

EMAR & BALIS 1996-1998
 PRELIMINARY REPORT OF THE JOINT
 SYRIAN-GERMAN EXCAVATIONS
 WITH THE COLLABORATION OF PRINCETON UNIVERSITY

I. EMAR 1996 and 1998

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(with a contribution by

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1. Introduction

1.1 Renewal of the excavations and Syrian-German cooperation

After the successful salvage operations of a French team under the direction of Jean-Claude Margueron had ended in 1976, the ruins of Emar and Bālis were largely flooded by the waters of Lake Assad. Only in the south of the town did a fairly large continuous area remain above water. It covers 10 to 12 hectares and is situated on a natural hill that rises towards the west. As most of the ca. 800 cuneiform texts recovered had come from there, this region was frequented by robbers—once the site was left without a guardian.

The robbers' activities caused considerable damage; therefore in 1992, the Syrian Antiquities Department started a small-scale excavation of their own. The excavations were continued in the following years as it had quickly become obvious that up to five metres of occupation levels had remained undisturbed by the mostly superficial robberies.

The directors of the Syrian excavations, Dr. Shawki Sha'ath from the Aleppo Antiquities Department and Dr. Farouk Ismail from Aleppo University, realized that more extended excavations would be worthwhile. They invited Tübingen University to cooperate in future undertakings. The first joint missions took place in 1996 and 1998 with such promising results that they will be continued on a larger scale.

We take the opportunity here to thank the Syrian Antiquities Department under its Director General, Dr. Sultan Muhesen, for the trust they put in us, their German partners. We also extend our thanks to our Syrian colleagues in the field, Dr. Shawki Sha'ath and Dr. Farouk Ismail. Their friendly cooperation made both campaigns very pleasant.

1.2 Dates, size, team

For the first campaign, most participants arrived in Aleppo on July 27, 1996. Work began on July 29 and ended on August 28, 1996. August 30, 1996, was the day of departure.

Another short Emar campaign took place from July 13 to August 15, 1998. The 1996 costs of the joint mission were shared by the Aleppo Antiquities Department, the University of Aleppo and the German Research Foundation (DFG). In 1998 the mission was financed by the Aleppo Antiquities Department, private donations, and contributions from the State Ministry of Science and Research (Stuttgart), and Princeton University.

The German participants in 1996 were Dr. Uwe Finkbeiner (Tübingen), Dr. Brigitte Finkbeiner (Tübingen), Gerti Preuss M.A. (Tübingen), Susanne Wilhelm M.A. (Tübingen), Betina Faist M.A. (Tübingen), Daniel Schwemer M.A. (Würzburg), Dipl. Ing. Dieter Müller (Stuttgart), Robert Bosch (Stuttgart), and Heinke Peters (Hamburg). Prof. Dr. Thomas Leisten from Princeton University started to excavate in the neighbouring settlement of Bālis. The Syrian participants were Dr. Shawki Sha'ath, Prof. Dr. Farouk Ismail, Prof. Dr. Saleh Alousi, and, for the second half, Prof. Dr. Sahr Ulabi. Farouk Ismail brought three of his students: Edris Hussein, Nasr Hamdou, and Ahmed ar-Rāwi. We all agreed that every team should consist of Germans and Syrians in compliance with the wishes of the Directorate General in Damascus. In an atmosphere of mutual respect and friendship, we joined our efforts towards a common goal.

The 1998 team to Emar and Bālis consisted of Betina Faist, M.A., Dr. Brigitte Finkbeiner, Gerti Preuss, M.A., Anja Rothmund, and Ferhan Sakal, all from Tübingen, as well as Su Kyung Huh (University of Münster), Heinke Peters (Hamburg) as photographer, Gwendolyn Peters, Henning Schriever (TU Berlin) as surveyor, and Martin Wille (University of Mainz) as draftsman. At Bālis the following persons participated as guest students from Princeton University under the direction of Dr. Thomas Leisten: Blair Fowlkes, Jaclyn Maxwell, Stephennie Mulder and Lennart Sundelin, assisted by Lorenz Korn, M.A., and Susanne Wilhelm, M.A., (both from Tübingen University), David D. Lineberry (Athens, Georgia), Sigrid Pohl (Dettenhausen) as botanist and Rosely Treschl (Stuttgart) as architect. From the Syrian side, Omar Mahmoud from the Aleppo Museum and Thabet al-Omar from Tannira joined the team under the guidance of our partner, Dr. Shawki Sha'ath.

1.3 Topography of the mound (figs. 1, 11, 24; pls. 1-3, 84-86)

The remains of Emar that survived the flooding of Lake Assad are situated on a natural hill extending from west to east (pl. 1). In the west, where the two temples of Ba'al and Aštarte were exposed by the French mission, it rises in a steep slope to a maximum height of 327 m above sea-level (fig. 1; pls. 2-3). Towards the east, it descends gently to the so-called Upper Town (fig. 11), on to the Lower Town, and then to a wide depression beyond which rises the city-wall of Bālis (fig. 24).

The southern flank of the hill also ascends sharply, while towards the north and the centre the site descends gradually. It was drained by a wadi running off in a northeastern direction, until the 1970s, when the wadi was clogged by excavation dumps. Further to the north, behind a low mound, another deeply entrenched wadi runs from west to east, then turns to the north and dries up in a shallow bay. Beyond the upper part of that wadi, a knob rises to a height of almost 320 m. It is connected with the highest mound, that of the temple area, via a flat saddle.

The northwestern corner of the site is extant as an island. Here, too, below the layers of occupation, more and more of the natural rock is laid bare by the waves. The excavation area of the so-called Bit Hilani is hardly discernible any more; for the general plan, it must be reconstructed according to the French plans.

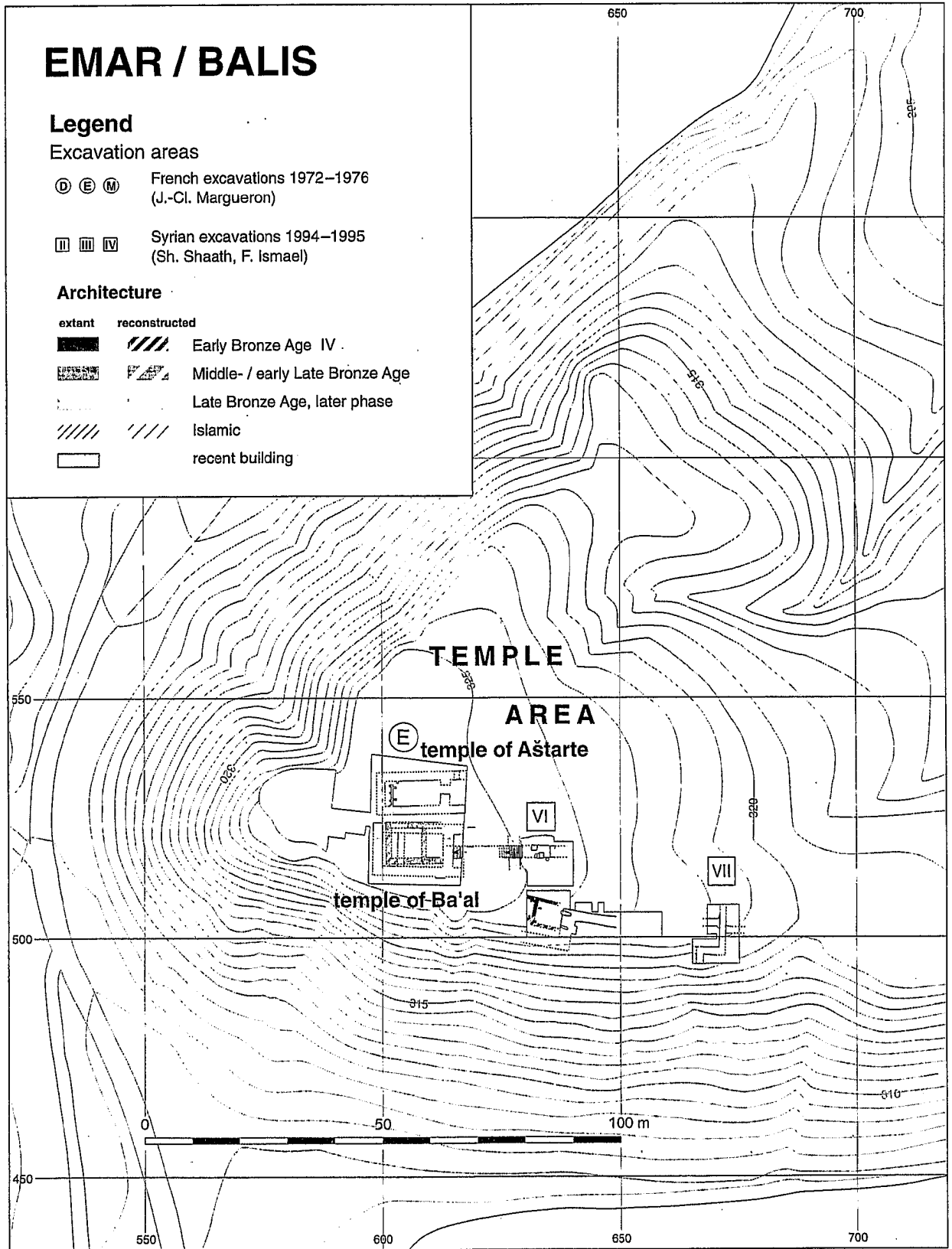


Fig. 1: Emar. Western part, topographic plan

2. Planning and execution of the excavation

2.1 Aim of the new campaigns

During the French salvage operations, extensive remains of Late Bronze Age architecture had been exposed. In the west, where the hill is highest, two temples had been discovered. They lie parallel to each other and were dedicated to Ba'al and, probably, Aštarte. In a big robbers' hole to the east of these temples, there lay the torso of a gate-lion—certainly to be seen in connection with the temples. Excavations in that region made it clear that the temple area covers more ground, in space and in time, than had been assumed so far. Our research will try to do justice to the synchronic as well as to the diachronic aspects of the site.

Another area of emphasis results from the stratigraphical findings of the soundings made by Dr. Sha'ath in the early nineties and reexamined by us in 1996 and 1998. A sequence of at least five metres of occupation layers in the upper town argues for a settlement, also up on the hill, extending back beyond the Late Bronze Age. There is such clear evidence of occupation in the late Early Bronze Age, as well as in the Middle Bronze Age, that an extensive examination of the stratigraphy of the dwellings and of the development of the town has become peremptory.

2.2 Field survey and preparation of a topographical map

One of the main tasks of the 1996 campaign was the topographical survey of the ruins of Emar and Bālis. Dipl. Ing. Dieter Müller from the State Authority of Monuments and Robert Bosch from the Technical College, both in Stuttgart, managed to complete this task in spite of the limited timespan and in addition to the installation of the grid. The topographical map on a scale of 1:500 is based on ca. 1500 measuring-points. They allowed for a detailed representation of the relief. The computerized version of the survey was produced by Günter Müller, Waldbronn, who has also followed up various updating of the general plan of the excavations.

2.3 Installing the grid

At the beginning of the 1996 campaign, the grid was installed, with the zero point located to the far southwest of the site. That positions the main hill of Emar between 550 and 900 m east and between 450 and 650 m north. Cemented fixed points lie on a baseline at 500 m north, which forms a right angle with the western arm of the Byzantine town-wall. The two lines meet at an old measuring-point, which now has as the co-ordinates of 1,000.00 E/ 500.00 N. Further fixed points are located on a polygon over the northern mounds and the island. In the areas of excavation and documentation a 10m-grid was marked out with iron bars. An exact orientation of the grid was not attempted.

2.4 Documenting earlier findings

The topographical survey of Emar and Bālis and the installation of the grid enabled us to position the old French and Syrian excavations in such a way that their situation in the topography and in relation to one another could be compared—a necessary prerequisite for further planning. At first, the level was chosen at random until, towards the end of the 1996 campaign, the exact height above sea-level became available. To that end, the level of an official measuring-point at 3 kms distance was transferred onto the site.

In 1998, we continued to document the extant building remains of the Syrian soundings. We worked in areas II, IV, and IX that are now shown in the general plan. With the exception

of area IV, we are dealing with remains from the Bronze Age, again forming a mighty sequence of layers up to 4 meters high. In area IX, Late Bronze Age remains are sealed by a little mosque, probably to be seen in connection with the great number of Islamic graves in this part of the site.

2.5 Method and execution

For a better understanding of this preliminary report, there follows an explanation of some technical terms and of their application in the excavation—without aiming at giving general instructions.

2.5.1 Square

Following the general standard, the excavation is executed in squares of 10 x 10 metres, with baulks of 50 cms all around. Thus, the excavation area proper is 9 x 9 metres. The squares are designated according to their position in the grid (see above at 2.3). The square between 630.00 m and 639.999 m east and between 500.00 m and 509.999 m north is square 063/050; the square between 750.00 m and 759.999 m east and between 540.00 m and 549.999 m north is square 075/054, and so forth. As the designation of every square is derived from the grid, it is also possible to associate any findspot with a particular square. The findspots are defined by coordinates; in order to arrive at the square, you disregard the last figure before and the figures behind the decimal point.

2.5.2 Locus

A locus is defined as the smallest unit that may constitute a "finding" in an excavation. It may indicate delimited areas such as pits, deposits in rooms etc., or structures such as walls, installations etc. Besides the loci identified in the course of the excavation, there are also those that are arbitrarily defined, such as test soundings or partial areas.

The entire documentation is based upon the loci. Their measurements are taken in three dimensions, and they are described in detail. Starting with number one, all loci within a square area are numbered continuously. Thus, for unequivocal identification of a locus, the designation of the square needs to be added. (It is only during later evaluation that the loci receive context numbers that are independent from the designation of the square.)

2.5.3 Plans and profiles

As a rule, all plans are drawn within the boundaries of a square, on a scale of 1:50. As the baulks between the squares are kept, the first plans are partial plans that do not immediately connect. This rule could not be observed where our excavations were next to already exposed areas or where there was no room for regular baulks because of robbers' holes—which are, unfortunately, very frequent. For the same reason, it was not always possible in the upper layers to document the north and the east profiles, as should be the rule. The profiles are drawn on a scale of 1:20.

We thank Jean-Claude Margueron for letting us have the plans of the temples of Ba'al and Aštarte (his former excavation site E) and of the dwellings (his former excavation site D) so that we were able to insert them into our detailed plans. As the French plans have not yet been published, we have only reproduced them schematically in our general map (fig. 11), with the exception of a few walls that connect directly with our findings and that were newly drawn by us.

3. Temple Area

(French excavation area E)

3.1 Late Bronze Age

3.1.1 Fragment of a gate-lion (fig. 6; pls. 10-11)

In a small sounding, the Syrian mission under Shawki Sha'ath had already cleared the immediate surroundings of a fragmentary gate-lion (fig. 6), which was discovered by looters after the close of the French excavations. This is what the local people tell about the circumstances of that find: The torso that remained on the site belongs to one of three gate-lions; there was a smaller pair, the whereabouts of which are unknown, and there was this bigger one, too heavy to be carried off. Therefore only its head, in full relief, was separated and taken away—or so the rumour goes. A deep groove in the upper side indicates that there was also an attempt at separating the front part and the left flank of the animal, both in low relief, from the otherwise untouched block. Fortunately, this attempt was abandoned—perhaps the looters were disturbed, or found the job too arduous. Obviously, the lion was built into the left jamb of a gate. With a width of up to 1.10 m, it was solidly integrated into the construction of the gate-jamb. The extant length is ca. 1.5 m, with the head and the back part of the animal missing. The resulting length of the passage or width of the gate-jamb is at least 1.8 m. The extant height is 66 cms; adding the missing head, it will have been ca. 1 m.

In 1996, we extended that locus to cover all of square 063/051. Close to the northeastern corner of the square and not far from the torso described above, there lay a fragment of a right hindleg that must have belonged to the gate-lion of the right jamb. There remains a ray of hope that this second lion may yet be found.

3.1.2 Architectural remains in the lower courtyard (fig. 2; pls. 7. 9. 13)

The architectural findings in square 063/051 were scarce; they were disturbed by robbers' holes and by deep-reaching Byzantine graves (fig. 2; pl. 9). The row of stones at the western profile proved to be the lowest step of a flight of stairs. The left and the right edge of this step are in line with large stone slabs that are very carefully hewn and laid down as floor-slabs. Right to the east of these stone slabs, there lay the lion in a robbers' hole, upside down. There is a small wall foundation belonging to the same building phase also in line with the stairs, the northern edgestone of which shows drill-holes. These drill-holes do not have anything to do with the erection of the lions as the lower sides of both lion fragments are smooth.

Southward and eastward of the stone slabs, there extends a plastered floor that must have been renewed once or twice. It is part of a large courtyard which, in the south, is limited by a temenos wall (square 063/050; pl. 12). In the west, the courtyard ends at the foot of a flight of stairs and at the terracing wall that connects to the south of the stairs. In the east, the boundary is not yet clear, neither is the continuation towards the north.

3.1.3 Temenos wall (fig. 2; pl. 12)

The temenos wall runs from east to west; it is extant over a length of 12 m. It is a good 2m broad. It is not yet clear whether, in square 063/050, it turns south or whether the protruding part belongs to a tower. The underground foundation is laid down in one course, sometimes two courses of big limestone ashlar. (The extremely soft limestone is not suitable for above-ground use.)

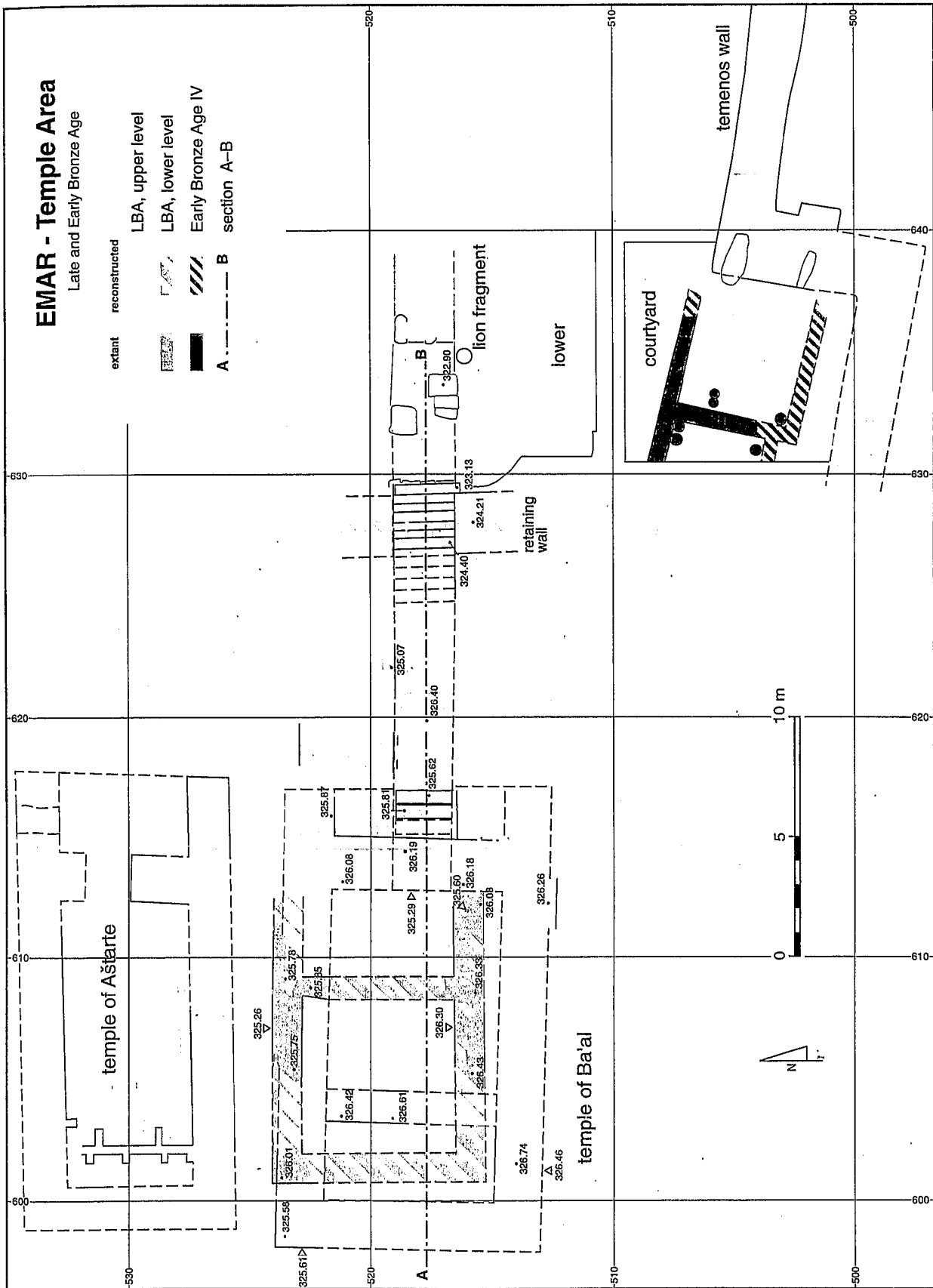


Fig. 2. Emar. Temple area, schematic plan

EMAR - Temple of Ba'al

Section A-B

- extant
- reconstructed
- LBA, upper level
- LBA, lower level
- unknown date

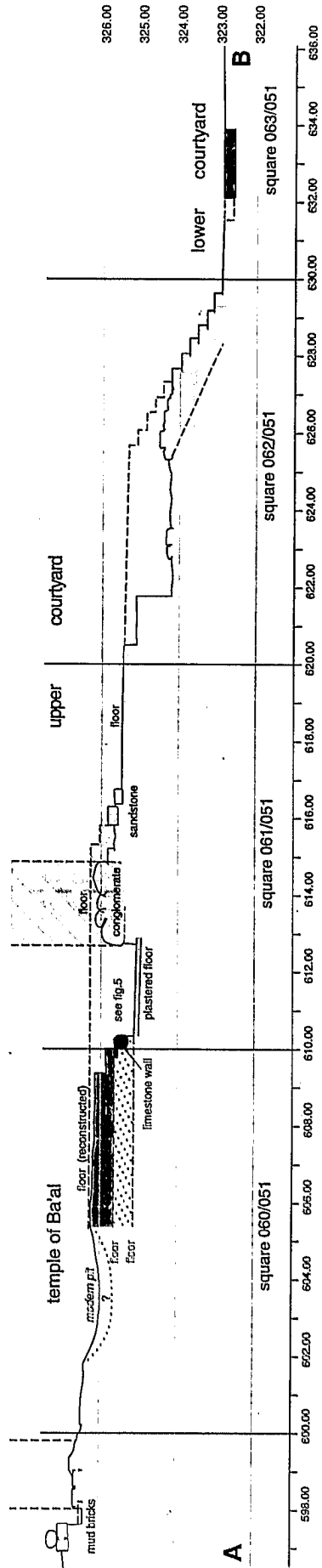


Fig. 3: Emar. Temple area, section A-B (west-east)

3.1.4 Temple of Ba'al, latest preserved building phase (figs. 2-5; pls. 4-8. 87-88)

The findings of the short 1996 campaign raised the question of their relationship to the temple of Ba'al, which lies further to the west and has already been excavated by Margueron. There were various reasons for ascribing it to the same building phase. The difference in level of more than 3 metres between the stone pavement in square 063/051 and the floor of the Ba'al temple could only be overcome with the help of stairs. In search of those stairs the excavation activities were extended westward into squares 061/051 and 062/051. At the same time we began to clean the temple of Ba'al so that its outline emerged again. This was not an easy task as most of the LBA findings previously excavated (Beyer 1982, fig. 4) had disappeared due to erosion (fig. 2; pl. 87).

What is left is a piece of the outer wall in the south, the northwestern corner with parts of the northern wall, and a partitioning wall in the interior or relics of installations. In squares 061/051 and 061/052, it was now possible to add the foundation of the eastern wall between the antae and a fragment of the northern anta. To the east of the threshold leading into the temple, there were steps in the form of large flat sandstone slabs, and another eight metres further east there lay the stairs as expected. The threshold, the entrance steps, the stairs, and the stone slabs in the lower courtyard are arranged along one axis; the outer edges are almost exactly in line. They follow a planned layout that must have included the gate-lions, the original location of which remains unknown.

3.1.5 Temple of Ba'al, earlier phases (figs. 2-5)

The temple of Ba'al and its surroundings were badly damaged by erosion and looting. In robbers' holes and in eroded places, there appeared walls that do not correspond to the late building phase just described. A trimming of some of the robbers' holes resulted in several profiles that show at least two earlier floors and that help to clarify the stratigraphical relationship of the walls, especially in locus 15 and in locus 22 (figs. 4-5). There appears the outline of an earlier antae-temple, smaller than and not exactly below the later one (fig. 2). Only the northern wall of the late antae-temple is founded on that of its predecessor. At a level of ca. 325.65 m above sea-level, the floor of the latter is identical with floor 2. It is covered with mudbricks that were used to fill up the earlier temple in order to lay a solid floor for the new building.

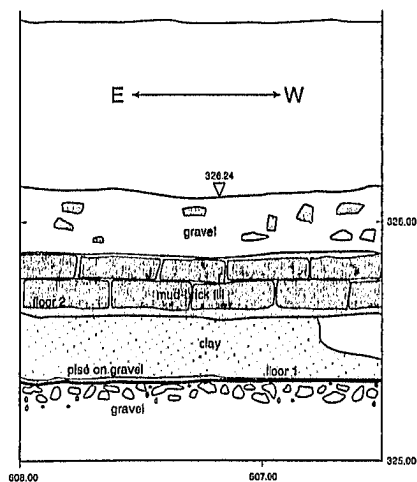


Fig. 4: Emar. Temple of Ba'al, square 060/052, trench FS 22, section C-D (east-west)

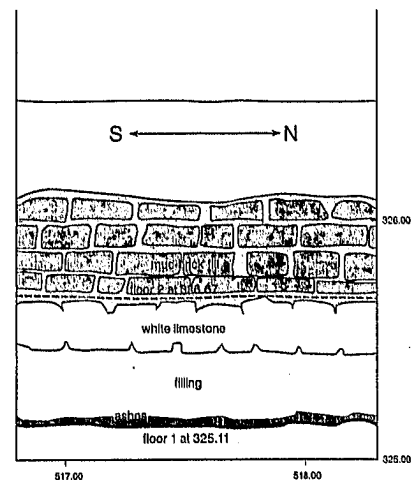


Fig. 5: Emar. Temple of Ba'al, square 061/051, trench FS 15, section E-F (south-north)

The earliest floor that we have reached so far, floor 3 at ca. 325.10 to 325.30 m above sea-level (figs. 4-5), cannot yet be associated with contemporary structures; thus, the outline of the building it belongs to remains unknown. The pisé floor is lined by a massive layer of large pebbles and red clay. It is covered by a thin layer of ashes into which were laid the foundations of the earlier antae-temple.

For none of the described three building phases of the temple of Ba'al and its predecessors is there any well-stratified pottery. It is therefore not possible to give a date to the two earlier phases. For the late temple of Ba'al, we follow the dating of the French mission ascribing it to the late LBA.



Fig. 6 : Emar. Temple area, gate lion from square 063/051, side view (scale 1:9)

3.2 Early Bronze Age. Excavation in square 063/050 (Anja Rothmund)

3.2.1 Architecture and stratigraphy (figs. 7-8; pls. 13-16. 21)

Square 063/050 is situated on the badly eroded southern slope of the western mound, to the east of the temples and just south of where the Late Bronze Age lion was found. During the short 1996 campaign, an area of 9 x 9 metres was opened. On the eroded southern slope, there appeared Early Bronze Age layers that were exposed up to the middle line (5 m line, running east-west) of the square. Architectural remains were scarce, but an ashy layer around an oven yielded a lot of pottery (locus 06a). In the northern part of the square only the Late Bronze Age layers were dug down to a plaster-floor (locus 22). In 1998, the excavations were continued by the author, again for a short time only. Now the layers underneath the plaster-floor (locus 22) north of the 5 m line were exposed as well. They yielded more ovens and building remains.

The Early Bronze Age layers are almost horizontal. In the northern part of the square, they were supposedly severed—and, at the same time, sealed—by the Late Bronze Age plaster-floor (locus 22), while in the southern part they were cut obliquely by the erosion of the slope (see

schematic section fig. 8). Here, the ashy layer (locus 6a) that alerted us to the Early Bronze Age was first encountered. So far, in almost all of the square the level of the floor (locus 6b) was reached that lies under the ashy layer. In a few places it appeared as if there were yet further occupation levels underneath. In addition, the sections at the square boundaries show clearly that the Early Bronze Age levels continue westward as well as eastward. (In the east, they were probably disturbed by the Late Bronze Age temenos wall (locus 20).)

The 1998 excavations determined at least four Early Bronze Age building phases. The later two, building phases 1 and 2, are badly preserved, and building phase 4 has so far been exposed in a few spots only. Best preserved is building phase 3 (see plan fig. 7 and pl. 16). Here, two rooms were partly uncovered that may belong to a dwelling or to the domestic quarter of a larger complex—as is indicated in both rooms by several ovens with mud-brick installations, maybe small platforms, next to them. On the slope south of the rooms there was an inclined plastered surface (locus 11), possibly a kind of glacis. As there is no stratigraphic connection, it may not definitely be aligned with either the EBA or the LBA architecture.

In the north and in the east, probably in the south as well, the western room is bounded by walls of "pebble-pisé" (locus 39/63 and 56). The term "pebble-pisé" is here used for a material consisting of reddish mud with many pebbles. At first we thought that we were dealing with virgin soil; but as this material does not appear in the geology of the region, there had to be another explanation. When we found wall-plaster at several places, it became clear that we were confronted with a kind of pisé. It was obviously used as building-material for walls and also as lining and grading material—which would explain its appearance as a thicker layer under stone walls and floors.

The western boundary is not yet known. In the fill of earth and broken mud-bricks, there were also larger broken vessels. Next to the two ovens (locus 59 and 60, see pl. 21) in the northeastern corner, there was probably a small platform at the wall; extant is a mud-brick structure covered with a second layer of plaster. The floor was plastered with lime and covered with ashes and a lot of potsherds. The eastern room is bounded in the west by the "pebble-pisé" wall (loci 39/63), in the north by a limestone wall (locus 66)—probably the foundation of another "pebble-pisé" wall. The boundary in the east is not known; the northern part is hidden under the LBA plaster-floor, the southern one was probably destroyed by the temenos-wall (locus 20). Towards the south, the ground was eroded, but north of the glacis (locus 11) there existed a wall that sat on a packing of "pebble-pisé". Three ovens were found in this room, one of them in the south, directly on the "pebble-pisé" packing that may have formed a small platform. Beside it were found several light-yellowish sherds of Euphrates-ware painted with red stripes (pl. 19). There were two more ovens (loci 61 and 75) in the centre of the room next to a small wall or platform. The mud-plaster of the floor continued up the walls for a bit. On the floor and around the ovens was an ashy layer (loci 6a, 49 and 65) with sherds of partly crushed or smashed vessels.

Very little has been excavated of the earliest phase, phase 4. Its floor level was reached in the southern part of the western room (locus 5a). In the small silo (locus 5b) that was set into this floor, there lay a carinated bowl (fig. 10,16; pl. 20). We also dug into an ashy layer with earlier ovens in the neighbourhood of the two ovens, loci 59 and 60. In the eastern room, too, there are hints of an earlier phase: here, too, we dug into remains of earlier ovens.

The two latest phases (building phases 1 and 2) are very badly preserved and heavily disturbed by graves. Above the ovens in the eastern room of building phase 3, there were remains of west-

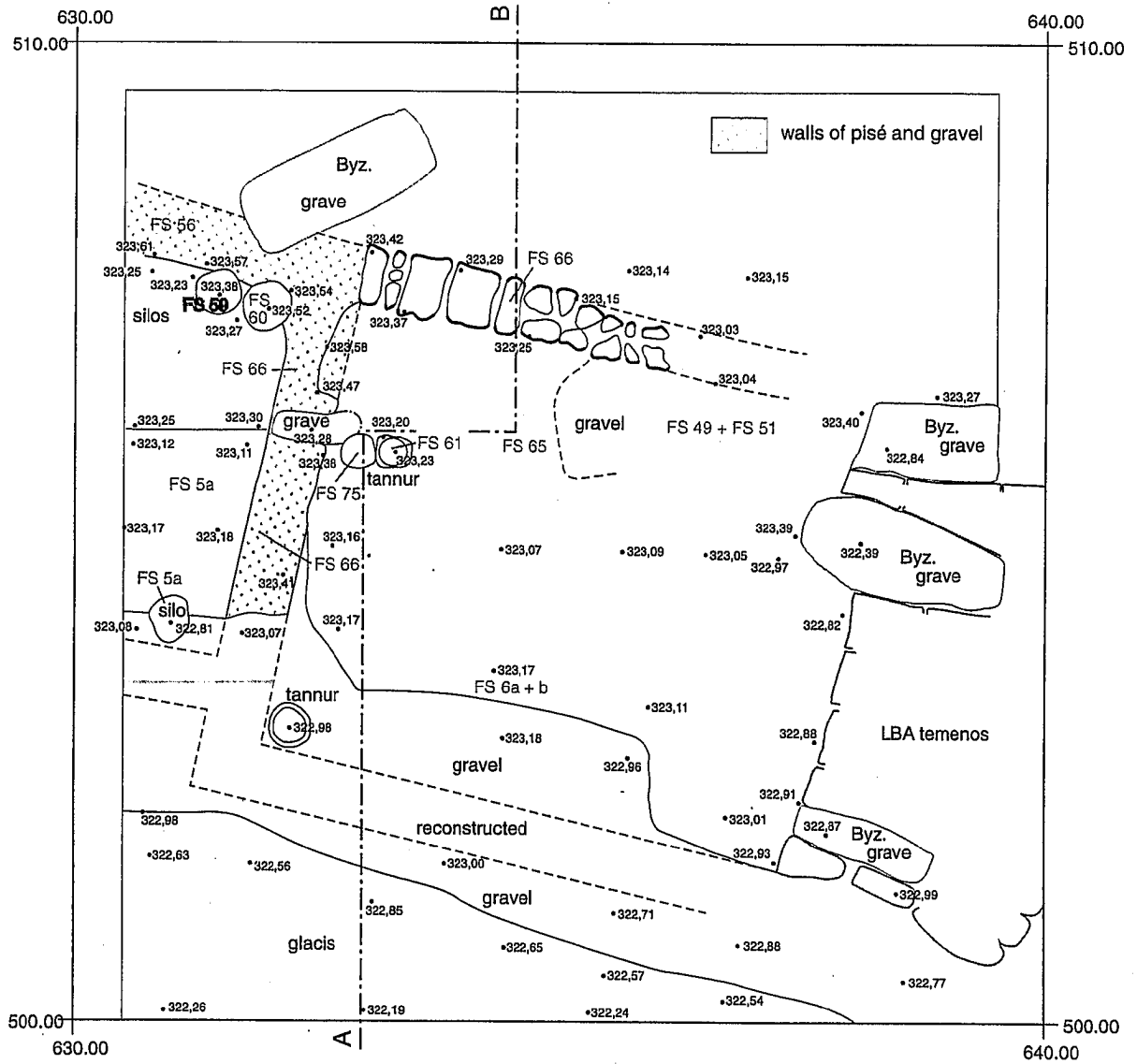


Fig. 7: Emar. Square 063 / 050, plan of the Early Bronze Age structures

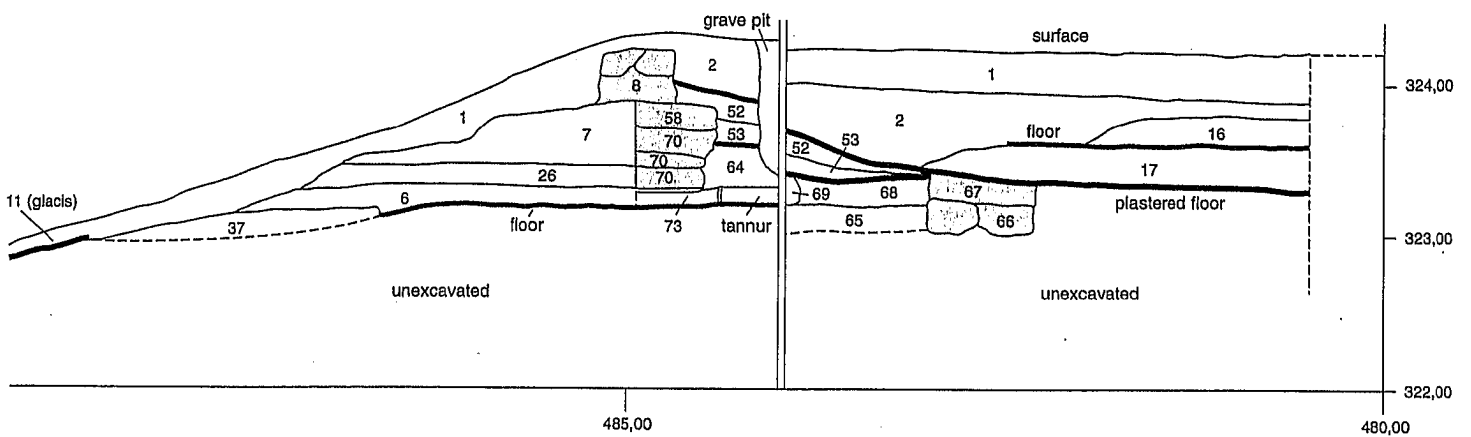


Fig. 8: Emar. Square 063 / 050, schematic section south – north at 633,00 m E (left side) and at 634,50 m E (right side).

east running walls (pl. 15, upper right side) and of the respective floors. It is not clear how they connect with the pisé walls (loci 39/63).

3.2.2 Pottery (figs. 9-10; pls. 17-20)

The plaster floor (locus 22) clearly delimits the LBA. As some of the pottery was found in situ, a relatively precise dating from the pottery collections should be possible. Unfortunately, the main collection coming from the floor of locus 6 was not brought to Tübingen. Therefore it was not possible to draw the sherds and to analyze the ware from the original. We present the material in colour on the CD supplement, plates 17-19.

Most of the pottery is greenish-yellowish with a fine mineral temper. Besides bowls and pots with two- or threefold ribbed rims (pl. 17), there are some examples of "reserved slip" (pl. 18)—the clay sometimes being reddish and the slip yellowish-beige. The same context included sherds of Euphrates-ware with red stripes and an item of Harran-ware and of incised decoration (pl. 19).

The pottery shown in figures 9 and 10 comes from two loci. Figure 9 shows pieces from collection 063/050-7 (cf. the schematic section fig. 8), found on the southern slope and belonging to one of the two later phases.

- 1 063/050-7,7: Bowl with grooved rim. Red-beige ware.
- 2 063/050-7,3: Bowl with thickened, everted rim. Greenish-yellow ware.
- 3 063/050-7,1: Neck with grooved rim. Light-yellow ware.
- 4 063/050-7,8: Everted neck of a bottle. Red-beige ware.
- 5 063/050-7,2: Rim of a pot with everted lip. Greenish ware.
- 6 063/050-7,6: Rim of a pot with bulged lip.
- 7 063/050-7,9: Fragment of a neck. Red fine-tempered ware painted with red stripes and burnished in stripes.
- 8 063/050-7,4: Flat base. Yellowish-beige ware with concentric circles on the inside.

Figure 10 shows pieces from locus 51, collection 063/050-51, found in the lowest stratum of a test-sounding in the eastern part of the square, and the bowl EM 96:132 from locus 5b:

- 9 063/050-51,7: Rim with decorative ridges. Greenish-yellow ware.
- 10 063/050-51,8: Rim with decorative ridges. Red-beige ware.
- 11 063/050-51,4: Neck with grooved rim. Greenish-yellow ware.
- 12 063/050-51,15: Everted neck with decorative ridge. Red-beige ware with traces of fire.
- 13 063/050-51,12: Everted neck with horizontal lip. Greenish-yellow ware.
- 14 063/050-51,13: Rim of a pot with triangular lip. Yellowish-white ware with red core.
- 15 063/050-51,1: Ring-base. Red-beige ware.
- 16 063/050-5b,1: Carinated bowl, inv.-no. EM 96:132.

Comparable pottery was found in Hadidi, where it is mostly dated to EB IV. A comparison with Anne Porter's six phases results in few parallels only, and those with phases 4 and 5. It must be emphasized that the results represented here are tentative; intensive evaluation of the findings and of the pottery has just begun.

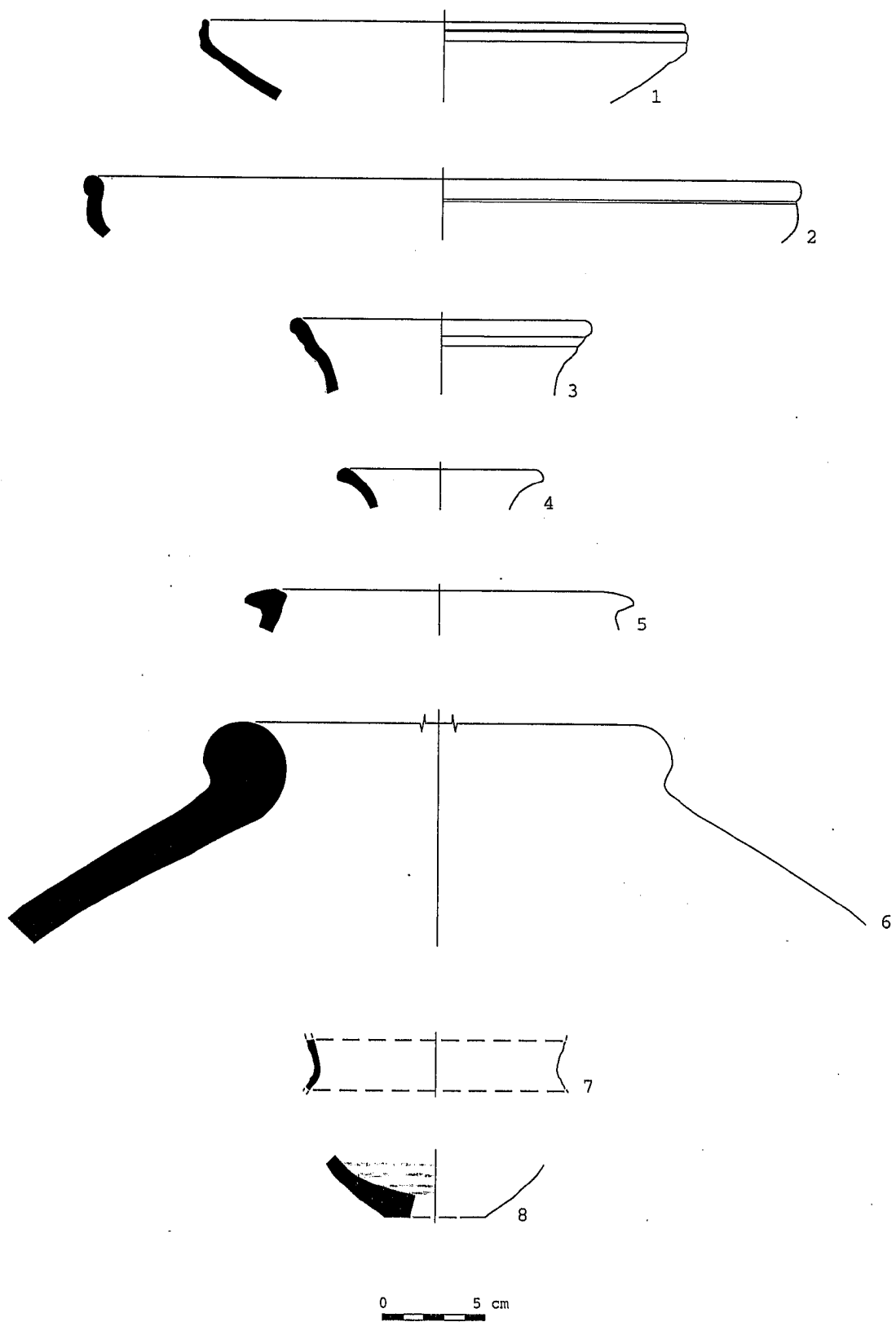


Fig. 9: Emar. Sounding in 063 / 050, Early Bronze Age pottery from locus 7

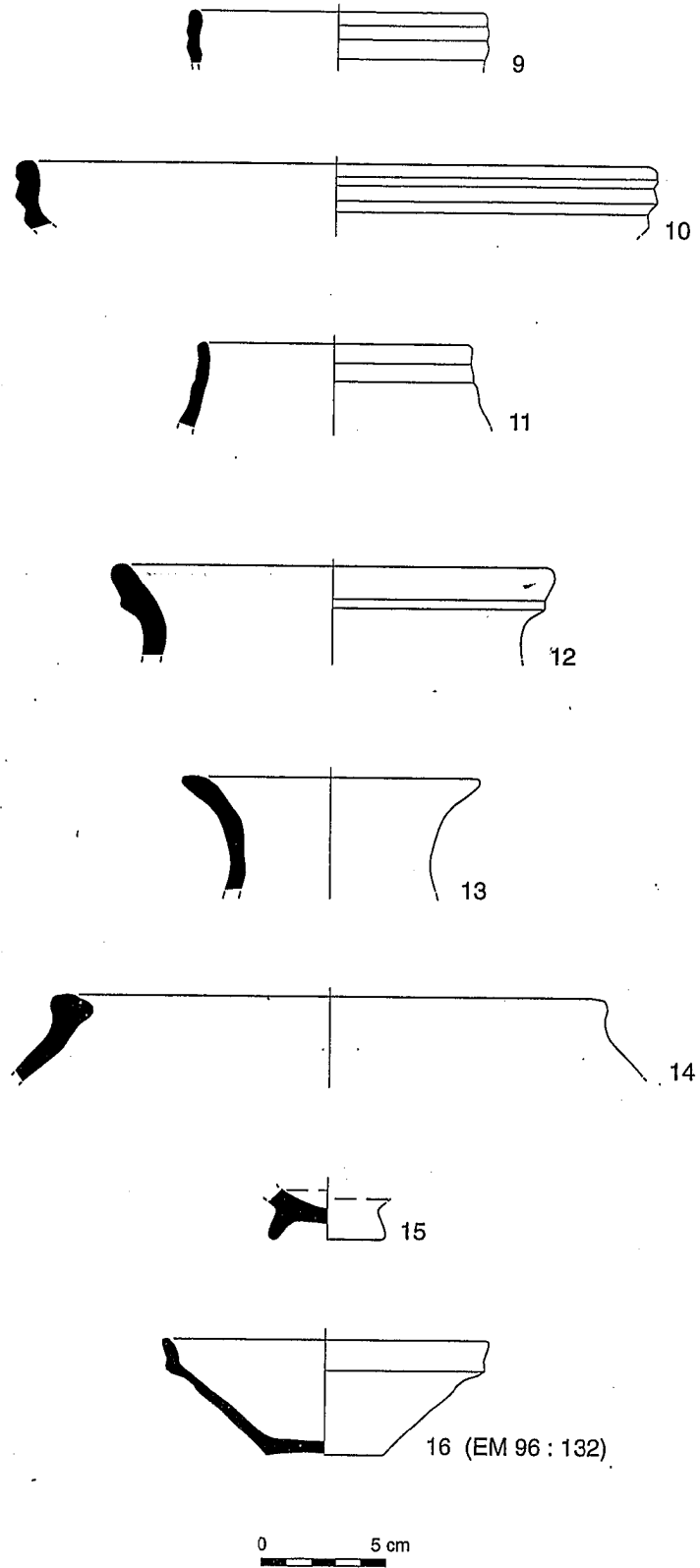


Fig. 10: Emar. Sounding in 063 / 050, Early Bronze Age pottery from locus 51 and 5^b

4. Upper Town

(Former excavation areas D, III, IV, VIII, IX and squares 074-076/052-055)

4.1 Late Bronze Age (figs. 11-16; pls. 22-28. 33-35. 85. 89)

The so-called "Upper Town" comprises the French excavation area D and the Syrian excavation areas III, IV, VIII, and IX (fig. 11 and pl. 85), as well as squares 075/054 and 075/055 started in 1998 by the common Syrian-German mission.

In the early 1990s, Shawki Sha'ath opened a trench 10 m wide and 45 m long (his "area III"), running approximately north-south and comprising squares 075/051-053 completely or partially. The trench is subdivided into 5 m squares that, from east to west and from north to south, are designated by lower-case letters (III a-t). One can discern dwellings after the usual ground-plan: two small rooms and one large, square room; they belong to at least three different building-levels.

In square 074/053, a trench branches off towards the west (III c-d); it is 5 m wide and extends into squares 073/052-053. Here, the first traces of a larger building were unearthed that, in the west, is bounded by a street running north-south. To the west of a baulk, there emerge facades of houses running west-east and bordering a street. Especially remarkable is the western extension, area III c-d, because here three soundings were made to a depth of up to 5 metres (see below at 4.2).

In 1996, we concentrated on cleaning and documenting the older excavations. Only two of the three deep soundings mentioned were reexamined (see below at 4.2). During the 1998 campaign, two squares were laid out, 075/054 and 075/055, that were to connect the higher-Syrian "area III" with the lower-French "chantier D"; a common profile at 750.50m east was to document the stratigraphy of the two sites (see plan fig. 12 and section fig. 14).

The 1998 campaign proved to be too short to achieve this aim. The later horizontal structures, rising to ca. 317.10 m and with their lower edge at ca. 316.70 m, were extant in square 075/053, but did not appear to the north of the baulk, in the southwestern quadrant of square 075/054. There, several Islamic graves had been dug into a soft small-grained layer of fill up to 1.8 m thick; walls did not appear above a level of ca. 315.50 m. At this stage of the excavation, it remains an open question whether the slope is terraced or whether, between the higher-lying structures in square 075/053 and the lower-lying structures in 075/054, there exists a levelling-layer that was cut obliquely by erosion. At any rate, the stratigraphical coherence is not yet clear.

Later, the northeastern quadrant of square 075/054 was opened up. It lies lower and connects immediately with the French findings; it encompasses several walls and floors that, because they are above a level of 314 m, must postdate the French findings (fig. 16). But the connection with the higher layers in square 075/053 cannot be ascertained. Only beneath the level that was reached in the French "chantier D" is there a sequence of building layers; it will be treated in section "4.2 Middle Bronze Age".

The next square to the north is 075/055. As it is situated lower in the slope, the architectural layers exposed here have not yet been reached in the western quadrant of square 075/054, although some of them postdate those in the northeastern quadrant of square 075/054. They may be an important connecting link in the stratigraphy of these two quadrants. Unfortunately, numerous late graves have destroyed the context to such a degree that neither the western profile at 750.50 m east nor the secondary profile at 755.00 m east show contiguous layers.

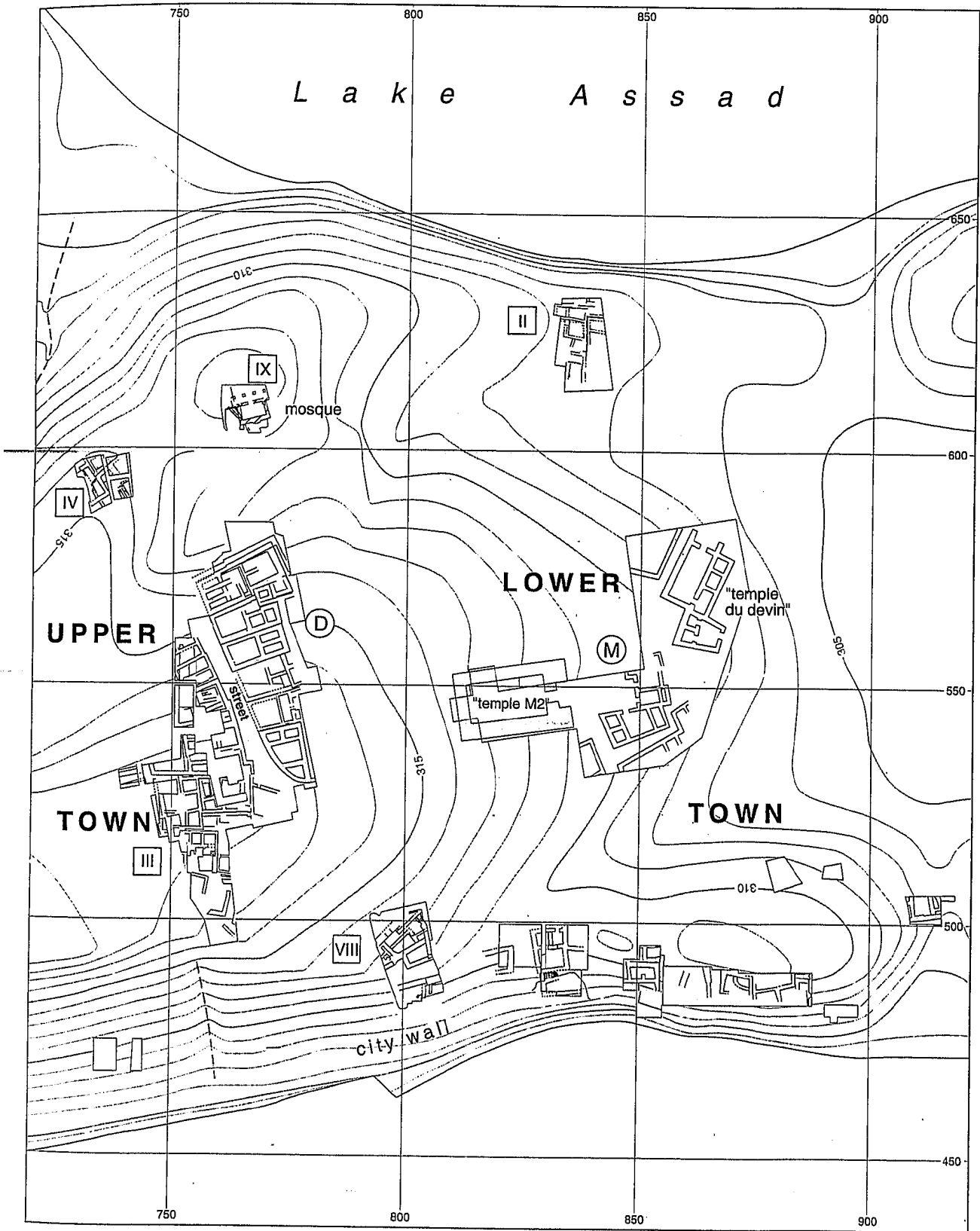


Fig. 11: Emar. Eastern part, topographic plan (for the legend, see fig.1).

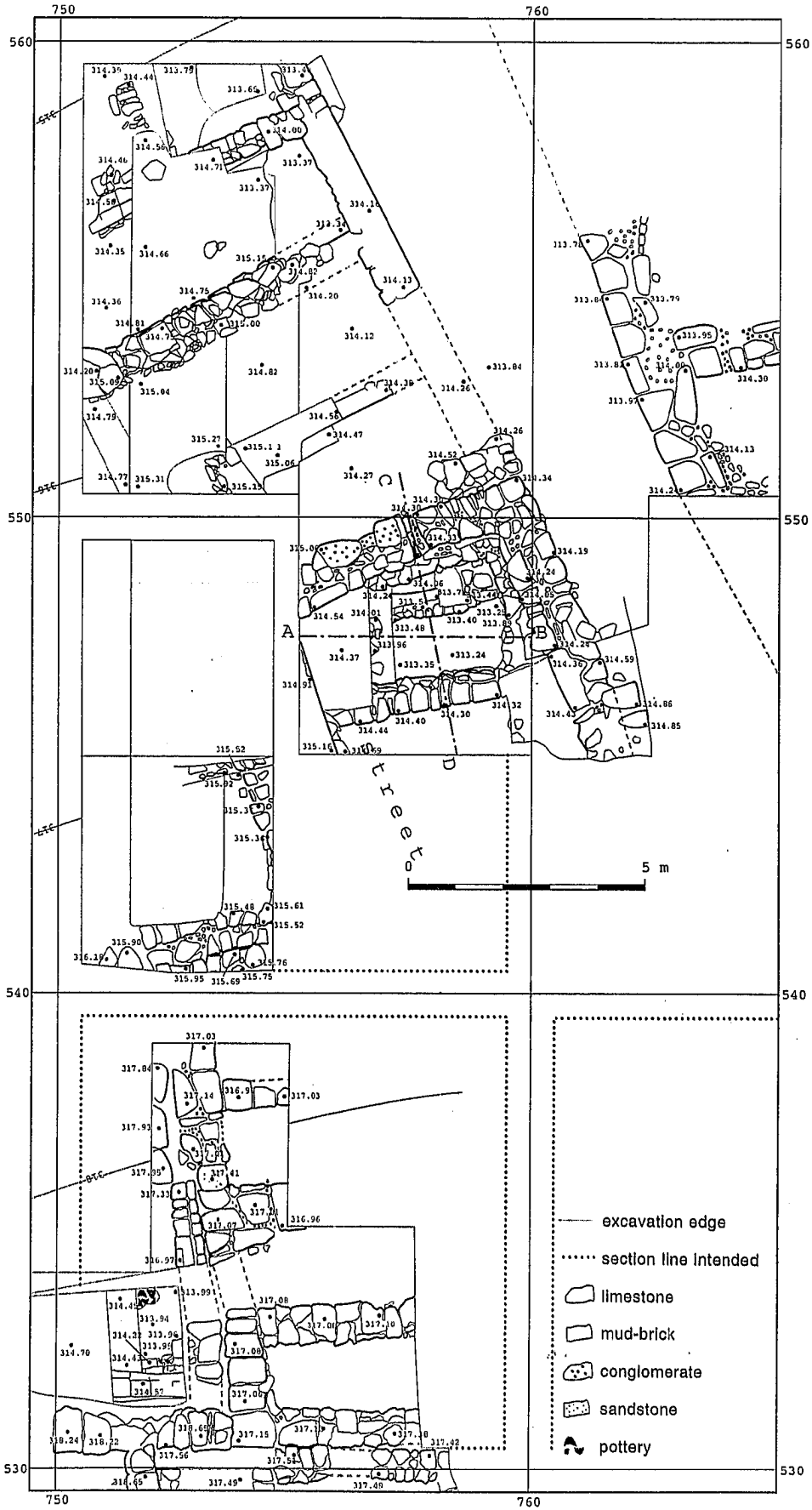


Fig. 12: Emar.
Upper town,
075-76 / 053-055

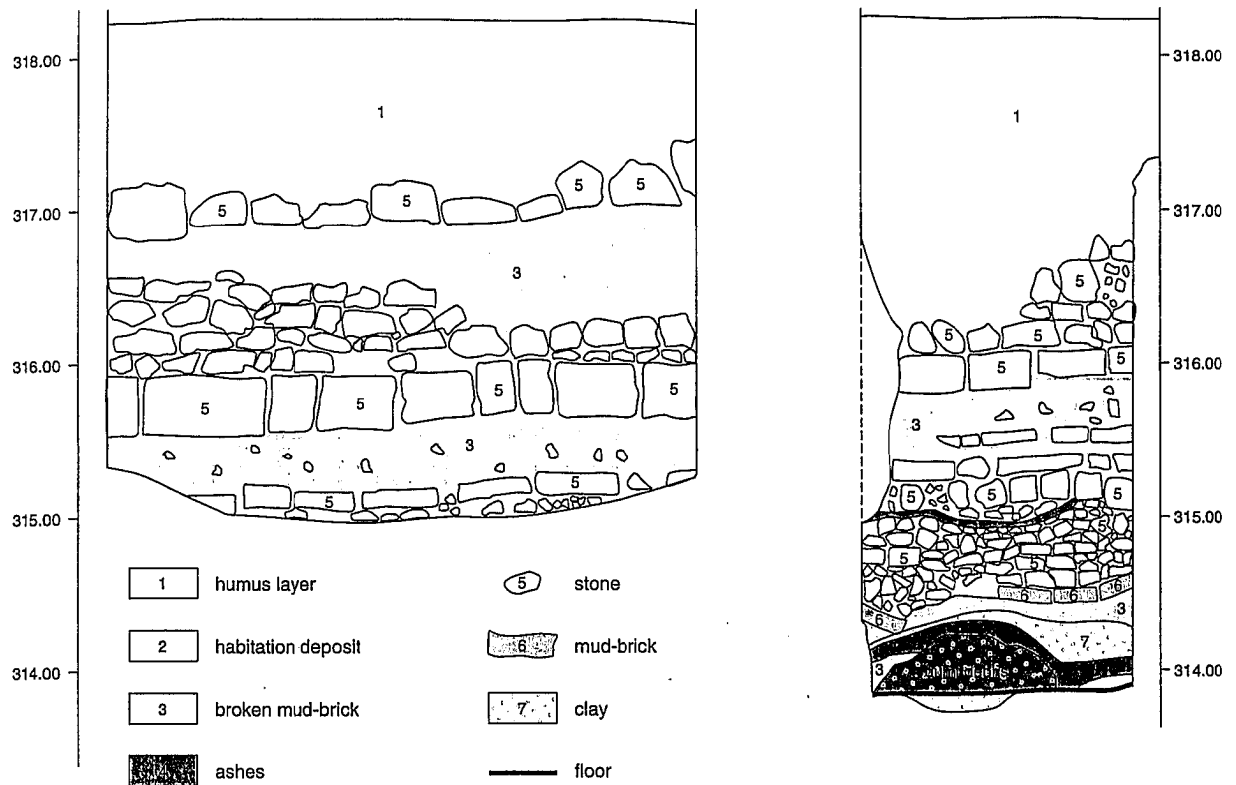


Fig. 13: Emar. Sounding in 074/052, section at the north baulk

4.2 Middle Bronze Age (figs. 12-19; pls. 29-32. 85. 89)

Our knowledge of the ruin has been improved considerably by re-examining the already mentioned soundings in squares 074/052-53 and 075/053. The profiles of those squares show a long sequence of occupation levels reaching back into the third millennium, as far as we can determine now. The most obvious example is seen in profile fig. 13, which shows the structures on the north-side of a lane. Four construction periods may be distinguished: Above a carefully made lime-floor at ca. 313.90 m, there is a thick layer of ashes and burnt debris; above that, a wall built of small stones partly situated right in the burnt debris; another ashy layer, and a second foundation made of ashlars on which rests a levelling-layer of flat stone slabs. There follows a layer of earth up to half a metre thick, then a third stone-foundation of large hewn sandstones with small stones for the superstructure, another construction gap, a second layer of earth, and, lastly, the youngest foundation, certainly dating to the Late Bronze Age and made of white limestone.

The most remarkable features of this sequence are the interruptions in the occupation of the north-side of the street: they suggest several periods, a suggestion underlined by the difference in material and construction.

The profile of the second sounding, i. e., the eastern profile in square 075/053 (fig. 15), does not connect directly. It does comprise the same levels between 314.00 m and 318.50 m, but lies inside a building or courtyard. The lowest layers between 314.80 m and 314.00 m were only reached in a small sounding in the 1996 campaign; they yielded pottery from two loci (075/053-1 and 075/053-2). After preliminary analyses in 1998 the pottery may be dated to the Middle Bronze Age. But we were not ready to make this dating public before it was confirmed by a further well-stratified context.

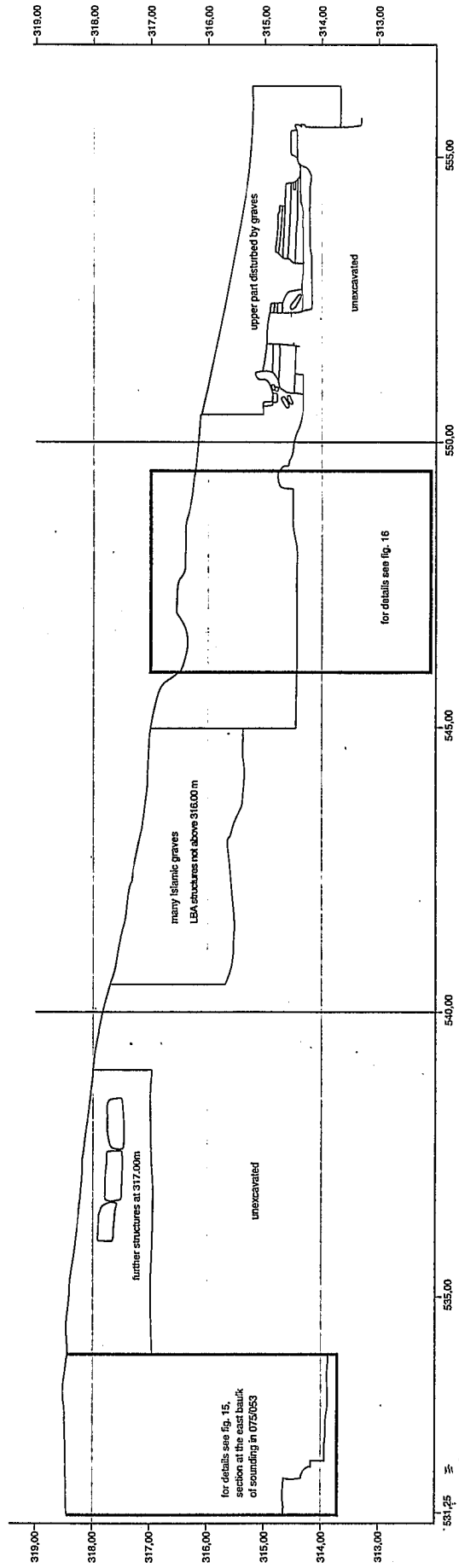


Fig. 14: Emar. Square 075/053-055, south-north section at 752,00 E (from 534,00 to 539,00 m N)

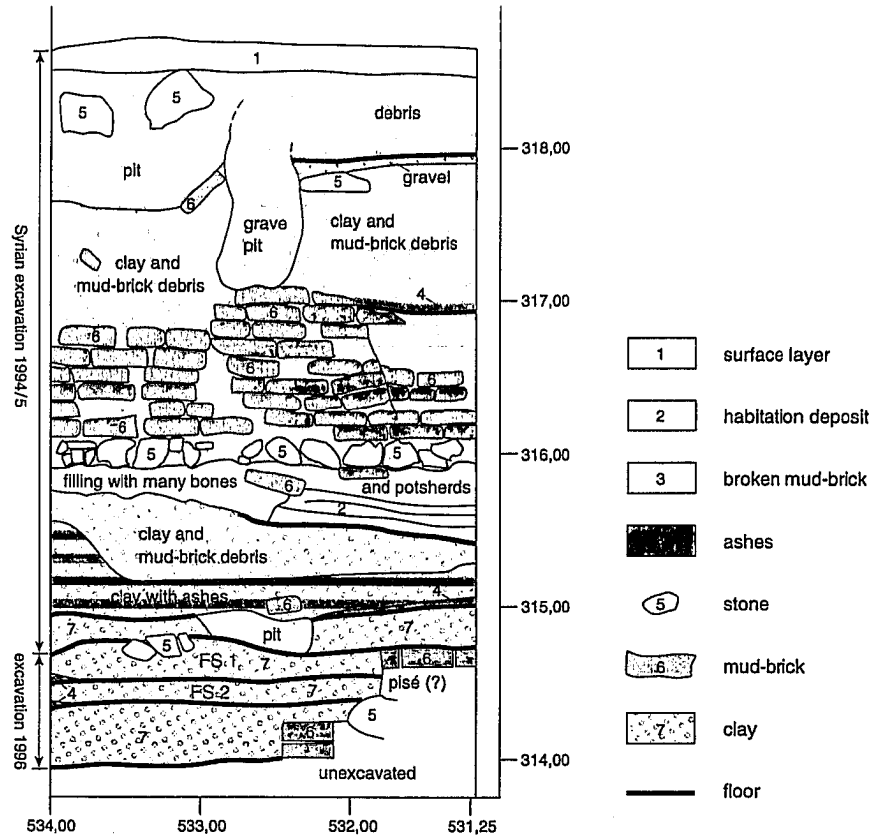
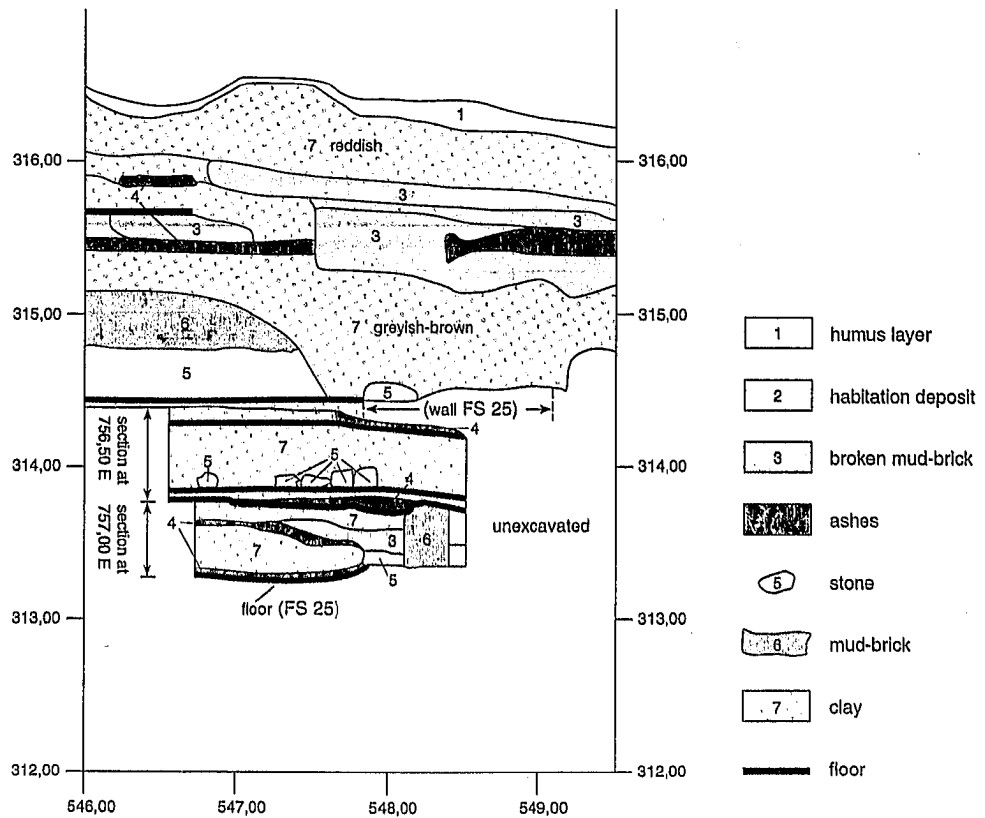


Fig. 15: Emar. Sounding in 075/053, section at the east baulk

Fig. 16:
Emar. Sounding in
075/054,
section north – south
at 755,00 E, 756,50 E
and 757,00 E



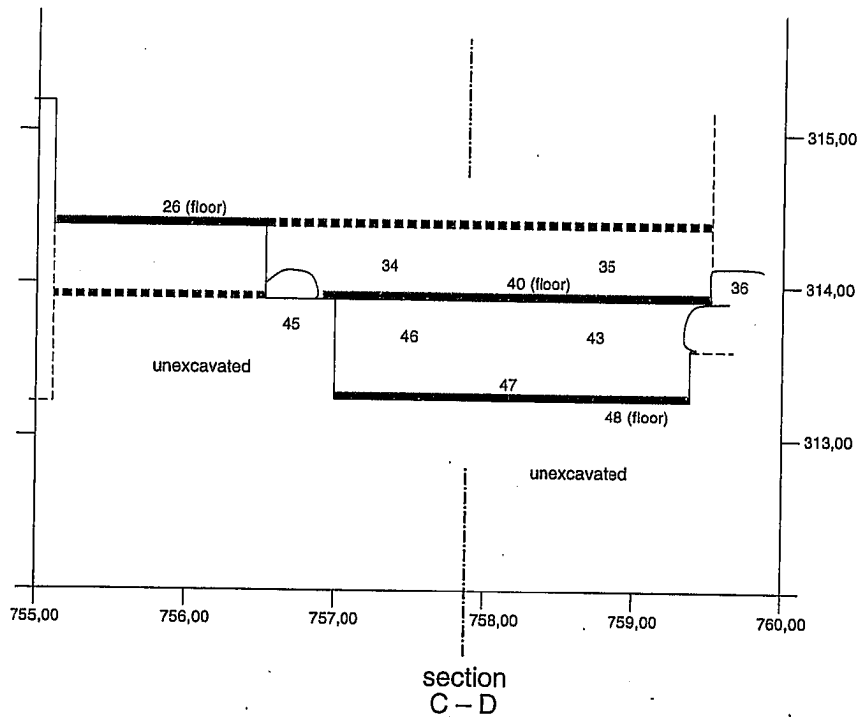


Fig. 17a: Emar. Sounding in 075/054, section A-B, east-west (with locus numbers)

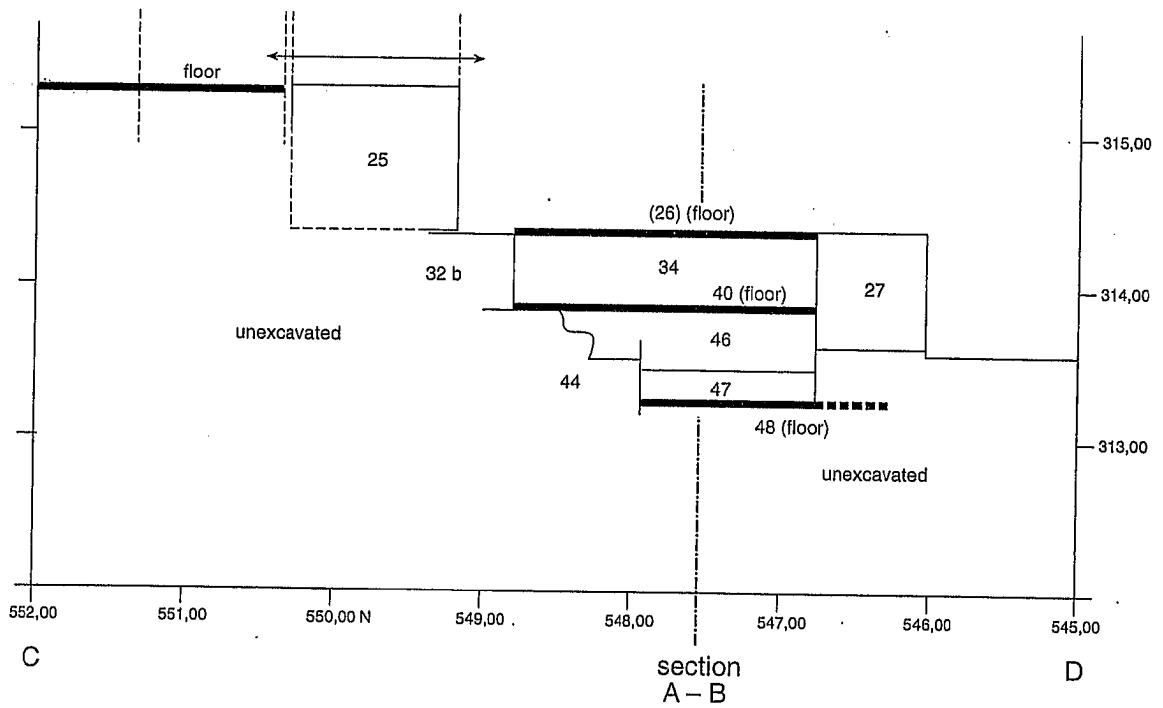


Fig. 17b: Emar. Sounding in 075/054, section C - D, north-south (with locus numbers)

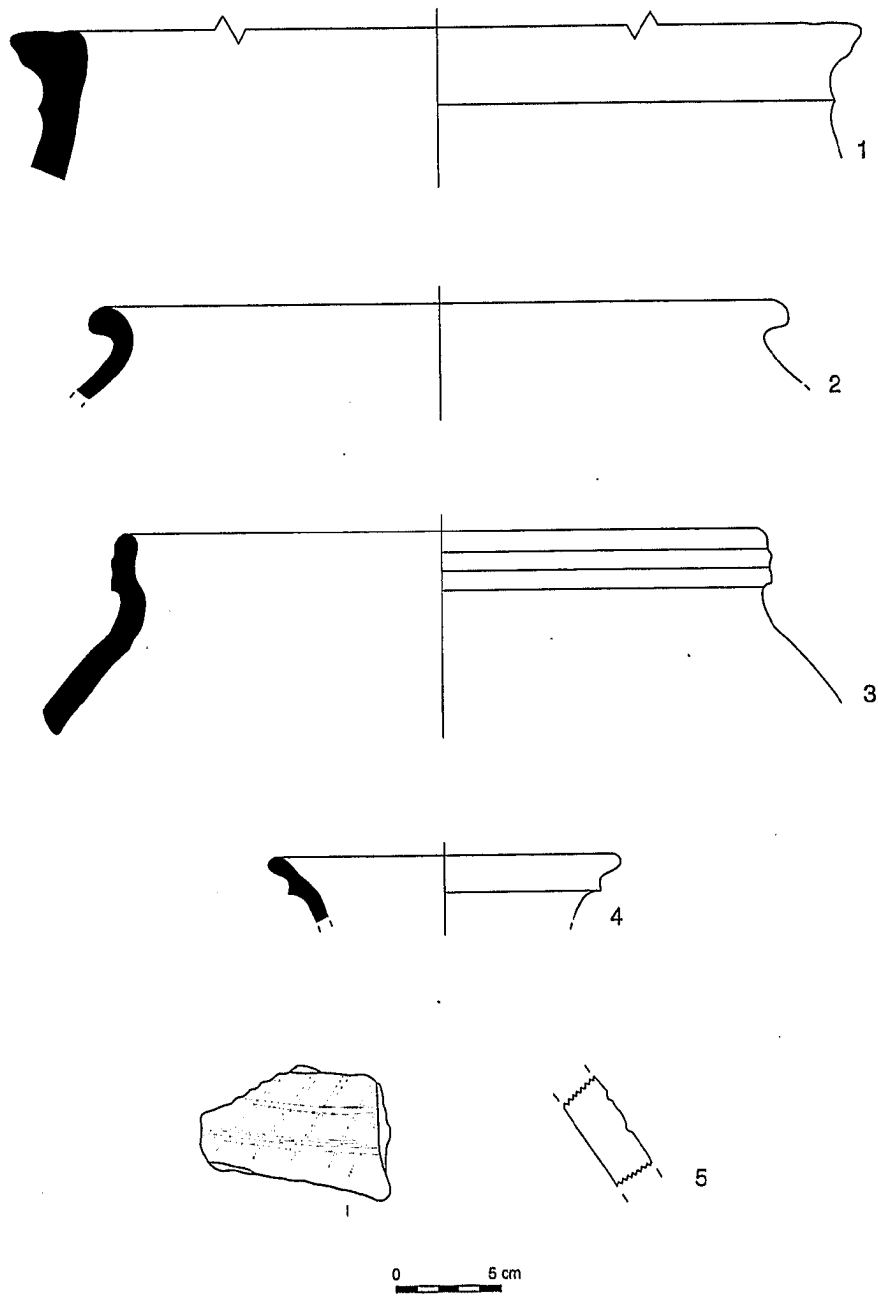


Fig. 18: Emar. Sounding in 075/054, MBA pottery from locus 43 (no. 1) and locus 46 (nos. 2-5)

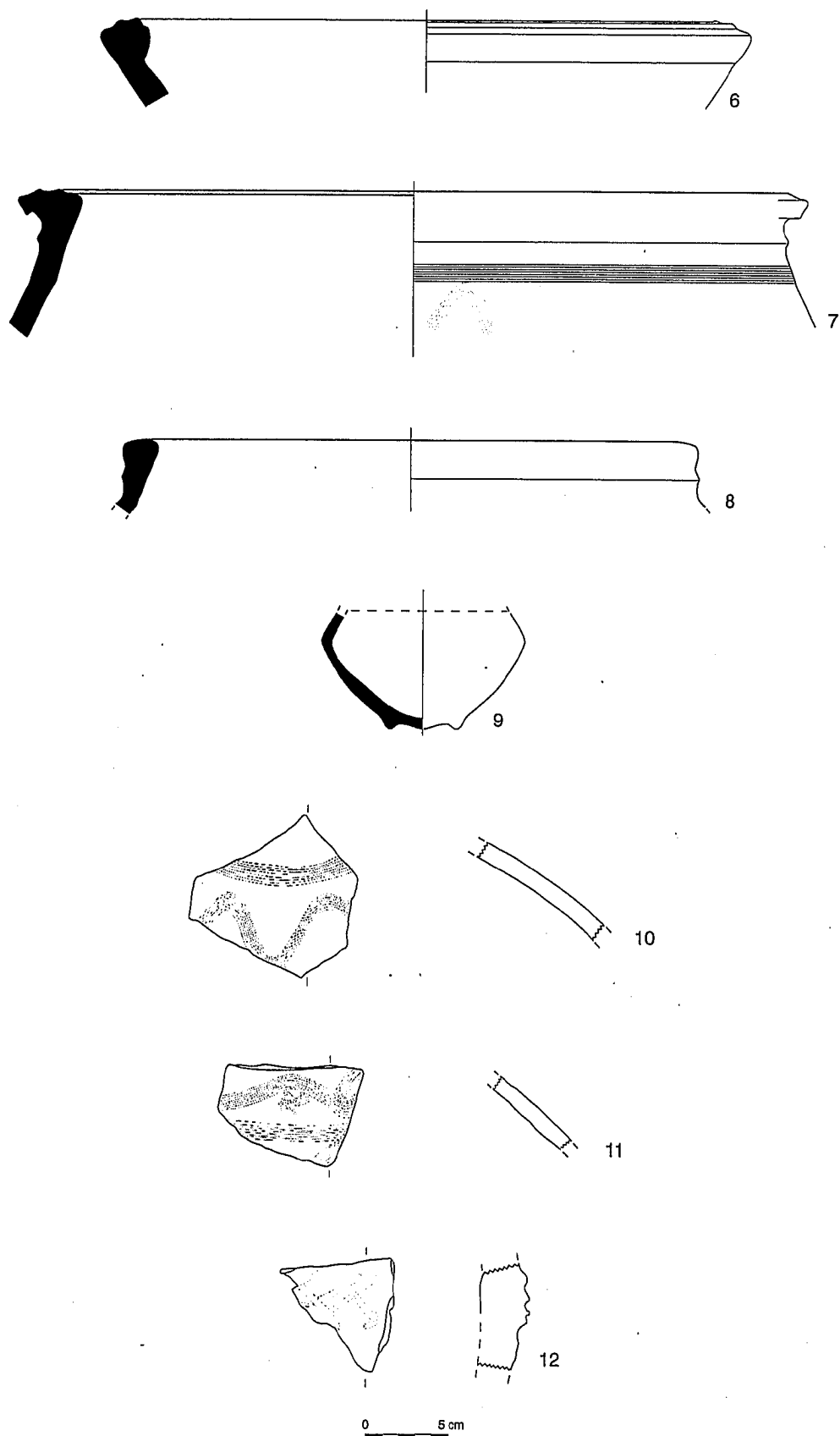


Fig. 19: Emar. Sounding in 075/054, MBA pottery from locus 47 (nos. 6-12)

With that aim in mind, a new sounding was made in square 075/054 towards the close of the 1998 campaign. The lowest level reached lay 60 to 80 cms below the street-level (ca. 314.00 m) reached by the French excavation. The lowest loci (43, 46, 47; see schematic sections figs. 17 a-b) yielded the pottery that is shown in figures 18 - 19. Shortly before finishing this manuscript we were able to date it to the early Middle Bronze Age.

We owe this dating to Gundela Kaschau, Heidelberg. Her analysis of the Middle Bronze Age pottery from Lidar Höyük (Gundela Kaschau, Lidar Höyük. *Die Keramik der Mittleren Bronzezeit. Archaeologica Euphratica* 3 (2000) makes available comparisons with many well-stratified examples. G. Kaschau was kind enough to do an autopsy of our potsherds and relate them to her findings. I quote from her letter of June 29, 1999:

- fig. 18,2: probably cooking-pot, type KT 6b, Lidar Höyük pl. 94,9 (MB phase 1-3)
- fig. 18,3: no parallels
- fig. 18,4: Lidar Höyük pl. 59,18 (MB phase 2); Tell Hadidi MB IIA
- fig. 18,5: ---
- fig. 18,6: Hadidi MB IIA/B
- fig. 19,7: Hadidi MB IIA/B
- fig. 19,8: Lidar Höyük pl. 48,6-10 (phase 2)
- fig. 19,9: possibly form of MB small bowl, type N 1-4, 6, 9-11 (phase 1-5)
- fig. 19,10: Lidar Höyük pl. 27, 5-13 (phase 1-2)
- fig. 19,11: Lidar Höyük pls. 27, 6.7.10; 28, 7-11 (phase 1-2)

Overall, this corresponds to pottery phase 2 from Lidar Höyük, which "compares well with the material from Hadidi MB IIA. That would take it to the earlier Middle Bronze Age (MB I) or Li MB IB, maybe somewhat later (MB II or Li MB II A)."

5. Lower Town and Town Wall

(Squares 082-090/048-049. - Figs. 11. 20-22; pls. 36-40. 85. 90)

At the beginning of our first season we were attracted by a system of walls visible on the surface of the eastern hill ridge. We opened a strip of ca. 10 m in order to expose those structures and, by surface clearance, to come up with individual ground-plans (fig. 20 and pls. 36-40). Two partial areas will be more closely treated in this preliminary report. In square 082-083/049, a house of the usual Emar type was exposed: one room, approximately square, and two smaller rooms to the north. The entrance was situated on the north side, through one of the smaller rooms. As no floor could be ascertained that might belong to the emerging stone-foundations, a test trench was opened in the southwest of square 083/049 running along the baulk and from the southern to the northern wall of the large room or courtyard.

The western profile of this test trench (fig. 21; pl. 90) is only one metre high, but encompasses a sequence of four groups of layers. They consist of ash and other traces of usage, as well as filling material, and are distinctly separated by three floors. A more exact analysis shows that the architectural findings change from one floor to the next, so that we are actually dealing with building-levels. As the pottery from the test trench was not collected by layers, only a preliminary dating is possible: roughly, the third quarter of the second millenium, or a little

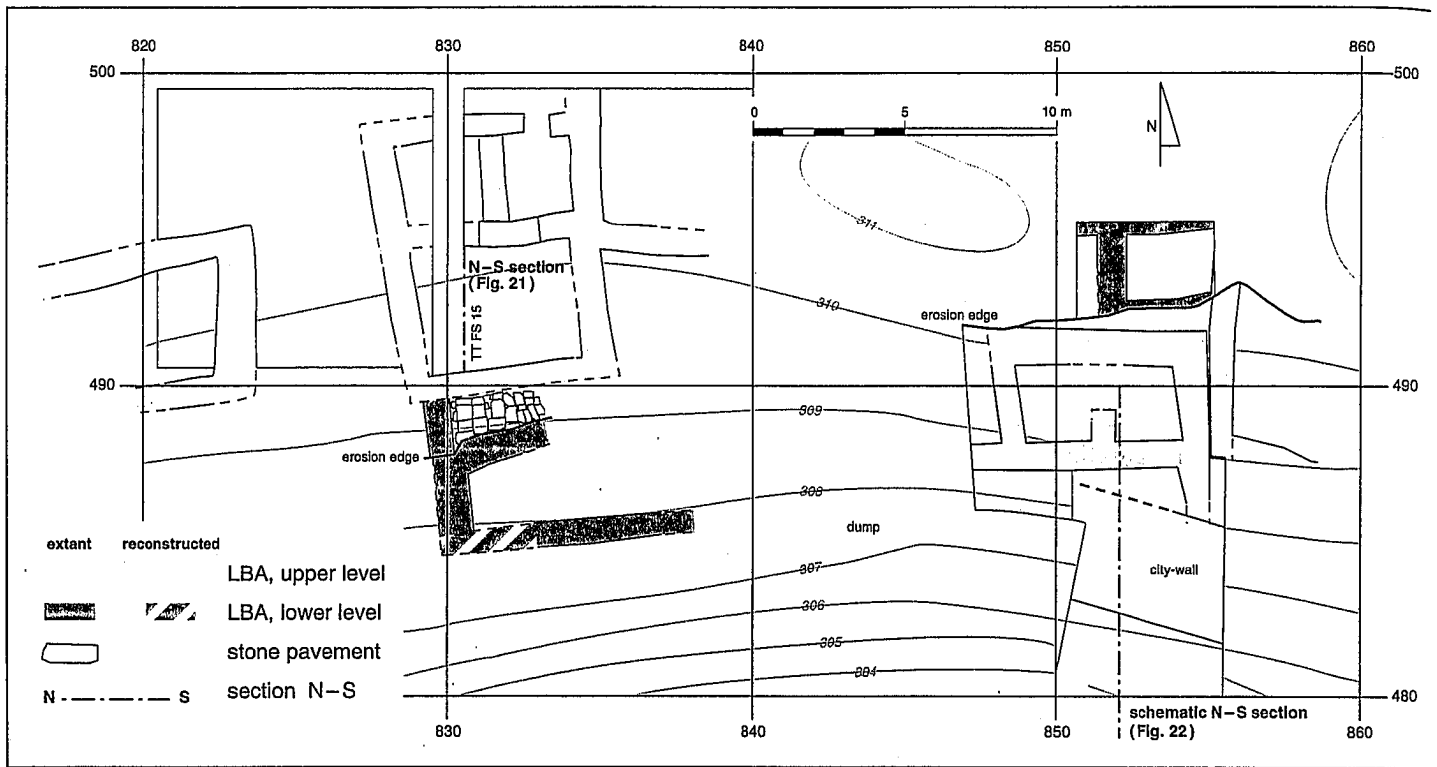


Fig. 20: Emar. Lower town, squares 082-085/048-049, schematic plan

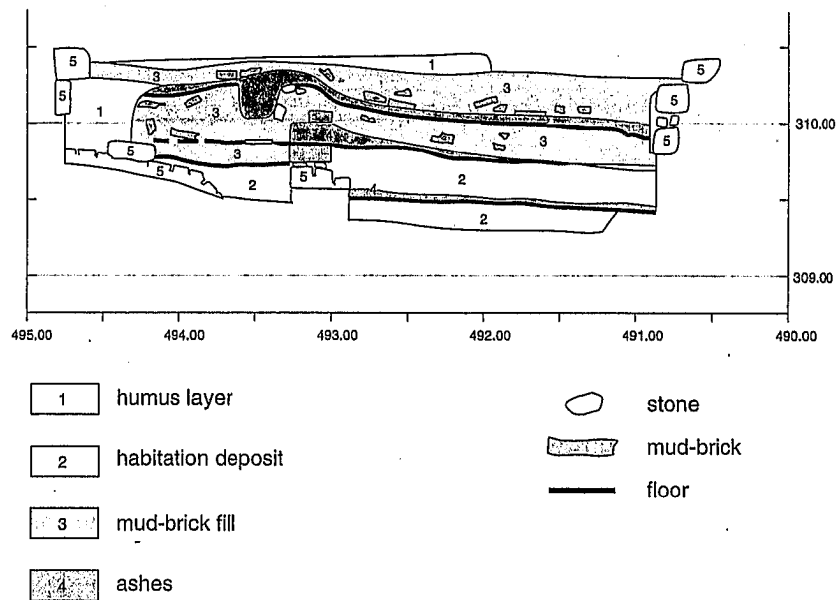


Fig. 21: Emar. Lower town, square 083/049, trench FS 15, section north-south

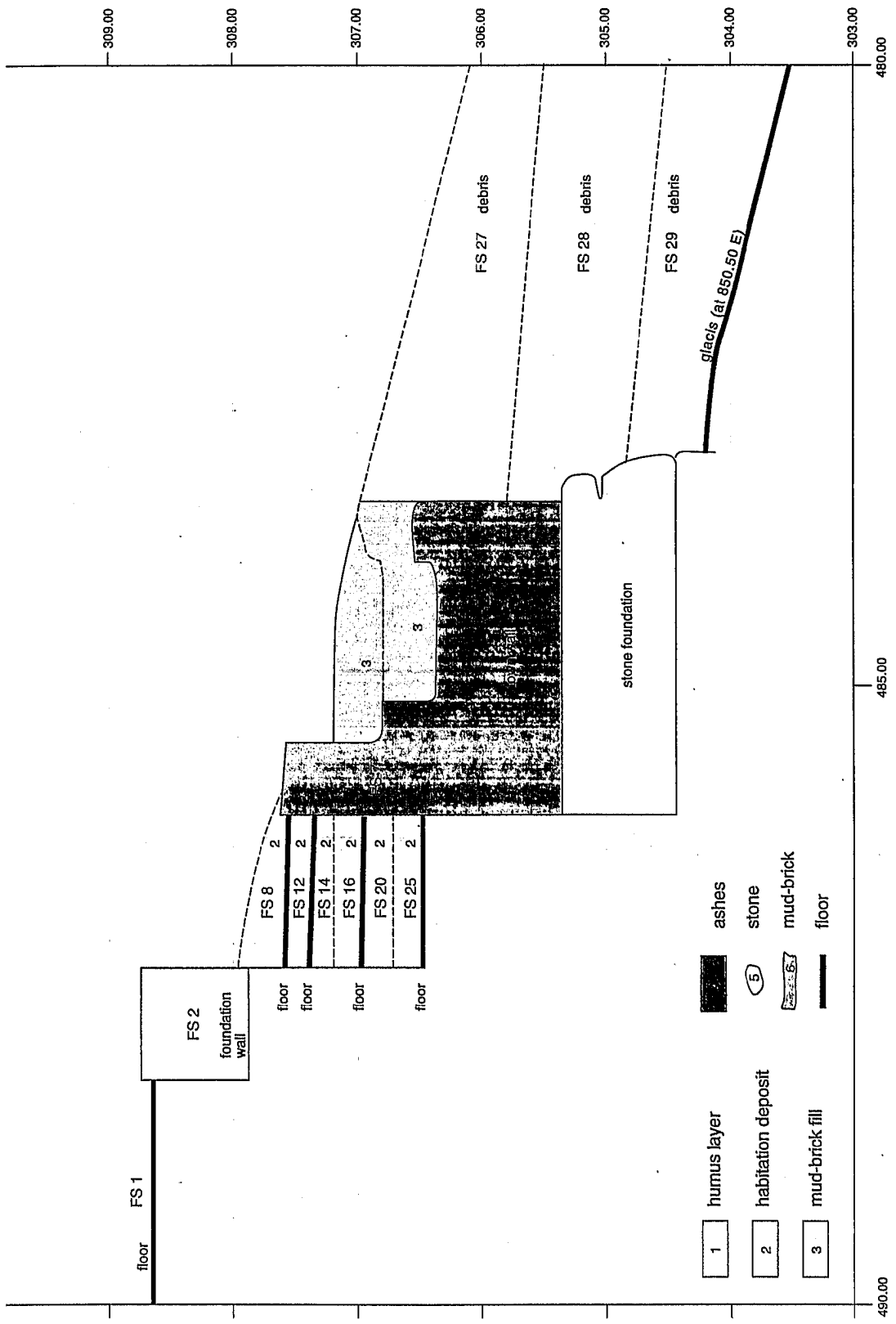


Fig. 22: Emar. Square 084/048, schematic section north-south at 852.00 E

earlier. During the 1999 campaign, the layers discernible in the profile were gradually exposed over the entire area of the room in order to collect well-stratified material to allow more accurate dating.

A little bit further to the east, in squares 084-085/048-049, the ground-plan of a typical Emar house was visible on the surface already. The walls of the two small rooms were well-preserved, the outer walls including some very big stones, and the partitioning walls inside made of small but carefully laid stones (pls. 38-39). Of the large room to the south, only meagre remains survived. It must have been built upon a wall, ca. 2.5 m wide, certainly the city-wall. Figure 22 shows a schematic section through the fortification wall, rising up to 2.5 metres. Its construction—mud-bricks on a stone-foundation—is easily discerned (cf. pl. 40).

Protected by the city-wall, a sequence of occupation levels has survived that were examined in a trench (fig. 22). Underneath the ground-plan of the house already mentioned there was a thick layer of ashes from a tannur (locus 8, see pl. 38) on a pisé-floor, with several similar habitation deposits (loci 12, 14, 16, 20, and 25) preceding it. Until a more exact analysis of the pottery is made, the dating remains preliminary here, too: from the late Middle Bronze Age to the Late Bronze Age. At any rate, this sequence of layers dates further back in time than the already described sequence from square 083/049. Both excavation sites have in common the close succession of occupation levels, often hardly 25 cm thick, from one floor to the next.

Other fragments that appeared further west in robber's pits on the south-slope or that were exposed by our digging (fig. 11) very probably correspond to the fragment of an earlier town-wall in square 085/048, described above. The walls situated in the steep part of the slope are similar, as far as construction and dimensions are concerned, but different from square 085/048, where no occupation levels have survived; the date remains open.

6. Graves

After the town of Emar had been deserted towards the end of the Bronze Age, the hill ridge that still rises above the lake became a burial ground. Whereas there were only Byzantine graves in the former temple area, the ruins of the Late Bronze Age upper town yielded Islamic graves, exclusively.

About 30 Byzantine graves, most of them robbed and destroyed, have been exposed until now. Only few of them still contained grave-gifts. Grave 2 in square 064/050 yielded a well-preserved fibula, inventory-no. EM 96:138, that dates the grave to early Byzantine times (pl. 46). Grave 7, square 063/051, with its necklace of frit and glass beads and a round pendant, points to the same time. More finds include a few "tear-glasses" and a rather well-preserved piece of a leather sandal. The ca. 25 Islamic burials did not have any grave-gifts, with the exception of a few bronze ear-rings. They are concentrated on the slope in squares 075/052-055. Possibly, the ground-plan to their north in squares 076-077/060-061 represents a small mosque to be seen in connection with the graves (fig. 11).

7. Small Objects

The finds of the 1996 and 1998 campaigns in Emar were not startling. Fragments of Late Bronze Age terracotta figurines were frequent; as we worked in layers close to the surface, they

came mostly from disturbed contexts. Some objects are grave-gifts from Byzantine graves in the higher, western, part of the ruin. Testimonies of earlier periods are rarer, but not at all fortuitous.

Work on the smallfinds of the last two, as well as of the previous Syrian excavation campaigns, is only starting. Within this preliminary report, we can only give a first impression by presenting a few selected examples.

EM 96:21, sealing on a stopper of clay (fig. 23, pl. 41), from the surface in square 079/048. Length: 74 mm, width: 59 mm, height: 32 mm. The sealing may represent a scene of introduction ("Einführungsszene"); it is repeated several times on the upper side, but also on the lateral sides. The sealing is disturbed by lines that were incised over it, similar to a potter's mark. Dating: First half of 2nd millennium.

EM 98:11, terracotta figurine (pl. 42), from square 075/055 locus 4. Length: 97 mm, width: 48 mm, height: 20 mm. Dating: LBA

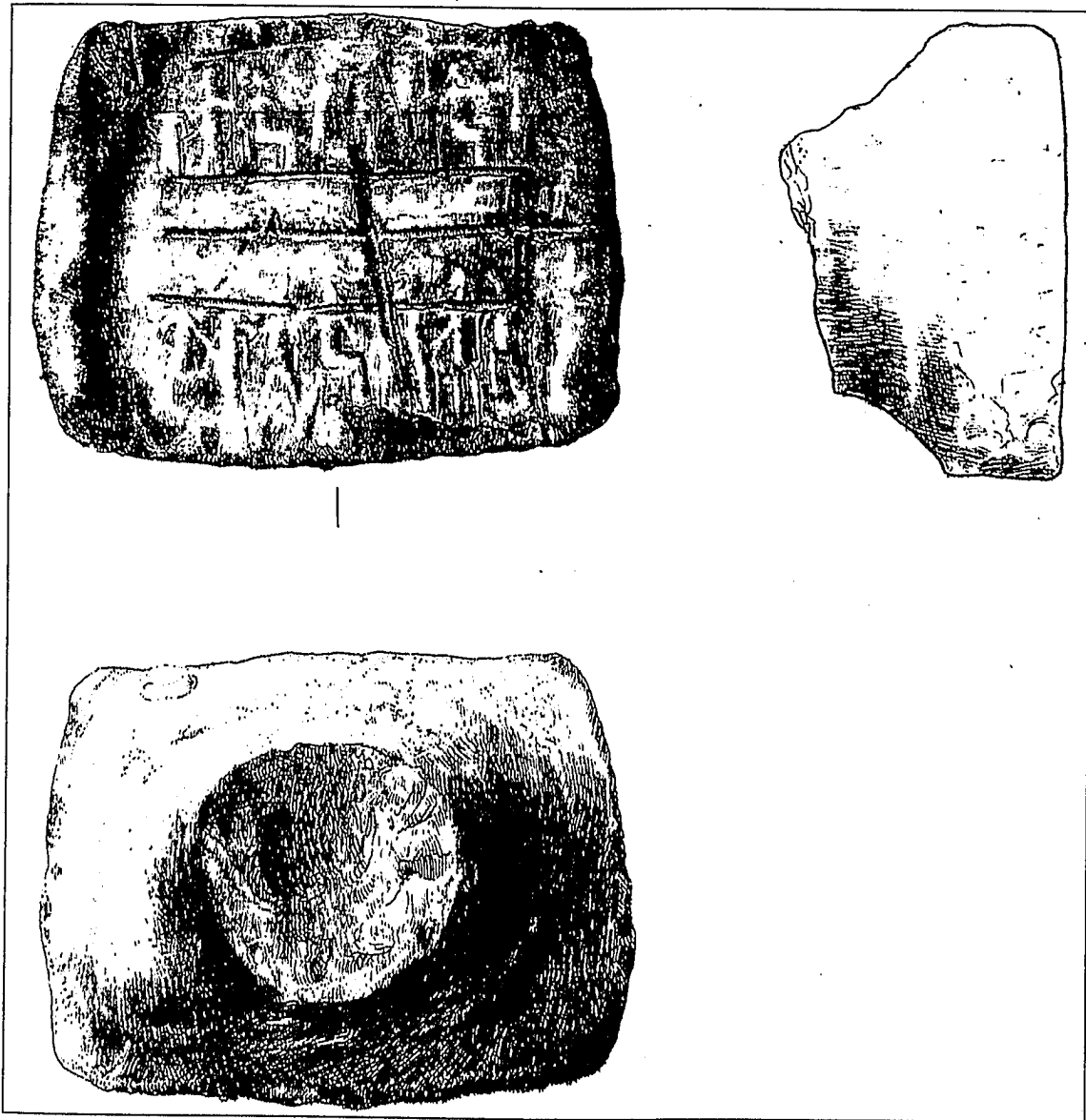


Fig. 23: Emar. Sealings on a stopper, EM 96:21 (scale 1:1)

EM 98:04, terracotta figurine (pl. 43), surface find. Length: 59 mm, width: 32 mm, height: 22 mm. Dating: LBA

EM 98:35, terracotta figurine (pl. 44), from the surface of locus 6 in square 060/052, Ba'al temple. Length: 53 mm, width: 38 mm, height: 9 mm. Dating: EBA

EM 98:50, terracotta figurine (pl. 45), from square 076/055 locus 1. Length: 47 mm, width: 29 mm, height: 14 mm. Dating: LBA

EM 96:138, fibula (pl. 46), from square 064/050 tomb 2. Length: 68 mm, width: 50,5 mm, height: 24 mm. Dating: Byzantine

EM 96:62c, necklace of glass and frit pearls and a pendant (pl. 47), from square 063/051 tomb 7. Diameter of pendant: 20 mm. Dating: Byzantine

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II. BALIS

PRELIMINARY REPORT ON THE CAMPAIGNS 1996 & 1998

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After a hiatus of more than twenty years, work has been resumed in Emar-Bālis. As guests of the German expedition to Emar directed by Dr. Uwe Finkbeiner, Altorientalisches Seminar der Universität Tübingen, a team from Princeton University undertook excavations in July-August 1996 and again in July-August 1998.

The staff assembled to conduct the work included in 1996 Susanne Wilhelm, MA, Tübingen University, and myself. In 1998 we came back with a much larger staff: Ms. Susanne Wilhelm, as Assistant Director and Dr. Lorenz Korn, Tübingen University, as specialist in Near Eastern Studies and Islamic art. Ms. Stephennie Mulder, Princeton University, supervised the ceramic finds and organized the typology; Mr. Lennart Sundelin, Princeton University, archaeologist and specialist in early Islamic history took charge of the excavation at the Qaşr together with Mr. Omar Mahmoud of the Aleppo National Museum. Mr. David Lineberry joined us from the University of Atlanta as archaeologist. Ms. Blair I. Fowlkes, working in the field of Classical Archaeology and Ms. Jaclyn R. Maxwell, Late Antiquity, both from Princeton University, worked as trench assistants. Ms. Rosy Treschl (Dipl. Ing.), architect, divided her time between Bālis and Emar, as did Martin Wille, MA, University of Mainz, drawing objects from both Bālis and Emar. Ms. Sigrid Pohl (Dipl. Biol.), botanist, collected and identified specimens of the flora and fauna in and around Bālis and Emar.

1. The ruin of Bālis today

Bālis and—to a lesser degree—the site of Emar have changed due to the rising level of the Buḥairat al-Asad after the closing of the Tabqa-dam in the early 1970s. Bālis has suffered in the process by losing most of its area to the water of the reservoir. What is left of the ruin today is an irregular triangle of terrain of about 150m (N-S) x 100m (E-W) x 170m. The two shorter sides of this tract in the west and the south are formed by remnants of the Byzantine/Islamic city-wall with a *praetorium* and a bastion as its corners (fig. 24 and pls. 48, 49). The longest side is marked by the coastline which forms a ridge about 3-4m high in the north and in the south. Between these points the terrain slopes gently down to the water and has been transformed into a marshy bay covered with reeds.

Still standing upright are parts of the *praetorium* on the northwestern and a square bastion on the southwestern side of the wall. Unfortunately, the deterioration of both structures has accelerated dramatically during this century. When the site was visited by Friedrich Sarre and Ernst Herzfeld during their travels in 1907 (Sarre/Herzfeld 1911, vol. I, 123), three of the

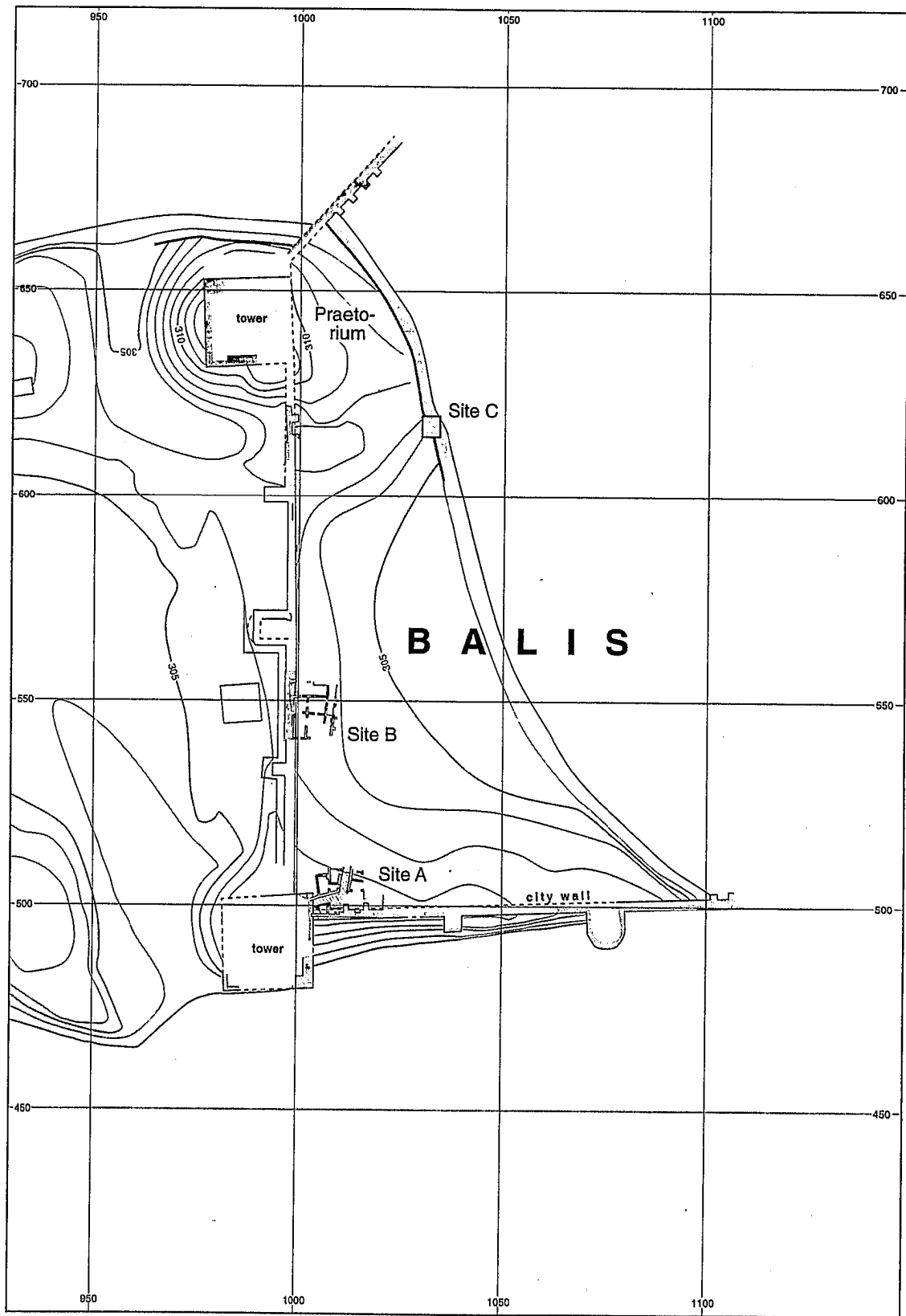


Fig. 24: Bälis. General topographic plan

building's sides were extant together with the central pier inside that supported its upper story (Sarre/Herzfeld 1911, vol. III, pl. XXIII). Of this impressive structure, nothing but remnants of the outer shell has been preserved. On the southern side, the base of the bastion in proximity to Site A is constantly being washed by the lake, and the winter storms of the last two decades have weakened its foundation considerably. In the winter of 1997, one of its corners finally fell; and there is concern that the larger one—which is also constantly exposed to the water—will soon follow (cf. Sarre/Herzfeld 1911, vol. III, pl. XXIV upper right photo).

The formation described above as a triangle, which constitutes the ruin of Bālis today, was once situated at the extreme western part of the city and simultaneously formed its most elevated tract.¹ Given the surrounding topography, a strong fortification in this place was absolutely essential (Sarre/Herzfeld 1911, vol. I, 123). About 100m to the west, the mound of Emar rises to a height of 325m, while the western wall of Bālis is built to a level of only 305m. As a potential enemy could use the mound of Emar for putting up an observation post or even for positioning mangonels, the necessity for protecting the city especially on its western side through massive defensive structures becomes clear. As a result, no gates existed on this side while each of the other segments of the city-wall had entrances (Raymond/Paillet 1995, fig.1).

As can be seen in photos taken prior to controlled excavations at Bālis (Raymond/Paillet 1995, pls. 1, 9, 11), the western quarter of Bālis along with the rest of the ruin was thoroughly burrowed through by robbers. Funnel shaped holes, some of them 2-3m deep, mark the surface. The backdirt around these holes has been dispersed equally in the meantime and might explain the occurrence of Byzantine coins and early Islamic pottery right on the surface together with Aiyūbid material.

2. Purpose of the Excavation in 1996 and 1998

The French expedition of the late 1920s and 1970s examined the central city-area of Bālis, but never included its westernmost part, i.e. exactly the part that is extant today.² Our excavations at Bālis during the years 1996 and 1998 concentrated on two sites (fig. 24): sites A and B that directly abutted the western city-wall and the western part of the southern city-wall in an attempt to study the relationship between the Byzantine wall and the later Islamic settlement. A third site (Site C) in the northeastern corner of what is left of the ruin was opened to obtain additional stratigraphic information.

¹ While the highest elevation at the base of the bastions is about 310m above sea level, the rest of the city's level was at about 305m and at its eastern wall about 297m above sea level; cf. Raymond/Paillet 1995, fig. 1.

² Cf. Raymond/Paillet 1995, fig.1 for the topography of French archaeological activities at Bālis.

³ L. Golvin and A. Raymond (Golvin/Raymond 1974, 111) only mention *objets de céramique abbaside* recovered from deeper soundings. An exception are two articles dealing with the carved stucco-decorations from a *mashhad* found in the surroundings of Bālis, dated to the mid 11th century AD (Raymond/Paillet 1995, pl. 8). Today, the stucco wall is

part of the exhibit in the National Museum at Damascus, cf. G. Salles, "Les décors en stuc de Bālis," *Mémoires du IIIe Congrès International d'Art et d'Archéologie Iraniens* (Leningrad 1935), 211-216 and D. Sourdel, and J. Sourdel-Thomine, "Un sanctuaire chiite de l'ancienne Balis," *Mélanges d'Islamologie à la mémoire de Armand Abel* (Leiden, 1974), 247-253. A. Raymond (Raymond/Paillet 1995, 35) claims that it is the decoration of a shrine of al-Khidr excavated by L. Cavro in 1929, a building he locates north of Bālis. It appears to me that the *mashhad* must be identified as a structure situated ca. 2km south of Bālis. Neither of them has been published so far.

In conjunction with this latter project, a second goal of both campaigns was to find remains of pre-Aiyūbid Bālis. That the city flourished in the Umayyad and in the 'Abbāsid period has been made clear by André Raymond's recent historical study on the city of Bālis (Raymond, A. and J.-L. Paillet 1995, 23, 25ff.). Yet, no significant traces or monuments related to these periods have been identified or sufficiently published.³

These goals were pursued by the following operations:

Site A included a conglomeration of small houses and possibly shops arranged on both sides of a narrow street and stretching along the city-wall directly northeast of the Byzantine bastion in squares 100/049, 100/050, 101/049 and 101/050.

The architectural remains of Site B in squares 100/050 and 100/051 belonged to a house of larger dimensions with courtyards and rooms that had been built directly on top of the city-wall. Unfortunately, robbers in their quest for valuable materials had dug deep holes into the ground and so made it impossible to identify the extension of this house (pls. 58-60).⁴

Finally, a single square (102/062) ca. 25m east of the *praetorium* on the ridge above the water was chosen as Site C. At this particular spot, the rising water had created a bulk measuring about 4m high above lake level. Remnants of walls made of both fired brick and mudbrick, as well as a series of floors, were visible in this artificial bulk and offered the opportunity to obtain stratigraphical information for this area (pls. 61-64).⁵

Simultaneously with the research in Bālis proper, excavations were started at a distance of about 2km south of Bālis, high up on the ridge overlooking the former Euphrates valley. A building of the *castrum*-type ca. 77m x 77m was found and given the preliminary designation "Qaṣr."

3. Results of the 1996 and 1998 Campaigns at Bālis

3.1 Site A (fig. 25, pl. 50): General Description

Site A covers an area of ca. 14m x 12m in squares 100/049, 100/050, 101/049 and 101/050. It is bisected by a narrow street (*dārb*) which enters the site from the north and turns southwest after 6m, ending at the eastern side of the Byzantine bastion. Buildings that once belonged to houses and single-room structures were found on either side of the street. When the bastion collapsed, parts of its walls fell towards the east, burying these structures underneath with its debris. The fact that the top layer in this area as far as 15m east from the former tower's wall consisted of compact rubble (ca. 1m thick), most of which was shattered Byzantine bricks (original size: 0.5m x 0.5m), mixed with large chunks of mortar, must have prevented robbers from looting this area.

3.2 The Byzantine Wall and Post-Byzantine Settlement in Site A

In the course of our work it became obvious that all post-Byzantine forms of settlement in this area were strongly influenced in terms of both orientation and dimension by the structure of

⁴ Site B will be discussed in a forthcoming report.

⁵ Site C will be discussed in a forthcoming report.

⁶ J. Sourdél-Thomine, "Bālis" *EI*² I, 1026; Raymond/Paillet 1995, 21 with bibliography. In the preface of Bālis II, A. Raymond, L. Golvin and J.-L. Paillet announced a separate

study of the Byzantine/Islamic ramparts in the series dealing with the results of the French excavation (Raymond/Paillet 1995, 15). For this reason, I will give here only basic informations on the Byzantine city-wall.

the city-wall built originally by Justinian in the middle of the 6th century AD after Byzantine Barbalissos had been sacked by the Sasanians under Khusrou II Anushirvān.⁶ A trench in 102/049, dug perpendicular from the outside towards the wall in order to expose its extant remains and to assess the height of the wall, revealed the following construction technique: the Byzantine wall consisted of large masonry blocks set in staggered courses of locally quarried material (pl. 51).⁷ They rested—at least in this area—directly on leveled bedrock. While the lower courses were made exclusively of oblong limestone blocks, square brecchie or limestone masonry was used for the upper courses. Generally, the width of the Byzantine wall measured ca. 2m. At a height of approximately 2m, the wall was heavily restored with various other materials: undressed limestone and fired bricks of various dimensions (0.3m x 0.3m; 0.2m x 0.2m), suggesting that these repairs were carried out in the Islamic period.

Inside, the city-wall was supported by pillar buttresses projecting 1.5m x 1.5m, set at a distance of ca. 3m apart from each other (fig. 24, pls. 52, 55).⁸ This formula was also applied to the city's fortification on the western side as well as to those parts of the northern wall that can be traced under water.⁹ It is unlikely, however, that these "buttresses" represent the original condition of the wall in the Byzantine period, as it would not have offered any space for a defensive platform or balustrade.

What then was the function of these buttresses? It is possible that they originally served as the basis for arches supporting battlement parapets on top of the wall.¹⁰ The fact that none of these arches has survived or was observed by either Sarre, Herzfeld or the French expedition must not mean that they never existed: it appears, in fact, as if these battlements—if they ever existed in this form—were deliberately removed at a certain moment in time during the Middle Ages. Large portions of the wall also show repairs of differing extent, originating from the post-Byzantine period,¹¹ obviously made with the intention of bringing the crown of the wall up to an even level after it had been partially destroyed or fallen into disrepair.¹² It does not appear, however, that these repairs represent an attempt to restore the city-wall after one of the numerous destructions Bālis suffered either from earthquakes or sieges (Raymond/Paillet 1995, 24, 25, 29, 30, 32) in order to put it in defensible condition. Rather, the partial mending must be interpreted as an attempt to make use of the wall's solid construction by building houses right on top of the former Byzantine city-wall and its buttresses. These new houses were built on top of the city-wall's crown after the surface level of this neighborhood had been raised considerably by heaping up soil and other loose materials. Fillings were recorded at Site A and B and in both cases, earlier, had covered destroyed levels.¹³

⁷ While the ancient quarries have not been identified, the limestone as well as the brecchie is identical to the material found in the environment of Emar and Bālis.

⁸ The best opportunity to observe the structure of the Byzantine wall today is on the northern side of the ruin. Here a segment of approximately 25m running northeast right below the surface of the water has survived. Here, the water has cleared away all later remains.

⁹ It can be assumed that this was also the case for the rest of the city's enclosure.

¹⁰ I thank Prof. S. Čurčić for this valuable suggestion. Even though it was built by the Byzantine emperor Justinian as well, the city-wall of Bālis probably did not possess a

fortification as sophisticated as that of Rušāfa-Sergiopolis, cf. Karnapp 1976, 14-16.

¹¹ These repairs are executed in small bricks, typical medieval Islamic material.

¹² Large patches of fired brick and undressed stones used in an effort to mend the Byzantine wall could be observed in 102/049.

¹³ A sounding in Room B (the gap between the buttresses) which led down almost to the level of the water-table, did not reveal anything but relatively loose filling material mixed with some pottery fragments.

¹⁴ This measure might have been inflicted on the city as part of the conditions of a peace treaty.

While the ultimate goal in such a measure must have been to regain new ground for building houses, the immediate effect was to render the city indefensible.¹⁴ That the wall was not functioning as a defensive city-wall for some time before Bālis was abandoned by its population in 1260 AD (Raymond/Paillet 1995, 45ff.) is also corroborated by high mounds of debris and garbage¹⁵ outside of the city-wall which grew until they had buried the city-wall from the outside and reached the houses now riding right on top of it.¹⁶ In fact, substructures of undressed stones reinforcing these buildings projected from the city-wall towards the outside and must be interpreted as having been built on the garbage mounds.

In the final period of Bālis, i.e. probably the end of the 12th and the first half of the 13th century AD, the southern Byzantine city-wall and its buttresses were put to use as either parts of rooms or courtyards—so that the only new wall that had to be built was the one on the northern side. Their composition is strikingly different from the Byzantine one as they were made largely from undressed stones or boulders set in mud or mortar, fragments of Byzantine bricks, and from newly made fired bricks and mudbricks. In either case, the 3m-segments in between the buttresses almost invariably pre-determined the dimensions of most of the buildings close to the city-wall as a unit of measurement. Simultaneously, the inclusion of the city-wall into civil architecture left no room for battlement parapets or other defensive architecture, which might also explain to a certain extent why the population of Bālis abandoned the city and fled without even attempting to resist the advancing Mongol army in the summer of 1260 AD.

The following paragraphs will provide a first description of the structures excavated at Site A.

3.3 Courtyard A (100/049)

Situated in the angle between the tower's eastern side and the city-wall, the trapezoidal form of its enclosure was created by the Byzantine city-wall which ran strictly east-west on one hand, and by the first buttress east of the tower on the other. Finally, a street leading to a gate in the eastern side of the Byzantine bastion confined Courtyard A on its northern side. In the south, the Byzantine wall with its partially crumbling blocks of *brecchie* had been covered with broken Byzantine building material that obviously was recovered from debris. Occasionally, fired bricks with a format (0.25m x 0.25m x 0.05m) that betrays their Islamic origin were used as well. Sitting on the stone, the new wall was not more than five or six courses high (ca. 0.40-0.45m) so that one should rather speak of a balustrade (pl. 54). The gap between the Byzantine and Islamic structure was coarsely filled with stone slabs set in mud rather than mortar. For the eastern enclosure of Courtyard A, riding on top of the Byzantine buttress, similarly mixed and rough materials were used: a foundation of rocks and boulders in mortar formed the basis for a wall (thickness ca. 0.5m) made of bricks, brick fragments and fieldstones laid in mud and topped by an additional layer of *pisé*. In opposition to this, the wall on the northern side, the one that faced the street, was made of smooth and carefully laid mudbricks—again with a *pisé* top layer.

In the case of the northern wall of Courtyard A, a foundation of very roughly dressed limestone blocks was added where no other basis was available. The foundation walls for the Islamic building—whether of Byzantine or later origin together with the filling material—were carefully covered by a 0.10-0.15m thick layer of packed, yellowish clay serving as a floor.

¹⁵ They contained filling material, ashes, bones and pottery fragments.

¹⁶ This is also true for the western city-fortification.

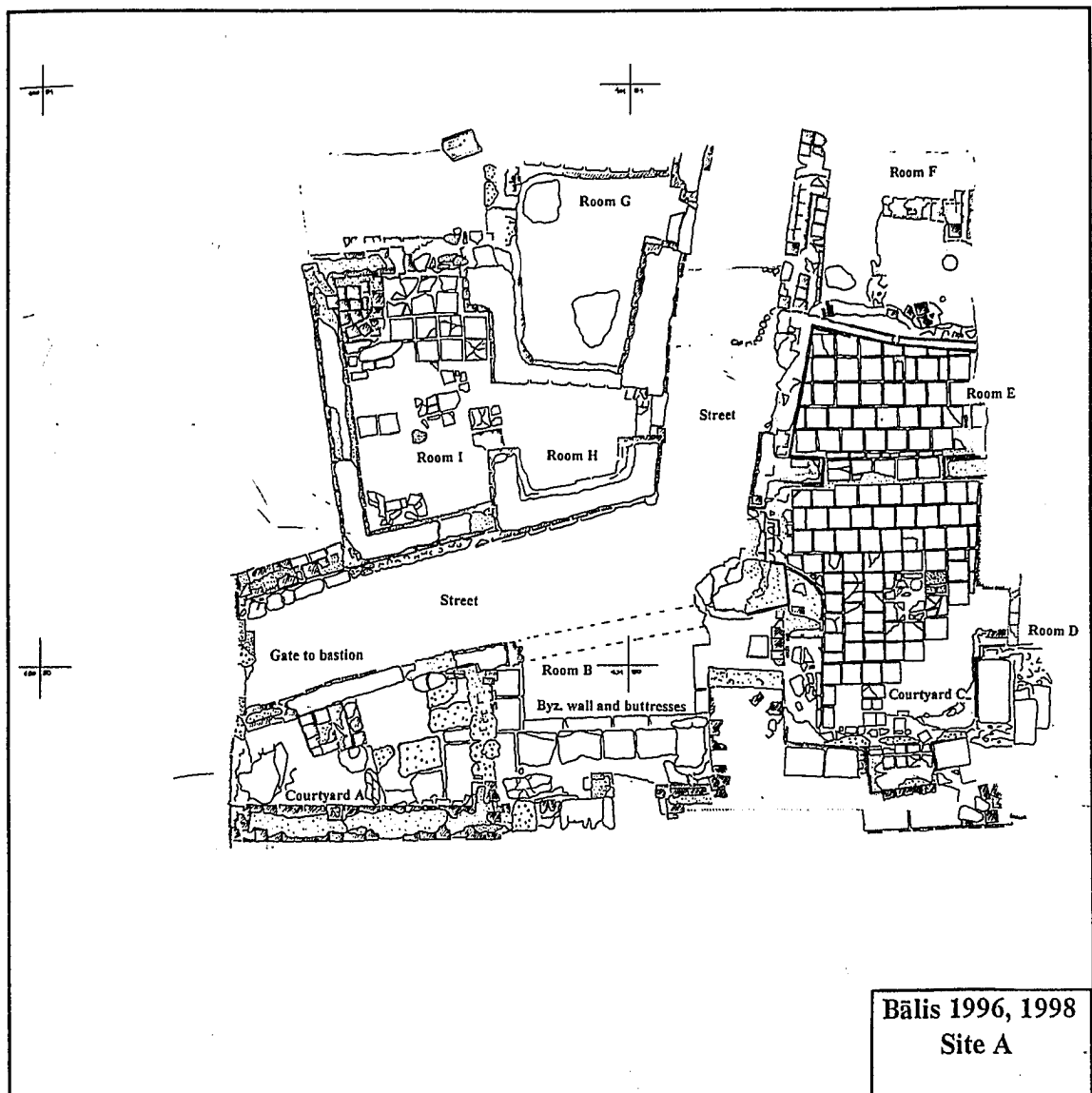


Fig. 25: Bālis. Site A, plan (scale 1:125)

Immediately next to the tower's eastern side we found that instead of using clay, the builders had covered the surface with large, but relatively thin (0.04m), irregularly cut flagstones. The slabs were part of the corbelled opening of a pit with an ellipsoid section (0.9m S-N; 0.62m E-W) situated exactly in the corner between the tower and the city-wall. The bottom of the pit reached a depth of 2.4m; 1.4m had been cut into the breccia bedrock, as we learned from chisel traces. The rest of the pit's wall up to the surface had been built up against the Byzantine limestone wall in the south using the mix of material familiar from other spots at this site: rubble, brick fragments of Byzantine origin, and whole bricks of an Islamic format laid in mortar. The fact that the lower part of the pit would hold water rules out the possibility that we are dealing with a drain. To interpret it as a cistern is possible but it is also likely to have been used for storage. Whatever the original purpose of the pit might have been, it certainly was used for garbage disposal before the site was abandoned. Large numbers of bones were recovered from the pit throughout all layers, but complete ceramic bowls, shards of different luxury wares and a metal vessel were also found.

Built against the northern wall, a stair of three steps made of bricks indicated that access to a building existed at an elevated level (pl. 53). Three postholes in the back of the stair's substructure suggest that the stairs continued as a wooden construction with their angles pointing further up. The conclusion would be that the stairs led up to a higher storey located in the Byzantine tower. A *tannūr*¹⁷ built against the steps of the staircase suggests an uncovered space. In the same vein, the profound difference in the levels taken from both the southern and the northern wall, indicate its function as a courtyard.¹⁸ The stairs were not the only way to enter the courtyard: a door in the eastern part of the northern wall opened on to the street.

3.4 The Byzantine Bastion and its Relation to Site A (pl. 55)

The stairs leading to the Byzantine bastion indicate that it was part of the Islamic settlement and possibly served, during the latest phase of Bālis, as a residential rather than a defensive structure. The mere fact that fired bricks, of a smaller size (0.25m x 0.25m) than the one used in the Byzantine period with mudbricks and fragments of Islamic pottery added, can still be seen on the surface as part of wall structures, indicates that the tower was in full use in the Islamic period. Investigation in a future campaign may clarify the time range of this usage. The fact that the former entrance from the street was blocked at a certain time suggests either a change in the way the tower was entered or that it was no longer accessible due to its state of preservation.

3.5 Room B (100/049, 101/049)

As described above, Room B occupied the space between two buttresses of the Byzantine wall. As in Courtyard A, the site had been filled with loose earth and stones up to a certain height of the wall and given a clay surface. The foundation of undressed limestone for the rising wall (made of mudbricks) was not only set in alignment with the northern wall of Room A, but was also bonded, and therefore must have been built simultaneously. Its only entrance was located to the east leading to the large tiled Courtyard C. Here, the southern wall was of much flimsier construction than the rest of the former city-wall in this square. While this room was not distinguished by any other architectural features, it yielded a number of complete vessels, among them a specimen of 13th century Raqqa-ware with underglaze painting, a monochromatic glazed spice-dish, an unglazed large amphora and a jar. Curiously enough, none of these items were found directly on the floor but in the very soft, loose soil, that had filled these rooms. Pieces of wood, partially charcoaled, indicate a wooden rack on which these ceramics might originally have been put.

3.6 Courtyard C and Room E (101/049; 101/50) (pls. 56, 57)

Both structures belonged to one house of which only Courtyard C with a central drain and an adjacent semi-open hall have been excavated. The main entrance to the courtyard was at the point where the street, coming from the north, bent west towards the bastion. Diagonally across the courtyard was a door to Room D (not excavated). Its southern doorjamb had been carved out of the limestone and plastered to form a recessed profile. The doorjamb on the opposite side was missing but had later been replaced by a simple brick wall.

¹⁷ A simple oil lamp was found put on the floor next to the *tannūr*.

above floor level, the one in the north was still standing at a height of ca. 1.8 - 2 m.

¹⁸ The original height of the southern wall was ca. 0.5 m

Besides the door to Room D, another existed between Courtyard C and Room B to the west. Both doors were blocked in a later phase by either a thin wall of bricks and rubble or, as in the case of the door leading to Room B, by a massive mudbrick bench. Courtyard C possessed a tiled floor with a drain in its center. Strewn in its corners and within the drain were large amounts of pottery fragments belonging to the group of 13th century AD molded wares.

The tiling of the courtyard was achieved with reused Byzantine bricks—with the exception of the courtyard's southern part with its small rectangular alcove in the wall, where the floor pavement was repaired with bricks of an Islamic format.

To the north, Room E was accessible through a wide opening, slightly elevated, that might have been an *īwān*. Its irregular form originates from the fact that its western and northern wall were not erected simultaneously with the tiling of the floor (again, reused Byzantine floor tiles) as they were built clearly on top of it, using it as a foundation and cutting off some of the space that had been covered by the floor in an earlier phase. We could not avoid the impression that, at an earlier phase, Room E might have had an extension further to the north, because it ends in a very flimsy wall made of mudbrick which is plastered only on its southern side. The space behind the backside of Room E, i.e. "Room F", turned out to be an empty pit with some remnants of structures which showed no connection with the building to the south. Thus, the northern wall of Room E might actually have been built against a mound of rubble in medieval times.

Having said this, it should have become clear that both C and E were part of a remodelling project probably in the late Aiyūbid period and that they represent at least a secondary state of a building that had existed at this spot prior to the present structure. As in the case of Room B, the southern half of Courtyard C was delineated by lateral walls (2.75 m apart) aligned with the underlying Byzantine substructures. Here, the walls consisted of large limestone blocks that already had lost some definition when they were included in the Islamic building. Accordingly, the later builders "mended" those portions that had broken away by adding fired bricks. At this stage, it is impossible to conclude whether these blocks were part of the original Byzantine construction and in place when they were included in a new building, or whether they were brought from somewhere else.

With the exception of the limestone blocks, the material used is of varying quality: reused Byzantine and Islamic bricks laid in regular and orderly courses appear especially in the lower courses of walls, while broken material combined with stones¹⁹ laid either in mortar or in mud created patchy looking upper courses. A conglomerate of rubble laid in mud (but coated with plaster) used only for building a pillar south of the door to the street, conveys the picture of a house that had to be rebuilt with very simple means available, after the preceding structure had fallen into disrepair.

4. The Excavation at the "Qaşr"²⁰

Besides the sites in Bālis proper, excavations were carried out approximately 2km to the

¹⁹ Even some fragments of 10th/11th century funerary stelae were included.

²⁰ For this portion of the report, an abstract submitted to me by Lennart Sundelin has been used.

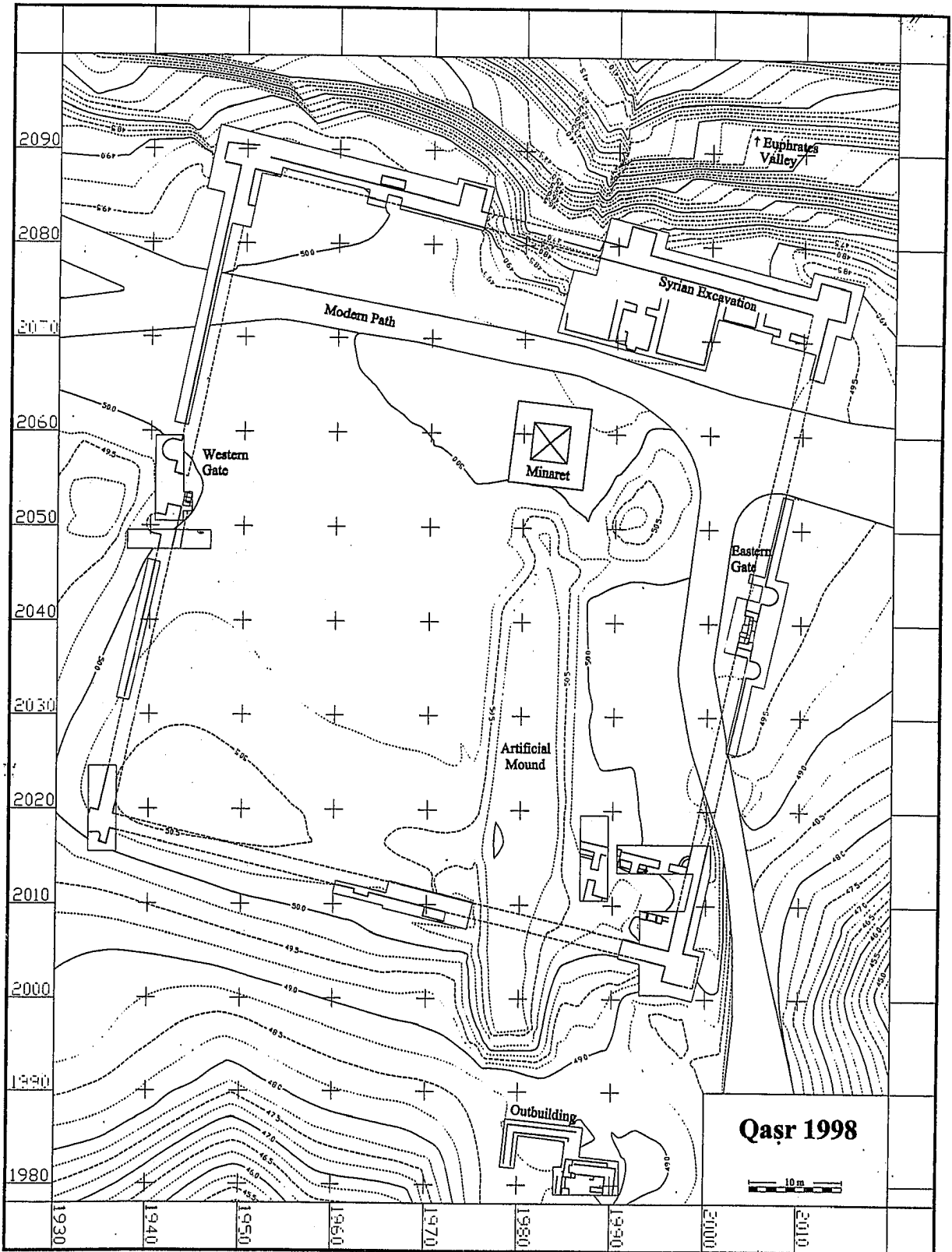


Fig. 26: Qasr. General plan (scale ca. 1:625)

south at an exposed place on the edge of the Euphrates valley, overlooking Emar and Bālis. After the Syrian Department of Antiquities had exposed wall structures here in 1993, consisting of large limestone blocks, our examination concentrated on establishing a basic idea concerning the kind of building and its dimensions.

Curiously, the site had been chosen in the 1970s as the place to re-erect the minaret of the Great Mosque of Bālis, excavated by G. Salles and G. de Lorey in 1929 (pl. 65; Golvin/Raymond 1974, 15). No information could be obtained regarding the question of why the minaret was rebuilt in such proximity to an ancient site and not elsewhere, even though it must have been obvious that this project took place on an archaeological site. As a result of the efforts to relocate the minaret, some damage was inflicted to the architectural remains of the structure we began to excavate during the summer of 1998. More recently, the drilling and terracing of a government tree-planting and forestation operation, as well as continued traffic on the road across the area have contributed more damage.

By the end of the campaign, the areas we had uncovered suggested an almost square structure of the *castrum*-type, measuring 77m x 77m (fig.26).

The *castrum* occupied a strategic position on the edge between the Syrian steppe and the river valley with a commanding view towards the east over Bālis and the Euphrates flood plains and the plain of the Syrian steppe towards the west.

Its walls were made of two parallel rows of large limestone blocks measuring 1.5m in width that were dressed only on the outside. The intermediary space was filled with rubble laid in mud. Some of the blocks measured 1.5m in length and were preserved in some spots to a height of up to 1.5m. Gaps between blocks were carefully mortared. It appears that the walls were built directly on the hard clay surface without using foundation trenches (pl. 66).²¹

Each of the four corners had a projecting square tower made of the same large limestone blocks. The northern wall, built at the edge of a steep *wadi*, was supported by two additional square buttresses.²²

Gates were found in the center of the western and the eastern sides²³ situated opposite each other. Both were flanked by semicircular towers or buttresses, but while the eastern, narrower entrance was aligned with the wall, its western counterpart was further recessed for a more dramatic effect (fig. 27; pl. 67). This main gate must have faced the road that led down the slopes of the Euphrates valley to the city of Barbalissos/Bālis. Large basalt slabs were used as thresholds²⁴ and doorpost rests—those of the western gate showing deep traces from opening the gates over a long time (pl. 68). In both gate areas, mudbrick structures of an unusual greenish color that differed considerably from the material found in the rest of the building indicate a possible remodelling of the gates at some period.

The fact that the limestone wall's elevation was more or less equal throughout the building

²¹ That these limestone courses are not the foundation, but the lower portion of the rising wall, can be seen in the gate areas in which the threshold with its traces of usage is on the same level with the first course of the wall on both of its sides.

²² Some cleaning of the southern wall suggests that its center area might have been reinforced by smaller buttresses as well.

²³ It is highly unlikely that gates also existed at the northern, inaccessible, side of the fort. In the south, on the other hand, work has not proceeded so far that the possibility of finding a third gate can be ruled out completely.

²⁴ The eastern gate has unfortunately been vandalized sometime between 1996 and 1998. The basalt threshold was ripped from its original position and broken.

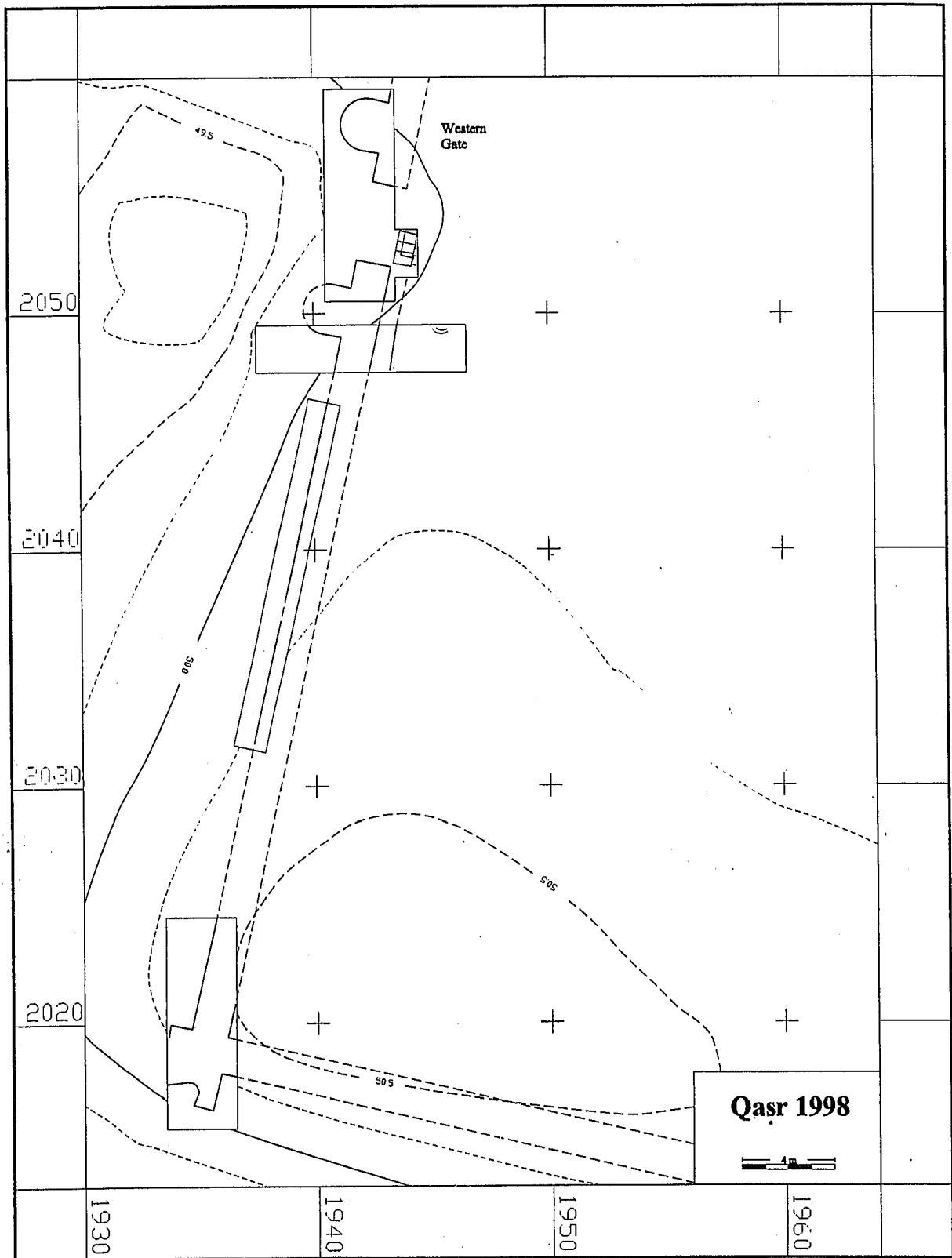


Fig. 27: Qasr. Plan of the southwestern quadrant (scale ca. 1:250)

and no larger quantities of dressed blocks were found out of context, suggest that it functioned as the lower level for a wall that once rose on top of it but has not been preserved. The assumption that this superstructure consisted of a mudbrick wall is confirmed by fallen mudbricks found singly and in clusters on both sides of the walls.

Three trenches (1990/2000; 1980/2010 and 1990/2010) which were opened inside the *castrum*'s southeastern corner revealed architectural remains of a series of two or three large rooms (figs. 29, 30; pl. 69). Using limestone blocks topped with mudbrick, their walls were built in a fashion similar to the surrounding curtain wall. They were plastered on both sides and the floors consisted of concrete. In all of these rooms, coarse installations of mudbricks and undressed stones combined with fired bricks²⁵ indicate a second phase of settlement within the building (pl. 70). Simultaneously, however, the debris contained fragments of marble plaques, painted wall plaster and roof tiles. One large piece of carved stucco decoration was found south of the western gate (pl. 73).

The Qaşr stood not as an isolated building on the ridge of the Euphrates valley: situated 20m to the south, an “outbuilding” on a podium, surrounded by a solid stone wall with steps leading up from a courtyard was found (figs. 26, 29; pl. 71), while within a radius of 1km, three smaller buildings were mapped that appear to have been built in connection with the *castrum*.

Only small amounts of pottery or artefacts were recovered from the trenches inside and outside the “Qaşr” that can be used to determine its date.²⁶ The ceramic types represented suggest a limited period of occupation in the pre-modern period, concentrated in the Late Roman/Byzantine and/or Early Islamic periods (pl. 72).²⁷

A fragment of carved stucco, probably part of a corner wall-decoration confirms that timeframe (pl. 73). On one side, a series of incised, concentric “V”s has been preserved, bordered by a zig-zag pattern, and attached at an angle of 90° is a frieze consisting of a continuous three-leaf pattern surrounded by a pearl border. The “three-leaf” motive as part of a repetitive pattern plays an important role in the carved stucco decoration of the late Sasanian (Kröger 1982, pls. 65, 3; 85, 4; 89,7; 9, 4.) and Umayyad²⁸ periods. Together with the building's characteristic form, this additional evidence indicates a tentative dating of the Qaşr in the Umayyad period.

Several probes dug inside and outside the *castrum* below the foundation level of the walls or the floor level of the rooms have so far produced no evidence of any earlier settlement there. The single coin found was too corroded to provide datable evidence.

5. The Ceramics ²⁹

The pottery assemblages from sites A, B, C and the Qaşr recovered during the 1996 and

²⁵ These large bricks of oblong format can be compared to those found at Emar exclusively in conjunction with Byzantine tomb covers. The occurrence of this kind of brick at the “Qaşr” points to their secondary use.

²⁶ Relatively large amounts of glass fragments were found in the so-called “outbuilding” mentioned above.

²⁷ Among them fragments of red wares with white *engobe*, typical for the early Byzantine period. A complete bowl of a greyish buff with incisions on its flat rim can be compared with a ware dated by K. Bartl as Late Roman/Early Byzantine (Bartl 1996, fig.2, no. 7).

²⁸ Hamilton 1959, pls. XXXIV, 3; L, 1; LIX, 14 (1); LXVIII, 1,2. The concentric “V” appears in late Sasanian borders (Kröger 1982, pls. 63,1-2; 64, 1; 65, 2; 85, 3), but might also represent the abstract form of the heart-shaped motive so commonly used as a border decoration in Sasanian and Umayyad stuccos alike; for example Kröger 1982, pls. 36, 6; 46, 5; 51, 2; 65, 5-7 and Hamilton 1959, pl. XXXII-XXXIII; XXXIX, 5; XLVII; XLVIII.

²⁹ This part of the report is based on a summary submitted by Stephennie Mulder, who is also preparing the final publication of our ceramic finds.

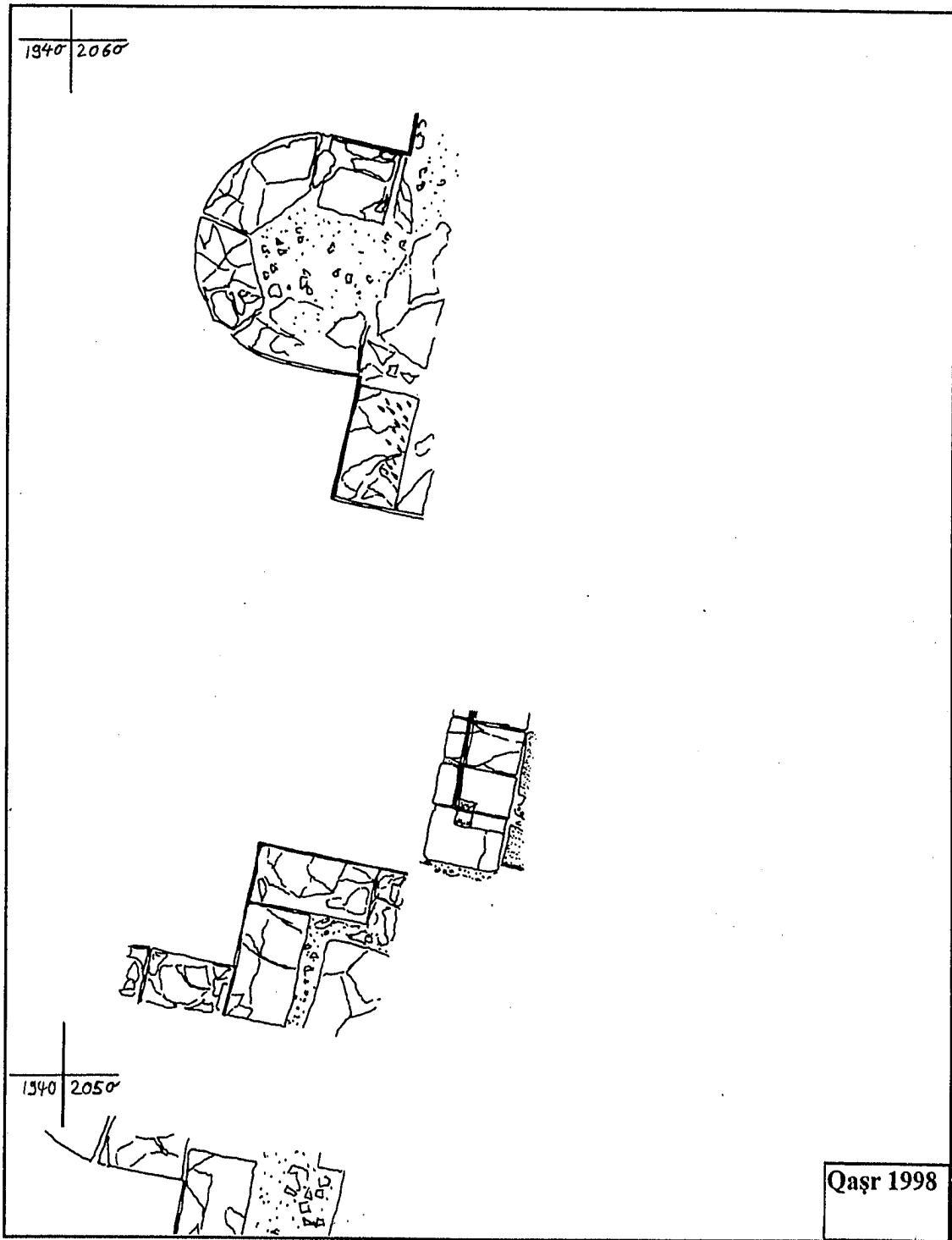


Fig. 28: Qasr. Stone-to-stone drawing of the western gate (scale 1:100)

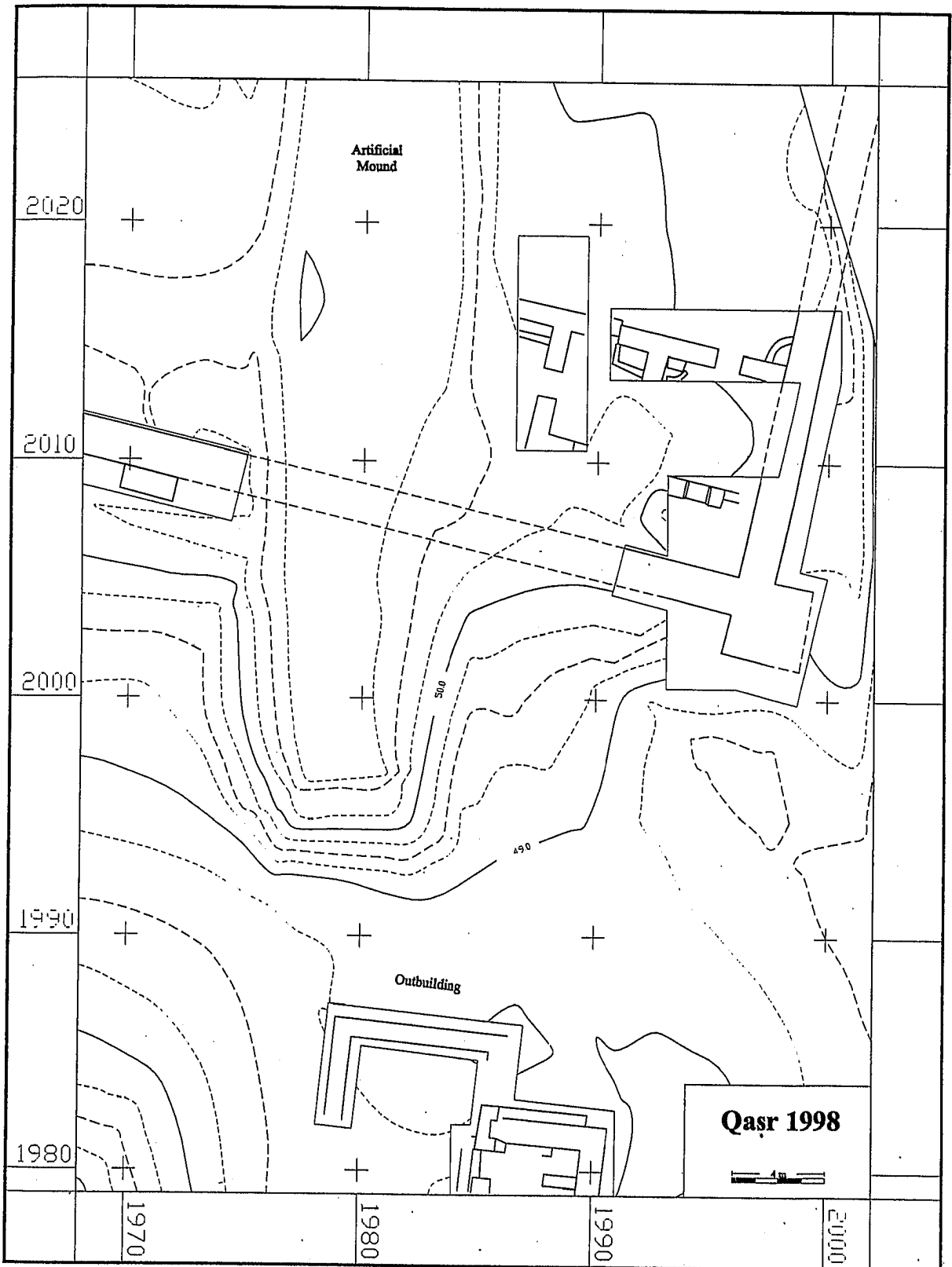


Fig. 29: Qasr. Plan of the southeastern quadrant (scale ca. 1:250)

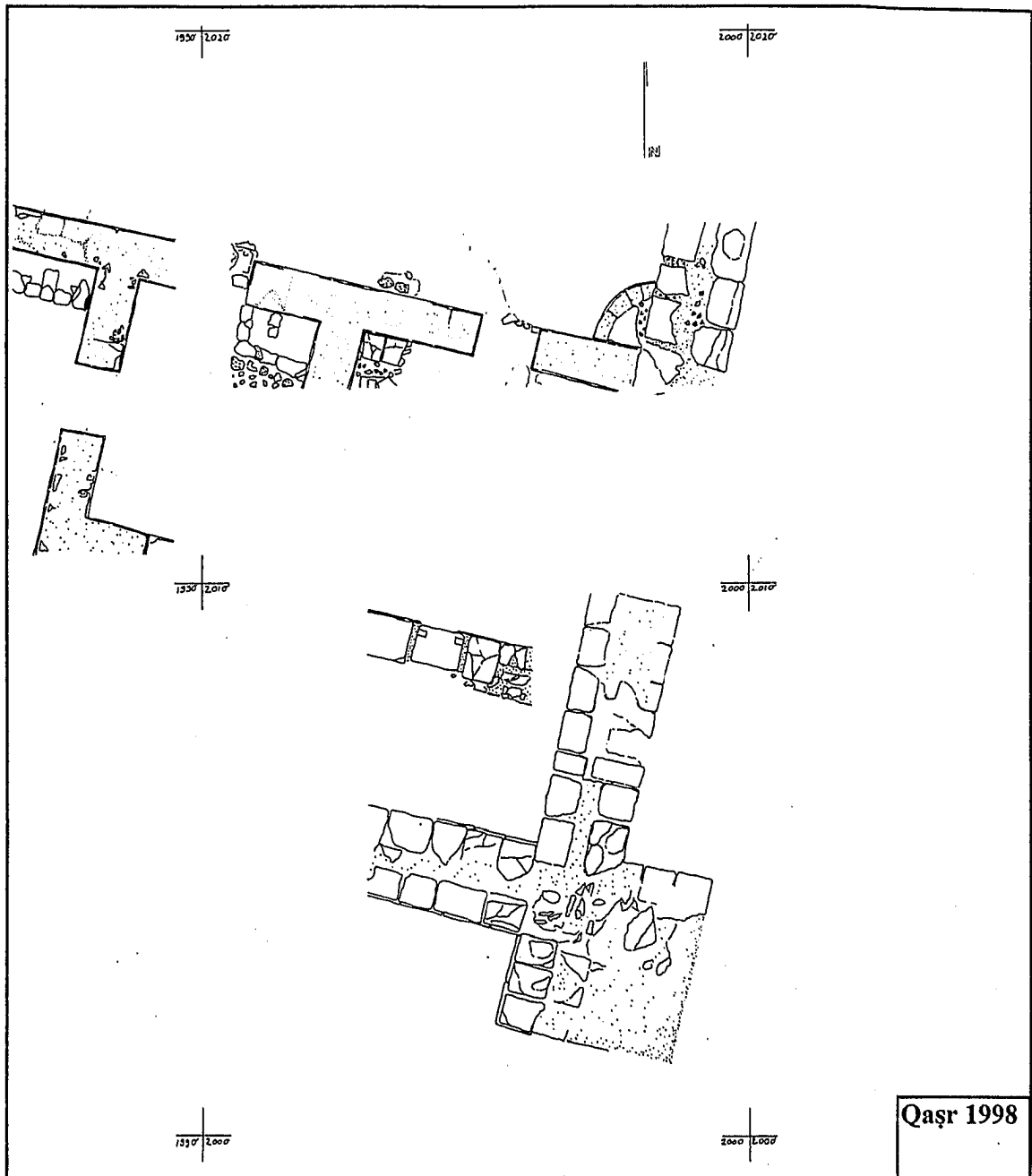


Fig. 30: Qaṣr. Stone-to-stone drawing of the southeastern quadrant (scale ca 1:100)

1998 campaigns include ca. 16,000 shards and indicate a range from the 9th/10th to the 12th/13th centuries.

In the case of the excavation at Site B and especially Site C—the results of which are currently being evaluated and will be published in a separate report—we hope to be able to assign specific wares to the various levels found.

Most wares from Bālis are typical for northern Syria and offer direct comparisons to sites such as Ḥamā, Raqqā, Qaṣr al-Ḥayr al-Sharqī, Qalʿāt Jaʿbar, and recently surveyed sites in the Balikh valley.

The following preliminary distinction between ware groups can be established:

5.1 Ware A: Buff colored unglazed Wares

Unglazed wares (cf. ware D) constituted about 70% of all ceramic specimens found at Bālis during both campaigns. Among them, buff-colored wares with mineral or chaff temper formed the largest group. Naturally, a large variety of forms occurred: among them large, thick- and straight-walled basins with a ledge or club rim, often decorated with wavy comb or incised patterns and/or crosshatchings. This type is known from the Umayyad period in Syria (Grabar, 1978, types A-3, A-5) and 9th century 'Abbāsīd Samarra (Northedge/Falkner 1987, 12.55), and is also common in the Balīkh valley during the medieval period (Bartl 1994, pls. 1-4, 13.9). A date between the 9th/10th and the 13th century for this type in Bālis is suggested by stratified finds. Other types of this waregroup were large storage vessels and amphoras with two or three handles. Smaller types included bowls with straight or curved walls and ringbases. Finally, a significantly large number of shards were identified as “eggshell”-ware, from small pitchers, and possibly jars, with a high ringbase and tall open necks, some of them showing remnants of strainers. The form of this type, though not of the same fine quality can be compared with finds from Ḥamā (Poulsen 1957, figs. 991, 993). The version of these vessels with their strainers is surprisingly close to Ṭūlūnid and Fāṭimid examples found in 9th-11th century levels at Fuṣṭāṭ.³⁰

5.2 Ware B: Molded Ware

Nearly 600 shards of molded wares were excavated at sites A, B, and C or were recovered from the debris in the two trenches dug perpendicular to the city-wall. The overwhelming majority of the shards belonging to this group, along with a substantial number of complete molds or fragments of molds, came from Site A and comprised both bottles and pitchers as well as “pilgrim flasks.” Decorative motives on these vessels covered a wide range, beginning with simple tear-shaped patterns similar to the ones found on medieval Iranian metal ware,³¹ to the representation of various animals and calligraphic themes (pl. 74).

One of the molds that could be reconstructed from a number of fragments bore in its center the incised inscription *naqsh Ibrāhīm al-Ḥalabī* “design of Ibrāhīm al-Ḥalabī” (pl. 75). As this portion of the molded design would have been removed and replaced in the process of assembling the vessel by the neck, the incised name could be interpreted either as a potter’s mark ensuring the compensation of the artisan or the signature of the mold’s actual designer. While we have to assume that original molds were made from different materials, for instance wood, the existence of “authorized” copies of such a mold raises a number of interesting questions in regard to dissemination of both these objects and their patterns in medieval Syria. The combined evidence of a large number of molds together with molded wares in a specific area suggests the existence of a workshop or storage facility.

A sequence of at least two phases (8th-10th century AD³² and 12th/13th century AD) during

³⁰ Scanlon 1974, pls. XVIIIb, c; XXVI, c, d; XXVII, a, b and Scanlon 1986, figs. 147-152. None of the strainers from Bālis, however, can be compared with the artistic examples from Fuṣṭāṭ decorated with animals, calligraphy or geometric patterns.

³¹ Similar molds were also found by the French expedition (Bernus-Taylor 1993, 482, nos. 446, 447).

³² A large number of shards with impressed lozenges and concentric circles were found in levels I and II of Site C. For similar material cf. Scanlon 1974, pl. XVIIc.

which molded wares were used or produced at Bālis could be established from the stratified context.

5.3 Ware C: Barbotine Ceramics

Sites A and B yielded fragments of barbotine ware, even though their number was insignificant in comparison with most other wares recorded from these sites. Barbotine ware occurred in the form of tall, voluminous three-handled amphoras with large open rims. In addition to barbotine, the rich decoration of these vessels included incised patterns, molded medallions inlaid with fragments of green or turquoise-glazed wares or broken blue glass beads. The same vessel was provided with “turban”-thumbrests (pls. 76. 77).

5.4 Ware D: Common Red Ware

Ware D designated bowls and pitchers of forms similar to ware A. However, it was characterized by a red-bodied or red-faced ware.

5.5 Ware E: Cooking-pot Ware (brittle-ware)

So-called cooking-pot or “brittle-ware,” with a hard, coarse, mineral-tempered, dark-red to black body was produced in Greater Syria from the Roman period. At Bālis it was found in all Islamic levels, especially in squares 100/50 and 102/62, comprising about 5% of the total ceramic count. This ware is represented predominantly by a round-bodied pot with a flat base and inward-bent, neckless rims. Its triangular and flat handles or—as in a few cases—looped handles attached vertically combined with rocker patterns have been recorded as early as in 9th/10th century ^cAbbāsīd contexts but continue in Bālis much later.³³ Several shards were found featuring a semi-transparent, green glaze at the inside close to the base.

5.6 Ware F: Fine Red Ware

A group of medium-sized bowls with rounded or straight body, flat turned-out rims and flattened ring bases was designated ware F. Its fabric is composed of a fine clay lacking the coarse sand temper of ware E. Rather infrequently, the majority of its fragments had a transparent glaze with an underglaze slip-painted pattern of geometric designs in white or yellow. While shards belonging to this ware were collected on the surface, others were recovered simultaneously from the lowest levels of the trench in 102/60 (Site C) possibly to be associated with the 9th/10th centuries. The shards from this particular site exhibited bright yellow and green inglaze-painted designs.

5.7 Ware G and H: Monochrome Turquoise and Green Glazed Wares

Both groups of wares used clay-based and mineral-tempered material resulting in buff-colored bodies similar to ware A, even though reddish bodies reminiscent of ware D were found as well. As a rule of thumb, smaller vessels such as bowls and pitchers were made of finer clay and received a brilliant semi-transparent glaze with colors ranging from turquoise blue to deep green. Larger bowls and storage jars on the other hand generally had a rougher fabric, inclusions

³³ Tell Sheikh Ḥasan (Bartl 1994, fig.2) and Samarra (Northedge 1987, fig.44).

of sand and small pebbles and a glaze that often exhibited a greyish-opaque quality with a rough, bubbly surface due to an unsuccessful firing process.

5.8 Ware I: Polychrome Glazed Wares (Splash and *Sgraffito* Wares)

Polychrome glazed wares accounted for nearly 8% of the total ceramic count of the 1998 campaign. Using red or buff-colored bodies for bowls and dishes, splash-wares with yellow-green-brown or yellow-green-aubergine coloring—known from the Samarra horizon (Sarre 1925, 68ff.; pls. 29-30)—were found along with fragments belonging to the later group of *sgraffito*-wares (Northedge 1985, 124). The patterns of *sgraffito*-wares can be divided into two groups: the first included simple series of loops or curling lines incised in the cavetto while the second consisted of floriated *Kūfī* or imitative varieties thereof. *Sgraffito* technique occurs almost exclusively in conjunction with smaller or medium-sized bowls with curving walls, straight rims, and high ring bases.

5.9 Ware J: Luxury Wares (Polychrome Glazed Frit Wares) (pls. 78-82)

At less than 5% of the ceramic finds at Bālis, ware J comprised monochrome turquoise, cobalt-blue, purplish-black, and aubergine glazed wares, as well as black-underglaze (semi-transparent turquoise) painted and lustre-painted wares with a quartz frit or stone-paste body.

While the center of production responsible for this kind of ceramics was situated in Raqqa after the 12th century³⁴, our collections yielded wasters, slacks, and potter's triangles suggesting that Bālis functioned during this period as a minor production site of luxury (and molded) wares as well. A number of forms were identified, the most common being bowls with straight, thin walls. Curved and carinated walls were also frequent forms, as was a variety with out-turned and flat rims. Nearly all examples had high ring bases, and several could be identified as "Tall Minis Ware," as their foot was cut sharply so that the bowl rested on the sharp edge of the base.

Additional forms included condiment dishes with seven round compartments,³⁵ and part of a ceramic tray or stove with a rabbit painted in coppery brown lustre on a cobalt-blue glaze. Other examples with lustre-painting ranged from gold and copper-brown to red.

Three shards of Chinese imports were also identified: a small shard of celadon from area 101/50 and three larger shards of opacified white and green glazed porcelain, possibly datable to the Song dynasty.

6. Coins and Metal Objects, Glass

Approximately forty bronze coins were recovered during the excavation from Sites A, B, C, and the Qaşr. The overwhelming majority of them was in an advanced state of corrosion, and their images and legends were effaced, which made any identification at first sight problematic or impossible. Further examination of the coins will require cleaning, a task which will be undertaken in the near future. However, there is no indication that the canon of coins established for the Roman/Byzantine and Islamic period of Barbalissos/Bālis more than twenty years ago

³⁴ For a more recent discussion of Syrian fine wares, cf. Tonghini 1994, 249ff.

characteristic of ware H had been found earlier in 1996 in Room B at Site A.

³⁵ An almost complete dish of that kind with a type of finish

(Hennequin /al-ʿUsh 1978) will receive significant additions.

A large percentage of coins found at Sites A and B (14) can be dated to the Byzantine period, with one possible match with type 127 in the catalogue of Gilles Hennequin and Abū l-Faraj al-ʿUsh (Hennequin /al-ʿUsh 1978: 13). All of these coins were found in either filling material or debris. As indicated above, moving large amounts of soil for the terracing project at the western and southern city-wall in the later phase of Bālis might be responsible for this kind of evidence. When traces were distinguishable on Islamic coins, they could be compared to the Aiyūbid star-pattern on the obverse—which also formed the majority of coins recorded by Hennequin/al-ʿUsh. A *fals* of the Rūmsaljuq sultan ʿIzz al-Dīn Arslan II b. Masʿūd (551/1156-588/1192) was found on the floor of Room F in Site A (Mitchiner 1977, type 954). This space had been used as a dumping ground and filled with debris possibly prior to the rebuilding of Courtyard C and Room E and therefore might provide a *terminus post quem* for this latest level of building activity in the southwest of Bālis.

Among the metal objects found, most—literally dozens of them—were nails and bolts. Some were still in pieces of wood, which, however, was too brittle to be preserved. To judge from this evidence, it seems likely that the buildings of Site A and B had flat roofs supported by beams, for which these nails were used. Other metal objects included domestic items as spatulas, a pair of scissors, a belt buckle, stirrups, knife blades, some arrow tips, and a bronze bucket.

Glass finds were ubiquitous and consisted of fragments of small flasks or bowls. The only complete object found was a glass pitcher with trailed blue thread decoration that had been hidden under the pavement in a corner of a courtyard of Site B (pl. 83).

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Captions of figures

- Fig. 1: Emar. Western part, topographic plan
- Fig. 2: Emar. Temple area, schematic plan
- Fig. 3: Emar. Temple area, section A-B (west-east)
- Fig. 4: Emar. Temple of Ba'al, square 060/052, trench FS 22, section C-D (east-west)
- Fig. 5: Emar. Temple of Ba'al, square 061/051, trench FS 15, section E-F (south-north)
- Fig. 6: Emar. Temple area, gate-lion from square 063/051, side view (scale 1:9)
- Fig. 7: Emar. Square 063/050, plan of the Early Bronze Age structures
- Fig. 8: Emar. Square 063/050, schematic section
- Fig. 9: Emar. Square 063/050, pottery from locus 7
- Fig. 10: Emar. Square 063/050, pottery from locus 51 & 5b
- Fig. 11: Emar. Eastern part, topographic plan
- Fig. 12: Emar. Upper town, plan of the excavated areas
- Fig. 13: Emar. Sounding in 074/052, section at the north baulk
- Fig. 14: Emar. Square 075/053-055, section south-north
- Fig. 15: Emar. Sounding in 075/053, section at the east baulk
- Fig. 16: Emar. Sounding in 075/054, section at 755,00 E
- Fig. 17: Emar. Sounding in 075/054, section A-B (17a) and C-D (17b)
- Fig. 18: Emar. Sounding in 075/054, pottery from locus 46
- Fig. 19: Emar. Sounding in 075/054, pottery from locus 47
- Fig. 20: Emar. Lower town, squares 082-084/048-049, schematic plan
- Fig. 21: Emar. Lower town, square 083/049, trench FS 15, section north-south
- Fig. 22: Emar. Square 084/048, section north-south
- Fig. 23: Emar. Sealings on a stopper, EM 96:21 (scale 1:1)
- Fig. 24: Bālis. General topographic plan
- Fig. 25: Bālis. Site A, plan (scale 1:125)
- Fig. 26: Qaṣr. General plan (scale ca. 1:625)
- Fig. 27: Qaṣr. Plan of the southwestern quadrant (scale 1:250)
- Fig. 28: Qaṣr. Stone-to-stone drawing of the western gate (scale 1:100)
- Fig. 29: Qaṣr. Plan of the southeastern quadrant (scale ca. 1:250)
- Fig. 30: Qaṣr. Stone-to-stone drawing of the southeastern quadrant (scale ca. 1:100)

Captions of plates (plates in colour on the CD supplement)

- Plate 1: Emar and Bālis seen from the south.
- Plate 2: Emar. The main hill with the temple area, from the southwest.
- Plate 3: Emar. The main hill with the temple area, from the south.
- Plate 4: Emar, temple of Ba'al 1998. Building remains of the later phase, from the northwest.
- Plate 5: Emar, temple of Ba'al 1998. Building remains of the later phase, from the southeast.
- Plate 6: Emar, temple of Ba'al 1998. Steps leading to the entrance of the later phase, from the east.
- Plate 7: Emar, temple of Ba'al 1998. View from the lower courtyard up the stairs and towards the entrance of the temple from the east.

- Plate 8:* Emar, temple of Ba'al 1998. Stairs, seen from the south.
- Plate 9:* Emar, temple of Ba'al 1996. Lower courtyard with paved floor and with the torso of a lion, as found (square 063/051). The graves date to the Byzantine era.
- Plate 10:* Emar, temple area. Torso of a lion, seen obliquely from the side.
- Plate 11:* Emar, temple area. Torso of a lion, seen from the front.
- Plate 12:* Emar, temple area. Foundation of the temenos wall with tower (?) from the west. At the right edge of the plate may be seen the lime-floor of the lower courtyard.
- Plate 13:* Emar, temple area. The edge of the profile running from left below to right above, at 505.00 m north, separates the lime-floor of the lower courtyard (LBA) from the floor of building phase 4 of the Early Bronze Age. Seen from the northeast.
- Plate 14:* Emar, temple area. View of the floor of building phase 4 of the Early Bronze Age and of the profile at 505.00m north with the later layers up to the lime-floor of the lower courtyard (LBA).
- Plate 15:* Emar, square 063/050. Structures of building phases 3 (stone-foundation to the right) and 4 of the Early Bronze Age, seen from the west.
- Plate 16:* Emar, square 063/050. Structures of building phase 4 of the Early Bronze Age, seen from the west.
- Plate 17:* Emar, square 063/050. Pottery from locus 6.
- Plate 18:* Emar, square 063/050. Pottery from locus 6.
- Plate 19:* Emar, square 063/050. Pottery from locus 6.
- Plate 20:* Emar, square 063/050. Bowl from a silo of building phase 5 of the Early Bronze Age (EM 96:132).
- Plate 21:* Emar, square 063/050. Installations of building phase 4 of the Early Bronze Age, from the south.
- Plate 22:* Emar, Upper Town. Late Bronze Age dwelling-houses in square 075/052, from the east.
- Plate 23:* Emar, Upper Town. Late Bronze Age foundations in square 075/053, from the south.
- Plate 24:* Emar, Upper Town. Late Bronze Age foundations in square 075/053, from the west.
- Plate 25:* Emar, Upper Town. Late Bronze Age foundations in square 075/053, from the east.
- Plate 26:* Emar, Upper Town. Late Bronze Age foundations in square 075/054, from the east.
- Plate 27:* Emar, Upper Town. Late Bronze Age foundations in square 075/054, from the south.
- Plate 28:* Emar, Upper Town. Street with Middle Bronze Age structures in squares 075- 076/054-055. View from the northwest.
- Plate 29:* Emar, Upper Town. Middle Bronze Age structures on both sides of the street in square 075/054, from the west.
- Plate 30:* Emar, Upper Town. Sounding in square 075/054, sunk from a room of the later Middle Bronze Age down into layers of the early Middle Bronze Age. Seen from the south.
- Plate 31:* Emar, Upper Town. Sounding in square 075/054. General view from the west.
- Plate 32:* Emar, Upper Town. Sounding in square 075/054, floor of the early Middle Bronze Age (locus 48), seen from the east.
- Plate 33:* Emar, Upper Town. View from the west across the Late Bronze Age walls towards the Middle Bronze Age street in square 075/055.
- Plate 34:* Emar, Upper Town. Middle Bronze Age to Late Bronze Age walls east of the street in square 075/055, seen from the north.
- Plate 35:* Emar, Upper Town. Detail of the Late Bronze Age structures in square 075/055, seen from the west.
- Plate 36:* Emar, Lower Town. Late Bronze Age occupation in square 082/049, seen from the south.
- Plate 37:* Emar, Lower Town. Late Bronze Age occupation in square 083/049, seen from the east.
- Plate 38:* Emar, Lower Town. Late Bronze Age foundation-wall in square 085/049 above an ashy layer of earlier LBA, seen from the south.
- Plate 39:* Emar, Lower Town. Late Bronze Age occupation in square 085/049, seen from the north.
- Plate 40:* Emar, Lower Town. Town wall of MBA/LBA in square 085/048 with Late Bronze Age occupation on top, seen from the south.
- Plate 41:* Emar. Sealing on a stopper, inventory no. EM 96:21, from the surface in square 079/048.
- Plate 42:* Emar. Terracotta figurine, inventory no. EM 98:11, from square 075/055 locus 4.
- Plate 43:* Emar. Terracotta figurine, inventory no. EM 98:4, surface find.
- Plate 44:* Emar. Terracotta figurine, inventory no. EM 98:35, from the surface of locus 6 in square 060/052, temple of Ba'al.
- Plate 45:* Emar. Terracotta figurine, inventory no. EM 98:50, from square 076/055 locus 1.

- Plate 46:* Emar. Fibula, inventory no. EM 96:138, from square 064/050, tomb 2, Byzantine.
- Plate 47:* Emar. Necklace of glass and frit pearls and a pendant, inventory no. EM 96:62c, from square 063/051 tomb 7, Byzantine.
- Plate 48:* Bālis. Byzantine bastion and Site A from the south.
- Plate 49:* Bālis. General view from from the Byzantine bastion towards northeast.
- Plate 50:* Bālis. Site A, general view towards the east.
- Plate 51:* Bālis. Trench in 102/049 exposing the Byzantine-Islamic city-wall.
- Plate 52:* Bālis. Site A, Byzantine city-wall and buttress (right).
- Plate 53:* Bālis. Site A, stairs and tannur in Courtyard A. In the background, blocked door of the Byzantine bastion.
- Plate 54:* Bālis. Site A, medieval wall sitting on top of Byzantine city-wall in Courtyard A.
- Plate 55:* Bālis. Site A, the Byzantine bastion and abutting Islamic structures of the 13th century.
- Plate 56:* Bālis. Site A, Courtyard C, and Room E towards southeast.
- Plate 57:* Bālis. Site A, rooms E and F towards west.
- Plate 58:* Bālis. Site B at the western city-wall.
- Plate 59:* Bālis. Site B, general view towards west.
- Plate 60:* Bālis. Site B, sounding east of the city-wall. Two floor- or paved street-levels of pre- Aiyūbid period.
- Plate 61:* Bālis. Site C, general view towards east.
- Plate 62:* Bālis. Site C, wall of level II in foreground, floor of level III (above). Drain and floor of level IV (top).
- Plate 63:* Bālis. Site C, plastered mudbrick structure of level I. Upper right: floor of level III.
- Plate 64:* Bālis. Site C, ash layer over level IV.
- Plate 65:* The minaret of the great mosque in its new location seen from Bālis.
- Plate 66:* Bālis/Qaṣr. Enclosure wall and southwestern tower (trench in 1930/2010 and 1930/2020).
- Plate 67:* Bālis/Qaṣr. The western gate (trench in 1940/2050).
- Plate 68:* Bālis/Qaṣr. Threshold of the western gate.
- Plate 69:* Bālis/Qaṣr. Southeastern quadrant of the castrum.
- Plate 70:* Bālis/Qaṣr. Door between two rooms with secondary installation (trench in 1980/2010).
- Plate 71:* Bālis/Qaṣr. "Outbuilding" in area 1980/1980 towards the east.
- Plate 72:* Bālis/Qaṣr. Bowl, red body, greyish-buff engobe.
- Plate 73:* Bālis/Qaṣr. Fragment of stucco wall decoration from trench in 1930/2030.
- Plate 74:* Bālis. Molded ware from Site A.
- Plate 75:* Bālis. Mold with engraved inscription: naqsh Ibrāhīm al Ḥalabī from Site A.
- Plate 76:* Bālis. Amphora with barbotine decoration from Site A, Room F.
- Plate 77:* Bālis. Fragment of an amphora with barbotine decoration.
- Plate 78:* Bālis. Bowl, fritware with painted decoration under semi-transparent turquoise glaze from Site A, Room B.
- Plate 79:* Bālis. Bowl, fritware with painted decoration under semi-transparent turquoise glaze from Site A, Room B.
- Plate 80:* Bālis. Lid, fritware with lustre painted decoration from Site B, loc. 1.
- Plate 81:* Bālis. Bowl, fritware with lustre and cobalt painted decoration from Site A, Room B.
- Plate 82:* Bālis. Lustre painted rabbit on cobalt-blue glazed tile from Site C.
- Plate 83:* Bālis. Glass pitcher with trailed thread decoration from Site B, loc. 1.

(Plans and sections in colour)

- Plate 84:* Emar. Western part, topographic plan.
- Plate 85:* Emar. Eastern part, topographic plan.
- Plate 86:* Bālis. General topographic plan.
- Plate 87:* Emar. Temple area, schematic plan.
- Plate 88:* Emar. Temple area, schematic section A – B.
- Plate 89:* Emar. Upper Town, plan of the excavated areas.
- Plate 90:* Emar. Lower Town, square 083/049, trench FS 15, section north-south.