

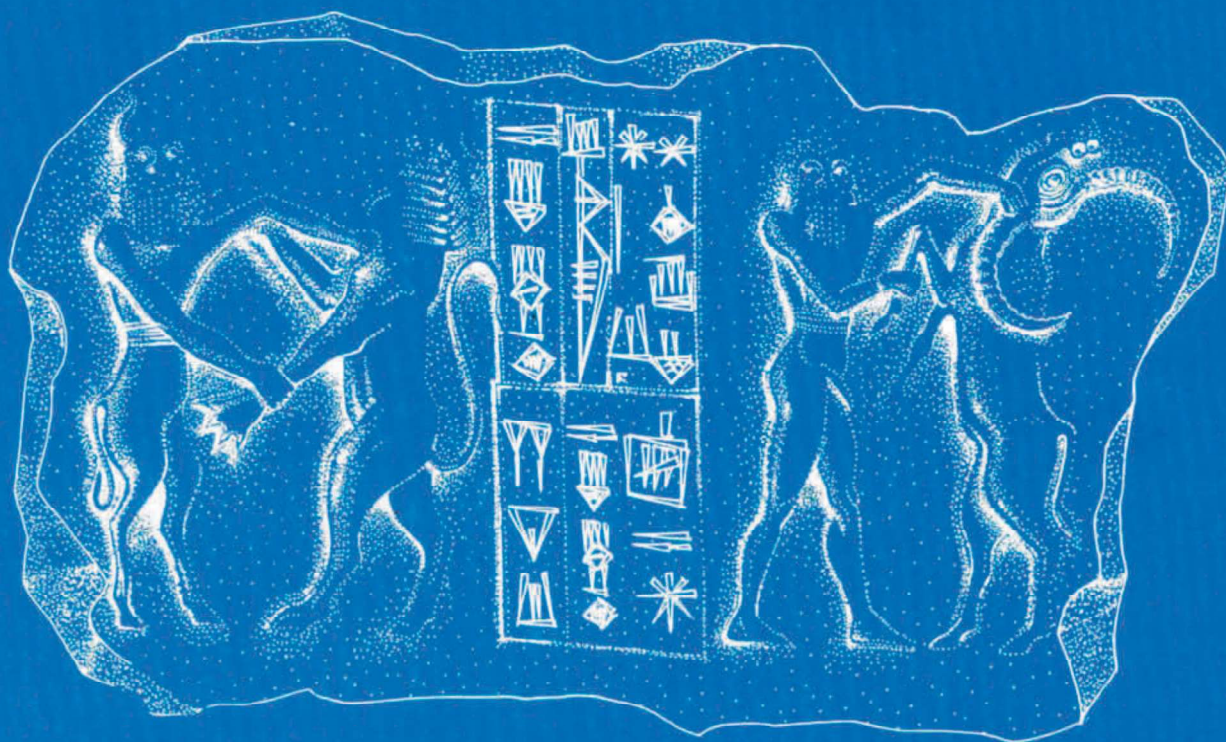


SANEM 3- STUDIES ON THE ANCIENT NEAR EAST AND THE MEDITERRANEAN

BETWEEN SYRIA AND THE HIGHLANDS

*STUDIES IN HONOR OF
GIORGIO BUCCELLATI & MARILYN KELLY-BUCCELLATI*

Stefano Valentini - Guido Guarducci
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TELL MOZAN'S OUTER CITY IN THE THIRD MILLENNIUM BCE*

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Abstract

During the third millennium B.C.E, Tell Mozan, ancient Urkesh, expanded to include an extensive outer city. A variety of investigations in the outer city reveal a complex urban environment: a mix of planned and unplanned activity with the environment and large municipal works acting as constraining factors on more localized activity.

1. INTRODUCTION

During the mid-third millennium, the site of Tell Mozan, ancient Urkesh, saw a period of growth and expanded urbanization and the city added an extensive area, enclosing approximately 100 hectares within a new outer city wall. The outer city encompassed by this area was roughly five times larger than the already extensive high mound. This extended area was critical to the function of the city and provided much more than simply space for additional housing.

Building on Zaccagnini's¹ analysis of the urban landscape of Arraphe, I have proposed using a modular approach to examining the interrelationship of different components of third millennium cities in Northern Mesopotamia.² By examining the relationship among the various components it is possible to look at the urban form as a whole. In particular, my work has called attention to the ways in which the lower towns and outer cities of urban centers are organized, and how the overlap or co-occurrence of different urban components is more significant than the appearance or location of a particular component. The main urban components of the third millennium cities identified were city walls, water resources, streets (intramural), roads (extramural), mortuary structures, houses, workshops, temples and shrines, and administrative structures.³

This article outlines the case of outer city at Mozan by examining the evidence for the different modular components and their relationship to each other in order to create a schematic view of the third millennium urban environment. A schematic modular

understanding of the city allows comparison with other cities, creating a level view that takes into account evidence from multiple methods including surface survey, geomagnetics, and excavations. At Mozan, most of the urban components of the model can be identified and understood as part of the larger urban environment that brought together individual features to create a functioning, flourishing city during the mid-third millennium. Additionally, this article brings together the various investigations to create an overview of the work the excavation team, led by Marilyn Kelly-Buccellati and Giorgio Buccellati, has conducted since 1984.

Rather than adhering strictly to a planned/unplanned dichotomy that is often present in discussions of urbanism, the investigations in Mozan's outer city show that there was an aspect of 'possibilism'⁴ that created preferred locations for certain activities based on a variety of influences including the natural environment, preexisting structures (including the already high central mound), and cultural and economic preferences. Furthermore, the widespread distribution and co-occurrence of the modular components shows a form of 'distributed urbanism' with the various functions of an urban city 'distributed' across the urban landscape, rather than centered solely on the high mound with undistinguished residential areas spreading out from the central area.⁵

2. MOZAN'S OUTER CITY IN CONTEXT

Extensive excavations, directed by Giorgio Buccellati and Marilyn Kelly-Buccellati, have given the overarching outline of the history of Mozan, ancient Urkesh.⁶ The excavations on the

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¹ Zaccagnini 1979.

² Chaves Yates 2014a.

³ see Chaves Yates 2014a, fig. 6.1.

⁴ The term possibilism is used in geography to define limits set by the natural environment (Vidal de Lan Blache 1952), but in this context it is used to reflect both natural environmental limits and any preexisting built environment.

⁵ see Chaves Yates 2014a, figs. 7.1, 7.2.

⁶ Buccellati, Kelly-Buccellati 1988; 1995; 1998; 2000; 2009; 2014; Buccellati 2005a; 2005b; 2010a; 2010b; Kelly-Buccellati

central mound have revealed a history back into the fourth millennium, demonstrating the centrality and longevity of the site for millennia.⁷ During the mid-third millennium, this city experienced a period of rapid expansion, enclosing the outer city and bringing that area more tightly into the control of the urban center. This expansion has been dated to potentially as early as 2600 BCE based on the finds in the outer city and the changes to the inner city wall at that time.⁸ Mozan's expansion is linked to a period of general urbanization across the larger region, sometimes called the 'Second Urban Revolution' (table 1).⁹ Structures on the high mound dating to the time of the expansion of the outer city include a monumental palace and a large temple complex.¹⁰ Rising more than 20 meters above the level of the outer city, the central high mound remained the center of power and authority in the city,¹¹ even while the city was rapidly expanding and various small neighborhoods and sectors of the city were developing.¹²

3. DEFINING THE OUTER CITY

There are three main areas when thinking about urban Mozan. The high mound, the outer city, and the area surrounding the city necessary for its support. Extensive excavations on the high mound have given a detailed understanding of its function in the third and second millennia (see above). The high mound was surrounded by a city wall initially and excavations in area K1 in the eastern part of the high mound showed that this wall was subsequently somewhat built over.¹³ Another city wall, the outer city wall, was constructed later during the EIII period. The Outer City is defined as the area between these two walls. Beyond the outer city wall areas of scattered occupation, important geographic features, water resources and supporting villages constitute the larger supporting hinterland of the city. Various excavations, surveys and other investigations have been conducted in the outer city, giving an incomplete but cohesive view of the outer city (fig. 1, table 2).

4. CITY WALL

The outer city wall is one of the defining components of the urban structure at Mozan, setting

the boundary of the contained urban area and representing a significant investment on behalf of the city. The outer city wall is clearly visible in the Corona images and the topographic survey and identified during the earliest investigations at the site.¹⁴ Surveys and geomagnetic studies have confirmed the location of the outer city wall circumvallating the city at a distance ranging from 200-400 meters from the base of the main mound and the inner city wall (fig. 2).¹⁵ A possible city wall was detected in a limited excavation in an area called OH1. Layered pebbles and stones from the sounding were suggested as a possible internal portion of a casemate wall.¹⁶ Casemate walls, filled with similar types of debris, excavated at Tell Chuera support this idea.¹⁷ This imposing structure would have restricted the points of access to the city and directed the flow of people and animals headed to the villages and fields. Several potential gates have been located. Hubner's magnetometry study in the southern outer city suggests that the gates were flanked by two towers.¹⁸ These access points would be the first point of centralized control. The inner city wall (excavated at K1) was probably used as an administrative control point as well since its significance as a fortification wall was diminished after the construction of the outer city wall in the mid-third millennium.¹⁹

Monumental architecture, possibly relating to the city wall, is suggested by the survey in area OG50, which identified almost 400 large stones (approximately 40-60 cm) and 100 smaller stones.²⁰ Stone architecture using the same types of stones is known on the high mound as part of the major constructions of the temple complex and the palace.²¹ The large stones, brought from the Tur Abdin mountain range to the north, were disturbed during modern agricultural work, yet appear to represent a substantial investment in the outer city architecture.

5. STREETS AND URBAN PLANNING

Integral to understanding the layout and organization of any city is an analysis of the transit routes. Without detailed excavation it is often difficult to identify or be certain about street patterns, however, the geophysical surveys at Mozan give a glimpse into the possible arrangement of the inter-

1990; 1998; 2010; 2013.

⁷ Kelly-Buccellati 2010.

⁸ Bunnens, Roobeart 1988; Buccellati 1998a, 16; Chaves Yates 2014a, 196.

⁹ Akkermans, Schwartz 2003.

¹⁰ Buccellati 2005.

¹¹ Buccellati 2010.

¹² Chaves Yates 2014b.

¹³ Bunnens, Roobeart 1988.

¹⁴ Buccellati, Kelly-Buccellati 1988.

¹⁵ Buccellati, Kelly-Buccellati 1988; Hughey 1988; Thompson-Miragliuolo 1988; Pfalzner *et al.* 2004.

¹⁶ Buccellati 1988a, 18.

¹⁷ Helms *et al.* 2017.

¹⁸ Pfalzner *et al.* 2004.

¹⁹ Bunnens, Roobeart 1988.

²⁰ Chaves Yates 2014a, 151.

²¹ Buccellati 2017.

city transport routes. The roads and streets in the southern outer city appear to radiate out from the gate area.²² The largest of these radiating streets leads toward the high mound, but at an angle (fig. 3). The other smaller streets appear to lead to destinations in the outer city, possibly suggesting a more circuitous route throughout the outer city was the norm, rather than a direct passage to the high mound and center city. This street patterning would have the additional benefit of alleviating the need to pass through the high mound to reach different parts of the city. A ring road found at Tell Chuera, seems to operate in this way and serves function similar to a modern bypass highway, allowing transit through the city without passing through the dense center.²³ Smaller streets seem to branch off with little organization or planning, giving additional evidence for a mix of planned and unplanned urban development at Mozan.

6. WATER

Although Mozan received enough rainfall for agriculture during the third millennium, access to water was an important aspect of site placement. Sites are known to be located along waterways which provided secondary access to water for people and animals.²⁴ Additionally, waterways were used as transport and communication routes between cities and their surrounding villages, as demonstrated by Chagar Bazar.²⁵ At Mozan a wadi appears to have run past, possibly even through, the city to the west in the third millennium.²⁶ Known from the first topographic surveys²⁷ the watercourse was confirmed through deep soundings in OR1 that uncovered water laid sediments.²⁸ This wadi functioned as a restraint on development in the western outer city and may have helped define the western border of the city during the third millennium.

Within the city, wells were also used to provide water to the population. Stone-lined wells were located in the outer city associated with third millennium ceramics at OS3 and OS8.²⁹ The presence of ancient wells within the city walls indicated diversified strategies for water use – the local wadis providing water needs in addition to these wells. The chance discovery of two wells in the early years of survey and exaction hints at their likely ubiquity in the outer city area. Wells are one example of the ways

in which the urban components could be fit in within the larger constraints of the environment and existing infrastructure to create a functioning urban landscape.

7. HABITATION

Across the Jazireh, the widespread addition of outer cities, or lower towns, appears to have been part of a pattern of urban expansion designed to accommodate growing urban populations as evidenced by expansions at sites like Hamoukar, Tell Beydar, Tell Chuera, Tell al-Hawa, and Tell Leilan.³⁰ Although outer cities are not exclusively used for habitation³¹, habitation and houses do seem to be a large part of the distribution of activities. For example, large-scale excavations within Tell Chuera's lower town have revealed densely-packed houses and housing complexes,³² and similar houses and occupation area have been excavated at Leilan and Hamoukar.³³ Like other regional sites, Mozan's outer city was a locus of habitation for a large portion of its population. Evidence from the surface surveys shows a broad distribution of household cooking wares.³⁴ Small structures arranged along the streets and alleys have also been revealed by the geomagnetic studies, indicating the likelihood of households in the outer city although none have yet been excavated.³⁵

8. PRODUCTION

The expansion of habitation, and extension of the living space of the city into the outer city required the necessary support structures for the people. Production seems to have been part of the neighborhood structure of the city, with multiple loci of production in the outer city.³⁶ In area OG51, in the northern part of the outer city, a concentration of ceramic slag and ceramic wasters was identified during the Pilot Survey. Fragments of kiln waste were identified in all the surface surveys conducted in the outer city at Mozan indicated the workshops were not confined to any particular section of the outer city.³⁷ At Tell Chuera in Area W of the Lower Town a makeshift kiln and large amount of ceramic wasters were found in neighboring houses, suggesting the manufacture of ceramic within the residential areas.³⁸ Household workshops are common across Northern

²² see Chaves Yates 2014a; Pfalzner *et al.* 2004, fig. 5.

²³ Helms *et al.* 2017.

²⁴ Wright *et al.* 2007; Deckers, Riehl 2008; Deckers, Dreschler 2011.

²⁵ Eidem, Warburton 1996, 53.

²⁶ Deckers, Riehl 2007; Deckers 2010.

²⁷ Buccellati, Kelly-Buccellati 1988; 1998.

²⁸ Deckers, Riehl 2007.

²⁹ Thompson-Miragliuolo 1988, 52.

³⁰ Akkermans, Schwartz 2003.

³¹ See Chaves Yates 2014a Chapter 1 for an extended discussion of the presumed function of outer cities in site reports and archaeological literature.

³² Helms *et al.* 2017.

³³ Gibson *et al.* 2002a; 2002b; Colantoni, Ur 2011; Weiss 1990.

³⁴ Thompson-Miragliuolo 1988; Chaves Yates 2014a.

³⁵ Pfalzner *et al.* 2004.

³⁶ Chaves Yates 2014b.

³⁷ Chaves Yates 2014a, 207-208.

³⁸ Helms *et al.* 2017.

Mesopotamia,³⁹ and widespread co-occurrence of wasters and ceramics across Mozan's outer city suggests this pattern can also be found at Mozan.

9. ADMINISTRATION

The systematic excavation of area OH2, on the rise of the eastern city wall, revealed small finds that appeared to be part of a larger third millennium administrative complex associated with the city wall.⁴⁰ The excavations were conducted over an area 4 meters by 4 meters, to a depth of 2 meters below surface.⁴¹ Although no architectural features were identified, the 35 sealings recovered in a layer of thin laminations seem to indicate the discard in an outside area exposed to the elements.⁴² The sealings indicate a variety of uses for sealing technology with identifiable cord, peg, fiber and fingernail impressions. Combined cord and peg impressions may have been associated with the administration of a storeroom along the city wall while the other sealings seem to be associated with moveable objects, again, possibly hinting at the administration and use of a nearby central administration building. The seal impressions that are preserved include animal and geometric shapes and are dated to the EDIII (or EJII) period.⁴³ The evidence from the seals, seal impressions and other small finds at OH2, together with its location on a rise in the outer city associated with the city wall, all support the idea that the area of OH2 was part of the administration and control of the outer city.

10. BURIAL

Evidence from across the outer city suggests that during the EJI and EJII, areas of the outer city were being used for burial, predating the addition of the outer city wall.⁴⁴ In the NE part of the outer city, a burial dating to the early mid-third millennium, was found intact. OB1 was a simple pit grave with multiple individuals and a minimum of 138 vessels as well as metal objects.⁴⁵ The finds from this tomb include Ninevite 5 ware, Metallic ware and painted scarlet ware stands. Kelly-Buccellati has dated the tomb to the late EJI. The remains and the ceramics appear to have been placed or dumped haphazardly possibly indicating reuse and disturbance (fig. 4). Nearby (OA4) a stone lined tomb was also found but it was disturbed in antiquity and could not be dated. In the SE part of the outer city (OD50), plowing

disturbed what appears to have been a grave similar to OB1 with Metallic Ware, and ashy material.⁴⁶ Metallic Ware and human remains are often correlated in survey collection units at Mozan and Metallic Ware has also been found associated with burials at other sites around the Jazireh into the mid-third millennium⁴⁷ which may suggest some intramural burial during the main period of occupation in the outer city. Additional undetected burials or cemeteries may lie beyond the city walls, but have not yet been discovered.

11. MOZAN'S BROADER CONTEXT

The city relied on the surrounding countryside for more than possibly burial locations. The countryside provided resources, particularly agricultural and pastoral land. A city like Mozan would have required at least an area of 5-6 km around the site to support its populations.⁴⁸ Several villages, as of yet uninvestigated, can be seen in Corona images, and some likely existed as support for the larger urban center. Preliminary investigations have suggested that at least 2 of the sites are significant archaeological sites.⁴⁹ The limited epigraphic finds from Mozan indicate that the city controlled various villages during the Akkadian Period, sending out workmen under the supervision of different administrators.⁵⁰ Although these tablets were found in what is likely a private residence, it still indicates that rural villages were integrated with the urban center, regardless if it was on a household administration level or a broader city-wide administration level. Comparable texts from nearby Beydar indicate that both household and city-wide administration occurred.⁵¹ In the MZ2 tablets at least five villages are identified, but only two village names are completely preserved. The two villages, Dah and Arzakum, are not known from other texts in the region suggesting they were local to Urkesh. The variety of occupations found in just two tablets indicates the strong integration of the urban and rural economies. The inclusion of a fuller in the listed professions, being sent out to the village, suggests that the villages were involved in pastoral activities. Additionally, a fowler indicates the exploitation of resources from the surrounding countryside. The importance of the urban skilled specialists is highlighted by the inclusion of several skilled laborers in the list of workers sent out including a scribe, smith, physician and upholsterer. The texts show the integrated links between the city and the greater countryside, with skilled labor from the city center and resources from the surrounding area.

³⁹ E.g. Stein, Blackman 1993; Wattenmaker 1998; Mazzoni 2003.

⁴⁰ Kelly-Buccellati 1998.

⁴¹ Walker 1998.

⁴² Buccellati 1998b.

⁴³ Kelly-Buccellati 1998.

⁴⁴ Chaves Yates 2014a, 212.

⁴⁵ Thompson-Miragliuolo 1988; Chaves Yates 2014a.

⁴⁶ Kelly-Buccellati 2013; Buccellati 2008.

⁴⁷ Broekmans *et al.* 2006.

⁴⁸ Wilkinson 1994; 2004; Deckers 2010; Deckers, Dreschler 2011.

⁴⁹ Barnard forthcoming; Davidson, McKerrel 1976.

⁵⁰ Milano 1991.

⁵¹ Milano *et al.* 2004.

12. CONCLUSIONS

Putting together all the different investigations in the outer city, a coherent, if patchy picture begins to form (fig. 5). It is helpful to think of cities on a spectrum of planned to unplanned, rather than as a sharp either/or.⁵² Mozan seems to be toward the middle of this continuum, exhibiting both the influence of strong centralized forces, as well as more haphazard and localized development. It is clear that the preexisting mound and the geography of the area around Mozan were determining factors in defining the layout of the city. Mozan's high mound remains more or less centered inside its outer city, unlike some other cities that have a more offset high mound (e.g. Hamoukar, Tell Leilan). The city appears to have expanded roughly equally in all directions from the oval high mound into an oval outer city. The only major constraint seems to be the water course in the western part of the outer city that may have either cut, or slightly restrained the growth in that area.

While the small streets and haphazard buildings indicated by the geomagnetic surveys indicate a position toward the less-planned end of the urban continuum, the large city wall and associated administrative buildings show a clear plan for control and regulation of the city. Furthermore, the relatively even shape of the outer city wall supports the idea that the high mound and center city maintained an important and prominent role in the city, visually and spatially.⁵³ Within these larger confines of the city wall and inner city wall, however, there seems to be a range of types of activities, relatively unplanned and unorganized with streets radiating out into the outer city in different directions, mixed use for production and housing, possibly with burials mixed in throughout, and pressing up against the more planned aspects of the city wall and administrative areas. Open areas, as possibly indicated on the geomagnetic surveys, may have also been used for orchards and gardens, a possibility that is also supported by studies of texts regarding the urban layout of later cities. There appears to be no specific craft areas, or zones, in Mozan's outer city and the neighborhoods do not appear to be organized by production type.⁵⁴ Household workshops, distributed throughout the city without regard for type of production is a common format within region at this time, with the exception of Titris Huyok and its large suburban craft workshop areas.⁵⁵

It is clear that Mozan's urban success was reliant on more than just the outer city, and it relied on

its surrounding countryside for agricultural land, additional water resources, building materials, and as links in the larger trade networks. Large stones for buildings on the high mound such as the palace and the temple complex were likely brought from the nearby Tur Abdin mountains,⁵⁶ and the concentration of large stones found in the northern outer city (OG50), may indicate large scale construction in that part of the city closest to the mountains, or a staging area for bringing the stones to the high mound.

Compared to other cities around the region, Mozan seems to represent a fairly typical urban structure, with a roughly distributed form of urbanism, with many of the important aspects of urban living located in the outer city, yet still linked to a significant central city on the high mound. In the Euphrates river valley and into modern-day southern Turkey, the cities begin to take a slightly different form, often with irregular expansion of the lower towns and outer cities and occasional dedicated craft production areas.⁵⁷ The Euphrates valley may have served as a limiting factor for expansion and growth of these sites.⁵⁸ Some sites in the Balikh river valley also show variation from the pattern of expansion seen in the Jazireh plains, with no major additions of outer cities, perhaps reflecting a preferential difference based on the open plains for agricultural activity of the large sites like Mozan, and the comparatively smaller river valley sites constrained by the environment.

As the evidence from Mozan shows, the expansion and enclosure of the outer city was an integral part of maintaining and securing a larger area as part of an integrated city. The widespread distribution of different activities, however, shows that much of the daily activity and life of the local people was unregulated with haphazard construction, localized resources such as water, and a variety of activities without and particular areas of craft concentration. Nevertheless, this all existed within the larger confines and structures created by the city walls, centralized administration and geographical/ecological limits.

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⁵² Smith 2007.

⁵³ G. Buccellati 2010; F. Buccellati 2010.

⁵⁴ Chaves Yates 2014b.

⁵⁵ Matney, Algaze 1995; Hartenberger 2003.

⁵⁶ Buccellati, Kelly-Buccellati 2014.

⁵⁷ Chaves Yates 2014a, 100.

⁵⁸ Wilkinson 2004; Cooper 2006.

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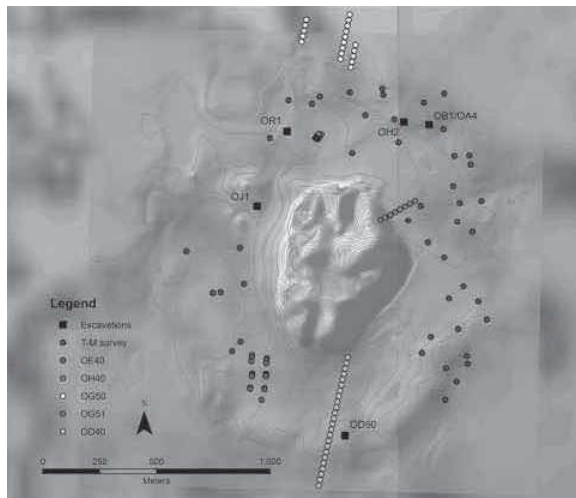


Fig.1. Locations of survey and excavations in Mozan's outer city

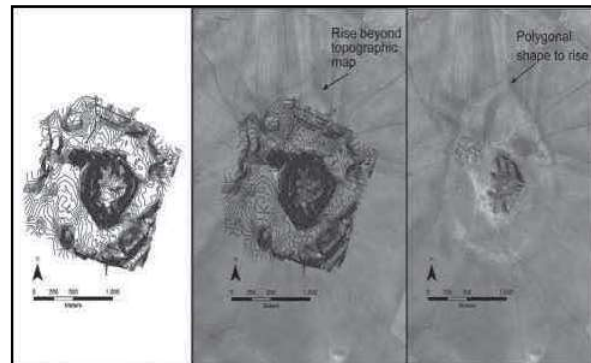


Fig. 2. Views of topography of Mozan's outer city showing rise of city wall. From left to right, Topographic map of Tell Mozan, composite image of topographic map and Corona satellite image, Corona satellite image. Topographic map after Hughey 1988, Corona image 1968 courtesy Center for Advanced Spatial Technologies, University of Arkansas/U.S. Geological Survey.

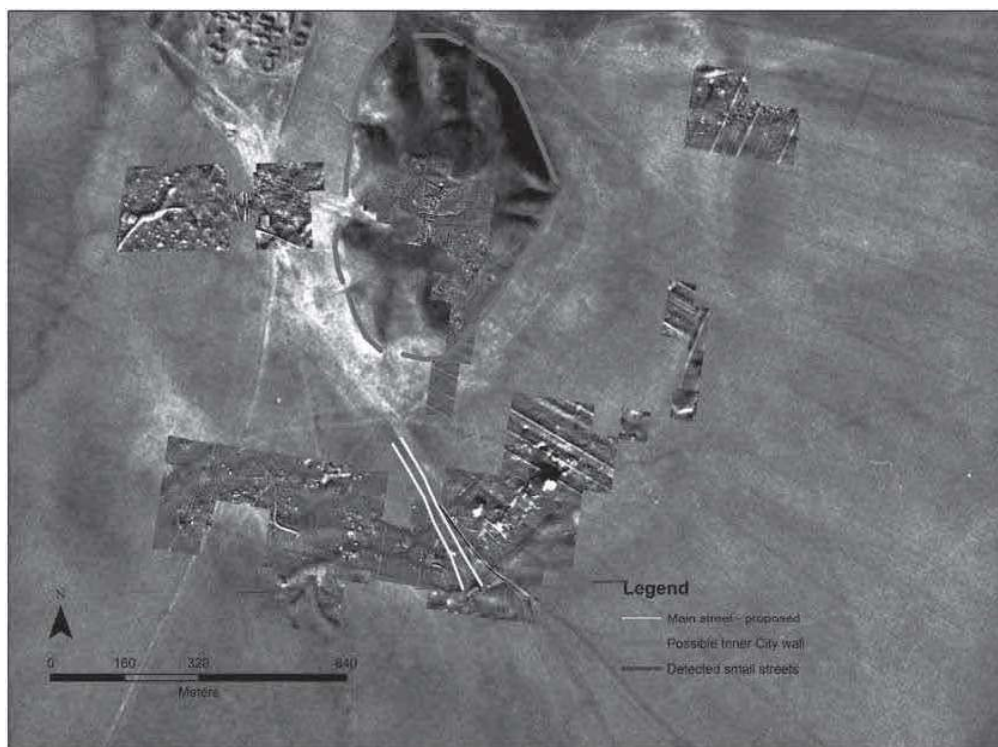


Fig. 3. Streets detected in geophysical survey. Numerous streets were detected during the 2002 geophysical survey. The streets are interpreted as radiating out from the city gate (Pfalzner *et al.* 2004). The main street appears to head directly toward the central mound, but not directly toward a gate location. (See Pfalzner *et al.* 2004, fig. 5 and Pfalzner 2010, fig. 2 for comparison). Corona image courtesy Center for Advanced Spatial Technologies, University of Arkansas/U.S. Geological Survey.

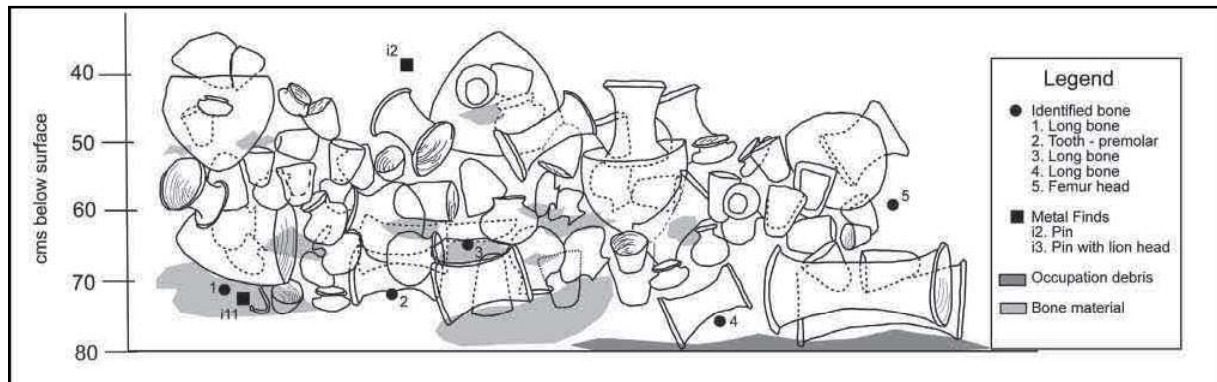


Fig. 4. Drawing of Finds from Tomb OB1. Original drawing by Thompson-Miraguilo (1985), inked by Chaves Yates (2013).

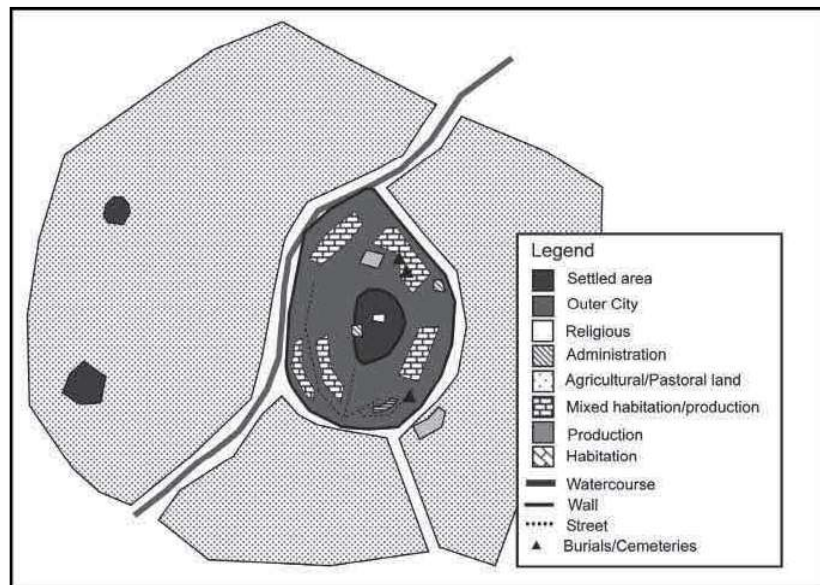


Fig. 5. Schematic of area around Mozan showing the 'distributed urbanism' during the third millennium.

	MZ	Early Jazira	Southern Mesopotamia	Early Bronze Age
2000	Phase 5			
2100				MB
2200		EIV	Akkadian	
2300	Phase 4			EBIVb
2400	Phase 3l-3u	EIII	EDIIIb	EBIVa
2500	Phase 3l-3u			EBIII
2600		EII	EDIIIa	
2700				EBII
2800	Phase 3b-3j	EI/NS	EDI-EDII	
2900		EJO		
3000				EBI

Table 1. Comparative Chronology Chart

Area	Location	Brief Description
OR1	NW	Excavation: Ancient watercourse
OB1	NE	Excavation: Grave
OG50	N	Pilot Survey transect
OG51	N	Pilot Survey transect
OH40	E	Pilot Survey transect
OE40	SW	Pilot Survey transect
OD40	S	Pilot Survey transect
ON	S	Geomagnetic and Surface survey
OL	S	Geomagnetic and Surface survey
OS9-12	N	Cuts for power lines
OH1	n/a	Excavation: possible wall
OH2	NE	Excavation: administrative area
OJ1	W	Excavation: Mozan village
OD50	S	Surface collection: disturbed burials
OA4	NE	Excavation: Grave

Table 2. Description and labeling of investigations in Mozan's outer city