as "houses of the gods."

A small group of clay sealings found in ED I levels might give clues to the political organization of the time. The impressions include the pictographs for the names of major cities, including Ur, Nippur, Larsa, Uruk, Adab, and Eridu (Matthews 1993). Since the act of sealing expresses authority and control, the grouping of city names suggests some form of unification. Indeed, they represent the only contemporary empirical evidence for Jacobsen's proposed Sumerian "league" (Jacobsen 1957: 109) and recent discussions assume some sort of economic or military confederation (Matthews 1993: 49–50).

Such intercity cohesion conflicts with the settlement pattern data. In general, under stable regional polities, settlement will extend beyond city walls into the countryside – e.g., under the Neo-Assyrian and Sasanian empires (Adams 1981: 88). On the other hand, endemic rivalries result in nucleated and evenly spaced

urban places where people could seek protection. A short-lived political arrangement might be seen in the city seals, but it is unlikely that any coalitions endured long enough to alter patterns of settlement. Although we know almost nothing about the cities themselves, the age of city–state conflict known from later 3rd millennium texts had probably already begun.

4 Competing Cities of the Mid- to Late 3rd Millennium BC

This landscape of competitive polities entered the light of history in the mid-3rd millennium BC. Writing was used for a range of political, economic, and literary purposes. The script adhered more closely to spoken Sumerian and Akkadian language, providing linguistic clues to the multiethnic nature of Mesopotamian cities (Woods 2007). For the first time, it is possible to get a sense of what literate Mesopotamians thought about their cities: they were the homes of the gods, who resided within temples and to whose favor the fate of the city was closely tied (Postgate 1992: 26). The cities themselves were ruled by men who presided over them in the name of the city god. These rulers frequently fought with their neighbors for control of land and water resources. For example, the kings of Lagash and Umma fought for generations over land and irrigation water along their frontier (Cooper 1983a). Short periods of unification certainly existed, but the predominant situation was one of small polities in political equilibrium until the end of the millennium, when the dynasties of Akkad and Ur unified the plain and extended their hegemony beyond it.

The great palace and temple institutions remained the foci of urban structure. Temples evolved forms clearly distinguishable from palaces, often including inscribed statuary, architectural elements, and foundation deposits that identify the deity and the king who commissioned the temple. Several distinctive monumental forms emerged. One type, best known from the Temple Oval at Khafajah, consisted of an elevated shrine in a large courtyard surrounded by rooms and a curved outer wall. A distinctive temple form called the *ziggurat* appeared by the end of the millennium. *Ziggurats* had a tiered rectangular core with sets of stairs leading to the top, where a shrine was presumably located. The best-preserved example is at Ur (Woolley 1939), but others are well known from Uruk, Larsa, and elsewhere. The temples represented huge expenditures of labor, and were constructed under the impetus of city rulers, who took great pride in the results. Temples served a religious purpose, but were also economic engines that controlled large amounts of land and other resources.

City rulers also expended a great deal of labor and resources on their own residences. For the first time, unambiguous palaces were constructed, including Palace A at Kish and an enormous building at Uruk, of which only the foundations survive. These structures can be compared to private houses, few of which are in excess of 150 square meters (Figure 28.4; Henrickson 1981; Matthews

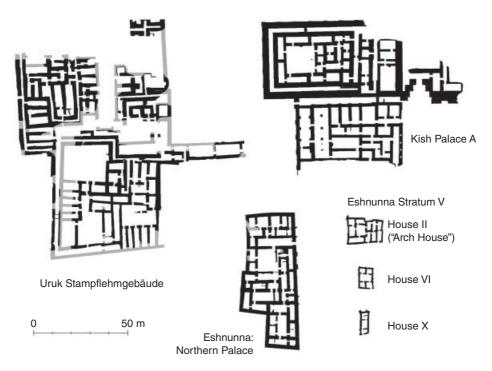


Figure 28.4 Households of the later 3rd millennium BC: palaces from Uruk, Kish, and Eshnunna; domestic houses from Eshnunna Stratum V (Eichmann 2007: Beilage 157; Delougaz et al. 1967; Mackay 1929: Pls. 21–22).

and Postgate 1987: 118). Like palaces and temples, houses were built around a square central courtyard where most household activities probably took place. On one side the entrance to the street could be found through a small vestibule. A well-maintained rectangular room served for receiving guests and other formal activities of the household. At Abu Salabikh, courtyard size varied with the overall size of the house and, indeed, larger houses might have two courtyards (Matthews and Postgate 1987: 117–18). Also around the courtyard were rooms for cooking, storage, washing, and accommodation (Matthews and Postgate 1994).

Houses, temples, and palaces could be found in close proximity within the urban fabric (Figure 28.5). At Eshnunna, the Northern Palace was an 1825 square meter structure with evidence of stone-working, ceramic manufacture, and textile dyeing, in addition to its residential functions (Henrickson 1982: 24–32). Its southwest corner accommodated the Abu Temple, which had existed in that spot for almost a millennium. To the south, and presumably surrounding them, were dense areas of small residential structures. Many were accessible from a large street, but others were accessible only via narrow alleyways. The major streets connected these houses and larger institutions with gates in the city wall.

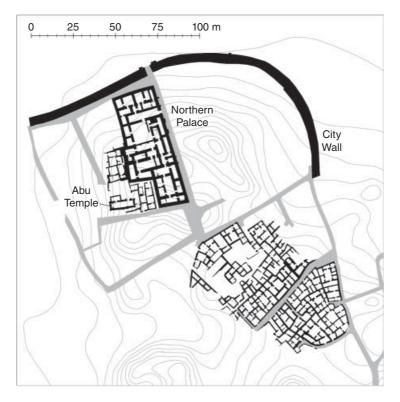


Figure 28.5 Temples, palaces, and domestic houses in the urban fabric of Eshnunna, c.2200 BC (compiled from Delougaz et al. 1967).

At Abu Salabikh, a 50 hectare town in the center of the floodplain (Matthews and Postgate 1987, 1994; Postgate 1994), the town itself was divided into several discrete mounds. On the primary mound the grid-like street pattern created residential blocks of 25–30 meters on each side, although probably not formally planned. Debris from the houses was dumped directly into the streets, where it was consumed in part by the pigs that ran loose (Matthews and Postgate 1994).

Occasionally, internal divisions separated large households and residential areas. At Khafajah, a group of houses near the Temple Oval was enclosed within a thick wall (Henrickson 1982). Some of the houses inside were large and apparently wealthy, but others were substantially smaller, suggesting the division was related to kinship rather than class. The separation of precincts reached an extreme at Ur, where a central complex contained the *ziggurat* of the moon god Nanna, several other temples, a large storehouse, and a possible palace, all within an enclosure wall.

In many cities, the urban dead were buried beneath the floors of their homes. Some of these tombs were reused over multiple generations. Some cities, however, had districts that were given over entirely to the dead. The most prominent example is the Royal Cemetery at Ur, which contained approximately 1,850 burials of its late Early Dynastic inhabitants, including some with breathtaking amounts of luxury items (Woolley 1934; Zettler and Horne 1998). The largest tombs contained donkeys and oxen, carts and sledges, and even male and female servants who went to their deaths with their masters. The tombs reveal the wealth of the royal households, which had access to exotic materials from far-off lands and even controlled the lives of their household members. They also reveal a degree of socioeconomic inequality that is absent in the relatively modest size differences in private houses.

Cities grew to massive scales. Perhaps the largest was Lagash, estimated at 400 hectares (Carter 1989–90: 62). The other major cities were smaller: e.g., Shuruppak at 100 hectares (Martin 1983). At the same time, the percentage of the population living in cities declined steadily throughout the 3rd millennium BC, from 78 percent at the end of the Early Dynastic period to 63.5 percent in the Akkadian period and 55.1 percent at the time of the Ur III Dynasty (Adams 1981: 138–9).

Archaeological survey probably underrepresents a flourishing rural landscape. The inhabitants of even the largest cities were closely connected to their lands for agriculture, animal husbandry, fishing, and other sorts of economic activities that took them beyond the city walls. For example, most of the region of Umma was surveyed, and 19 sites from the time of the Ur III Dynasty (2100–2000 BC) were identified (Adams and Nissen 1972; Adams 1981). However, at least five times that many settlements existed in the region, according to the cuneiform record, which describes places that may not have amounted to more than a threshing floor and grain storage area (Steinkeller 2007). Such ephemeral sites are likely to have been washed away by shifting rivers, covered over by floodborne silts, or scoured away by the wind; some may have been constructed largely of reeds.

The use of writing increased dramatically at this time, especially in association with the great institutions. Centralized administration reached a pinnacle under the royal household of the Ur III Dynasty, from which at least 92,000 administrative texts are known (CDLI 2010). This increasing concern with administration is often described as "bureaucratic" (Yoffee 1995). For some, this term is used as a synonym for administration (Civil 1987: 43), but for others it takes on the Weberian sense of a hierarchical governmental system composed of "offices" that exist independently of the individuals who hold them; the office-holders ("officials") owe their allegiance to the hierarchical system, rather to any individual within it (Weber 1978).

There is evidence against the existence of such a system in 3rd millennium BC Mesopotamia from both texts and archaeology. A marker of administrative power was the cylinder seal, a visible indicator of authority not only on cuneiform documents but also on one's person: there is evidence that they were worn pinned to the front of a garment. Yet the inscriptions on seals emphasize not the office, but the seal-holder's personal relationship with the king. With the installation of a new king, new seals were issued, even without a corresponding change in office (Zettler 1977:33). If the seal-holder's position was in a true bureaucracy, a new seal would have been unnecessary (Schloen 2001: 265). On this and other evidence, the Ur III Dynasty is best described as a patrimonial state in which Weberian bureaucracy was unknown (Michalowski 1987; Steinkeller 2004).

For much of the 20th century AD, scholars of Mesopotamian cities thought that they were dominated by temple-based states in which the gods (through their priest-administered households) owned all of the land and its products. Subsequent research has shown that they were actually composed of many such households of varying scale, some conceptualized as the houses of gods (i.e., temples) and others as the "secular" households of kings and other elites (Foster 1981). Secular households were dominant on the northern plain, while temple households were more powerful in the south (Steinkeller 1993).

The structuring metaphor for Mesopotamian society at this time was the household (Sumerian é, Akkadian bītum). These terms had the same range of meanings in the cuneiform languages as they do in English: they referred to buildings ranging in size from a single room to an entire palace, but also to social units like families, lineages, or dynasties, and also their property, including fields, animals, and slaves (Gelb 1979). The largest households were the temples, ruled by hereditary lines of priest-administrators, sometimes with hundreds of dependents. Some scholars assume that most urban residents were dependent on these households (Pollock 1999). In this view, the institutional "household" was a means of economic and political organization in the absence of kinship ties. To the Mesopotamians themselves, however, the large palace and temple institutional households and the smaller "domestic" households were different in degree, not in kind, and they could be nested within each other hierarchically (Schloen 2001). The dependents of a temple household, for example, devoted some of their energies to its functioning, but also worked to sustain their own domestic households (Steinkeller 2004). At a higher scale, provincial and city governors presided over their households, which encompassed the provinces and cities, but themselves were "servants" in the household of the king. Instead of an impersonal bureaucracy, all these relationships were personal ones, couched in kinship terminology. At a general level, patrimonial household organization was found throughout the Bronze Age Near East (Schloen 2001).

With the increasing place of writing in temple and palace administration, it is finally possible to consider aspects of ethnicity in Mesopotamian cities. Ethnicity is a matter of self-ascription, generally in opposition to one or more other groups and almost never coterminous with language groups; nonetheless, it is uncommon that an ethnic group will encompass communities speaking different languages (Emberling 1997). If one considers linguistic aspects of personal names, from an early time, there appear to be Sumerian and Akkadian speakers living together in Mesopotamian cities and many were bilingual (Woods 2007).

There appear to be no archaeological distinctions, however, between these foreign groups and other indigenous urban dwellers, nor between "Sumerian" and "Akkadian" material culture on the southern and northern plain, respectively.

5 Cities of the Middle Bronze Age

After the fall of the Ur III Dynasty, competing polities re-emerged, with foci at Isin, Larsa, Babylon, Uruk, Eshnunna, and Marad. To the east, the Elamites were centered at Susa and a large kingdom was ruled from Mari on the Euphrates and Shubat-Enlil in the Jazirah. Brief moments of unification emerged, particularly under Shamsi-Addu and Hammurabi, but the predominant pattern was of small competing polities, albeit fewer and larger than those of the later 3rd millennium BC (Charpin 2004).

The Isin-Larsa and Old Babylonian periods (early 2nd millennium BC), as this time is also labeled, provide perhaps the strongest dataset for the comparative analysis of Mesopotamian cities. Excavations have revealed great palaces, most notably at Mari but also at Uruk, Larsa, and Eshnunna. On the other hand, archaeologists have exposed broad residential areas that allow insights into urban structure. If the distribution, quantity, and variety of texts are indicators, this was perhaps the time of greatest literacy in Mesopotamian history. Palaces and temples produced great quantities of texts, but so too did smaller households. Where tablets have been excavated in situ, it is possible to reanimate their owners to reveal some of the social dynamics behind the evolution of neighborhoods and cities (see esp. Charpin 1986; Stone 1987; Van de Mieroop 1992a).

Houses remained the basic building block of urban structure, most extensively revealed at Ur, where more than 8,000 square meters of domestic housing were uncovered (Figure 28.6; Woolley and Mallowan 1976). Their builders invested heavily in them by using baked bricks in their lower walls, foundations, and courtyards. As in earlier times, many houses had sub-floor burials, now often elaborately constructed beneath altars for the veneration of the family's ancestors. House size varied, but can generally be divided into rectangular houses with rooms on four sides of a central courtyard and smaller houses with rooms on only two sides. These forms are two stages in a continuous process of household evolution, as a father's house was physically divided between sons at the time of his death, a situation vividly illustrated at Nippur (Stone 1981). This process was repeated thousands of times across the city; neighborhoods – and, by extension, cities – evolved from the bottom up.

House evolution was not limited to subdivision, however. Old Babylonian houses at the northern edge of Larsa were very large, on the order of 500–1,000 square meters, and were built according to an ideal plan (Calvet 1996). Their wealthy merchant owners acquired adjacent urban plots over years in order to construct these palatial houses (Charpin 2003). Because Larsa was abandoned

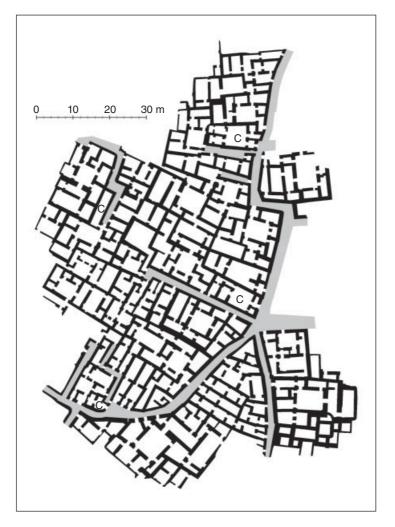


Figure 28.6 A Middle Bronze Age neighborhood at Ur (based on Woolley and Mallowan 1976: Pl. 24). Gray areas are public space; buildings identified as neighborhood chapels are marked "C."

shortly after these houses were constructed, the divisive process of inheritance never occurred, thus preserving a snapshot of an urban neighborhood before it evolved into a form like that seen at Ur and Nippur.

In addition to domestic residences, other facilities existed within Old Babylonian neighborhoods (Keith 2003). Within the houses at Ur were small chapels with recessed entryways, courtyard altars, and recesses for small divine statues. These small temples were clearly the households of their gods; without these few internal elements, they are indistinguishable from the houses surrounding them. Monumental temples also existed at this time, but the Ur chapels show that the households of the gods came in a range of physical sizes.

Many houses in Ur contained the cuneiform archives of their former inhabitants. Of the 51 houses in Area AH, 16 contained tablets; the merchants and traders living in them were involved with various sorts of financial transactions in silver (Van de Mieroop 1992a: 163). Many of these transactions involved the temple of the moon god Nanna but the individuals themselves seem to have operated independently. Area EM, which was closer to the Nanna precinct, contained the houses of priests and other individuals closely connected to the temple (Charpin 1986).

Most productive activities were distributed throughout cities. At Mashkanshapir an intensive surface survey found some crafts clustered in ways that suggested that some neighborhoods had manufacturing specializations, but with minor scatters of debris from lapidary, ceramic, and metal production found throughout the city (Stone 1997: 20; Stone and Zimansky 2004). For the spatial organization of Middle Bronze Age cities as a whole, our best evidence comes from Larsa and Mashkan-shapir (Huot et al. 1989; Calvet 1996; Stone and Zimansky 2004). Both were surrounded by city walls for defense against invaders and flooding. Water was an important structuring element; rivers flowed around them but also through them. Intra-city canals defined neighborhood districts at Mashkan-shapir and probably also Larsa, and harbors are known archaeologically and textually from several cities, where they were important economic loci. Within Mashkan-shapir, canals also structured streets and possibly also formalized neighborhood subdivisions. In Ur and Nippur, the urban fabric was dense, with narrow streets and alleys and very little unbuilt space. Neighborhoods in Larsa, however, may have been more diverse.

For the Old Babylonian period, two small sites allow for comparison with these cities. Prior to excavation, the small towns of Haradum and Shaduppum were concealed beneath low mounds of roughly 1 hectare, well within the smallest size category of the major surveys. Surprisingly, excavations revealed within them all the characteristics of urban centers, apart from size (Baqir 1946, 1948; Kepinski-Lecomte 1996). Both were surrounded by strong walls and showed evidence of planned street patterning. Near its eastern gate, Shaduppum contained a major temple to the goddess Nisaba, along with several smaller shrines, several large households, and many tablets (Figure 28.7). Haradum also had a single gateway which led directly to a central, open space with an adjacent temple and the house of the mayor. At both places, the fabric of the town consisted of dense, central courtyard houses of the sort known from the major cities of the central plain. One might argue that Shaduppum and Haradum are special planned places, but until archaeologists make extensive excavations at other small sites, the possibility that they are typical of rural settlement cannot be ruled out.

The progressive decline in urbanization across the plains continued into the Middle Bronze Age; by the Old Babylonian period, just over 50 percent of all settlement was in excess of 40 hectares, compared to almost 80 percent in the

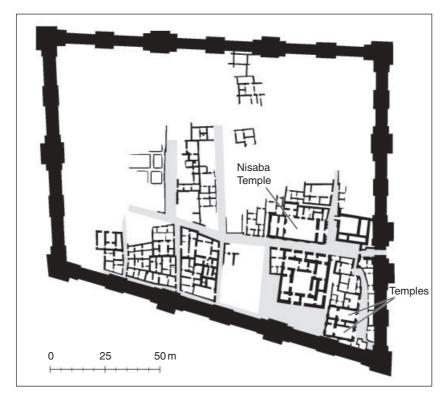


Figure 28.7 Shaduppum, a Middle Bronze Age town (based on Baqir 1946: Fig. 1).

late Early Dynastic period (Adams 1981: 137–41). Settlement patterns could change dramatically, however, within ceramically defined periods. In the decades following Hammurabi's unification, economic or environmental crises led to regional abandonments: first, the southern plain around Ur and, 20 years later, the central plain around Nippur and Isin (Gasche 1989). The priests and administrators of individual temple households are known to have migrated; for example, the priests of Enki at Eridu moved to Ur and several cults at Uruk shifted to Kish (Charpin 1986: 343–418). A shift in river channels, either intentional or via natural processes, was probably to blame. The cities of the northern plain, particularly Sippar and Babylon, continued to flourish, but the later Old Babylonian kings were unable or unwilling to restore the old river channels and the cities of the central and southern plains could not be resettled.

6 Cities of the Late Bronze Age

After the dissolution of the Babylonian Dynasty and the dramatic reorganization of the settlement landscape that preceded it, a new dynastic line solidified political control over the plain. These Kassite kings had names and a language wholly unfamiliar to Mesopotamia and, indeed, from what little we know if it, completely unrelated to any other known language. Although they had a non-Mesopotamian origin, they were quick to employ the Babylonian dialect of Akkadian and to embrace most aspects of indigenous Mesopotamian culture. At almost 450 years, it was the longest-attested political dynasty in Mesopotamian history (Sommerfeld 1995).

Nonetheless, the Late Bronze Age is one of the most poorly known times in Mesopotamian history. Archaeologists have focused on earlier periods and have given Kassite levels only a cursory treatment. Fewer known Kassite written records exist than from other periods, and the only large archive, some 10,000 tablets from Nippur, is mostly unpublished and understudied. The physical environment has also discouraged the archaeology of the Kassite period. Following the Middle Bronze Age, Euphrates water flowed mostly through western branches (Gasche and Tanret 1998), leaving the old cities of Sumer and Akkad without reliable water. The main branch ran past Babylon; as a result, settlement has continued in this western part of the plain up to the present, sealing the Kassite levels and causing them to sink beneath the water table, where they are inaccessible to archaeologists. Babylon, the capital of the Kassite kingdom, is almost completely unknown in this period.

In maintaining traditional aspects of Mesopotamian kingship, the Kassite kings resuscitated many of the old cities, including Ur, Uruk, Larsa, Isin, and Nippur. For cities in the center of the plain, they restored water to the area via long canals from the Euphrates. The most visible form of royal investment was in religious institutions, especially *ziggurats*; the temples at Nippur and Ur were restored, as was the Shamash temple at Larsa and Gula's temple at Isin. Door sockets and foundation documents at these and other temples name the kings and the gods in Sumerian, a language that had long since ceased to be spoken.

We can speak of individual temples but, with a few exceptions, it is very difficult to discuss Kassite cities holistically. Dur-Kurigalzu (modern Aqar Quf) was founded on a long limestone outcrop. The southeastern end of the city was dominated by a *ziggurat* and temple complex in typical Mesopotamian form dedicated to Enlil and other traditional gods (Baqir 1944). One kilometer to the northwest sat an enormous palace with multiple courtyards and a smaller one to its south (Jasim et al. 2006). The mounded area between the palace and *ziggurat* complexes was assumed to be the residential quarter (Baqir 1945: 4), but this remains untested by excavation. The elongated urban form at Dur-Kurigalzu is unknown among the older Bronze Age cities and was perhaps related to the nature of the limestone outcrop, pre-existing river channels, or both.

At this time, Nippur was a large walled city that was home to restored temples to Enlil, Inanna, and Gula, a major administrative palace and large domestic structures at its southwestern corner (Zettler 1993). These isolated structures can be placed into a broader urban plan with reference to an ancient plan of the city, drawn on a clay tablet (Figure 28.8; Gibson 1993b: 4–7). Three aspects of the

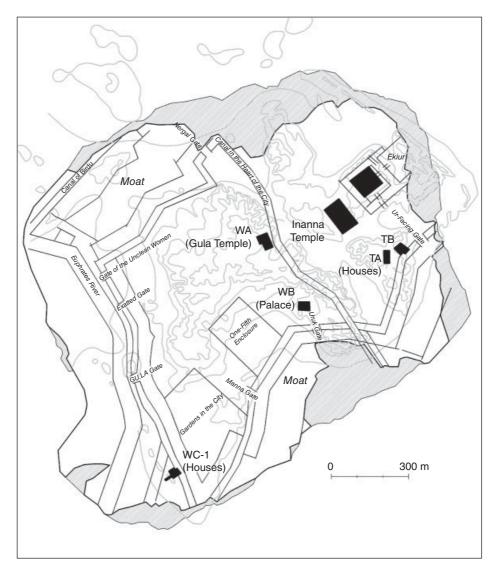


Figure 28.8 Nippur in the Kassite period, based on an ancient cuneiform map (black lines) and modern topography (gray lines). Italic labels are translated from the cuneiform inscriptions; all others are modern designations (based on Zettler 1993: Pls. 6–7).

city's topography were significant to its cartographer: watercourses, the city wall and its gates, and three major precincts. Most prominently, the Euphrates flowed west of the city, with an off-take labeled the "canal of Birdu"; a watercourse running through the center of the city was labeled the "canal in the heart of the city." The city wall is depicted with particular attention to its angles and the positions of gates. The gates themselves are mostly named after specific places beyond them, or the gods that lived in those places (e.g., the Ur Facing Gate and the Nanna Gate both face to the southeast toward Ur), but others, such as the "Gate of the Unclean Women," hint at neighborhood identities that are otherwise unknown. Finally, the Ekur temple precinct, dedicated to Enlil, the chief deity of Nippur, is prominently indicated, as are the enigmatically named "One-Fifth Enclosure" and an area of gardens. Omitted features include the large, archaeologically known palace on the western mound, the other temples known from texts, streets, and named residential neighborhoods. In light of the otherwise scanty information at hand, it is tempting to see in the Nippur map an indigenous understanding of the most significant elements of the Kassite city, but nothing is known of the reason for its composition or its institutional context.

7 Discussion and Conclusions

Mesopotamian cities varied in time and space, but some aspects remained consistent throughout the Bronze Age. Most importantly, the building block of cities at all times was the household, which was conceptually identical at the level of the family, the lineage, the city, or the kingdom (Schloen 2001). Households were manifested as small domestic structures, but also as large institutions that are called temples and palaces by archaeologists and philologists. The indigenous terminology used to describe relationships between household members, both small-scale and institutional, was that of kinship, including father, son, brother, and especially master and servant. The household basis for Mesopotamian institutions may have been established by the Uruk period, when the physical layouts of temples, palaces, and more modest structures all conformed to the same tripartite plan. The ruling institutions, whether interpreted as religious or, more likely, secular, were conceptualized on the model of the household, and this organizational structure remained in place throughout the Bronze Age. A distinction is often made between "public" and "private" sectors of Mesopotamian society, but the textual and archaeological record does not support this division. At some sites a real dichotomy does appear to exist between large institutions and domestic houses, but not in all cases. At Larsa, houses existed in the range of 500-800 square meters, which is large for a "private" house but small for a palace. Recent remote-sensing research is showing that these intermediate forms are not uncommon. In one such structure at Larsa was found an administrative tablet that would generally be classified as the record of a "public" institution (Charpin 2003: 313-14). "Private" estates were not copying the behavior of kings; in fact, all households engaged in the same sorts of behaviors, just at different scales and some better documented by texts than others (Charpin 1996: 226–7; Steinkeller 2004). Administration was a concern of all households, large and small, and even households that did not make use of writing used other administrative technologies, such as clay sealings, as far back as the Uruk period.

Likewise, texts and archaeology do not support the existence of a "bureaucracy" attached to palace or temple households. From the earliest times, the supposed elements of bureaucratic administration are either too infrequent (e.g., pictographic tablets) or too widespread (seals and sealings, bevel rim bowls) to be critical elements of a state apparatus. The notion of bureaucracy under the Ur III Dynasty, the time of maximal centralization of administration, is equally suspect and better explained in patrimonial terms (Michalowski 1987; Steinkeller 2004). The organization of cities was dependent on personal relationships between individuals and households, relationships that had to be reinforced when kings died, and which were created and extended through diplomatic marriages inside and beyond the southern plains. The complex administration that often characterized Mesopotamian cities can be better explained as large-scale patrimonialism and the metaphorical extension of kinship.

Bronze Age cities appear not to have been structured on the basis of social classes. With the exception of the northern residential area at Larsa, neighborhoods were socioeconomically heterogeneous, with large and small houses occurring side by side (Stone 2007a). Temple districts were walled off, but where residential areas were subdivided – e.g., at Khafajah – the internal areas are equally heterogeneous. In general, production was scattered throughout cities at the household level; when clustering can be identified, it was because smokestack industries such as metalworking and ceramic firing were isolated, most often on the leeward site of the city. Where occupational clusters did exist, they probably emerged over time through father–son transmission, rather than by conscious design (Keith 2003: 77). In general, the evidence currently at hand suggests that the divisions within Mesopotamian cities were vertical, corresponding to lineages and their affiliated households at various scales, rather than a class-based horizontal structure (Stone 2007a).

Mesopotamian cities were closely integrated with their natural environments. Modern cities are defined in part by their high proportion of non-producers, but ancient Mesopotamian cities were always closely connected with subsistence. The records of the large institutions show a deep concern for the management and distribution of the products of the urban hinterland: cereal harvests, herds, and lacustrine resources like fish and reeds. There is no evidence that nonproducers represented a large percentage of the urban population in the Bronze Age. Mesopotamian cities were populated largely by farmers, herders, and fishermen, and are better considered as "agro-towns," in the terminology of cultural geography.

This evidence for economically productive cities contradicts a widely held model that opposes an extractive urban sector and a productive rural sector. The idea of a non-productive urban sector can be dismissed (see above), but the rural side of this model is difficult to evaluate from an archaeological perspective because so few small Bronze Age sites have been excavated. The major exceptions, the Old Babylonian settlements at Haradum and Shaduppum, reveal all the characteristics of urban centers. Close attention to the texts also reveals an unexpected level of rural complexity. Settlements in the hinterland of Umma, for example, possessed a variety of "urban" features, including temples and storage facilities (Steinkeller 2007: 188–95). Instead of a dichotomy, the admittedly limited evidence suggests a continuum of functions between large and small settlements, all of which were closely integrated economically and socially (Steinkeller 2007: 200–2).

If small and large settlements shared many functions, what distinguishes these large settlements? Or, more specifically, what about them caused people to immigrate into them, and to remain there? Large temple and palace institutions were critical elements. These institutions attracted individuals or groups to come to these places either voluntarily, via their economic strength and the attractiveness of joining such a household, or (less likely) through coercion, by forcing dependents to cluster. The latter arrangement is a particularly dysfunctional one for an agricultural civilization, where the most efficient pattern of labor is closer to fields and pasture. The most likely reason for the growth and continuation of Bronze Age Mesopotamian cities is ideological. Cities were literally the homes of the gods, who favored these places by making them strong and productive, as evidenced by the success of the temple and large secular households based in them. To extend, improve, or resuscitate a city was to behave like a king; such actions inspired the favor of the city's gods, and lent legitimacy to claims of political authority. It was the enduring significance of these places that kept people within them, and inspired people to return to them repeatedly over millennia.

GUIDE TO FURTHER READING

The most accessible holistic treatments of Bronze Age Mesopotamian cities are Postgate (1992) and Van de Mieroop (1997); both focus primarily on textual evidence but provide good syntheses with archaeological data. Well argued (but conflicting) theories for the origins of Mesopotamian cities are Adams (1981), Pollock (1999), and Algaze (2008). Englund (1998) is a good review of what is known about the earliest pictographic tablets. For the 3rd millennium BC, the publications of the research program at Abu Salabikh are particularly broad and insightful (see especially Matthews and Postgate 1987; Matthews and Postgate 1994; Postgate 1994). On the sociopolitical and economic structures of the late 3rd millennium BC, reviews by Steinkeller (2004) and Michalowski (1987) are especially valuable. The conclusions of Steinkeller's study (2007) of the urban settlement geography of the Umma region are far-reaching and applicable to southern Mesopotamia in general. For the 2nd millennium BC, several excellent studies synthesize texts and archaeology in Old Babylonian Nippur (Stone 1987) and Ur (Van de Mieroop 1992a; Charpin 1986). Holistic treatments include Stone (2007a) and Keith (2003). Although its primary case study is the LBA Levant, Schloen (2001) is a masterful study of the

household basis of Near Eastern society throughout the Bronze Age, including Mesopotamia; it also includes succinct reviews of earlier social models.

On settlement and landscape in Bronze Age southern Mesopotamia, see especially Adams (1981) and Wilkinson (2003a). An important critical appraisal of survey data and its use for demography is Postgate (1994).

ACKNOWLEDGMENTS

This chapter was improved substantially by the insightful comments and critiques of Piotr Steinkeller, Elizabeth Stone, and Alexandra Witsell.

Bibliography

Adams, R. M. 1972. "Patterns of Urbanism in Early Southern Mesopotamia," in Man, Settlement and Urbanism. Edited by P. J. Ucko, R. Tringham, and G. W. Dimbleby, pp. 735-749. London: Duckworth.

---. 1981. Heartland of Cities. Chicago: University of Chicago Press.

Adams, R. M., and H. J. Nissen. 1972. The Uruk Countryside. Chicago and London: University of Chicago Press.

Algaze, G. 2005. The Uruk World System: The Dynamics of Expansion of Early Mesopotamian Civilization, 2nd edition. Chicago: University of Chicago Press.

—. 2008. Ancient Mesopotamia at the Dawn of Civilization. Chicago and London: University of Chicago.

Aurenche, O. 1982. À la origine du temple et du palais dans les civilisations de la Mésopotamie ancienne. Ktema 7:237-261.

Baqir, T. 1944. Iraq Government Excavations at 'Aqar Quf: First Interim Report, 1942-43. Iraq Supplement:3-16.

—. 1945. Iraq Government Excavations at 'Aqar Quf: Second Interim Report, 1943-44. Iraq Supplement:1-15.

Beale, T. W. 1978. Bevelled-Rim Bowls and their Implications for Change and Economic Organization in the Later 4th Millennium BC. Journal of Near Eastern Studies 37:289-313.

Calvet, Y. 1996. "Maisons privées paléo-babyloniennes à Larsa, remarques d'architecture," in Houses and Households in Ancient Mesopotamia. Edited by K. R. Veenhof, pp. 197-209. Leiden: Nederlands Historisch-Archaeologisch Instituut te Istanbul.

Carter, E. 1989-1990. A Surface Survey of Lagash, Al-Hiba, 1984. Sumer 46:60-63.

CDLI. 2010. Cuneiform Digital Library Initiative. http://cdli.ucla.edu/.

Charpin, D. 1986. Le clergé d'Ur au siècle d'Hammurabi (XIXe-XVIIIe siècles av. J.-C.). Geneva: Librairie Droz.

—. 1996. "Maisons en maisonnés en Babylonie ancienne de Sippar à Ur: Remarques sur les grandes demeures des notables paléo-babyloniens," in Houses and Households in Ancient Mesopotamia. Edited by K. R. Veenhof, pp. 221-228. Leiden: Nederlands Historisch-Archaeologisch Instituut te Istanbul.

— 2003. "La politique immobilière des marchands de Larsa à la lumière des découvertes épigraphiques de 1987 et 1989," in Larsa, Travaux de 1987 et 1989. Edited by J.-L. Huot, pp. 311-320. Beirut: Institut français d'archéologie du procheorient.

 —. 2004. "Histoire politique du proche-orient Amorrite (2002-1595)," in Mespotamien: Die Altbabylonische Zeit, pp. 25-480. Fribourg and Göttingen: Academic Press, Vandenhoeck & Ruprecht. Chazan, M., and M. Lehner. 1990. An Ancient Analogy: Pot Baked Bread in Ancient Egypt and Mespotamia. Paléorient 16:21-35.

Childe, V. G. 1950. The Urban Revolution. Town Planning Review 21:3-17.

—. 1952. New Light on the Most Ancient East: The Oriental Prelude to European Prehistory, Revised edition. New York: W.W. Norton & Company.

Civil, M. 1987. "Ur III Bureaucracy: Quantitative Aspects," in The Organization of Power: Aspects of Bureaucracy in the Ancient Near East, vol. 43-53, Studies in Ancient Oriental Civilization 46. Edited by M. Gibson and R. Biggs. Chicago: Oriental Institute.

Cooper, J. S. 1983. Reconstructing History from Ancient Inscriptions: The Lagash-Umma Border Conflict Malibu: Undena.

Delougaz, P., H. D. Hill, and S. Lloyd. 1967. Private Houses and Graves in the Diyala Region. Oriental Institute Publications 88. Chicago: University of Chicago.

Delougaz, P., and S. Lloyd. 1942. Pre-Sargonid Temples in the Diyala Region. Oriental Institute Publications 58. Chicago: University of Chicago Press.

Eichmann, R. 2007. Uruk Architektur I: Von den Anfängen bis zur frühdynastischen Zeit. Ausgrabungen in Uruk-Warka Endberichte Band 14. Rahden/Westf.: Verlag Marie Leidorf.

Emberling, G. 1997. Ethnicity in Complex Societies: Archaeological Perspectives. Journal of Archaeological Research 5:295-344.

Englund, R. K. 1998. "Texts from the Late Uruk Period," in Mesopotamien: Späturuk-Zeit und frühdynastische Zeit. Edited by P. Attinger and M. Wäfler, pp. 15-233. Freiburg and Göttingen: Universitätsverlag Freiburg, Vandenhoeck & Ruprecht.

Finkbeiner, U. 1991. Uruk: Kampagne 35-37, 1982-1984. Die archaologische Oberflachenuntersuchung (Survey). AUWE 4. Mainz am Rhein: Philipp von Zabern.

Forest, J.-D. 1987. Les Bevelled Rim Bowls: Nouvelle tentative d'interprétation. Akkadica 53:1-24.

—. 1996. Mésopotamie: l'apparition de l'Etat, VIIe-IIIe millénaires. Paris: Méditerranée.

Foster, B. 1981. A New Look at the Sumerian Temple State. Journal of the Economic and Social History of the Orient 24:225-241.

Gasche, H. 1989. La Babylonie au 17e siecle avant notre ere: Approche archéologique, problemes et perspectives. Mesopotamian History and Environment Series II Memoirs I. Ghent: University of Ghent.

Gasche, H., and M. Tanret. Editors. 1998. Changing Watercourses in Babylonia: Towards a Reconstruction of the Ancient Environment in Lower Mesopotamia. Mesopotamian History and Environment Series II Memoirs IV. Ghent and Chicago: University of Ghent and the Oriental Institute.

Gelb, I. J. 1979. "Household and Family in Early Mesopotamia," in State and Temple Economy in the Ancient Near East. Edited by E. Lipinski. Leuven: Departement Oriëntalistiek, Katholieke Universiteit Leuven.

Gibson, M. 1972. The City and Area of Kish. Coconut Grove, Florida: Field Research Projects.

—. 1993. "Introduction," in Nippur III. Kassite Buildings in Area WC-1, Oriental Institute Publications 111, by R. L. Zettler, pp. 1-10. Chicago: Oriental Institute.

Goulder, J. 2010. Administrators' Bread: An Experiment-Based Reassessment of the Functional and Cultural Role of Uruk Bevel-Rim Bowl. Antiquity 84:351-362.

Hansen, D. P. 1965. "The Relative Chronology of Mesopotamia. Part 2. The Pottery Sequence at Nippur from the Middle Uruk to the end of the Old Babylonian Period (3400-1600 B.C.)," in Chronologies in Old World Archaeology. Edited by R. W. Ehrich, pp. 201-214. Chicago: University of Chicago.

Henrickson, E. F. 1981. Non-Religious Residential Settlement Patterning in the Late Early Dynastic of the Diyala Region. Mesopotamia 16:43-140.

—. 1982. Functional Analysis of Elite Residences in the Late Early Dynastic of the Diyala Region. Mesopotamia 17:5-34.

Hritz, C., and T. J. Wilkinson. 2006. Using Shuttle Radar Topography to Map Ancient Water Channels in Mesopotamia. Antiquity 80:415-424.

Huot, J.-L., A. Rougeulle, and J. Suire. 1989. "La structure urbaine de Larsa," in Larsa: Travaux de 1985. Edited by J.-L. Huot, pp. 19-52. Paris: Editions Recherche sur les Civilisations.

Jacobsen, T. 1957. Early Political Development in Mesopotamia. Zeitschrift für Assyriologie 18:91-140.

Jasim, A. K., H. A. Hamza, and M. R. Altaweel. 2006. Tell Abu Shijar, near 'Aqar Quf: Summary of Excavations. Akkadica 127:155-166.

Johnson, G. A. 1973. Local Exchange and Early State Development in Southwestern Iran. Anthropological Papers 51. Ann Arbor: University of Michigan Museum of Anthropology.

Keith, K. 2003. "The Spatial Patterns of Everyday Life in Old Babylonian Neighborhoods," in The Social Construction of Ancient Cities. Edited by M. L. Smith, pp. 56-80. Washington and London: Smithsonian Institution.

Kepinski-Lecomte, C. 1996. "Spatial Occupation of a New Town Haradum (Iraqi Middle Euphrates, 18th-17th Centuries B.C.)," in Houses and Households in Ancient Mesopotamia. Edited by K. R. Veenhof, pp. 191-196. Leiden: Nederlands Historisch-Archaeologisch Instituut te Istanbul.

Kohlmeyer, K. 1996. "Houses in Habuba Kabira-South: Spatial Organization and Planning of Late Uruk Residential Architecture," in Houses and Households in Ancient Mesopotamia. Edited by K. R. Veenhof, pp. 89-103. Leiden: Nederlands Instituut voor het Nabije Oosten.

Lenzen, H. 1974. Die Architektur in Eanna in der Uruk IV periode. Iraq 36:111-128.

Liverani, M. 2006. Uruk: The First City. London and Oakville: Equinox.

Mackay, E. 1929. A Sumerian Palace and 'A' Cemetery at Kish, Mesopotamia, Part II. Anthropology Memoirs Vol. I No. 2. Chicago: Field Museum of Natural History.

Martin, H. P. 1983. Settlement Patterns at Shurruppak. Iraq 45:24-31.

Matthews, R. J. 1993. Cities, Seals and Writing: Archaic Seal Impressions from Jemdet Nasr and Ur. Berlin: Gebr. Mann Verlag.

Matthews, R. J., and J. N. Postgate. 1987. Excavations at Abu Salabikh, 1985-86. Iraq 49:91-119.

Matthews, W., and J. N. Postgate. 1994. "The Imprint of Living in an Early Mesopotamian City: Questions and Answers," in Whither Environmental Archaeology? Edited by R. Luff and P. Rowley-Conwey, pp. 171-212. Oxford: Oxbow Books.

Michalowski, P. 1987. "Charisma and Control: on Continuity and Change in Early Mesopotamian Bureaucratic Systems," in The Organization of Power: Aspects of Bureaucracy in the Ancient Near East, Studies in Ancient Oriental Civilization 46. Edited by M. Gibson and R. Biggs, pp. 55-68. Chicago: Oriental Institute.

Nissen, H. J. 1970. Grabung in den Quadraten K/L XII in Uruk-Warka. Baghdader Mitteilungen 5:101-191.

Oates, J., A. McMahon, P. Karsgaard, S. al-Quntar, and J. Ur. 2007. Early Mesopotamian Urbanism: A New View from the North. Antiquity 81:585-600.

Pollock, S. 1999. Ancient Mesopotamia: The Eden the Never Was. Cambridge: Cambridge University Press.

Pollock, S., M. Pope, and C. Coursey. 1996. Household Production at the Uruk Mound, Abu Salabikh, Iraq. American Journal of Archaeology 100:683-698.

Postgate, J. N. 1992. Early Mesopotamia: Society and Economy at the Dawn of History. London and New York: Routledge.

—. 1994. How Many Sumerians Per Hectare? Probing the Anatomy of an Early City. Cambridge Archaeological Journal 4:47-65.

Pournelle, J. R. 2003. "The Littoral Foundations of the Uruk State: Using Satellite Photography Toward a New Understanding of 5th/4th Millennium BCE Landscapes in the Warka Survey Area, Iraq," in Chalcolithic and Early Bronze Age Hydrostrategies, BAR International Series 1123. Edited by D. Gheorghiu, pp. 5-23. Oxford: Archaeopress.

Roaf, M. 1989. "Social Organization and Social Activities at Tell Madhhur," in Upon This Foundation: The 'Ubaid Reconsidered. Edited by E. F. Henrickson and I. Thuesen, pp. 91-146. Copenhagen: Carsten Niebuhr Institute of Ancient Near Eastern Studies.

Rothman, M. S. 2004. Studying the Development of Complex Society: Mesopotamia in the Late Fifth and Fourth Millennia BC. Journal of Archaeological Research 12:75-119.

Safar, F., M. A. Mustafa, and S. Lloyd. 1981. Eridu. Baghdad: State Organization of Antiquities and Heritage.

Schloen, J. D. 2001. The House of the Father as Fact and Symbol: Patrimonialism in Ugarit and the Ancient Near East. Studies in the archaeology and history of the Levant 2. Winona Lake: Eisenbrauns. Sommerfeld, W. 1995. "The Kassites of Ancient Mesopotamia: Origins, Politics, and Culture," in Civilizations of the Ancient Near East, vol. 2. Edited by J. M. Sasson, pp. 917-930. New York: Charles Scribner's Sons.

Steinkeller, P. 1993. "Early Political Development in Mesopotamia and the Origins of the Sargonic Empire," in Akkad, the First World Empire: Structure, Ideology, Traditions, HANE/S Vol 5. Edited by M. Liverani, pp. 107-129. Padova: Sargon SRL.

—. 2004. "Toward a Definition of Private Economic Activity in Third Millennium Babylonia," in Commerce and Monetary Systems in the Ancient World: Means of Transmission and Cultural Interaction. Edited by R. Rollinger and C. Ulf, pp. 91-111. Stuttgart: Franz Steiner Verlag.

—. 2007. "City and Countryside in Third-Millennium Southern Babylonian," in Settlement and Society: Essays Dedicated to Robert McCormick Adams. Edited by E. C. Stone, pp. 185-211. Los Angeles: Cotsen Institute of Archaeology.

Stone, E. C. 1981. Texts, Architecture and Ethnographic Analogy: Patterns of Residence in Old Babylonian Nippur. Iraq 43:19-33.

—. 1987. Nippur Neighborhoods. Studies in Ancient Oriental Civilization 44. Chicago: Oriental Institute.

—. 1997. "City-States and their Centers: The Mesopotamian Example," in The Archaeology of City-States: Cross Cultural Approaches. Edited by D. L. Nichols and T. H. Charlton, pp. 15-26. Washington DC: Smithsonian Institution Press.

—. 2003. "Remote Sensing and the Location of the Ancient Tigris," in The Reconstruction of Archaeological Landscapes through Digital Technologies: Proceedings of the 1st Italy-United States Workshop, Boston, Massachusetts, USA, November 1-3, 2001, BAR International Series 1151. Edited by M. Forte and P. R. Williams, pp. 157-162. Oxford: Archaeopress.

—. 2007. "The Mesopotamian Urban Experience," in Settlement and Society: Essays Dedicated to Robert McCormick Adams. Edited by E. C. Stone, pp. 213-234. Los Angeles: Cotsen Institute of Archaeology.

Stone, E. C., and P. Zimansky. 2004. The Anatomy of a Mesopotamian City: Survey and Soundings at Mashkanshapir. Winona Lake: Eisenbrauns.

Ur, J. A., P. Karsgaard, and J. Oates. 2007. Urban Development in the Ancient Near East. Science 317:1188.

Vallet, R. 1996. Habuba Kebira, ou la naissance de l'urbanisme. Paléorient 22:45-76.

Van de Mieroop, M. 1992. Society and Enterprise in Old Babylonian Ur. Berlin: Dietrich Reimer.

—. 1997. The Ancient Mesopotamian City. Oxford: Oxford University Press.

Weber, M. 1978. Economy and Society. Vol. 2. Berkeley: University of California.

Wilkinson, T. J. 2003. Archaeological Landscapes of the Near East. Tucson: University of Arizona Press.

Woods, C. 2007. "Bilingualism, Scribal Learning, and the Death of Sumerian," in Margins of Writing, Origins of Cultures, 2nd edition, Oriental Institute Seminars No. 2. Edited by S. L. Sanders, pp. 95-124. Chicago: Oriental Institute of the University of Chicago.

Woolley, C. L. 1934. The Royal Cemetery. Ur Excavations vol. 2. London: British Museum.

—. 1939. The Ziggurat and its Surroundings. Ur Excavations 5. London: British Museum.

Woolley, C. L., and M. Mallowan. 1976. The Old Babylonian Period. Ur Excavations vol. 7. London: British Museum.

Wright, H. T. 1981. "The Southern Margins of Sumer: Archaeological Survey of the Area of Eridu and Ur," in Heartland of Cities, by R. M. Adams, pp. 295-345. Chicago and London: University of Chicago.

Yoffee, N. 1995. Political Economy in Early Mesopotamian States. Annual Review of Anthropology 24:281-311.

Zettler, R. L. 1977. "The Sargonic Royal Seal: A Consideration of Sealing in Mesopotamia," in Seals and Sealing in the Ancient Near East, Bibliotheca Mesopotamica 6. Edited by M. Gibson and R. Biggs, pp. 33-38. Malibu: Undena.

—. 1993. Nippur III. Kassite Buildings in Area WC-1. Oriental Institute Publications 111. Chicago: Oriental Institute.

Zettler, R. L., and L. Horne. Editors. 1998. Treasures from the Royal Tombs of Ur. Philadelphia: University of Pennsylvania Museum of Archaeology and Anthropology.