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The Tell el-Burak Archaeological Project

A Preliminary Report on the 2001 Season

UWE FINKBEINER and HÉLÈNE SADER

With contributions by INGRID GAMER-WALLERT, JENS KAMLAH,
RANIA KIRREH and MARTIN MAINBERGER

This is a preliminary report on the first excavation season on Tell Burak, which took place during the month of September 2001. Two excavation areas and a step trench were opened. On the Tell summit, remains of an Ottoman house partly covered a large mud-brick fortress. This impressive building of which mainly substructures survived, consists of a central courtyard surrounded by rows of rectangular rooms with protruding square towers at the corners. A pebble and red earth packing was poured against its walls and covered all the slopes of the Tell like a sort of glacis, as attested by the 50 m trench which was tested on the southern slope. Two successive but badly preserved city walls were uncovered at the foot of the mound. A structure that seems to be a gate was also found. Fortress and city walls cannot be dated with certainty but a Late Iron Age date is suggested.

The Tell el-Burak Archaeological Project is a joint venture of the American University of Beirut, the German Archaeological Institute, Berlin, and the University of Tübingen. The dig permit was granted by the Lebanese government on August 2, 2001, for a period of three years (Decree No.11) and the Directorate General of Antiquities issued a Cahier de Charges on August 31, 2001, allowing the beginning of the excavations.

The first season was funded by the Gerda Henkel Foundation, the German Archaeological Institute, and the American University of Beirut (University Research Board and Hewlett grant). Work began on September 1, 2001, under the direction of Uwe Finkbeiner (Tübingen University) and Hélène Sader (American University of Beirut) and lasted until September 29, 2001. Dr. Jens Kamlah (Kiel

University), Dr. Ariel Bagg (FU Berlin), Dr. Brigitte Finkbeiner, Rania B. Kirreh M.A. and Can Gündem (Tübingen University), Raphaela Heitmann M.A. (Museum of Near Eastern Archaeology, Berlin), Dirk Wicke M.A. (Münster University), Linda Kurzweil (Berlin), photographer, Dipl. Ing. Dieter Müller (Stuttgart), surveyor, and seven archaeology students, Katar Abed, Canan Cakirlar, Carene El-Chawa, Pia Haddad, Andreas Kropp, Elisa Rossberger, and Lana Shehade, actively participated in the excavations.

Concerning work organization, two main excavation areas were opened: one on the tell summit and a step-trench on the southern slope of the Tell (Fig. 3). Two archaeological teams, one supervised by Jens Kamlah and the other by Dirk Wicke and Raphaela Heitmann carried excavation

on the Tell summit and one supervised by Ariel Bagg was in charge of the test trench. Can Gündem and Canan Cakirlar collected and processed the bone material. Brigitte Finkbeiner was in charge of the small finds and Rania Kirreh of the pottery. Palaeobotanical samples were collected by flotation. Earth, plaster and ash samples were sent to the Geology Department at AUB for analysis.

From September 3 to September 10, 2001, the German Archaeological Institute team under the direction of Dr. Margarete van Ess undertook an archaeological marine survey along the coast of Lebanon opposite Tell el-Burak. The survey permit (September 1, 2001; registration No. 3254) was granted by the Director General of Antiquities and a special Cahier de Charges (Registration No. 3253) was issued to allow the beginning of the operations. The survey was conducted by Dr. Martin Mainberger, a professional marine archaeologist, assisted by Can Gündem and Lebanese divers (see below). This operation was funded by the German Archaeological Institute.

We would like to extend our warm thanks to Mr. Frédéric Husseini, Director General of Antiquities, for supporting our project and to the representatives of the Directorate General of Antiquities, archaeologists Bahija Trabulsi and Dalida Shameseddin, and Mr. Sami Kawkabani for their cooperation. Our deep gratitude also goes to Parliament Member Bahia Hariri, who kindly gave us permission to use a house belonging to her family in the Tell vicinity as a storage and working space during the excavations.

1. Introduction

1.1. The site: Location and Previous work

Tell el-Burak lies on the shore of Addusiyye, a small village between Zahrani and Sarafand (see Lebanon map 1/20 000). It is ca. 19 m. high and measures approximately 150 m x 120 m at its base (Fig. 2). The site is surrounded to the north, east and south by vast private plantations. Due to advanced erosion, its western slope reaches today the edge of the water and is threatened by further destruction. In the vicinity are water springs which

are held in two cisterns, one pentagonal and one rectangular (see cadastral map, Fig. 1), similar to those of Ras el Ayn. These cisterns, *Burak* or *Bräk* in Arabic, gave the Tell its modern name. Both Tell and cisterns were mentioned by XIXth c. travelers like Thomson (1864: 142), Renan (1864: 524-525), and Van de Velde (1866: 76), to name but a few. Some, like Renan (1864: 524-525) and Auberive (1861: 187) refer to an aqueduct, which may be hiding under the modern irrigation canal departing from the pentagonal cistern. The existence of this aqueduct was not further investigated during this first excavation season but the ancient ashlar blocks, which can be seen at some spots under the modern irrigation canal, clearly betray the existence of an older structure. The example of the aqueducts departing from the Ras al Ayn cisterns, which are also running under modern irrigation canals, supports this assumption. No ancient structure or ruin is mentioned to have stood on the Tell. The Baedeker guide, who never fails to note ancient remains, simply mention «...Tell und Chän el-Buräk mit schöner Quelle und Gärten» (1910: 254) without further details. This reference also suggests that the caravanserai stood near and not on the Tell.

Because of its well-protected location and given the fact that it is a state property, the Tell did not suffer from major looting or destruction through building or agricultural activity during the Lebanese civil war. However, local militias, and possibly also clandestine diggers, cut trenches in the northern and southern slopes. Around the tell summit, several large holes were dug and they were first assumed to be areas excavated by the Department of Antiquities archaeologist, Ibrahim Kawkabani. The Tell was indeed surveyed by the Department of Antiquities in the early 1960s and expropriated in 1966 (Expropriation decree No. 4392, April 2, 1966; Addusiyye parcel No. 49). Upon our first visit to the site, Department employees informed us that Kawkabani worked there, implying that he has conducted excavations (Sader 1997: 370). Before planning our topographical survey in 1997, we undertook some preliminary research in order to collect as much information and documentation as possible concerning Tell el-Burak and previous work there. The Directorate General of Antiquities had neither plans, nor photographs, nor any other

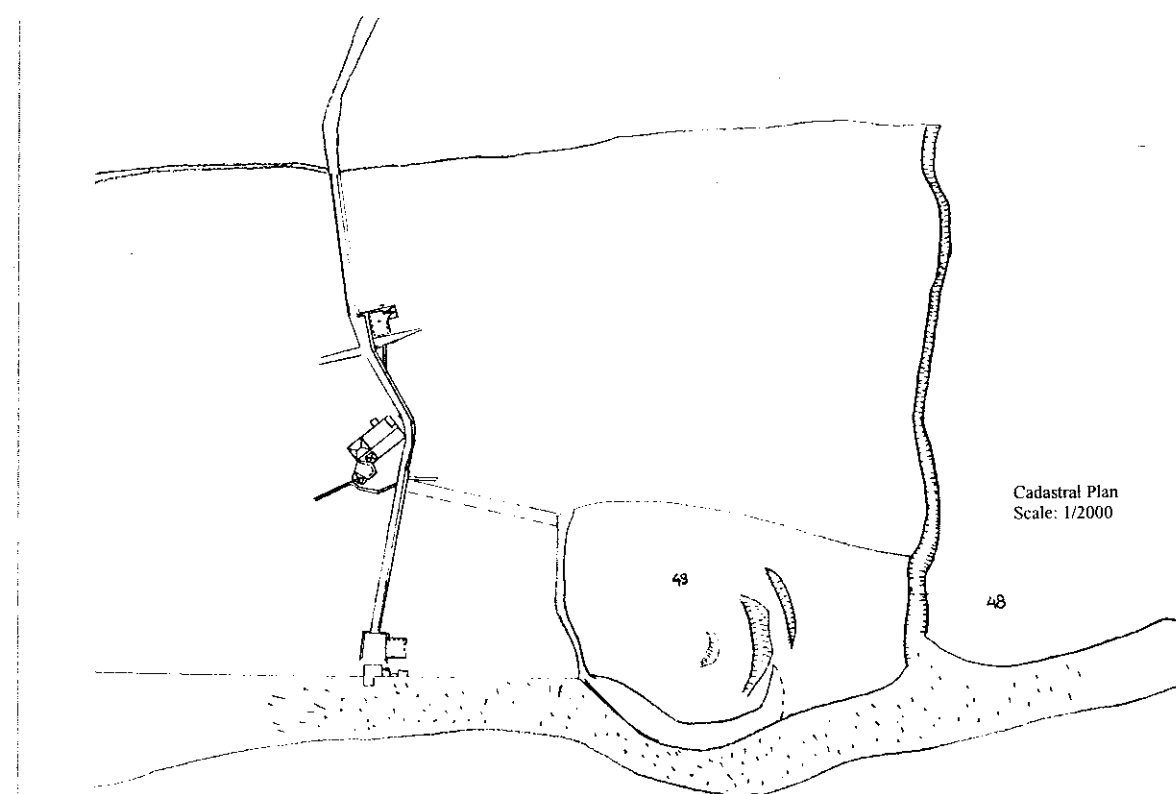


Fig. 1 - Tell el-Burak. Cadastral map showing the Tell and the two water reservoirs

written documentation on the site. The only document we obtained was the expropriation decree mentioned above and the cadastral map showing the expropriated parcel. Ibrahim Kawkabani (personal communication) corrected our previous assumption concerning the nature of his intervention on Tell el-Burak and informed us that it was a systematic surface collection of pottery and not an excavation. In the early 1970s, he laid a grid on the Tell and the pottery was collected from the surface square by

square. According to him, the collected material was stolen from the Tell where it was left lying. It had not been documented and stored when the war broke out and no record of this material is available. The topographical plan used for laying the grid could not be located in the Department archives.

In August-September 1997, a new topographical plan was drawn by Dipl. Ing. Dieter Müller in the context of a survey mission on and around the site of Tell el-Burak, which was undertaken jointly by the American University of Beirut and the German Archaeological Institute. The Lebanese Directorate General of Antiquities issued a Cahier de Charges dated July 12, 1997 (Registration No. 2403) allowing the beginning of the operation.

The long-term excavation, which was planned to start in 1998 had to be postponed because the Lebanese authorities had decided to freeze all archaeological operations for two years. With the exception of the Beirut Central District excavations, the present archaeological project is one of very few



Fig. 2 - Tell el-Burak seen from the SW.

new excavations, which were launched in Lebanon after the war in an attempt to re-place the country on the archaeological map of the Near East and to answer some of the questions related to the ancient history of Lebanon.

1.2. The Identification of the Site

The modern name of Tell el-Burak is clearly an Arabic name that the site owes to the near-by springs and cisterns. The ancient toponym has fallen into complete oblivion and several attempts have been made to identify it (For the identification of the site with Ornithopolis- *Bit-Supuri*, Enhydra, Little Sidon and Kar Esarhaddon, see Sader 1997: 371 ff.). Regarding the problem of the identification, one thing seems certain: Since the site is located between Sarepta and Sidon, the ancient settlement hidden under the ruins of Tell el-Burak must have been, at least in the Late Bronze and Iron Ages, a satellite city of Sidon. It is in the list of toponyms belonging to this south Phoenician kingdom that the ancient name of Tell el-Burak should be looked for. Such a list is provided by the Assyrian annals of Sanherib and Esarhaddon: Tell el-Burak is most probably to be identified with one of them since it was settled and fortified during the Iron Age and most probably before (see below).

The Sidonian cities listed by Sanherib, *Great Sidon*, *Little Sidon*, *Bit-Zitti*, *Zaribtu*, *Mahalliba*, *Ušu*, *Akzib* and *Akku*, follow a clear north-south order and are all to be located south of Sidon (see also Sader 1997: 365 ff. and 2000: 238 ff.). With the exception of *Little Sidon*, the other cities can be identified with a fair certainty.

From the annals of Esarhaddon, two important information related to ancient Sidonian toponyms can be collected: 1-the building of a new city named *Kar-Esarhaddon*, a city that Esarhaddon made the kings of Hatti and the Seacoast build him next to Sidon (Borger 1967: 48: D2), and 2- the names of the Sidonian cities forming the province of *Kar-Esarhaddon* which are listed in a south-north order (Kestemont 1983: 56): *Bit-Supuri*, *Sikku*, *Gi'*, *Inimme*, *Hildua*, *Qartimme*, *Bi'ru*, *Kilmê*, *Bitirume*, *Sagû*, *Ampa*, *Bit-Gisimeia*, *Birgi'*, *Gambulu*, *Dalaimme*, *Isihimme*. It was also argued that all the

cities forming the Assyrian province are to be located north of Sidon (Sader 1997: 368 ff.). In other words, the Assyrian province included the northern part of the Sidonian territory. If this assumption is accepted, as seems highly probable from the internal logic and order of the text (Sader 1997: 368-369), two toponyms are left as possible alternatives for the identification of the ancient name of Tell el-Burak in the Iron Age: *Little Sidon* and *Kar-Esarhaddon*. In favor of *Little Sidon* speaks the fact that it was most probably located, as is Tell el-Burak, south of Sidon. This is implied not only from the order of the toponyms listed in the annals of Sanherib but also from the fact that *Little Sidon* was not included in the province of *Kar-Esarhaddon*.

Concerning the city *Kar-Esarhaddon*, there is no clue as to its location either north or south of Sidon. Since Esarhaddon says in his annals that he cut off the cities of *Sarepta* (modern Sarafand) and *Ma'rubbu* (most probably Adlun; see Forrer 1929: 65) from the territory of the king of Sidon and added them to that of Tyre (Borger 1967: 49:15-17), *Kar-Esarhaddon*, the capital of the new province, cannot be located south of Sarafand. Its name seems to betray a location on the seashore near a natural harbor but it is unclear whether it was built on virgin soil or on the ruins of an older city commanding a small harbor. Regarding the first alternative, it would be surprising to see the Assyrian king not take advantage of the strategic location of an important coastal city for the building of his own province capital, for instance one of those cities destroyed by his father, Sanherib, a few years earlier. It cannot be therefore too far-fetched to assume that Esarhaddon built his city on the ruins of a fortified urban settlement with a commanding position (*Little Sidon?*), close enough to Sidon to keep the defeated metropolis under watch and located in such a way as to allow the control of the borders between the new Assyrian province and the autonomous kingdom of Tyre. From Tell el-Burak, one can clearly see both Sidon and Sarafand and this site seems to be a good candidate for the location of either (or both) *Little Sidon* or *Kar-Esarhaddon*.

1.3. Aim of the Archaeological Project

This long-term archaeological project aims at investigating the settlement formation of Lebanese coastal sites. In this respect, Lebanon is still *terra incognita* and the archaeological record available to date does not allow a clear understanding of the formation processes of these settlements, which have culminated in a yet unexplained economic growth and expansion during the Iron Age. Sporadic as well as long-term excavations of major coastal sites, like Tyre, Sidon and Byblos, failed to give well-stratified sequences of extensive occupation to shed some light on this issue.

On the other hand, Lebanese coastal sites are seriously threatened with physical destruction due to anarchic urbanization, agricultural activity and looting. This was the fate of many of them like Naame, Giyye, Rmayle, Tell Ras Abu Zayd and Tell Rashidiyye, which deprived Lebanese archaeology of vital information. Tell el-Burak is the only well-preserved site on the coast between Sidon and Tyre and its investigation has become an urgent scientific necessity.

Furthermore, as we were planning the first season of excavations, sensational news about a submerged ancient city opposite Tell el-Burak made its way to the Lebanese newspapers and spread also on the web. Photographs of «roads» and «walls» were published and this discovery aroused the interest and the concern of both the larger public and the concerned authorities. The author of the «discovery», a Sidonian diver, Mohammad Sarji, observed some peculiar underwater structures and interpreted them as the remains of an ancient settlement. Concerning the historical background of these remains, he consulted a Lebanese historian, Yusuf Hourani, who unconvincingly identified them as those of ancient Yarimuta (see his arguments in favor of this identification as reported in the Lebanese newspaper, *The Daily Star*, in its 28. 04. 2001 issue).

As is well known, Yarimuta is mentioned only in the Amarna letters of Rib-Addi of Byblos, where it is referred to almost exclusively as a country rich in grain from where the people of Byblos got food supplies (Moran 1987: 68, 75, 81, 82, 85, 86, 90,

105, 112, 114, 125). This country seems also to have been accessible by boat and to be located on the southern coast of Phoenicia. The area of Sarafand and Tell el-Burak opposite which the submerged structures were found, is obviously part of the kingdom of Sidon and could not possibly have been referred to by Rib-Addi as the land of Yarimuta. The latter is probably to be looked for further south, in northern Galilee, where, according to both texts and archaeology, wealthy agricultural production is attested, at least in the Iron Age (Lemaire 1991).

Since the discovery was widely advertised both in Lebanon and abroad, and because of its crucial importance for the understanding of the ancient settlement of Tell el-Burak in case the structures were really the result of anthropogenic activity, a marine survey was organized during the first excavation season. The aim of this investigation was first and foremost to identify the exact nature of the submerged remains and to assess the work to be done in order to document and record them properly. The results of this survey are also published in this preliminary report.

2. The excavation: conception and terminology

2.1. The Site, Situation and State of Preservation

Tell el-Burak is situated right on the shore of the Mediterranean Sea between the ancient towns of Sidon (modern name: Saida), which is located ca. 10 km to the north, and Sarepta (modern name: Sarafand). The tell is over 18 m high and descends towards the sea in a steep slope (Figs 2 and 3). In the south it is bounded by a small creek ending here in the sea. Beyond the creek there lies a terrace, ca. 1-2 m high, which may mark an extension of the original settlement. In the north and in the east the site is bounded by walls, which enclose private plantations. Potsherds that were found in the gardens indicate that, during later periods, the town may have covered a larger area (cf. 1.1).

Tell el-Burak was largely undisturbed. When we began to excavate, we noticed shallow soundings

right on the mound itself and to the west of it; we took them to be traces of Ibrahim Kawkabani's excavations on behalf of the Antiquities Department (for details see 1.1). Northeast of the triangulation point on top of the hill, there starts a trench, ca. 2.5 m deep which was cut by tanks during the Lebanese civil war; it continues downhill in the same direction (square areas 34-35/27-29). On the southern slope there is a similar disturbance in square areas 29/23-24; the disturbance in square 32/21 was probably caused by looters. Generally speaking, such disturbances are, of course, a nuisance; but in two cases they helped us arrive at findings without much exertion (see 3.2 and 3.3 below).

2.2. Conception

One of the principal aims of the excavation at Tell el-Burak is the establishment of a long and uninterrupted sequence of levels (see also 1.3). As far as the ceramics collected on the surface of the tell during the 1997 survey could be dated with certainty, they suggest a date in the Late Iron Age. This dating arose the hope to find Phoenician settlement levels underneath, and, further down, levels belonging to the Bronze Age. A step-trench on the southern slope should provide further information as to the periods to be expected. In addition, we planned to open a small area on the mound of the Tell, where, in one of the previous soundings, walls partly made of hewn stones were visible. Thereby, we hoped to understand and date the findings of the latest extant level so that we could give a safe latest date to the stratigraphy of the step-trench on the slope.

In 1997 already, Dipl. ing. Dieter Müller (Baden-Württemberg Heritage Board) had done a topographical survey of the site on a scale of 1:500, part of which is represented here in a simplified form (plan Fig. 3). The grid that we established is congruent with the official grid, which has its zero point at Palmyra. As the official coordinates, here in italics, would all be in the negative, we used for the measurements in our excavation, reciprocal positive coordinates, which rise from west to east and from south to north. The zero point of the grid, P 0, is at -356000 / -73200, towards the southwest, in the sea. The base line of our local grid is defined by

points A 320/260 (= -355680/-72940) and B 320/180 (= -355680/-73020).

As in most other excavations, work is organized in square areas of 10 x 10 m. Around the square, a 0.5 m broad baulk is left for the documentation of profiles. That is, the excavation area proper is only 9 x 9 m in every square. Considering the shortness of the excavation period we chose to open the step-trench in a width of only 1 m, with the option to broaden it depending on the findings.

2.3. Terminology

Some terms used in this preliminary report might need an explanation.

Excavation area: According to the grid that has been established, the excavation areas are designated by the respective 10 x 10 m squares. For example, the square reaching from 310.00 m to 320.00 m east and from 250.00 m to 260.00 m north is called 31/25. Square 32/21 lies between 320.00 m and 330.00 m east and between 210.00 m and 220.00 m north.

Locus: The term describes stratigraphic and architectural units, i.e. all deposits as well as building elements. They are given a number each within the respective square. The number is preceded by loc for «locus».

Building phase: The ground plans which have been defined and numbered for the various excavation areas according to their size and sequence, are called *building phases*. The term shall bring to mind the limitedness of the results in time and space. The terms *building level* and *building period* as a complex of closely related building levels are reserved for the final results.

3. Stratigraphy and Architecture

In this first campaign, the excavation on the mound of Tell el-Burak exposed three building phases. The latest of the three, building phase 1, consists of the foundations of a building which is almost complete in its contours; building phase 2 is

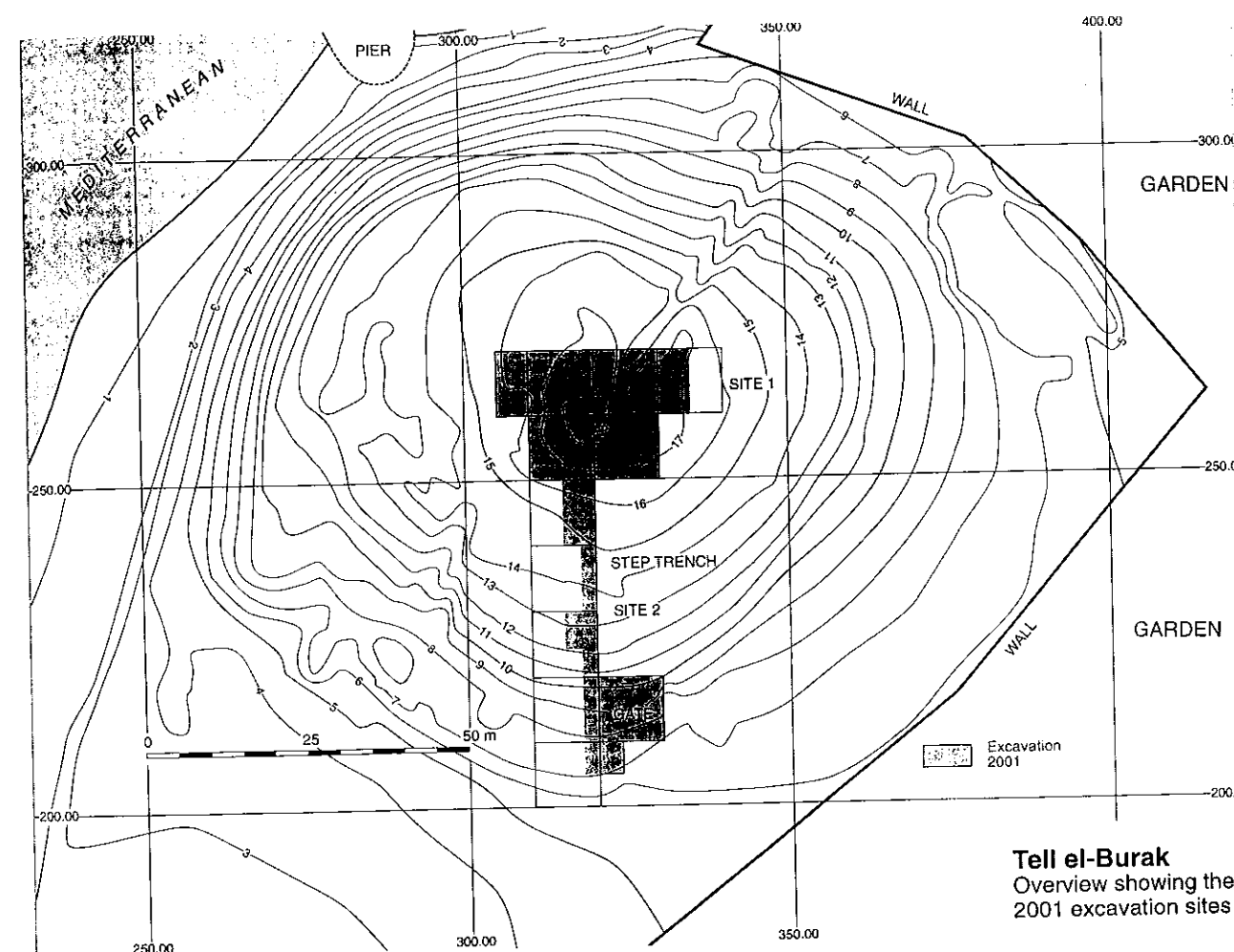


Fig. 3 - Tell el-Burak. Topographic plan of the Tell. (Survey: D. Müller; final drawing: G. Müller)

the preliminary designation of unconnected fragments of walls, which are, stratigraphically, earlier than building phase 1 and later than building phase 3. It is differentiated from building phase 1 by the irreconcilability of their respective remains and, in square 31/25, by the overlapping of walls. The foundations of building phase 1 have destroyed the context to such a degree that it is impossible to assign to building phase 2 any floors or usage levels.

The situation is quite different for building phase 3, which consists of a large, compact building (see 3.2 below). Big mud-brick walls enclose chambers which are filled with hard-packed pisé – a layer of at least 3 m that effectively seals off any earlier findings. So far, we have not reached the preceding occupation level anywhere. It is one aim of the next

campaign to get through to the earlier layers; to that end, we will try to intrude at the periphery of the building, where most of the construction has been carried off by erosion.

For the mound of the tell, the stratigraphy is mostly solved, but for the step-trench and for the fortification walls at the foot of the slope, no stratigraphy can as yet be shown (see 3.3).

3.1. Building Phases 1 and 2

Building phase 1. Even before the excavation had begun, stonewalls were visible on either side of the triangulation point on the hilltop. The excavation laid bare the ground plan of a rectangular building, ca. 8.5 m broad and at least 20 m long

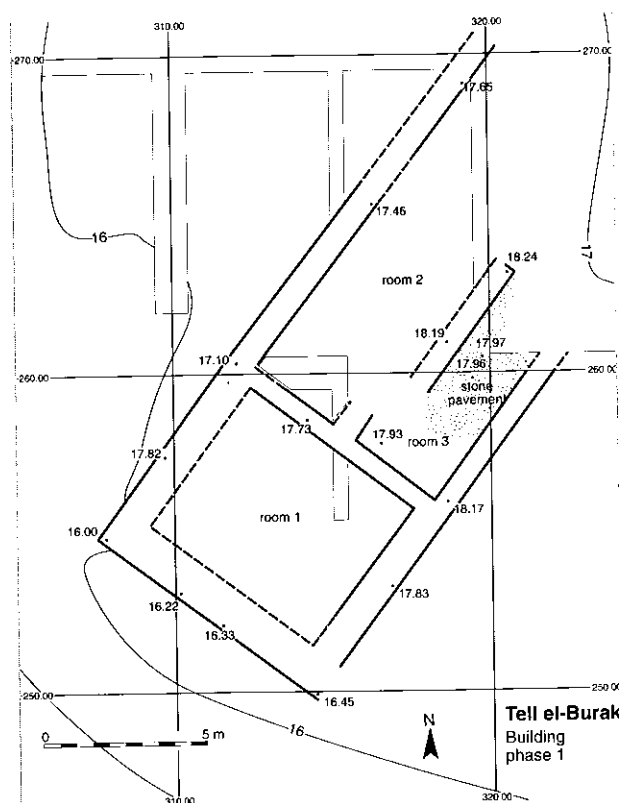


Fig. 4 - Tell el-Burak. Outline of the Ottoman building in square 30-32/25-26. (Final drawing: G. Müller).



Fig. 5 - Tell el-Burak. Foundation walls of the southern part of the Ottoman building in square 31/25 seen from the north. (The centre remained unexcavated to preserve our main measuring point).

(Fig. 4). The northeastern corner and a possible extension to the east are not preserved nor is the precise arrangement of the rooms. Only in the south, in square 31/25 could a room be clearly defined; this room 1 extends over the whole breadth of the building and measures 5 m from the southwest to the northeast (Fig. 5). The floor was not preserved. To the north, there follow two oblong rooms, 2 and 3; most of the stone pavement of the narrower room to the east is preserved. Here it can also be observed that at least the first course of the rising walls was laid in hewn stones, whereas the foundation was made of rubble stones. The walls are not preserved any higher. As the northern wall is missing and since no single door could be recognized in the ground plan, it is not clear how rooms 2 and 3 relate.

When the building of phase 1 was erected, the mound of the tell must have been badly eroded, already, because the foundations follow a terrain that declines strongly southward (Fig. 5). From the center of the building to its southwestern corner, the foundation levels differ by more than 2 m – over a distance of barely 9 m. This fact argues for a rather long hiatus between building phases 1 and 2, the latter being represented here only by a few stones under room 1. Some sherds that were found scattered among the remains of phase 1, are Islamic and suggest a late date, probably in the Ottoman period, thereby confirming the assumed long hiatus between building phases 1 and 2.

Building phase 2. The findings that were taken together as building phase 2 come mostly from depressions in the slope under room 1 of phase 1. They are scarce remains of walls which deviate from the orientations of building phases 1 and 3 and some of which – but not all – can be supplemented to form a common ground plan. No floors were found. The ceramics collected in loose contexts with this phase date to the Late Iron Age or to the transition to Hellenistic times. As the massive, several meters thick building remains of phase 3 form a continuous layer right under the remains of building phase 2, thus excluding any contamination with earlier material, those sherds are contemporaneous with or later than building phase 3 – and, at the same time, a *terminus post quem* for building phase 2.

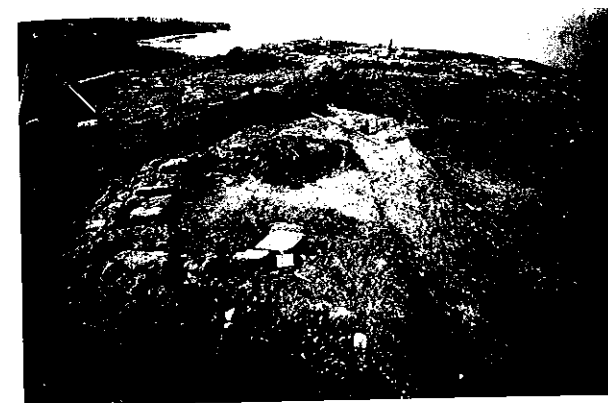


Fig. 6 - Tell el-Burak. Mud-brick building (building phase 3); room with ovens seen from the NE.



Fig. 7 - Tell el-Burak. Mud-brick building (building phase 3); mud-brick wall, loci 24/25, in square 32/26 from the SW with the inner courtyard to the left, a room of the SW-wing of the building to the right.

3.2. The «Mud-Brick Building», Building Phase 3

Jens Kamlah

In building phase 3 the mound of Tell el-Burak was occupied by a massive building with mud-brick walls. Five rooms were exposed in the excavation season of 2001, but only one of them with a floor (see plan Fig. 8 and the preliminary reconstruction, Fig. 14a). Probably, most of the preserved parts of the building are substructures (foundations of walls and fills of rooms).

Although the building has only begun to be excavated, we may already try to determine its function. The mud-brick building of phase 3 was presumably a fortress, which here, on the coast south of Sidon, dominated from its central and raised position the immediate surroundings of Tell el-Burak.

Ground-plan

Walls of the mud-brick building were excavated in square areas 30/26, 31/26, 32/26, 33/26, 31/25, 32/25, and 31/24 (Fig. 8). The walls belong to five rooms, which are arranged in two rows. In the south, those two rows of rooms form a rectangular corner (squares 31/25-32/25 and 31/24). The ground plan of the corner-room of the building is a square of 4 x 4 m (interior measurements). Its outer walls are situated ca. 0.5 m further to the outside than the other outer walls of the building. The corner-room turns out to be a square tower, which is set off from the outer façade of the building.

To the northwest as well as to the northeast of the tower there follows a room ca. 8 meters in length (interior measurements; interior breadth of all rooms: 3-4 m). In squares 30/26-31/26 there follows a room ca. 6 meters long. Along its central axis, a mud-brick wall runs in a longitudinal direction. According to this ground plan the room is defined as a staircase (Figs 12 and 13).

In the south eastern row of rooms, a ca. 8 meters long room is followed by a ca. 6 meters long one (square area 33/26; Figs 6 and 7). There are three ovens along its southwestern wall (Figs 8 and 10).

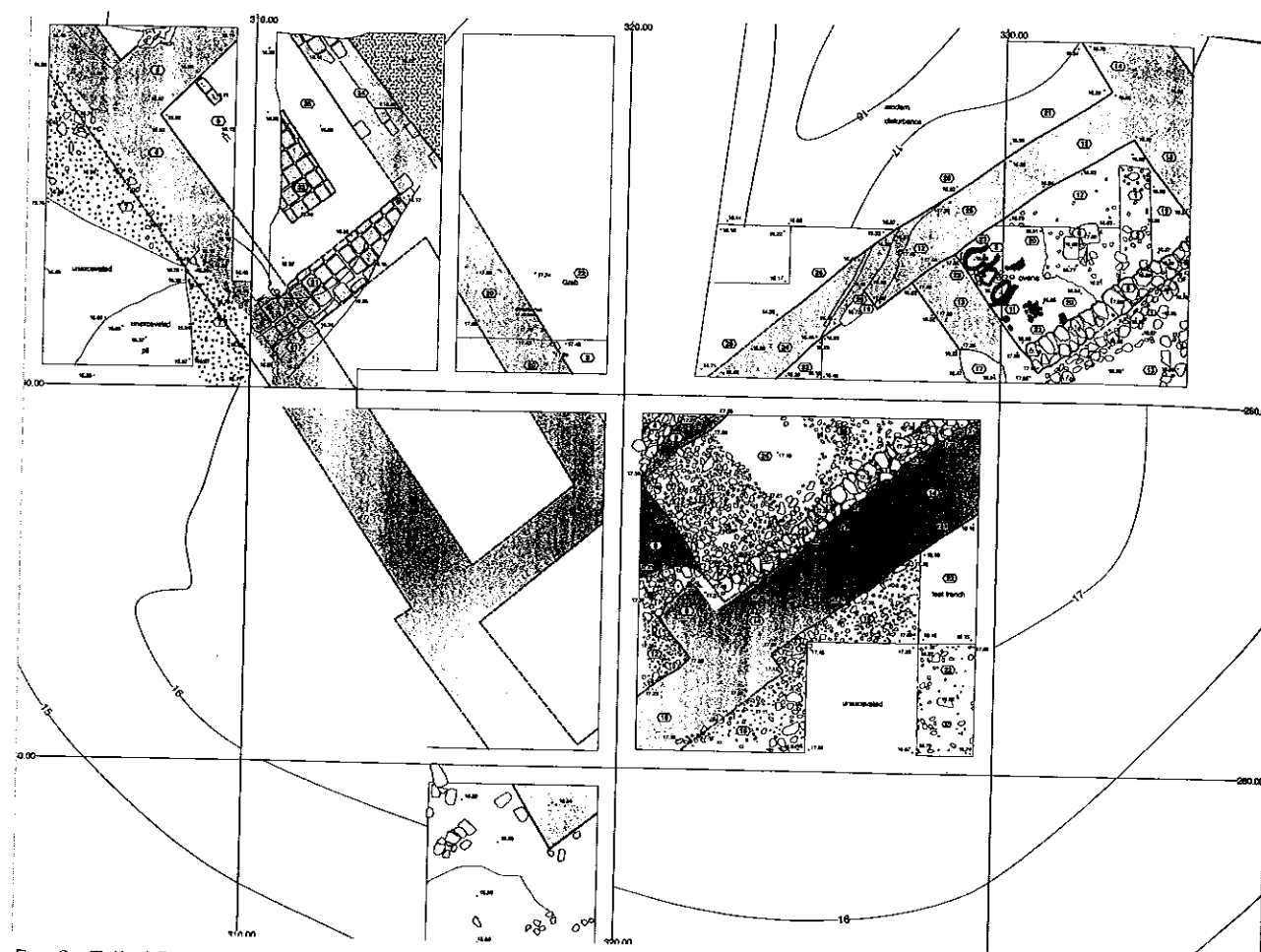


Fig. 8 - Tell el-Burak. Stone-to-stone plan of the mud-brick building, building phase 3. (Final drawing: G. Müller).

The ovens were built of unburnt clay, which became hard in the fire. Around the ovens, there lay large quantities of ashes. The walls of the ovens are further strengthened by fragments of clay vessels. In the southern corner of the room, there were remains of yet another oven. The ground plan of the ovens is oval, the upper walls incline slightly inward. The original surface is not preserved. In the front, close to the bottom, there is a narrow slit in the shape of an elongated triangle. That room yielded also remains of a mud floor (south) and two limestone blocks (center), which may have served as bases for roof-supports.

Four ovens side by side in one room are unusual. It means that the rooms of building phase 3 did not belong to private dwelling houses but that they were part of a public building.

The two rows of rooms enclose an area ca. 15 x 15 m large, which, according to the excavations in square 32/26, does not bear any further architecture (Figs 8 and 14a). It was probably the central courtyard of the building. This interpretation is confirmed by the material with which the area was filled up. It consisted of pebbles and sand and could retain larger quantities of leakage water. So we may assume that the area was not roofed.

Building technique and building materials

In the southwestern corner of square 32/26 a sounding was made along the wall of the south eastern row of rooms bordering on the courtyard. It showed that the courtyard was filled up with pebbles

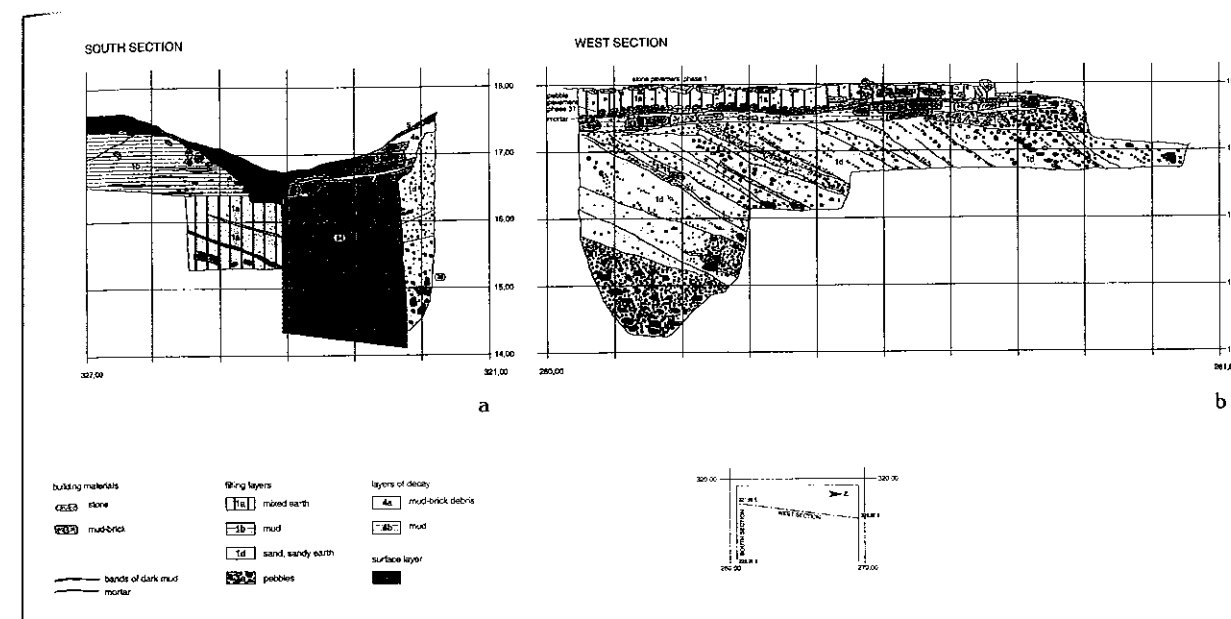


Fig. 9 - Tell el-Burak. a - South section in square 32/26. b - West section in square 32/26; filling under the courtyard of mud-brick building, building phase 3. (Final drawing: G. Müller).

and sand to a height of at least 3 m (cf. the section Fig. 9b). The sounding did reach the lower end of the fill or the lower edge of the mud-brick wall. The diagonal lines in the section indicate that the courtyard was filled from the surrounding walls. Without any doubt, the material - pebbles and sand - come from the beach below the Tell. They were brought up on the mound and poured down into the courtyard from the walls. The lower part of the fill consisted almost exclusively of stones and only very little sand - an indication of the carefully planned and systematic proceeding of the builders.

With a height of (at least) 3 m and an area of 15 x 15 m there results a volume of 675 m³ for the fill of the courtyard. Obviously, the builders were in a position to use numerous workmen. It is possible that they had also work done on the beach, for example in order to build a landing-place for boats below the Tell. They would have pursued two aims simultaneously 1. to dig a landing-place and 2. to heap up a substructure for the courtyard. At this stage, there is no proof for this thesis of simultaneous building activities on the waterline. But it would fit well into the overall picture of the costly and methodical construction of the mud-brick building.

The roofed rooms were filled with a different material. Here, the builders used dark-brown to black mud, maybe from the bed of the creek, which bounds Tell el-Burak in the south. There are only a few stones in the fill of the rooms, it is very compact and gathers humidity. Together with the surrounding mud-brick walls, the compact mud fills formed a massive substructure for the rising walls of the building.

The walls consist of 40 x 40 cm large and 12 cm high mud-bricks. In squares 30/26-31/26 the individual bricks of the walls are easily recognized (Figs 12 and 13). Elsewhere, the contours of individual bricks in the upper preserved courses have been dissolved by humidity. The inner walls are ca. 1.30-1.40 m and the outer walls of the building ca. 1.80 m wide.

State of preservation

Not everywhere can the width of the walls be defined with precision because some edges of the walls are rather irregular. The north western edge of the wall southeast of the courtyard is a good example (square areas 32/26-33/26). The upper preserved brick-courses of the wall are sometimes dislodged by 40 cm (cf. the top of the wall in the section, Fig. 9a).



Fig. 10 - Tell el-Burak. Mud-brick building (building phase 3); three ovens in square 33/26.



Fig. 12 - Tell el-Burak. Square 31/26 seen from the south. From lower left to upper right the foundation of the northwest wall of the Ottoman building. On both sides of this stone foundation, traces of mud-brick walls of building phase 3. The pavement of pebbles in the right upper corner probably belongs to the inner courtyard of the same building of phase 3.



Fig. 11 - Tell el-Burak. Mud-brick building (building phase 3); mud-brick wall, locus 14, and stone foundation, locus 2, in square 32/25 seen from the east.



Fig. 13 - Tell el-Burak. Mud-brick building (building phase 3); mud-brick walls in square 31/26 seen from the north.

Therefore it is possible that the factual course of the walls does not correspond exactly to the walls as rendered in the drawing, **Fig. 8**.

On the whole, quite a few remains are preserved of the massive mud-brick building of phase 3. But almost all parts that have so far been excavated belong probably to the substructures. It was only near the three ovens that a floor within a room was exposed, and that floor is also not preserved throughout the room.

In square areas 32/26-33/26 and 32/25 the remains of building phase 3 are right underneath the

present-day surface of Tell el-Burak (**Fig. 11**). This means that, here, the floors of the mud-brick building are eroded (with the exception of the area around the three ovens). In square areas 31/26 and 31/25, building phase 3 lies underneath the remains of building phases 1-2. Here, in the courtyard area, another floor of the mud-brick building is preserved. Above the fill of sand and pebbles, section **Fig. 9b** has a layer with mud-bricks that formed the floor of the courtyard (further above: remains of building phases 1-2). Future excavations in that part of the mound may succeed in exposing floors of building phase 3.

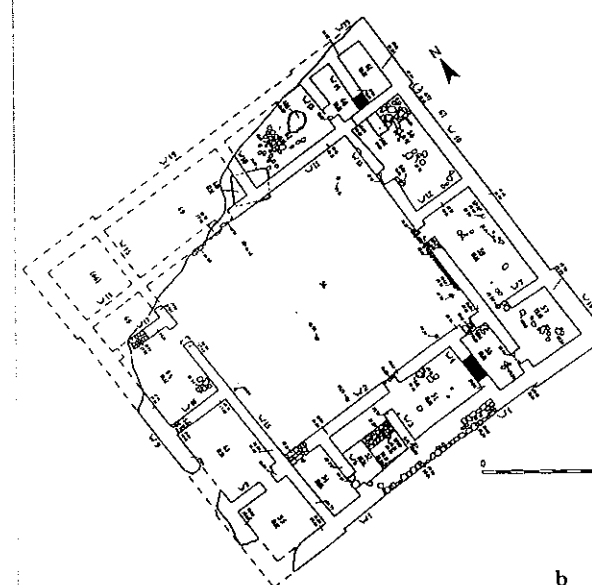
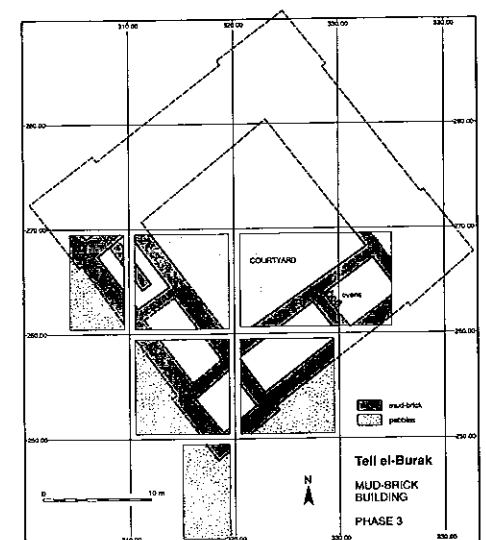


Fig. 14a - Tell el-Burak. Preliminary reconstruction of the mud-brick building, phase 3.

Fig. 14b - Fortress to the north of Ashdod (Persian period). (Final drawing: G. Müller).

Dating and building-history

The state of preservation as described does not allow at this point a dating of the mud-brick building of phase 3. The only floor inside a room, the floor around the three ovens, did not yield any ceramics that might date the findings. The fill of sand and

pebbles that was excavated in the courtyard sounding did not contain one single potsherd. Only very few sherds came from the dark mud fills in the rooms, most of them undatable body-sherds. The secure dating of building phase 3 remains an important task for future excavations at Tell el-Burak. The ceramics found in the surroundings suggests that the mud-brick building might go back to the Late Iron Age / Persian Period.

A complete reconstruction of the history of the building from its erection to the end of its usage is not possible at this point. But two stonewalls in square areas 32/25 and 33/26 should be mentioned in this connection (**Figs 6 and 11**). They line the inner façades of the southeastern outer walls of the building, and they give the impression of later installations (**Fig. 8**). But the floor around the three ovens joins the surrounding mud-brick walls as well as one of the stonewalls proving definitely that all those walls were used simultaneously and that the stonewalls belong to a usage-phase of the mud-brick building.

Preliminary reconstruction and architectural comparison

As the north eastern corner of the courtyard was also exposed in the 2001 excavations, it is possible to reconstruct the extension of the courtyard with relatively great probability. The inner courtyard seems to be square with a side-length of ca. 15 m. In consequence, we may assume a square ground plan for the mud-brick building as such, with exterior measurements of ca. 30 x 30 m (**Fig. 14a**).

Such a ground plan would fit well with the architecture of the Late Iron Age / Persian Period. Many large and public buildings of that time are of the "court building" type, with the rooms grouped around a central, often square yard. (cf. Stern 1982: 54-57)

Comparing ground plan and size, the mud-brick building of Tell el-Burak closely resembles an isolated fortress that was excavated in 1969 on a hill not far from the coast north of Ashdod (**Fig. 14b**). (For the fortress cf. Stern 1982: p. 19 and 54 with fig. 54; cf. further Hoglund 1997: 326-329). It comprises an area of ca. 30 x 30 m (Tell el-Burak: ca. 30 x 30 m), the courtyard is ca. 16 x 16 m (Tell el-Burak: ca. 15 x 15 m), the outer walls are ca. 1.5 m wide (Tell el-Burak:

ca. 1.8 m). The fortress in the Ashdod region has also protruding corner-towers and a staircase. The ceramics found in the 1969 excavations date the fortress to the middle of the 5th century BCE.

Further excavations at Tell el-Burak will enable us to compare the ground plans of the two buildings in detail and see whether both might go back to the same period. As it stands to date, the excavation allows a preliminary interpretation: The mud-brick building of building phase 3 at Tell el-Burak was a massively built fortress rising on the mound of the hill at a height of ca. 16 m above the coast and the surrounding prosperous plain. It had an unimpeded view to Sidon in the north, to Sarepta in the south and into the coastal plain with its traffic routes. The massive and costly construction technique corresponded to its strategic importance.

3.3. Structures on the Slope and the Fortification Wall

Starting from the southern corner of the mud-brick building in square 31/24, a meter wide test-trench was carried down to the foot of the slope in square 31/20. Right under the surface, an almost uninterrupted coating of round stamped-down pebbles forms a kind of glacis (Fig. 15). In the excavation on the mound we had already noticed that such layers of pebbles surround the mud-brick building closely, they must have been poured against the outer walls and stamped into place. At any rate, there is an obvious connection between the construction of the glacis and the mud-brick building. It may be concluded that the pebble layers on the slope also follow a plan.

When narrow wall foundations appeared in squares 31/24 and 31/22, the test-trench was enlarged westward to a width of 4 m and 5 m respectively. Lying very close to the surface the foundations were of no stratigraphical value; there were no walls nor floors that might have belonged to them. Both foundations should be considered as later than the mud-brick building and belong possibly to building phase 2. The scarab (Figs 19 and 20) described in chapter 6 comes from square 31/22.

As the slope becomes much steeper between squares 31/22 and 31/21, we supposed that this

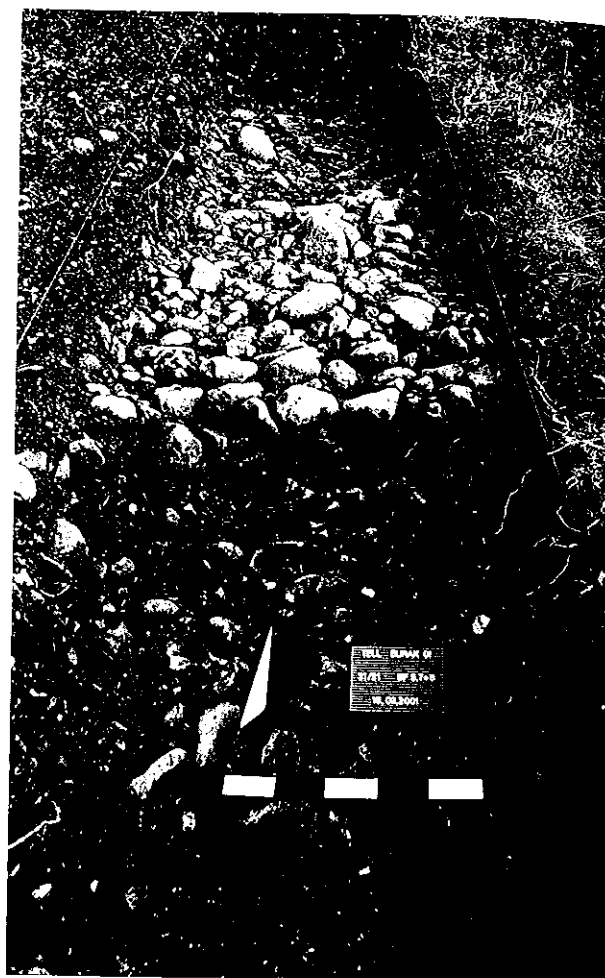


Fig. 15 - Tell el-Burak. Test trench at the slope in square 31/21 with parts of the glacis made of pebbles seen from the south.

outline was caused by a strong fortification wall. We did not find such a wall at first. Only when we had cleared a large disturbance in square 32/21, did we recognize the course of the heavily dislocated wall; we exposed parts of it during the last two days of work (Fig. 17). Immediately behind this wall, a second wall, which we have not yet examined, appeared. It inclines so badly forward that the other wall must be seen as a later securing or retaining measure.

On our last day of work we had a surprise. On the outside of the outer wall we identified a ca. 1.5 m wide gate (Fig. 18). We did not have the time to clear and examine the gate, but the photograph shows that the gate was framed with hewn stones, now lying on either side of the gate, while the wall itself was built with unhewn stones.

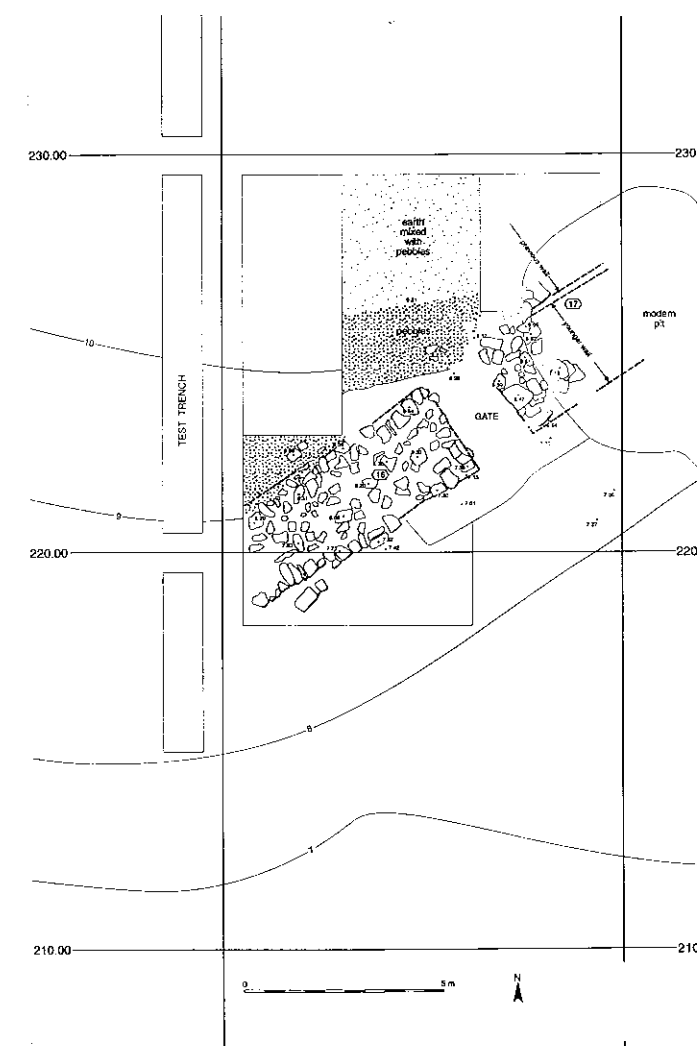


Fig. 16 - Tell el-Burak. Stone-to-stone plan of the fortification wall in square 32/21. (Final drawing: G. Müller).



Fig. 17 - Tell el-Burak. The younger fortification wall in square 32/21 seen from the south. The previous fortification wall is hidden behind the younger one.



Fig. 18 - Tell el-Burak. Detail of the younger fortification wall in square 32/21 with the gate. The gateway is still unexcavated.

4. Pottery

Rania Kirreh

The pottery uncovered in the first season of excavation at Tell Burak 2001 was relatively scarce, and the majority of it came from unstratified contexts. In fact, only about 25% of the total number of pottery collections uncovered were considered to come from stratified *loci*, and even here none of the pottery was found *in situ*. Moreover, a few collections consisted entirely of nondiagnostic body sherds, whereas some others had rim and base sherds, which were too small and fragmentary to be of any typological value.

Pottery from building phases 1 and 2 (Square areas 31/26, 31/25)

Due to heavy erosion, these square areas did not yield much pottery. Most of the collections consisted of surface material, and the few collections that came from stratified *loci* had quite a lot of glazed Islamic ware, as well as modern/contemporary sherds (the so-called 'Hommos' bowl-ware). A few red-slipped body pieces were also among the sherds.

Pottery from building phase 3 (Square areas 32/25-26, 33/26)

From the substructures of the mud-brick building, not much pottery was recovered. The sand and pebble fill of the courtyard was sterile. The dark mud fills in the building's rooms, on the other hand, did yield some pottery. However, due to the compactness and nature of the mud fill, some of the sherds recovered (mainly of mineral tempered wares) were too badly preserved and tended to either crumble into pieces as they were removed from the earth or get reduced to muddy clumps on contact with water, also probably indicating that most of these pots had been underfired to start with. One had to be particularly careful with painted or red-slipped pieces as the remaining traces of the paint and/or slip would easily come off when brushing off the already

moist earth from the sherd. The best-preserved sherds were again the later (Islamic-Ottoman and modern-contemporary) glazed sherds. Their mere presence, however, is an indicator that the *loci* in which they were found, although containing sherds from older periods, had been disturbed and that the respective ceramic collections are therefore not suitable for dating purposes. The only floor uncovered, around the three ovens (square area 33/26), also did not yield any pottery.

Generally speaking, the substructures of the mud-brick building, as well as the glacis associated with it on the slope of the tell, constituted a very compact layer several meters deep, effectively sealing off older layers lying beneath. The remaining repertoire of ceramic material, especially that found towards the bottom of the tell in the wall and gate area (see below), as well as that associated with the mud-brick building would tentatively suggest a Late Iron Age date for the stratified contexts in which they were found, thereby also suggesting a possible dating of the building, namely Late Iron Age/Persian period.

Pottery from the test trenches on the southern slope of the Tell.

Having encountered a very compact layer of cobble stones and pebbles at a shallow depth (about 30 cm) from the surface forming a type of glacis, no attempt was made at penetrating this layer and excavating deeper beneath it. Thus, most of the pottery collections uncovered from these test trenches consisted of surface material with lots of modern and glazed ware ('Hommos' bowl) mixed with predominantly Late Iron Age pottery. A single black glazed body sherd was found among the sherds of collection 31/22-9, one of the very few stratified *loci* in the slope area of the excavation.

The bulk of the pottery of the entire excavation came from square area 32/21, where apparently a huge amount of sherds had been washed down the tell and lay covering the collapsed wall and gate area. Unfortunately, this was uncovered during the last couple of days of the excavation,

which did not leave any time for the processing of the material. However, upon initial assessment, the majority of the sherds seem to belong to the Late Iron Age.

A clearer picture of the Tell Burak pottery would be gained by conducting a ceramic comparative analysis with pottery assemblages from other excavations. The ideal sites for such a comparison are:

- neighbouring Tyre, where the pottery from the sounding conducted by Patricia Maynor Bikai provides a firm stratigraphic and chronological framework and
- even closer Sarepta, whose pottery, recovered in the excavations carried out by the University of Pennsylvania, under the direction of James B. Pritchard, has, as would be expected, a very similar assemblage.

Moreover, it is necessary that Tell Burak ceramic types be studied quantitatively in relation to their stratigraphical context in order to assess the changes which took place over time. However, for all this to become feasible, an unbroken sequence of pottery styles or type series for Tell Burak has first to be established over the coming seasons of excavation.