

4. THE OUTER CITY:

INTRODUCTION AND SURFACE COLLECTION

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4.1 Introduction — G. Buccellati and M. Kelly-Buccellati

During the two short seasons of work at Mozan reported here we concentrated on surveying and excavating the High Mound; at the same time, however, we also developed a concern about the Outer City. Research in the Outer City appeared promising for a number of reasons. In the fields south and east of the site we had found two wells with third millennium pottery scattered by the mouth of both. It was unclear whether or not the wells themselves were ancient, but the ceramics did not indicate a period later than the third millennium. One of the wells was stone lined, and the local villagers indicated that this well was not of recent date. They also pointed out a spot on the High Mound where they said another well was located which had the same kind of stone lining; however the opening was covered and we did not investigate further.

We had also noted a gradual but regular and considerable rise in the ground around portions of the site, and this too needed to be investigated. Another interesting problem was to determine the nature and extent of a wide depression visible on the south-eastern portion of the site. Some aerial photographs seemed to corroborate the impressions which we had formed on the basis of ground observations, although the photographs were taken while the fields were still under cultivation, and thus do not afford the best view of the slight differences in relief (Illustrations 2-4; see the comments in the next section about the best conditions for "archaeological visibility").

There were two immediate problems in undertaking such a survey of the Outer City: (1) we did not have the staff to survey adequately such a large area, and (2) by the Spring of 1985 the fields had already been planted and it would have been very difficult to survey the area at all. It was at this point that we enlisted the aid of Dr. Judith Thompson-Miragliuolo, then living in Qamishli, who had already done extensive archaeological survey work in eastern Iran, and was thus well prepared to undertake this project. During the Spring 1985 season

we were able to define together the main goals and objectives for a surface survey of such a large area, a survey which she then carried out independently in the late Summer and Fall after the harvest. While the survey is not complete, it is of great significance for what it tells us in terms of the potential expanse of the lower city and the homogeneity of its deposit. Her account is given in the rest of this chapter.

4.2 Surface collection

From the top of Tell Mozan, as well as from aerial photographs taken in 1985 (Illustr. 2-4; PDS-1 3), it is possible to discern traces of what appears to be a slight ridge in various points around the main mound. This ridge or rise appears roughly equidistant from the High Mound in the points where it is visible, suggesting the possibility of an Outer City wall which could have encircled the tell some 300 to 400 meters from the main mound. Alternatively, the rises noted from afar could prove to be satellite occupation mounds. In either case, a determination of the existence of man-made topography in this circumference zone would have significant implications for a reconstruction of the urban environment of Tell Mozan and would be an indispensable adjunct to any statement regarding population estimates of the site.

It was to test the existence of such a rise, to estimate its extent, and to determine the nature of any artifact cover in the entire Outer City, that the Mozan Outer City project was begun in late summer 1985 with a surface survey involving controlled collection and topographic mapping.

As in most of this part of the Khabur Triangle, Mozan is situated in the midst of an agricultural zone; all of the land adjacent to the tell for many kilometers around is currently or has recently been farmed so that the agricultural cycle has considerable importance for a surface survey. Fieldwork was begun in September 1985 immediately following the harvesting of the survey area, and was completed by December, when most of the fields in the area had been plowed. It was deemed important to examine both the supposed rise and the level ground which separates it from the main mound itself. The aim was to determine the volume and variability of surface cover over as wide an area as possible before the late autumn rains began to make surface collecting impossible.

Although homogeneity of the surface area could not be assumed, a random sample was attempted as the best means of covering the survey zone in the time period available. A 100-meter grid was extended on paper from a known point (A) on the highest point of the main mound to a distance of some 300 meters from it in every direction. All squares which encompassed the High Mound or the mound's talus, as well as several which were inaccessible due to modern habitations and a vineyard, were eliminated from the population to be sampled (the surface survey of the main mound is published elsewhere in this report, see Chapter 3). The remaining 72 squares were subdivided into sixteen 25-meter squares each, which were manageable dimensions for a surface collection. Of these 25-meter squares, over 70 were selected, using a table of random numbers, to arrive at a 7% sample. At the end of the season only the northwestern portion of the survey zone remained unsampled due to the impassable conditions of the fields under cultivation; this portion will be completed during the next season.

The ten-meter square in the southwest corner of each selected 25-meter square was

exhaustively collected to give a basis for the comparison of artifact volume among the sampled units. Ten by ten meter squares were seen to be the maximum area to which adequate controls could be applied for a complete collection of artifacts. The remainder of each 25-meter square was then systematically surveyed for a more selective collection of diagnostic material. [Each 100-meter square is designated by two numbers: the first refers to the North coordinate, and the second to the East coordinate, counting by hundreds in each case. Each 25-meter square is designated by two letters using the convention explained graphically in Figure 6. — G. B. and M. K.-B.]

Contours of the Outer City area were taken in the eastern and northeastern portions, but due to logistical problems, topographic mapping was not completed this season; this also will be finished during the 1986 season.

A total of 49 of the selected squares, as well as 13 additional sampling units, were collected before December 1985. From the sketch map based on observations in the field after removal of the plant cover by cultivators, and from the partial contour map (Fig. 6), it may be seen that a rise is clearly present at a distance of some 200-400 meters from the base of the tell in what appears to be a concentric ring. This ring encircles the tell from the southwest to the east and then from the northeast to the northwest; it is highest and most clearly apparent in the south-southeast, where the artifact cover is concomitantly densest. There are three gaps in this concentric ring to the east and northeast and one small gap on the southeast. Immediately west and west-northwest of the tell a rise is not discernible by eye, although traces of the rise which continues from the north gradually diminish and eventually disappear in the vicinity of currently inhabited Mozan village. The local inhabitants have plowed this area for at least a couple of centuries, possibly contributing to the erosion of the rise in this part of its circumference. Artifact cover is correspondingly lowest in density in this area. The rise may be slightly elliptical, extending farther from the High Mound (up to 500 meters) in its northwest portion where Os4 is located. The width of the rise appears to be generally between 50 and 100 meters; height variability cannot be determined until topographic mapping is completed. As is to be expected, detection of the rise is enhanced in late autumn after the first rains have fallen and have been followed by a dry spell. Moisture drains from higher ground to lower-lying areas; when viewed from the top of the High Mound, this differential drying causes the rise to appear lighter in color than the lower plain. Just beyond the concentric rise on the south a 100-meter wide depression is also clearly evident, appearing to follow the rise toward the east; its significance is not clear at this point, but it may be a part of an ancient watercourse or moat.

Disturbance of the surface within the area between the base of the High Mound and the outer periphery of the rise is considerable in some locations. Several unpaved roads cut across the peripheral ring, three of them actually slicing through the apparent rise. In several locations on the crest and slopes of the rise there are signs of deliberate unauthorized excavations. The entire area is currently, or has been in the last few years, cultivated for the production of wheat, with a large vineyard on the northwest adjacent to the High Mound, an irrigated cotton field in the southeast, extending up onto the rise, and an irrigated garden in the western portion near a recently dug well. Wheat fields are plowed twice in the late Autumn and Winter before sowing; harvest is during the summer months and in early autumn herds of sheep and goats are brought in to crop the stubble. Archaeological visibility is greatest (i.e., artifacts are most visible on the surface) after grazing and before the first plowing,

and then again after the second plowing when the light showers which precede the heavy winter rains have washed the artifacts from the loose earth.

For recording purposes, the survey area (the Outer City) as a whole was designated Oz1, or simply z1. [Upper case "O" stands for Outer city, lower case "z" for the entire Outer City, and lower case "s," on which see presently, for special areas. Use of upper case "O" is not required, but it can be useful when contrasting areas from the Outer City with the High Mound; areas on the High Mound are designated with single, upper case letters. — G. B. and M. K.-B.] Eight specific locations within the Outer City were assigned separate unit numbers from Os2 to Os9 based on the presence of significant ceramic concentrations, often accompanied by features such as wells, depressions, or pits. Os2 is a small test excavation carried out in the second season during the late spring of 1985, the results of which were somewhat inconclusive. Os3 is an area on flat ground some 100 meters east of the High Mound where two disused wells are located — one of these is relatively recent (within 50 years) and the other was exposed by Mozan villagers during plowing and is associated with third millennium ceramics and a heavy concentration of human bones. Os4 is an area 500 meters north of the High Mound where a tractor uncovered concentrations of ceramics, some of them whole vessels. Os5 is a similar area on the crest of the rise east of the High Mound where a ten-meter wide shallow pit was still open, indicating recent disturbance of the location. Os6 is again an area with a heavy concentration of ceramics, this time on a slope of the rise where it appears to have been eroded or worn away, exposing freshly broken Metallic ware sherds in great numbers. Os7 extends for some 100 meters along the crest of the rise and is characterized by signs of dozens of small refilled pits indicating deliberate disturbance of the surface; one pit was made within days of my examination and was still open and scattered with freshly fractured sherds of large, heavy vessels. Just 50 meters to the west is Os8, where a well was discovered by villagers digging an irrigation channel. Like the well at Os3, this one is associated with third millennium ceramics, but, unlike Os3, it is located on the crest of the rise. The final location was a square sampled outside the grid to the south on the crest of the highest portion of the rise; this square yielded the greatest amount of material.

In all, eight probable locations of wells were found on the survey, including those with early ceramics at Os3 and Os8, both of which are lined with large unmortared stone. Six were said to have been dug within memory of the oldest villagers at Mozan. While sinking several of the more recent wells, villagers had found many items of archaeological interest, few of which remain in the villagers' possession.

Other features of the Outer City include a row of large (1 m. by 1/2 m.) stones removed from fields on the rise east of the High Mound and two larger (2 m. by 1 m.) stones on the top of the rise north of the High Mound. Within 200-300 meters west of these latter, three shallow areas were found where similar large calcareous stones had been excavated. These seem to have been worked into rectangular shapes and had been chipped and broken by farmers attempting to break them down for removal and clearing of the fields. At scattered locations all around the rise, large calcareous stones, obviously imported into the area, had been exposed during plowing and removed to the edges of the fields. [A number of these slabs line the edge of the vineyard on the northwestern slope of the tell, and many more are found scattered throughout the village at Mozan. — G. B. and M. K.-B.]

4.3 Relative percentages

During the survey some 14,000 artifacts were collected from the surface and tabulated according to the provisional types established during the first two seasons at Mozan. Typing was made difficult by the fragmentary nature of sherds on the surface, as well as their often heavily weathered and abraded condition, but the material in general displays a clear affinity with the third and early second millennium material found on the High Mound itself and in the excavations there. Predominant are Wet Smoothed, Simple, and Chaff-Tempered wares, with good numbers of Metallic, Pebble-Tempered, and Rough wares as well (for a description of these ceramic wares see above, Section 3.4). Also in evidence are Habur and Halaf painted wares, Ninevite V Incised ware, and several other types. Out of the approximately 14,000 sherds, less than ten were glazed. Ceramic types may be summarized as follows, in decreasing order of frequency (see Figs. 27-32 for drawings of representative samples):

Wet-Smoothed ware — 32% of the total artifact count: This was the major type in practically every controlled collection sampling unit. Of this major type, almost 40% came from the southeastern portion of the rise.

Unidentified — 16% of the total artifact count: In the ten-meter complete collection areas, all sherds, even the smallest, were collected. Many of these were of such minute size that identification by type was not possible; these comprise the bulk of the unidentified category.

Simple ware — 15.5% of the total artifact count: There are three definite concentrations of this ware — one is at square 98Da where Simple ware constitutes 21% of the sherds collected, another encompasses four squares east of the High Mound and the third is on the rise southeast of the High Mound in an area which includes seven squares. The proportion of Simple ware is low on the rise south of the High Mound at Os9 (5%) and on the west (8%; see Figure 8).

Chaff-Tempered ware — 14% of the total artifact count: This ware is present in all the sampled units but is less well-represented in the south-southeast and the south, while it is found in high proportions (above 20%) to the west and east on level ground and on the rise near Os5.

Metallic ware — 7.6% of the total artifact count: In most collected squares, Metallic ware composed 4 to 6% of the sherds. However, the most notable concentration of any type encountered during the survey occurred in the extreme northeast corner of the survey area, where Metallic ware is fully 87% of the 241 sherds selectively collected from Os6. It is interesting to note that three squares bordering on this Metallic ware concentration zone were completely without Metallic ware, as were only two other squares from elsewhere in the Outer City. Square 98Da, near Os6, had more than 20% proportions of both Pebble-Tempered and Simple wares.

Pebble-Tempered ware — 4% of the total artifact count: As with Metallic ware described above, Pebble-Tempered ware is also absent from the three squares near 98Da. Square 98Da itself had a 20% concentration of Pebble-Tempered ware as mentioned above. There are no other concentrations of Pebble-Tempered ware but there are two areas where this ware is significant in its absence: the zone mentioned above where a total of six squares has no evidence of this type, and another of five squares in the east-southeastern portion of the Outer City.

Rough ware — 1.7% of the total artifact count. Rough ware in no instance comprises more than 6% of any one square's collection; more often it occurs in 1 to 3% proportions while many sampling units lack it altogether. No clustering of this type is evident.

Mica Grit ware — 1% of the total artifact count: This ware occurs in only slight quantities throughout the survey area but more so in the eastern portion than elsewhere. The lowest quantities of Mica Grit ware are found in the south and west.

Other types — comprising altogether another 7% of the total artifact count: These include most decorated wares such as Habur painted, Ninevite V Incised, Ur III modelled rope designs, and Halaf painted. None of them ever comprises more than 1% of the collected sherds from any one unit.

Flaked lithic material — A total of 36 blades and blade fragments were recovered, as were two cores, five retouched flakes, and one awl. In most cases the material used was a medium grade flint or chert, ranging in color from black to light tan, but four blades were manufactured from translucent obsidian. Three of the blades display a silica sheen, indicating their use for cutting vegetable matter, and two blades were denticulated.

Groundstone — Six groundstone objects were collected from the surface: a rough cube, a sphere, one with three flat surfaces, one with one flat side opposite a circular depression suggesting usage as a hammerstone or small mortar, and one object perforated from two directions. In addition, a distal fragment of a polished groundstone celt was found on the Outer City surface.

Other stone objects — A perforated stone cylinder with a completely abraded surface was found by a Mozan villager on flat ground approximately 200 meters southeast of the tell, an unfinished pink stone bead was recovered from Os7, and a fragment of cut and polished red marble was collected on the rise north of the mound.

Metal — Only one copper/bronze item was found on the surface of the survey area: a pin or shaft fragment in square 09Cc on the southeast rise.

Animal figurines — Fifteen fragments of animal figurines in baked clay were collected from the surface, most of them from seven locations on the eastern portion of the rise. One, a small horse with male genitals and faint incised lines on its mane, was almost complete. Eight of the fragments were the torsos of quadrupeds missing head and limbs, and the remaining six are head fragments. Of these, one appears to be a bull's head with one long, curved horn (the other broken off), a painted red band extended from between two applied eyes down the full dorsal length. Another head fragment also has one horn, ears, one eye depression, and incised lines on its dorsal surface. A third head is missing its muzzle but has an applied band across its top and incised circles which may represent curly hair. A fourth head has a long neck and two eye holes separated by a deep groove. The remaining two heads have long snouts and faint eye holes, one of them suggestive of a camel, although the third and early second millennia are thought to be too early for the representation of camels, which are believed to have been domesticated later.

Ceramic objects — Twenty-two miscellaneous objects of baked clay came from the surface of the survey area. Six of these are small wheel fragments, some of them completely perforated, some incompletely perforated. Another six are perforated disks made from sherds of Simple ware, two are perforated clay beads, and one is a very small perforated lump. Other pieces include a perforated spindle whorl, a perforated ceramic cylinder, a possible gaming piece with a circular concave base, a flat, roughly rectangular fragment, a large rough

cone-shaped object, a large squarish piece with a square socket, and finally an undefined piece marked with two incised holes separated by an incised X.

Reconstructible vessels — Five Metallic ware vessels are complete enough to be reconstructed; four are small jars from Os4 and one is a miniature bowl or cup from Os9. A miniature painted Habur ware jar was found on flat ground east of the mound and a support stand painted in red and black hatched triangles and checkerboard motifs was recovered at Os6.

4.4 Distributional patterns

Half of all samples taken were from level ground, either on the roughly level expanse between the High Mound and the outlying rise or in level gaps in that concentric rise. Of the 63 samples collected, 31% was collected on top of a definite rise and another 19% of the total was taken from the slopes of the rise. A marked difference in artifact density is evident between the rise and flat ground as may be seen in the fact that, while half of all sampled units were located on level terrain, the total percentage of all artifacts collected there during the survey was only 34%. A majority of artifacts (66%) was taken from the crest and slopes of the rise. The average density of artifact cover in the sampled squares appears to co-vary with the relative height of the rise. In the table below, areas of the Outer City rise are listed in descending order of height from level ground as judged in the field; artifact density descends roughly in accordance with height from the highest point along the entire rise (in the south) to the west, where no rise at all was apparent.

Rise Segment	Average Artifact Density per Square
South (highest)	1250
Southeast	306.6
East	332
North	252
Northeast	203
West (no rise)	63.8

This would seem to suggest that both natural erosion and human factors such as continual plowing and downcutting for roads have contributed to a disappearance of an original rise with cultural levels, as is true of many tells in the surrounding Khabur Triangle plain. This factor may be construed as additional evidence of a rise which indeed encircled the entire tell. On the other hand, differential artifact densities and the interrupted occurrence of the rise could indicate the presence of separate occupation sites, perhaps in the form of small satellite settlements. In the absence, however, of comparative data from other excavated sites of the third and second millennia, it is difficult to conceive of satellite hamlets occurring in such a regular concentric fashion around the High Mound, so that it is perhaps more reasonable to postulate a continuous zone of occupation from the inner city wall at the base

of the High Mound to an artificial boundary, perhaps in the form of an Outer City wall, on the outer circumference of the area of surface scatter. The density of artifact cover falls drastically immediately after the base of the rise on its outer face, confirming an artificial (cultural) boundary. The depression mentioned earlier, which clearly borders the rise on the south and southeast, should be examined in this regard. Its regularity could possibly represent a canal, although it is wide for a canal (at least 100 meters); extensive sampling by excavation would be required to test such a hypothesis.

The nature of the occupation attested to by material found on the Outer City rise is difficult to determine solely on the basis of a surface collection. The data are not sufficient to allow us to ascertain whether specific activity areas, such as food processing, manufacturing, communal storage, or defense, are represented. The widespread occurrence of large groundstone fragments, possibly of mortars, and the fact that approximately 25% of the total potsherds were of finer wares such as Simple and Metallic, points to domestic habitation activities; ceramic slag points to some pottery manufacturing. Large, heavy, handmade wares, which could have had a storage function, account for roughly 16% of the artifacts represented. A clustering of animal figurine fragments in the southeast may have some significance if such figurines were votive objects. Possible burial areas are suggested by human bones, including a molar at Os6 and several dozen bones at Os3. Likewise difficult to support with data obtained from the surface are definitive statements regarding areal variations, although some general observations can be made. As alluded to above, by far the highest density of artifacts in any one square occurs in the south at Os9. The eastern portion of the rise yielded the most animal figurines, as well as a high proportion of Chaff-Tempered ware; the northeast segment of the Outer City zone has a significant concentration of Metallic ware and somewhat larger proportions of Pebble-Tempered and Mica Grit wares. The western area yielded the lowest density of artifacts. All of these wares are worthy of closer examination, as is the possible disappearance of the rise in the northwest and the west. Further interpretation of the results of this season's survey must await additional analysis. Further surface surveying is required for the collection of more data to allow more sophisticated statistical analyses such as trend surface analysis. It is to be hoped that excavations will be undertaken in selected areas such as Os9, with its dense artifact cover, and Os6, with its Metallic ware concentration, in order to facilitate the interpretation of the Outer City concentric rise, which appears contemporary in almost all respects at this point with what is known of the third millennium occupations on the High Mound itself.