

THE FOURTH SURVEY SEASON IN THE NORTH-WEST ARḌ EL-KERAK,  
AND SOUNDINGS AT BALU' 1986.

by  
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The fourth season of the reconnaissance survey in the northwest ArḌ el-Kerak was carried out from June 30 to July 23, 1986. The project was funded by the Deutsche Forschungsgemeinschaft (German Research Foundation, Bonn, Germany) and the Theologisches Seminar Marienhöhe (Darmstadt, Germany). The members participating in the survey and the soundings were F. Zayadine, U. Rosenthal, Ursula Worschech, and Udo Worschech. N. Beqa'in and E. Masa'deh were the helpful and able representatives of the Department of Antiquities. U. Rosenthal wrote the report on Area CII of the sounding at Balu'. F. Zayadine was also supervising the sounding in Area CII.

The survey owes its importance to the fact that the territory of the slopes extending from the Transjordanian plateau to the Dead Sea between Wādī el-Kerak and Wādī el-Mūjib has never before been the object of archaeological campaigns. In order to get a better understanding of the Iron Age pottery in the survey area two soundings were carried out at Balu'. We are very thankful to Dr. A. Hadidi, Director-General of the Department of Antiquities of Jordan, for his support in this matter during this season.

The first campaign of this reconnaissance survey took place in the spring of 1983. Other campaigns followed in the summer of 1984 and 1985. For a complete coverage of the results reached during the three campaigns see *ADAJ* 29 (1985) and the Beiheft Biblische Notizen (*BNB* 2, Munich, 1985), where methods, goals, and objectives are presented in detail, as well as site descriptions and drawings pertaining to the more important discoveries. The following catalogue of sites is a continuation of the already published material, continuing also the figuration of the sites (Fig. 1).

CATALOGUE OF SITES

Site No. 86

*Name: Wādī Judēra, Elev.: 800 m, PG.: 2199.0917*

A considerable number of Thamudic rock drawings were found on big black basalt boulders facing south, *ca.* 50 m above the Wādī Judēra. The drawings show the typical ibexes of Thamudic art, hunting scenes, and warriors (the largest figure *ca.* 0.80 m high with naked body and a sword or a large knife). The figures do not appear to have been arranged systematically or to depict a cultic or everyday-life scene. Unfortunately, recent Arabic writing on the rocks have marred most of the scenes (Pl. LVI, 1). No pottery.

Site No. 87

*Name: ed-Dēr or Tabi'at Judēra, Elev.: 700m, PG.: 2198.0915*

Below the escarpment dropping into the Wādī Judēra is a *ca.* 150 m wide plateau extending to the banks of the wadi at its north side. On this plateau there are numerous, mostly circular, walls standing 5-6 courses high built of roughly dressed basalt stones. These circular dwellings (*ca.* 2-4 m in diameter) form clusters of three to four rooms with wide open spaces (courtyards?) among them. The units are spread over an area of *ca.* 160×100 m. Only Mamluk pottery was found here. However, it is not very convincing to date all of these houses to Mamluk times when considering the massive, almost megalithic, stone blocks set into the ground. Pottery:

Pottery: Mamluk.

Site No. 88

*Name: Mudeyneh, Elev.: 750m, PG.: 2197.0932*

This site is located on a flat narrow plateau high above Wādī el-Mūjib. The extensive

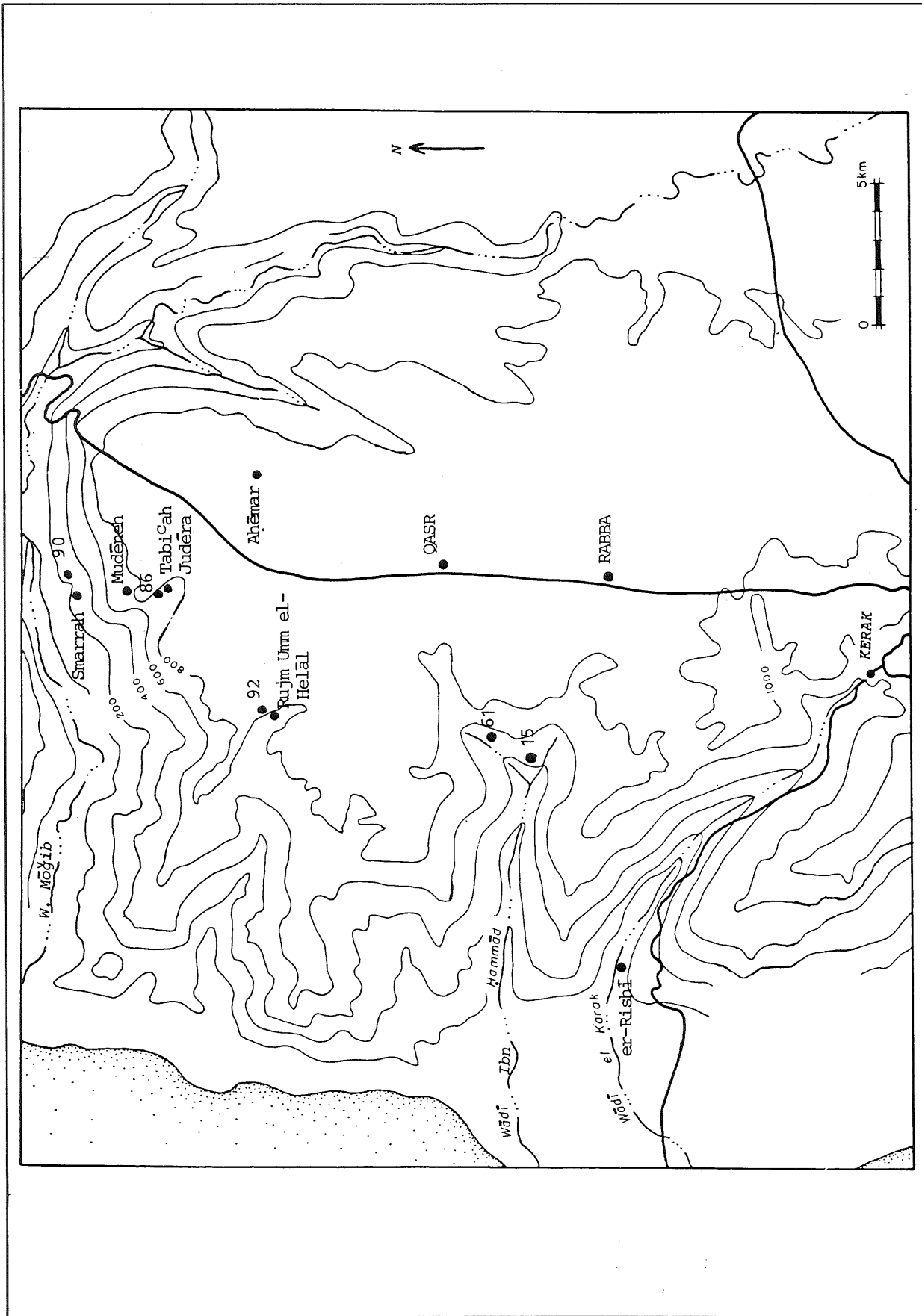


Fig. 1: Sites located in the Arq el-Kerak during the survey of 1986

ruins date mostly from Mamluk times and cover an area of *ca.* 120x25-30m. The site can be reached over a rocky saddle from the plateau *ca.* 2.5 km NNW of Miş'ar. The descent to the foot of the plateau as well as the ascent is dangerous since large basalt rocks and boulders are covering the area. The Mamluk ruins are covering the older remains which date back to the Iron I period. At the south side of the narrow site there is a 1.20m thick fortification wall built of unhewn basalt boulders, following the topography of the top of the plateau (Pl. LVI, 2). There are small bastions and towers. However, it is difficult to draw the outline of the city walls since other buildings from later times have been partially or completely erected on the outer walls. No wall could be traced out at the north side of the settlement. The Iron Age pottery was found at the western slopes of the settlement. A plastered pool (called *berkat moyeh*) measuring 12x8m, is 2.5 m deep and can be seen immediately at the foot of the site when approaching the settlement from the east.

Pottery: poss. MB II, Ir I-II; LHell, E/LRom, Byz, Um, Ayy/Mam.

#### Site No. 89

*Name: es-Smarrah, Elev.: 280m, PG.: 2192.0944*

At this site two installations were identified. There is one rectangular building measuring 12x9 m. Its outer wall is standing two courses high, built of fairly dressed stones. Inside is a heavy accumulation of stones, therefore no interior wall lines could be identified. The other "building" consists only of an ellipsoidal line of fairly dressed stones (*ca.* 10 m in diameter). The side of the wall to the east is built against the slightly sloping ground. This wall stands five courses high. The western wall is even with the ground floor inside the camp-like installation. It is difficult to understand the function of this structure (which may be a threshing floor?).

Only pottery dating to the Ir II period was found inside and outside the buildings and at the western slopes of the hillock on which these installations are located.

#### Site No. 90

*Name: -, Elev.: 270 m, PG.: 2195.0945*  
This tomb, *ca.* 100 m east of no. 89 at the roadway to the Wādī el-Mūjib is representative of nine other tomb structures of the same kind, which can be seen near the roadway through Wādī Judēra. The dolmen-like structure consists of a ring (*ca.* 1 m wide) of fist to head-size stones forming a circle of *ca.* 6m in diameter. Off center, at the west side, is a huge capped standing stone measuring *ca.* 2x1x0.50 m. Other stone slabs close off the western portion, while the east side is "open". Hard packed soil is inside the stone ring. This tomb structure is of the same kind as those discovered at Wādī Jarra during the survey in 1983 (see *Beiheft Biblische Notizen*, 1985, pp. 28-34). No pottery, no flints.

#### Site No. 91

*Name: Rujm Umm el-Helāl, Elev.: 900m, PG.: 2163.0869*

This building complex (see Fig. 2) can be compared with other Roman-Byzantine farmhouses or villas in the survey area. It is situated in a fertile region of the Moabite plateau at the confluence of Wādī Imrā' and Wādī Faqū'. The outer walls of the building are built with fairly dressed stones forming defence-like walls which are 1.20 m thick. Interior walls can be made out and show three long rooms at the west side. There is a small pool (?) inside the complex which itself measures 30x19.50 m. In the courtyard is a cistern. *Ca.* 5 m from the northeast corner is another pool (cistern?) measuring 8.60x6.80x1.70 m.

Pottery: terra sig., tessarae, ER, Byz, Um, Ayy/Mam.

#### Site No. 92

*Name: Hajar el-Yahudieh, Elev.: ca. 900 m, PG.: 2164.0876*

About 25-30 years ago some people of the tribe of Ḥamaydeh had erased the inscription which was found on this hewn black basalt stone. Inquiries concerning the whereabouts of the pieces which were cut off from the stone — chisel marks can still be seen — were fruitless. The dressed stone functioned as a standing stone before

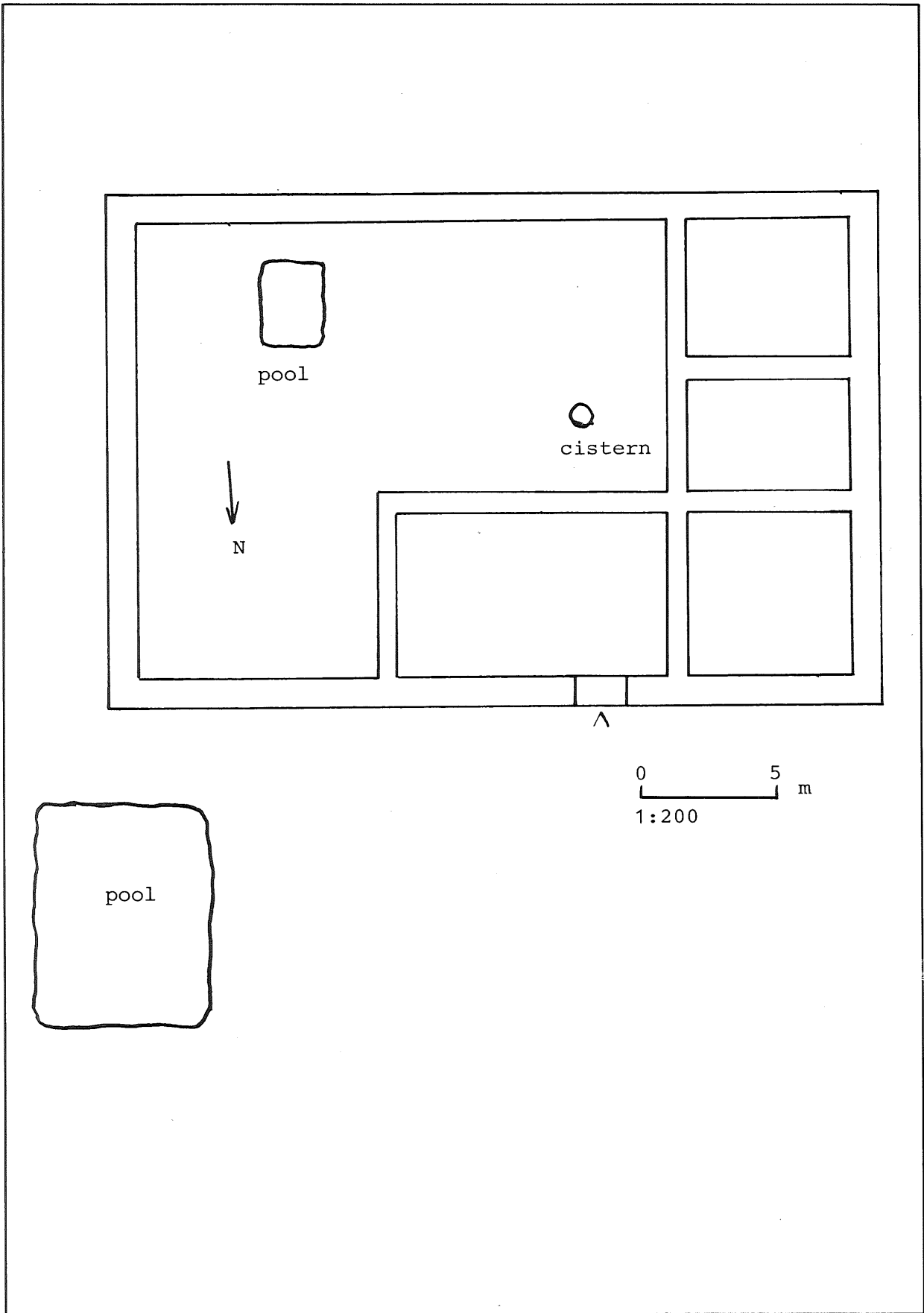


Fig. 2: Rujm Umm el-Helāl

it was pushed over. The bottom is entirely flat. Its measurements are: 2.90m long, the diameter at the top is 0.80m and at the bottom 0.45m.

No pottery.

#### Site No. 93

*Name: er-Rishī, Elev.: -100m, P.G.: 2059.0754*

This site consists of two settlements dating to the EB- (93.1) and Nabataean-Roman-Byzantine periods (93.2).

93.1: The EB-settlement can be reached by crossing the Wādī el-Kerak to the south *ca.* 150 m before the newly installed water catchment basin at the north bank of the wadi. Wall lines which were exposed by the heavy erosion of this site in the past can be seen especially at the western upway to the site, as well as at the upper escarpment of the plateau which lies *ca.* 12 m above the Wādī el-Kerak. The walls are built of unhewn boulders. At the exposed banks where the walls are visible thick ashy layers can be seen indicating heavy destruction of the site by fire. The spread of the pottery and the wall lines suggest the size of the site to be *ca.* 80x60 m.

Pottery: EB I-III.

93.2: PG.: 2060.0754. Of this site only those walls which are close to the escarpment of the wadi bank can be seen. They were built of fairly dressed stones of which two to three rows are visible. Interior walls are covered by heavy rock tumble. It appears that this site is only a large building complex of *ca.* 30x25 m. A small tower of which 5-6 courses are still standing can be seen across a small wadi east of the main building.

Pottery: Nab (also rouletted ware), ER (also terra sig), LR, Byz.

#### Site No. 94

*Name: Aḥeimer, Elev.: ca. 800 m, PG.: 2249.0867*

Aḥeimer is located immediately north of the wadi head of Wādī et-Tu'alaqah. The site consists of a complex building arrangement with an indefinable outer wall line

standing at certain spots two to three courses high. Interior wall lines can be seen but are difficult to follow, since heavy accumulation of fallen rocks have covered the foundation walls. There may have been a tower at the north side of the settlement. Immediately at the wadi are three terraces dropping down to the wadi bed. The entire site measures about 80x60 m.

Pottery: MB(?), Ir II (?), Hell, Nab, ER, Ayy/Mam.

#### Other sites visited and revisited

Two sites which are already known from other earlier visits (Glueck, Miller) were revisited. Here only the extent of the ruins, the Palestine grid and the pottery are registered.

*Name: Qreifilla, Elev.: ca. 1030 m, PG.: 2195.0694*

A very ruined site measuring *ca.* 120x100 m. Recent building activities have destroyed some of the south side walls which were built of dressed stones. Other wall lines are visible. Three cisterns were counted. Numerous small caves.

Pottery: ER, LR, Byz.

*Name: Kinnār, Elev.: ca. 1050 m, PG.: 2193.0668*

Of this site almost no definite wall lines have remained since bulldozer work has levelled the building remains to the ground. The site was bulldozed to form a rectangular wall enclosure which may follow the original outline of the outer walls measuring *ca.* 120x100m.

Pottery: ER, LR, Byz.

During a revisit in order to restudy some pottery samples for comparison from earlier surveys (1984), two sites produced additional occupational periods which had escaped the attention of the team earlier.

*Name: Jebel Dafyān (site no. 61), Elev.: 510 m, PG.: 2149.0801*

Immediately at the much eroded escarpment of the west bank of Wādī Fawwār where this site is located wall remains of an EB and MB settlement were discovered. Hence, the former date of this site which

was assigned to the LB and Iron Age periods must be pushed back to the EB and MB periods.

*Name: Fuḥḥara (site no. 15), Elev.: 460 m, PG.: 2137.0783*

Fuḥḥara 15.1 has the remains of a Nab-Roman house measuring 20×14 m of which only the foundation stones are visible. Interior wall lines are missing. The site is across the roadway north of the earlier identified site of Fuḥḥara, which dates to the same periods and also includes later remains.

#### Summary

The reconnaissance survey in the northwest Arḍ el-Kerak in 1986 has mapped 11 new sites dating to the various periods already identified in former surveys. Of special interest may be the EB-site of er-Rishi (no. 93) and site no. 88 (Mudeyneh) dating to the Iron age, which may be identified with the enigmatic "city in the

midst of the valley (river)" Joshua 13,16). Again the different installations from settlements to tombs and isolated houses present a picture of the rich and manifold culture during the various epochs in the ancient Arḍ el-Kerak. The area not reached during the surveys is the extreme northwest territory close to Wādī el-Mūjib. This difficult terrain can only be reached on horse back with equipment to stay for several days.

#### Acknowledgements

I would like to thank Dr. A. Hadidi, Director-General of the Department of Antiquities of Jordan, Amman, for his most considerate assistance in supporting this project, also for providing the survey license for us, as well as for his unbeaureaucratic help when special requests were made. I would also like to thank Dr. F. Zayadine for his support and help in many respects during the soundings at Balu'.

## SOUNDINGS AT KHIRBET EL-BALU'

The ancient site of Khirbet el-Balu', which lies to the east of Jebel Shiḥan, is well known for its extensive ruins dating to EB and MB (Baluh North<sup>1</sup>, to LB and Iron Ages, as well as to the Nabataean, Roman, Byzantine and Mamluk periods. Except for J.W. Crowfoot's soundings at Baluh<sup>2</sup>, no more than casual remarks and references have been made concerning the site<sup>3</sup>. There are studies pertaining to the pottery from Baluh<sup>4</sup>, and to the dating and interpretation of the Baluh Stele<sup>5</sup>. However, since Crowfoot, only sherds have been gathered at the site. Not even a plan has been drawn or a specific area studied or excavated. This neglect of the site is largely due to the uninviting basalt ruins which have discouraged anyone considering excavations.

But anyone visiting the site which is ca. 5km. east of Jebel Shiḥan and about a 15 minutes drive through the fields from the village of Smakiyeh to the southeast, is undoubtedly impressed by its extensive ruins, by its location at the Wādī Baluh with its rugged beauty, and by the breathtaking escarpment by which the early site was situated not far from the springs of the now dried-up wadi. On the other hand, the descriptions which M. Horsfield and Père Vincent gave of the site as "misérable et ... amorphe"<sup>6</sup>, and as "gloomy and desolate" and standing on an "intolerably dreary" plain<sup>7</sup>, deterred archaeological work there, since J.W. Crowfoot's soundings in 1933. It seems also that the verdict he passed upon the site was the final word -

and taken seriously: "As a site for future excavations Baluh'ah does not appear to the writer to be attractive... the prospects of important finds are not obviously promising"<sup>8</sup>.

The team which carried out the soundings at Baluh' stayed at the village of Smakiyeh, the only permanent settlement near the site, even during Crowfoot's days there. We are thankful to Khalil el-'Awabdeh for the rent of his newly built house. There were workmen from Smakiyeh who had once excavated for Crowfoot and we met one man who had laboured at Baluh' for 500 fils per day. According to the British archaeologist, he and his friends were "tolerably efficient"<sup>9</sup>. We found that the five young men we hired (one workman came from Jad'ah) were most efficient, as demonstrated by the mounds of soil and stones which were removed during the fortnight. The older people of Smakiyeh confirmed Crowfoot's observation that in his days the villagers came to the springs of Baluh' to fetch water.

Today, the rolling plains of the Moabite plateau are covered with fields yielding barley, oats, wheat and trees. Modern irrigation techniques have made the plain more hospitable than fifty years ago.

### The Site

An extensive survey of the site of Baluh' during the afternoons from June 28 to July 11, and also while the soundings were in progress, provided a better under-

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1. J. Maxwell Miller, 'Archaeological Survey of Central Moab', *BASOR*, 234 (1979) p.49; *ADAJ*, 23 (1979), p.81. The first explorer to refer to the site seems to be Tristram in 'The Land of Moab', New York, 1873, p.139. But his description, as it has been pointed out by J. Miller, is inadequate.

2. J.W. Crowfoot, 'An Expedition to Baluah', *PEFQ*, (1934), p.76-84.

3. Miller, *BASOR*, *op. cit.*, p.49.

4. M.F. Oakeshott, 'A Study of the Iron Age II Pottery of East Jordan with Special Ref-

erence to Unpublished Material from Edom'. Unpubl. Doctoral Thesis, University of London, 1978.

5. E. Drioton, *RB*, 42 (1933) p.353-365; W.A. Ward, M.F. Martin, *ADAJ*, 8/9 (1964) p.5-29.

6. G. Horsfield, L.H. Vincent, 'Une stèle Egypto-moabite au Balou'a', *RB*, Chronique, 41(1932) p. 417-444.

7. Crowfoot, *op. cit.*, 77.

8. *Ibid.*

9. *ibid.*

standing of the site, and in particular of the area of concentration for occupational periods. On the basis of this survey, the main occupational centres can be established and mapped as follows (see Fig. 3)<sup>10</sup>:

- The latest occupational remains date to the Mamluk period.<sup>11</sup> The small settlement can still be seen in the area south-west of Balu'. Here the concentration of sherds of Mamluk provenience was heaviest.
- Between this area and the Qaşr, as well as around the Qaşr itself, Nabataean, Roman, and Byzantine pottery is most prominent. The Qaşr and the tower *ca.* 100 m. south of it (today with the benchmark at elevation 852 m) seemed to have been rebuilt and used in Nabataean and Roman times as the hewn stones suggest.
- Iron Age pottery is found all over the site, except at or near the Mamluk settlement (D). However, immediately west between the Qaşr and the escarpment to the springs below and a little to the southwest of the Qaşr, there seems to have been the oldest settlement dating to the Late LB and early Iron I periods (on Fig. 3 encircled area A). The Iron IIA city expanded to the east (B) and north of the Qaşr as the sherds indicate. In the following Ir IIB period the city expanded further to the east (CI-II), covering an area as much as *ca.* 600 m east of the Qaşr (CIII).
- The ruins of the EB and MB settlement can be seen across the wadi to the north.

It should be noted that the entire site of Balu' is covered with sherds dating to the Iron Age periods. Also, no sherds have been found dating to the Persian and Hellenistic epochs. The extension of the city

area towards the east can be misinterpreted if one expects closely built housing units or suburbs. This is not the case. Between the settlement units of two or three houses are large open spaces measuring from 80 x 50 (the largest) to 10 x 8 m (the smallest). These may have been public places, yards or forums.

It is most likely that the southern city wall can be traced in the southeast. On the map Fig. 1, this is indicated by the two dotted double lines. The wall can no longer be traced when one moves to the west towards the Qaşr and the Mamluk settlement.

Any visitor to the site of Balu' knows that the entire settlement is covered with small to extremely large blocks, slabs, and boulders of basalt. For the sounding, areas were chosen which did not require too much of the time-consuming removal of stones. Therefore, the sounding areas are located in the later extension of the Iron Age city (C).

#### *Area C I*

Area CI is located inside a large building complex (22 x 16 m.), which is situated at the top of steep escarpment of Wādī Balu' (Fig. 4). The north wall of the house is part of the city wall running almost exactly east-west and following the irregular line of the edge of the plateau. Between the house and the (earlier?) western quarter lies a large open space (*ca.* 80 x 50 m) with no definite wall lines within it except for the city wall on the north side.<sup>12</sup>

The building overlooks the valley of the wadi as far as the Wādī Meḥeires, the northern plains, and the areas to the south and the east. Its commanding position controlling all approaches to the eastern quarters of Balu' has led us to interpret it as an administrative centre since it is also the largest building in the Ir II extension of the city

10. The map is taken from Horsfield-Vincent, *op. cit.* Fig. 1.

11. Many Arab Chroniclers refer to Shihān or Siḥān. The earliest author to my knowledge is al-Harawī (12th century A.D.) in his '*kitāb el-isharāt ila ma'rifat el-ziyarāt*', translated by J. Sourdel-Thomine, *Guide*

*des Lieux de Pèlerinage*, Damas, 1953, p.18 (Ma'ab). See also al-'Umari (14th century) and Yaqut (13th century) in '*Textes Géographiques Arabes sur la Palestine*', p.113 (Šihān, Siḥān).

12. Crowfoot's sounding at the casemate wall can still be seen *ca.* 30 m west of the building.



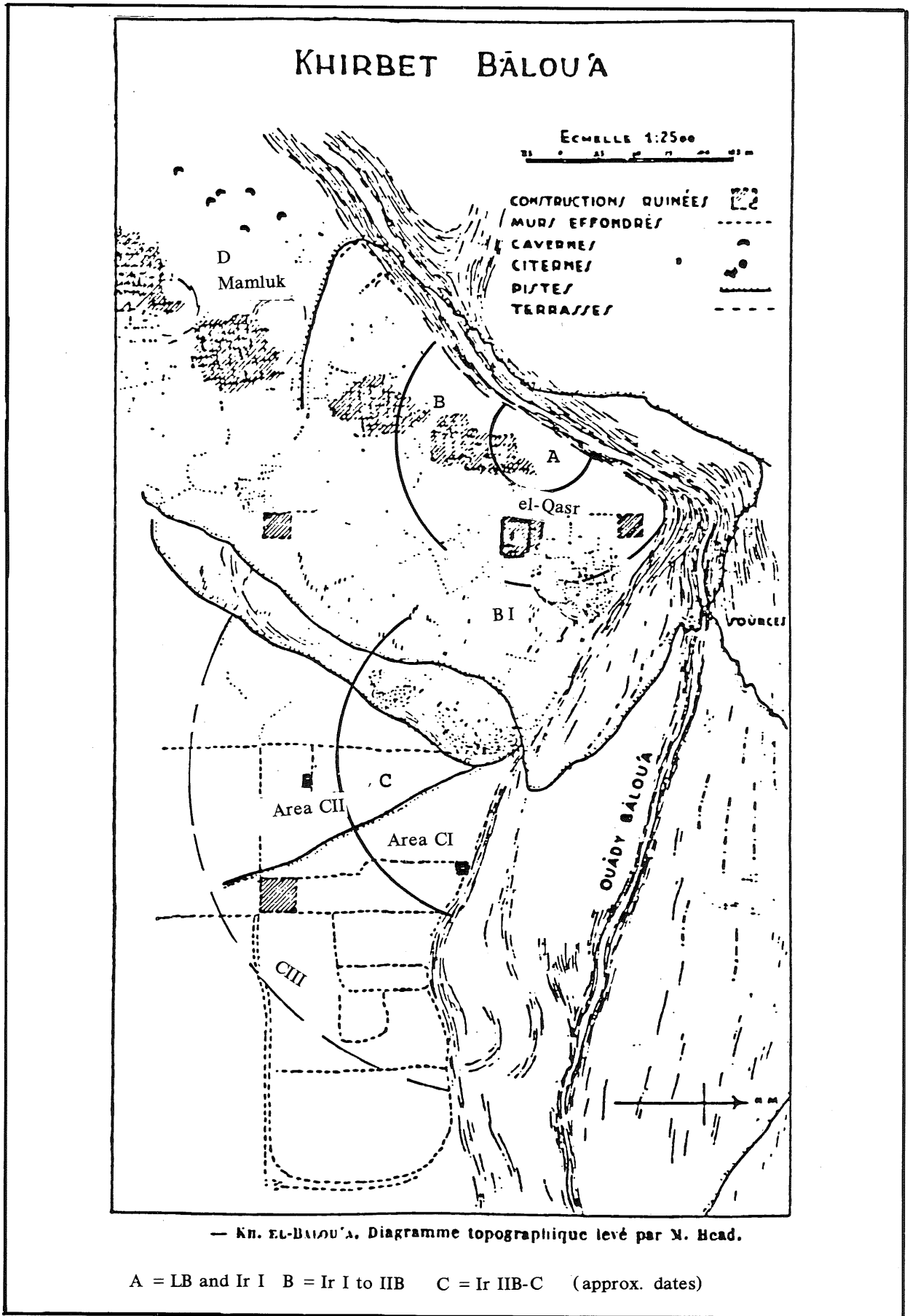


Fig. 3: Map of Khirbet Balu'

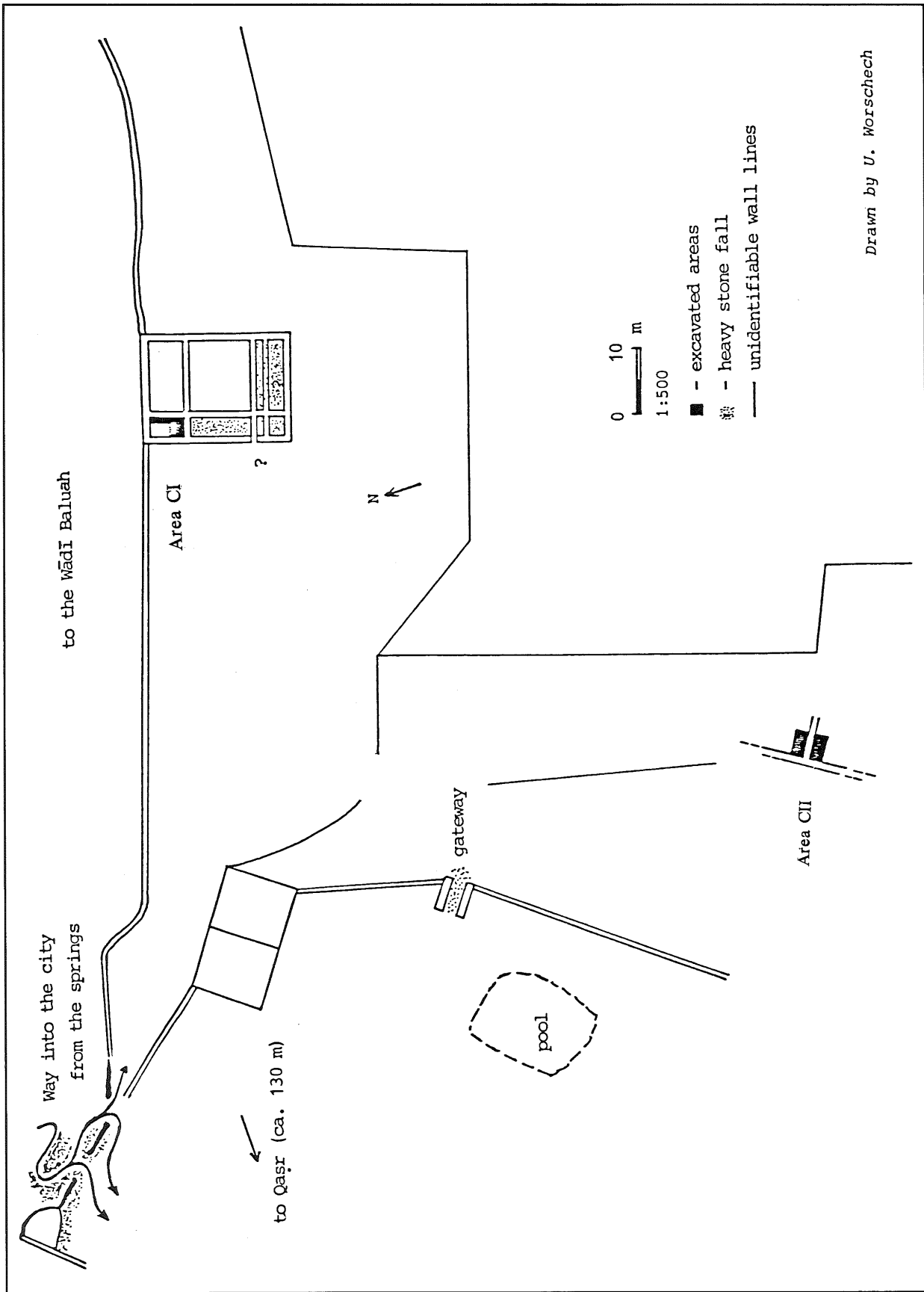


Fig. 4: Eastern City quarters with Sounding Areas at Balu'.

area to the east.

On the plan (Fig. 5) only the drawn walls present identifiable original walls standing almost to their original height. It was possible to identify the general outline of the house with certainty, although the wall faces and its top were covered with heavy rock fall and debris. It appears that some areas in the compound which have cobble stone layers are later constructions by the bedouins who have camped inside the remains. There is also architectural evidence for rectangular tower or one storey structure within the south side of the building. A doorway leads from a possible yard into this tower-like southern room of the compound (Pl. LVII, 1-2). Only further excavation can verify whether the wall running east-west inside the building is a partition wall between large rooms or separates an outer court from a roofed living area.

The sounding area was chosen within the building complex where wall lines suggested a room or an open unroofed living area. This unit lies at the northwest corner of the complex. A trench (1 m wide) was opened running east-west from a large well-cut stone slab towards the western outside wall (wall 70) of the house. This sounding very soon revealed that the cut stone slab formed the lintel of a doorway. The left and side of the door was exposed showing two stones of the doorpost (Pl. LVII, 2).

In order to uncover the entire doorway another trench was cut alongside wall 50 towards the south. Thus the doorway was exposed, measuring 0.95 m - 1 m between the doorposts (Fig. 6 & Pl. LVIII, 2). At the right hand doorpost (ca. 0.30 m) the second wall (wall 60) of the entire room was uncovered; it measures 4.50 x 3.40 m. Although there is no doorway leading from this room to the south, an adjoining southern room can be postulated, since some stones ca. 3.30 m south of wall 60 seem to form a wall line. It thus appears that three rooms may have been built alongside the western wall (wall 70) inside

the compound.

With the discovery of the southern partition wall (wall 60), the limits of the sounding in Area CI were well defined, within the context of the building. We continued with the excavation of the entire room. Although time did not allow for clearing it completely, the sounding was still successful in identifying the function of this room.

Subsidiary balks were left standing whenever the physical properties of the soil seemed to change. However, the same soft, crumbly brown soil filled the entire room to the fillor, which was reached at the depth of 2 m. The fill<sup>13</sup> contained at various levels between 0.90-1.40 m and in different spots throughout the excavated area hard packed clayey grey soil. The irregularity of these clay pockets with regard to level, size, and location in the fill material excludes the possibility of one or several floors. It is more likely that these "layers" are portions of the plastered roof, which have fallen at different times into the accumulating fill. The patches were of different sizes of clayish soil in the wind-blown and rain-washed fill material. No wooden beams or pieces from the roof were found. However, a grinding stone with a flat and smooth bottom was found on top of and partially sunk into the clayey layer, near the corner where walls 60 and 70 join (Pl. LVIII, 1). It is possible that this object was once used either to smooth the roof's surface or for grinding work on top of the flat roof.

As already mentioned, the floor (loc 7) of the room was reached in a 1 m wide trench at a depth of 2 m from the top soil level. Next, the subsidiary balk left in front of the doorway was removed and bedrock was encountered. More clearing of the area in front of the doorway revealed that the doorposts were set on bedrock, which was cut to form a step for entering the doorway. The bedrock was level with the floor (Fig. 6 and Pl. LVIII, 2).

When removing the portions of the balk at wall 60, a *ṭabun* (loc 8) was discov-

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13. The pottery of the fill will be published elsewhere.

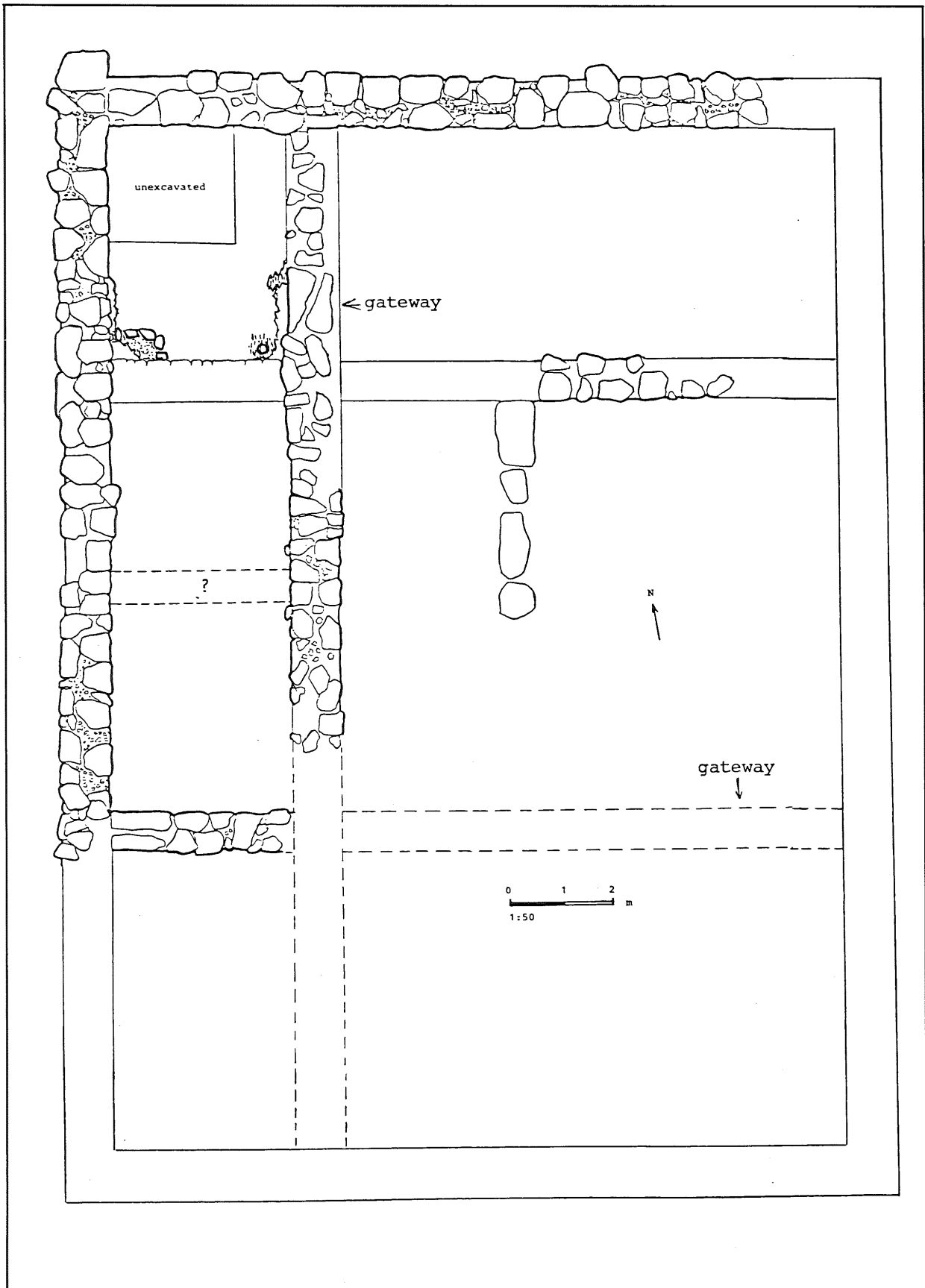


Fig. 5: Plan of House in Area CI.

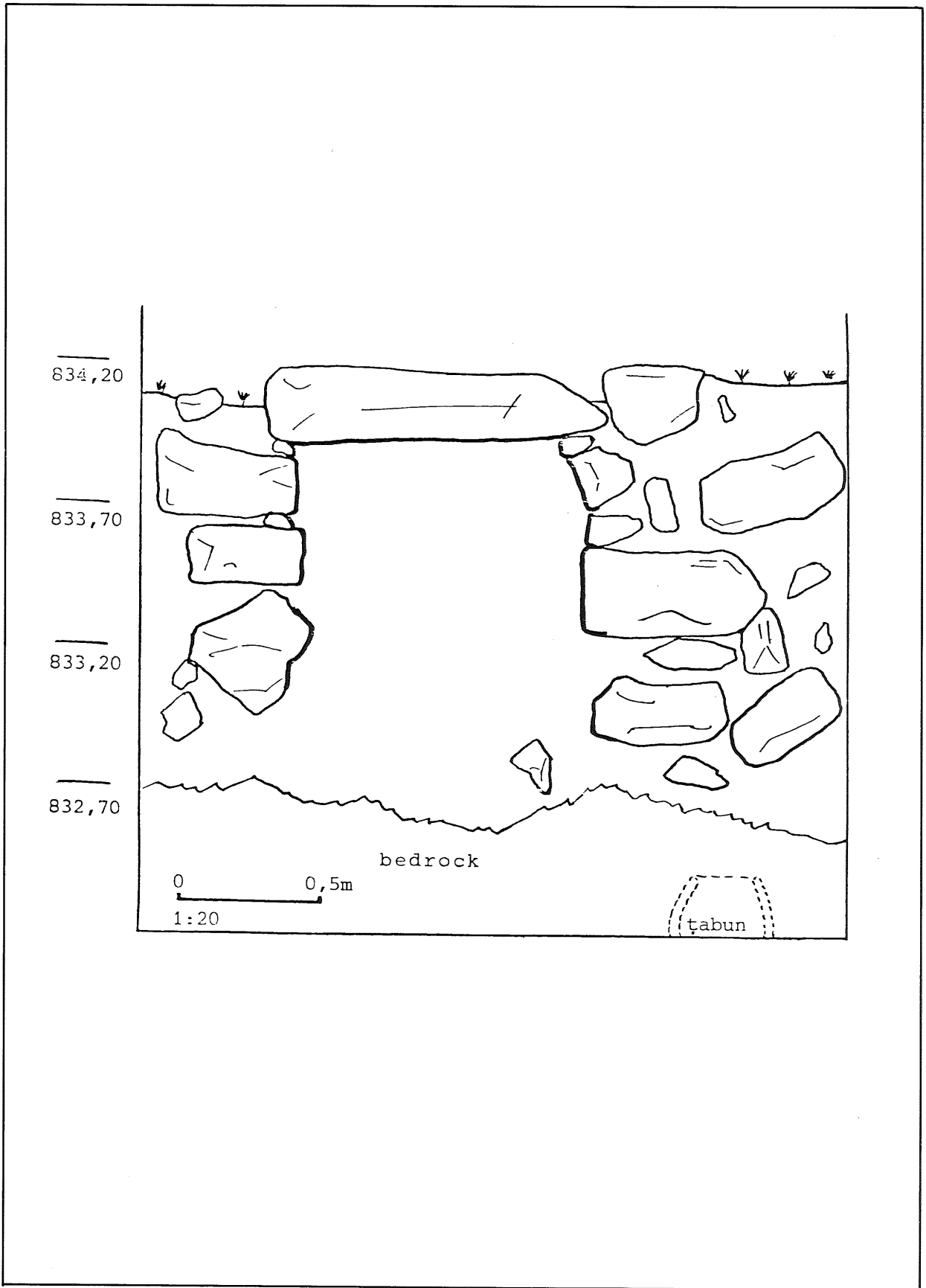


Fig. 6: East wall (50) with doorway.

ered set in the rounded corner of the bedrock (Fig. 7 and Pl. LIX,1), which was cut out here. The *tabun* is set *ca.* 0.15 m. away from the curve the bedrock makes here before it continues under wall 60. The space between the bedrock wall and the *tabun* was filled with ashes. Ashy layers were also inside and in front of the *tabun* to the west. Sherds of a broken jar were set tight against the eastern wall of the *tabun*. The bedrock was followed under wall 60. It continued under wall 70 and wall 50, against the city wall. A small portion of the wall face was uncovered at the end of the sounding (Pl. LIX,2).

During the final stage of the sounding in Area A, the soil fill at the southeast corner between walls 60 and 70 was removed. An almost rectangular structure (loc 9; 1.05 × 0.60 m) consisting of two rows of head-sized stones and extending alongside wall 60 to the east was discovered built on bedrock (Fig. 7 & Pl. LX,1). The floor came up against its side walls. From the top row of stones to the bedrock floor, this structure measured *ca.* 0.35 m. The inside was filled with very fine sand which contained some charcoal as a storage place or bin.

Finally, when cleaning the floor and bedrock in front of the doorway, a rectangular basin-like "installation" in the bedrock was uncovered filled with a thick layer of ashes which contained no bones or potsherds (Fig. 7). The possibility of another fireplace must be excluded because of its awkward location in front of the doorway. This "installation" (*ca.* 0.10 m deep) is nothing but a natural crevice in the bedrock, and may have served as a "container" to receive the burned-out material and ashes from the *tabun* close to it.

During the eleven days of soundings at Balu' in Area CI, this room was partially excavated and appears to be the kitchen of a possible administrative complex. The *tabun*, the bin, the ash layers, as well as the objects found in the fill, such as 4 grinding stones, one spindle-whorl, and a broken

box-like ceramic object (see Pl. LX,2 - LXI,2) seem to support this interpretation. An ostrakon with possible reading of a *mem* and *waw*<sup>14</sup> was also found in the fill (Pl. LXII,1). The pottery from above the floor (see below the detailed descriptions) contained no Persian or later forms. Hence, a tentative date to the Ir IIB-C may be assigned to this room (and to the whole complex?).

#### Area CII

This area is an open platform, located at the east side of the walled Iron IIA-B city. It communicates with area BI by a gateway, situated to the NW, and opens to the N into the passageway which leads down to the springs of W. Balu' ('Ayun el 'Arāyes) (Fig. 4).

Two squares, CII,1 and CII,2, both measuring 4 x 2 m. were plotted on both sides of wall 100 (Fig. 8). This wall, which was built with roughly squared blocks, is 0.80 to 0.86 m wide and stands to the preserved height of 1.75 m (Pl. LXI,1). Before the excavation, many fallen boulders had to be removed in CII,1.

The top layer consisted of a soft, grey-brown vegetal soil (Fig. 9). Locus 2 (henceforth loc) was a layer of hard-packed light grey soil with many sherds and bone fragments. In the softer and stony greyish-brown soil of loc 3, the number of sherds increase. Loc 4 was assigned to a platform-like accumulation of unhewn fist to head-sized stones which covered only half of Sq. CII,1. Its function is not clear. After removal of this platform, two big stones appeared, measuring *ca.* 0.70 × 0.48 × 0.30 m (Pl. LXII,2). A floor (loc 5), running against the stones and wall 100, was uncovered below loc 4. A rim fragment of a basalt bowl was found on this floor.

Another square was then opened at the north side of wall 100. This Sq. CII,2 had the same stratigraphy as CII,1, except for the following: in loc 2 the amount of sherds was less than in CII,1, loc 2. At

14. See description and interpretation of the possible ostrakon by M. Weippert in a forth-coming issue of *ADAJ*.

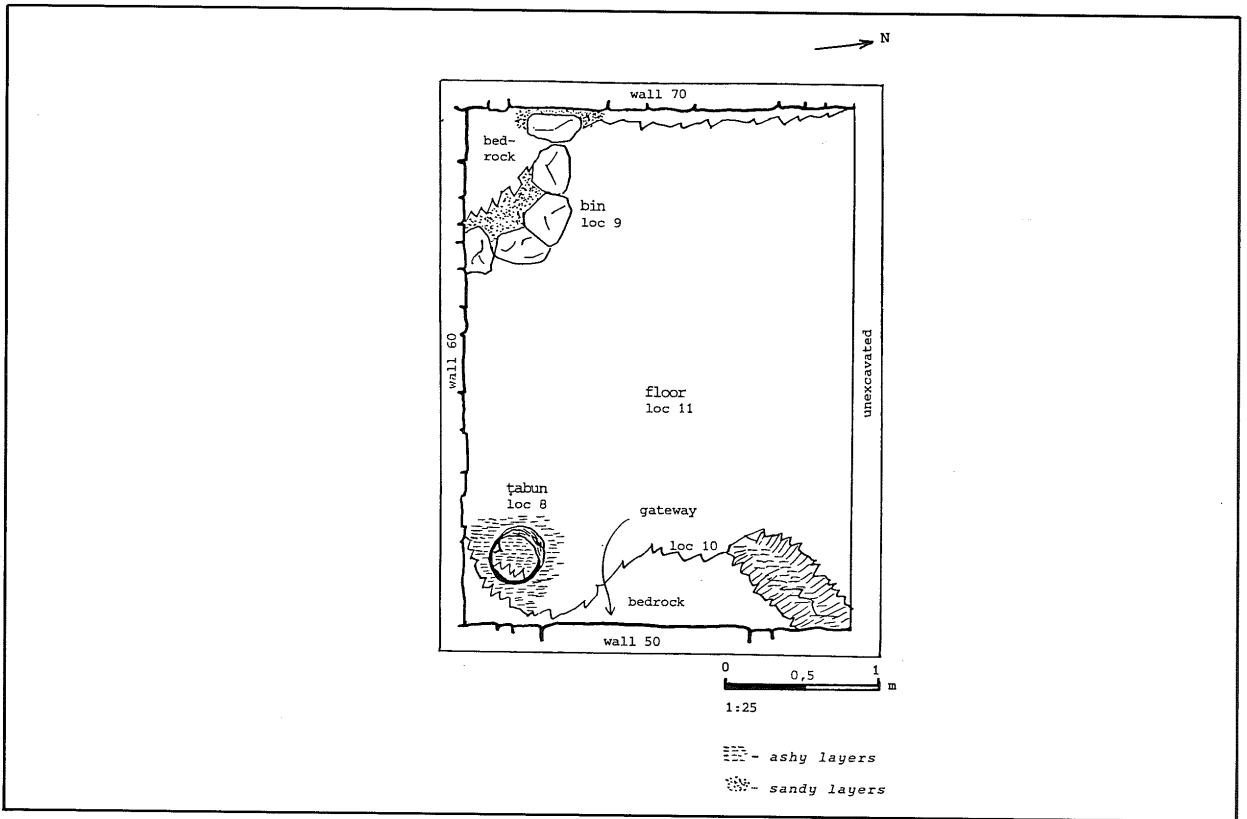


Fig. 7: Plan of kitchen area in Area CI.

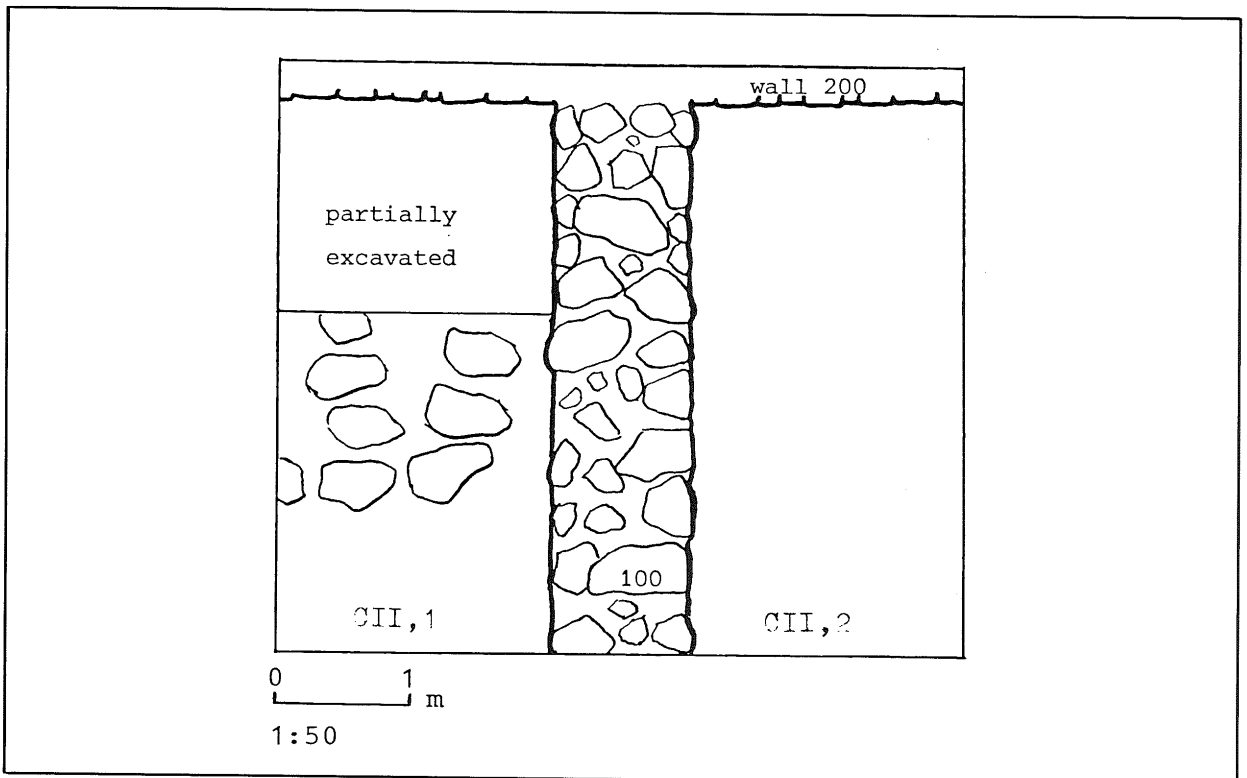


Fig. 8: Top plan of Area CII.





level 835.70 m. (loc 2) a corroded knife blade was found sticking out of wall 100 (Pl. LXIII, 1). Loc 3 was a possible floor consisting of a layer of hard-packed light-grey soil which ran against wall 100.

The excavation then continued to the west by extending CII, 2 towards a wall which was almost entirely covered with rockfall. This wall (200), which runs north-south, is 0.90 m. wide and preserved to the height of 1.75 m. The same stratigraphy (loc 1-3) continued here. On the floor of loc 3 a column base (?), 0.39 m. in diameter and 0.14 m. thick (Pl. LXIII, 2), and a *ṭabun* fragment were found. The floor came up against wall 200. Hence the two walls form an architectural unit, which is still awaiting further excavation and interpretation.

Loc 4 in CII, 2 is identical with loc 4 in CII, 1: a platform of fist to head-sized stones extending *ca.* 0.96 m from wall 100 to the north but not running alongside the entire length of the wall. In loc 4 a spindle-whorl made of stone was found (Pl. LXI, 1). Much stone fall was encountered at wall 200.

After removal of loc 4, another very smooth floor (loc 5) appeared, extending all over Sq. CII, 2 (Pl. LXI, 1). This corresponds to loc 5 in CII, 1. The floor contained sherds, ashy patches, and charcoal flecks. At level 835.20m, close to wall 100, at the depth of 1.10 m from the preserved height of the wall, one half of a rounded basalt object (0.16 m in diameter, mortar or door-socket?) was found with an inscription of four Moabite letters written on its 0.025 to 0.04 m wide flat rim (Pl. LXV, 1. Figs. 10-11; see publication by F. Zayadine in this report). There was also an arrow or spear head made of basalt in this locus. Further excavations in CII, 2 revealed that both walls were built on virgin soil.

In order to secure additional information concerning the two large stone slabs left in CII, 1, and to investigate the possible continuation of wall 200 towards the south, we continued in CII, 1 towards the west. It was found that the stratigraphy (loc 1-5) extended here in the same layers, except that the stone fall increased closer to wall 200. In loc 5, a pendant made of green stone and a shell, both pierced, were found (Pl. LXI, 2). Below loc 5, virgin soil was reached.

The two stone slabs of CII, 1 turned out to be part of a circular structure of concentric rings of stones of which the inner circle is sunk deep into virgin soil (Pl. LX, 2). Only one half of this structure was excavated. It is however, contemporaneous with the floor (loc 5) and wall 100. Its function is not clear (cistern? bin?).

#### *Summary and Conclusion*

The soundings in Areas CI and CII at the site of Balu' have produced a number of important discoveries which accentuate the great significance of this ancient city. The first Moabite ostrakon and the stone inscription mentioning a *melek* (king) as well as the impressive architecture demand a resumption of the excavation. That there were no indications of any destruction by fire or warfare in the soundings raises several questions as to the exact reason for the abandonment of the site in the Ir IIC period. Since no other household or significant objects except for the grinding and work stones were left in the kitchen area, at least this area was cleaned out by the inhabitants before leaving. It may be however that there are destruction levels in other parts of the city.

Hopefully, future excavations will give some answers and raise more questions, thus stimulating the overdue research in the Arq el-Kerak and Balu'.

## THE MOABITE INSCRIPTION

by  
F. Zayadine

It has been noted above that the fragmentary Moabite inscription was excavated in Sq. CII, 2, loc 5, a smooth packed floor, associated with walls 100 and 200. Four letters are carved on a flat basalt rim, about 16 cm in diameter and not more than 4 to 2.5 cm in width. The inner face, which is preserved to the height of 3 cm, is well polished and suggests that this object was used as a cosmetic mortar rather than a doorsocket (Pl. LXV, 1 and Fig. 10-11).

### Paleography

Three of the four letters display characteristics of the early Moabite and South-Palestinian script. The *taw* shows the x form of the Meshah Stone<sup>15</sup> (around 840 B.C.), the Kerak<sup>16</sup> and Dhiban<sup>17</sup> fragments. The *lamed* with the hooked tail is also common in these inscriptions. It is also frequent in Hebrew and Aramaic epigraphy.<sup>18</sup> In the Citadel inscription,<sup>19</sup> dated to the 9th century B.C., the same *lamed* occurs. As for the *kaf* with a long curved shaft and two branches, it appears on the Meshah Stone (especially 1.28 ('NK) and on the Amman Citadel inscription. Only the *mem* with a horizontal thrust and two parallel sprongs is different from the zigzag headed *mem* of the Meshah Stone and the Citadel inscription. In the Balu' fragment, the *mem* displays a short vertical leg and a horizontal thrust with two parallel

sprongs. This type of *mem* occurs on several Moabite seals and is said by P. Bordreuil<sup>20</sup> to be a post Meshah development. This development was most probably under Aramaic influence and G.L. Herr states that "strong Aramaic elements were brought into the Trans-Jordanian scripts, possibly by the Assyrian conquests, in the M and L 8th c."<sup>21</sup> A scaraboid seal belonging to *M' Š H MZKYR* (Me'ash, the herald), was discovered at Um Udheinah,<sup>22</sup> west of Amman and dated to the 8th century B.C., shows the same *mem*. The stratified Moabite inscriptions are unfortunately very rare and the chronological evidence from the seals, attributed to the Moabites, might be irrelevant. Since most of the letters display the characteristics of the early Moabite epigraphy, it is reasonable to date the Balu' fragment to the 8th century B.C. The pottery sherds collected with the inscription are of no help for dating, since the object was a later reuse.

### Interpretation

It is not easy to restore the original meaning of this fragmentary inscription. My first intuition was to read it *KMŠYT MLK M'B*, Kamoshyt, king of Moab. But the break of the rim suggests a letter with a long curved shaft, like *mem*, *kaf* or *bet*. If the first letter is a *bet*, the inscription could be completed: *L BT MLK M'B*, be-

15. See Clermont-Ganneau, *La stèle de Dhiban ou stèle de Mesa roi de Moab*, Paris 1870; A. Lemaire, in *La Voie Royale*, Catalogue of the Exhibition in Musée du Luxembourg, Paris, 1987, p. 121 with bibliography; F.A. Tuqan, *ADAJ*, 15 (1970) p. 19-51 and Pl. I (Arabic).
16. W.L. Reed and F.F. Winnet, *BASOR*, 172 (1963) p.1-12; D.N. Freedman, *BASOR*, 175 (1964) p.50-51.
17. R.E. Murphy, O. Carm, *BASOR*, 125 (1952) p. 20-23
18. See L.G. Herr, *The Script of the Northwest Semitic Seals*, Harvard Semitic Museum, Missoula Montana, 1978; J. Naveh, *The*

*Development of the Aramaic Script*, Jerusalem, 1970.

19. *BASOR*, 193 (1969), p.2-18 and Figs. 1-3.
20. *Catalogue des Sceaux Ouest-Sémitiques Inscrits*, Paris, Bib. Nationale, 1986, p.59. For a similar *mem*, see seals No. 62,63,65.
21. *The Script of Ancient North-Semitic Seals*, *op. cit.*, p.153.
22. F. Zayadine, *Syria*, 62 (1985) p. 156-158 and Fig. 13; M. Abu Taleb, *ZDPV*, 101 (1985) p. 21-29, Fig. 1 and Pl. 1, B-C. Fig. 1 is not accurate. The photograph Pl. 1 shows that the *mem* of line 2 has a horizontal thrust.

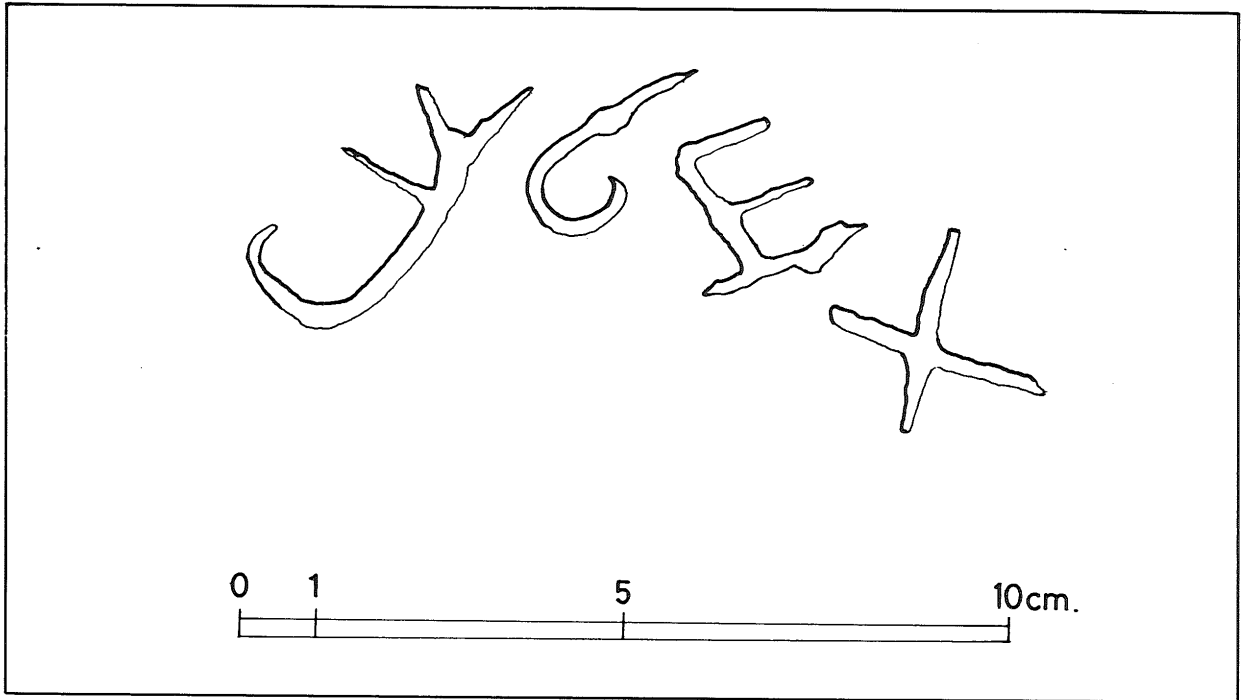


Fig. 10: Facsimile of the Moabite Inscription (after J-P. Lange)



Fig. 11: Squeeze of the Moabite Inscription.

longing to the house of the king of Moab (royal palace) or to the daughter or to the wife (*'ŠT*), in case the rim is part of a mortar. *BT* is also a capacity measure of 45 or 22-23 litres.<sup>23</sup> A storage jar inscribed with *BT LMLK* to be translated “royal bat” was discovered at Lachish.<sup>24</sup> Another pottery fragment bearing *BT* was found at Tell Beit Mirsim.<sup>25</sup> After the examination of the different inscriptions, R. de Vaux concludes: “Il est difficile que cette chaîne d’hypothèses conduise à une certitude”. Thus, the real volume of the *bat* remains uncertain. A sherd with the Phoenician

characters .. *TMLK* was excavated at Kamid el-Loz in Lebanon. W. Röllig<sup>27</sup> who published it, presents different hypotheses for the reading. One of them is that the inscription is a compound name, like *'mtmlk*, *ħtmlk* or *'mtmlk*. Such theophoric names appear also in the Moabite onomastic.<sup>28</sup> But it is more likely that the Kamid el-Loz short inscription belongs to a capacity measure. It is also possible that the Balu’ inscription belongs to a proper name: *TMLK*, which appears in the West Semitic onomastic,<sup>29</sup>.

23. Cf. R. de Vaux, *Les Institutions de l’Ancien Testament I*, Paris, 1969, p.307-308.

24. O. Tufnell, *Lachish III*, London, 1953, p. 356-7 and Pl. 49.

25. R. de Vaux, *op. cit.* p.307.

26. *Idem*, p. 308.

27. *Fruhe Phoniker im Libanon*, Mainz/Rhein,

1983, p.47-48; Kamid el-Loz, 1977-1981, p.159-160 & Pl. 20.

28. P. Bordreuil, *Catalogue, op. cit.*, p.59 & note 19.

29. See Harding, *An Index and Concordance of Preislamic Names and Inscriptions*, University of Toronto, 1971, p.138 & 564.

## THE IRON II POTTERY FROM BALU'

Figs.12-15

In order to immediately present to the archaeologists of Jordan the small corpus of stratified Iron IIB-C pottery from Balu', I have refrained from giving an exhaustive treatment of the material presented here.

The published pieces come from Area CI and CII. They are exclusively those pottery fragments which were found on or partially embedded in the floors (loc 7 in Area CI and loc 4 and 5 in Area B) or underneath the floor in Area B (loc 6).

In the following report, only brief and very general descriptions of the color and possible surface treatments of the individual pieces are given. However, emphasis is laid upon the parallels from the published reports from Ḥesbān, 'Aro'er, and Balu'.

A more detailed study of the pottery from Balu' will be presented in the future, but because of limited time and space a glimpse at the first stratified pottery from a relatively unknown area — the northwest Arḍ el-Kerak — will have to suffice at this time. The pottery description will follow this sequence: number — registration number — surfaces (ext./int.) — inclusions — parallels.

Abbreviations: PH = E.N. Lugenbeal, J.A. Sauer Seventh-Sixth Century B.C. Pottery from Area B at Hesbon, *AUSS* 10 (1972), 21-69; Ar = E. Olavarri, *Sondages à 'Aro'er sur l'Arnon*, *RB*, 72 (1965), 77-94; B = J.W. Crowfoot, *An Expedition to Baluah*, *PEQ* (1934), 76-84.

### Pottery description:

1	A. 7. 31	cream slip	fine	PH IXA 507,511; Db III 2:33
2	B. 4. 14	pinkish cream slip	fine	PH IV 213-125
3	B. 4. 7	reddish cream slip	fine	PH IV 224, 212
4	A. 7. 21	cream/pinkish slip	fine	PH IV 211; Db III 24:13.14
5	B. 4. 21	light reddish brown slip	fine-medium	PH IV 219
6	B. 5. 23	greenish cream	coarse	PH IV 215; Db III 22:5; Ar 1:7
7	B. 4. 22	reddish/light brown	fine-medium	PH VIII 446.449
8	A. 7. 32	light reddish	fine	PH VIII 446.449
9	A. 7. 20	light brown	fine	PH VII 367; VIII 424; Db III 1:37
10	B. 4. 3	reddish brown/sandy	fine	PH VIII 454
11	B. 6. 5	light orange	fine-medium	PH VIII 401
12	A. 7. 25	greenish cream	fine	Db III 22:8
13	B. 5. 0	reddish brown/sandy	fine	PH VII 355
14	B. 4. 1	cream/light brown	fine-coarse	Db III 1:41
15	B. 6. 4	light greenish slip	fine-medium	PH VII 353,370; Db III 14:8; B II 1:1
16	A. 7. 12	light brown	fine	PH VII 389; Db III 24:19
17	B. 4. 12	light reddish brown slip	fine-medium	PH VII 389; Db III 24:20; B II 2:2
18	A. 7. 13	brown	fine-medium	PH VII 389; Db III 24:19; B II 2:1
19	A. 7. 24	sandy cream	fine-medium	PH VII 389; Db III 24:20
20	B. 4. 23	reddish brown	fine-coarse	PH VII 378,384
21	A. 7. 3	brick orange	fine-medium	PH V 313 (?)
22	B. 4. 11	reddish brown	fine	B II 2:5
23	A. 7. 1	reddish brown	fine-medium	PH VIII 396 or Krater (cf. no. 49)

24	A. 7. 4	light reddish brown	fine	PH VI 320, 321
25	A. 7. 5	grey	fine-medium	no parallels
26	B. 5. 30	greyish brown/ reddish brown	fine-medium	PH VI 320, 321
27	B. 6. 2	sandy-cream	fine	PH IX 460
28	A. 7. 22	cream	fine	no parallels
29	B. 4. 17	cream	fine-medium	PH IX 460
30	A. 7. 6	brick red	fine	PH VIII 419
31	A. 7. 7	dark grey	fine	PH IX 498
32	A. 7. 15	creamy orange	fine	PH IX 490
33	B. 4. 19	grey	fine	no parallels
34	A. 7. 14	cream/light brown	fine	no parallels
35	B. 4. 5	grey	fine	Db III 22:4; PH IX 468(?)
36	B. 4. 6	sandy	fine	no parallels
37	B. 4. 9	creamy white	fine	PH IX 484
38	A. 7. 23	greenish/pink	fine	PH IIA 151, 152
39	A. 7. 17	ochre; burnished slip	very fine	PH IIA
40	A. 7. 26	reddish brown on pink slip/ pinkish cream	fine-medium	PH IX 487, 488
41	A. 7. 15	light pinkish brown	very fine	no parallels
42	A. 7. 17	alternating stripes red and black; black zig-zag line/ dark reddish brown	very fine	PH IIIA 205, 206
43	B. 4. 12	light ochre	very fine	no parallels
44	B. 5. 41	light brown	very fine	no parallels
45	B. 4. 4	grey	fine-medium	B II 1:4
46	B. 5. 20	greenish slip/ bricky red	medium	PH X 535, 538; Db III 17:15
47	A. 7. 11	greenish cream	fine-medium	no parallels
48	B. 6. 3	light brown	fine-medium	no parallels
49	A. 7. 2	grey brown	coarse	Db III 1:40; B II 2:3
50	A. 7. 9	brick orange	fine-medium	Db III 2:52; B II 2:15; Ar 1:12
51	B. 5. 17	greenish cream	fine-medium	see no. 50
52	B. 5. 4	light brown	fine-medium	PH XI 553
53	B. 5. 1	reddish brown	fine-medium	see no. 52
54	B. 4. 8	pinkish cream	fine	PH X 528
55	A. 7. 30	light brown	fine-medium	see no. 54
56	B. 4. 2	black on creamy white	fine	
57	B. 4. 18	chocolate on creamy white	fine	poss. LB II
58	A. 7. 29	black line between red brown on light brown slip	fine	see PH 61f. for discussion of painted body sherds
59	B. 4. 13	same as no. 58		
60	B. 5. 31	cream	fine-large	incised lines as decoration
61	A. 7. 10	brick orange	fine	platter or pan
62	A. 7. 8	cream slip/ dark-grey	fine-large	spindle whorle

Udo F. Chr. Worschech  
U Rosenthal  
F. Zayadine

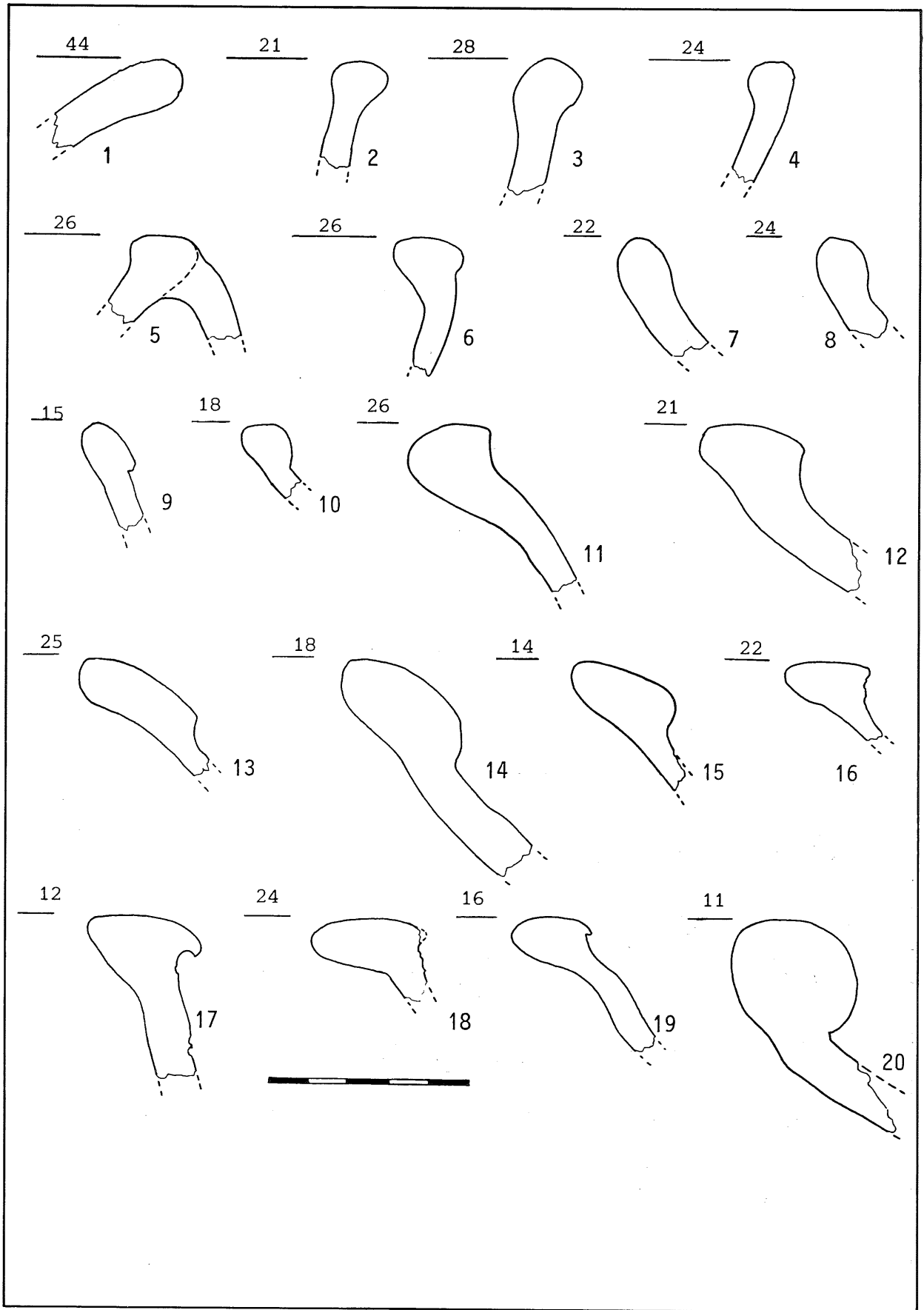


Fig. 12 Iron II Pottery from Balu' 1 Platter; 2-8 Bowls; 9-20 Jars.

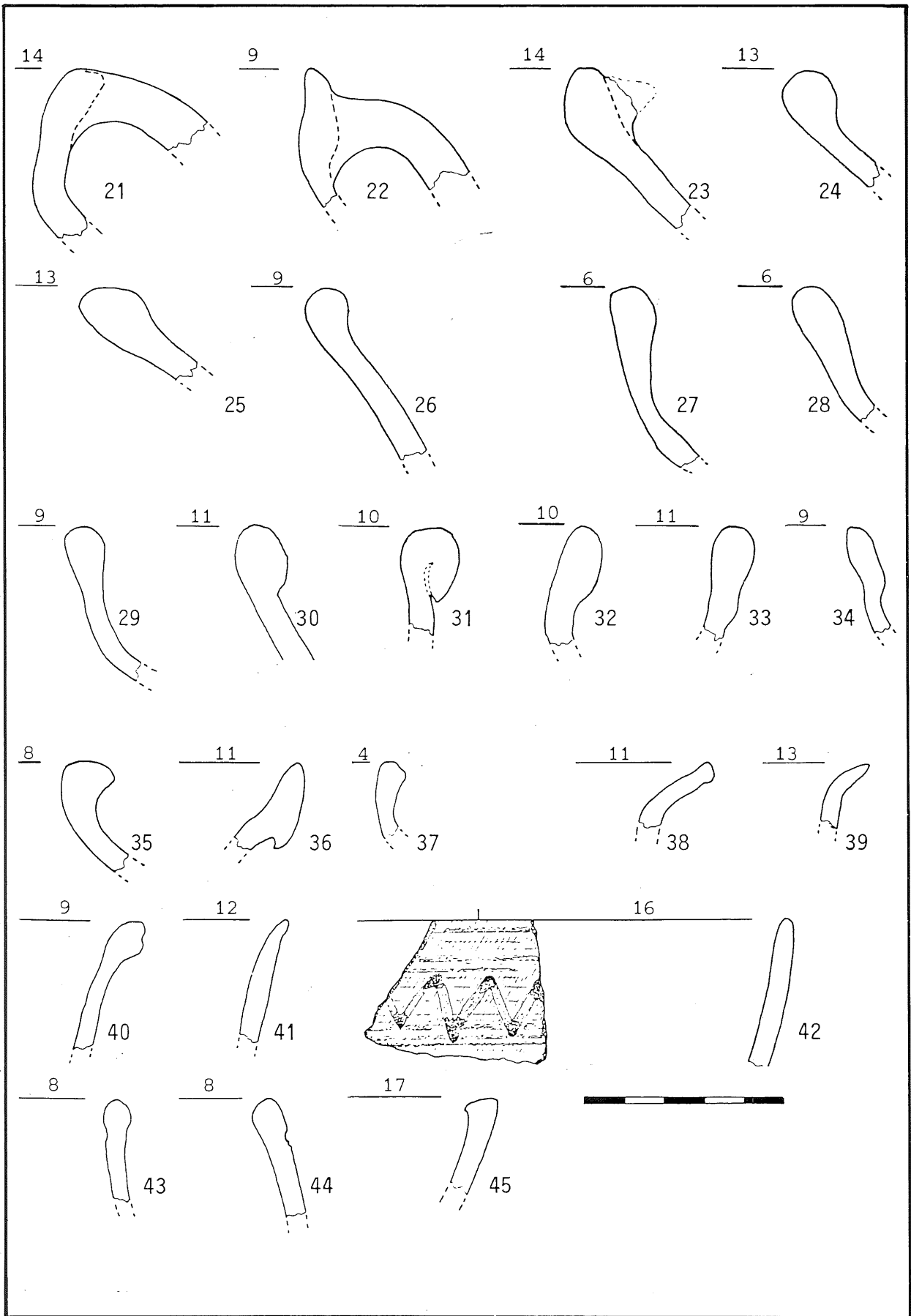


Fig. 13 Iron II Pottery from Balu' 14-26 Cooking pots; 27-37 Jugs and Juglets; 38-45 Fine Bowls .



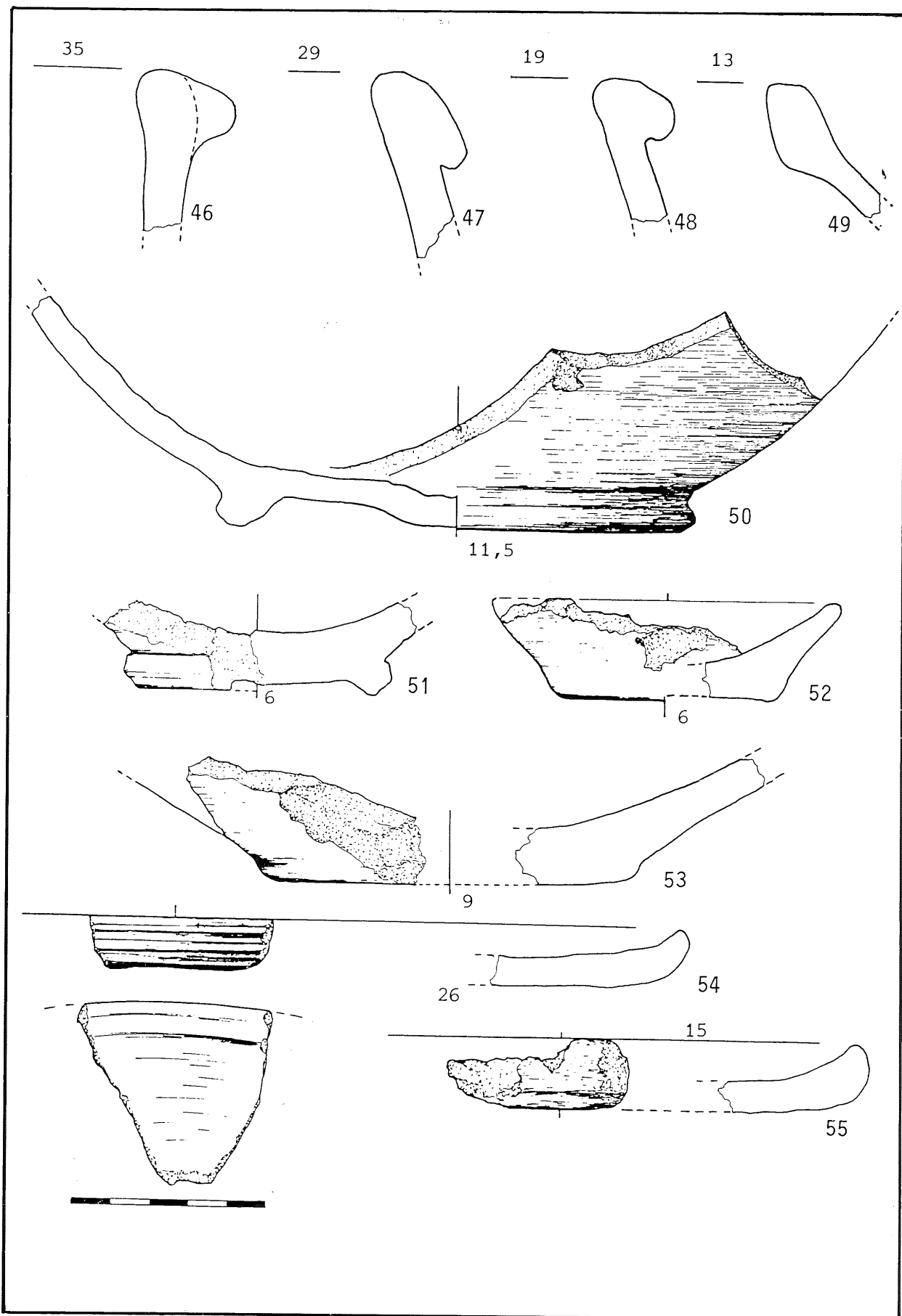


Fig. 14 Iron II Pottery from Balu' 46-49 Kraters; 50-55 Bases and Plates.

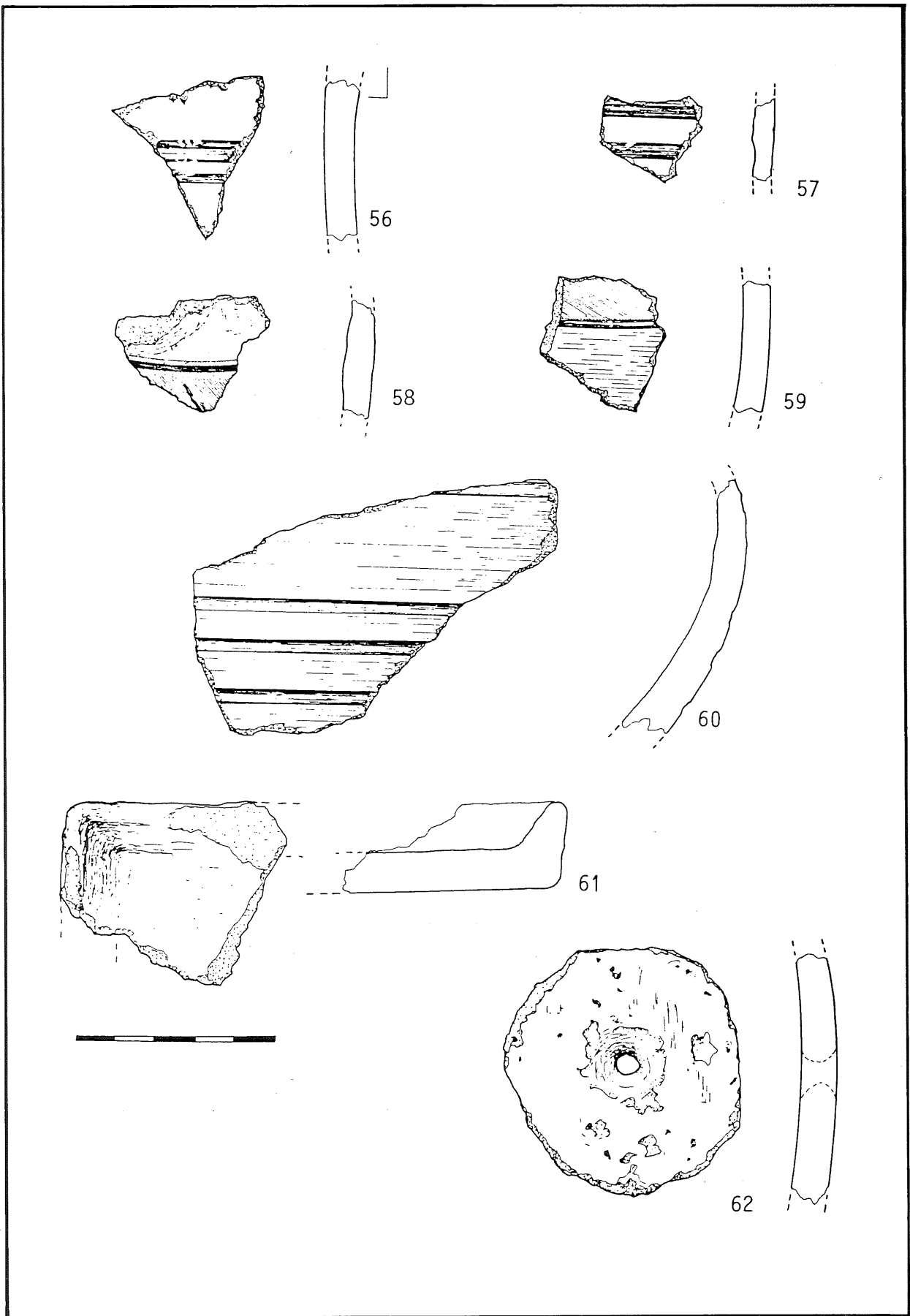


Fig. 15 Iron II Pottery from Balu' 56-60 Body Sherds decorated; 61 Plate or Pan; 62 Spindle whorl