

TELL ES-SULTAN IN THE EARLY BRONZE AGE IV (2300-2000 BC) SETTLEMENT VS NECROPOLIS - A STRATIGRAPHIC PERIODIZATION

Lorenzo Nigro

0. A PREMISE

Tell es-Sultan is a key site for the study of the last quarter of the 3rd millennium BC in Palestine. Both the site and the nearby necropolis, which is one of the largest of the ancient Near East, have provided outstanding evidence for the Early Bronze IV.¹ A preliminary attempt of matching the two sets of data was put forth by K. Prag (1986), which on the basis of her excavations at Kirbet Iskander in Jordan, suggested a new approach towards the “non-urban” phase of Palestinian Early Bronze Age. In the last decades, this long and crucial period of the history of Palestine continued to attract

¹ The long and complicated terminological debate concerning this period has been carefully summarised by G. Palumbo (1990: 5-22). Here the denomination Early Bronze IV (corresponding to the archaeological period of Sultan IIId) is preferred in order to underscore, from the one hand the strong continuity in respect of the Early Bronze III (Sultan IIIC), and, from the other, the clear change occurring with the complete reconstruction of the site fortification in the following Middle Bronze Age, affecting both architecture and material culture. Moreover, the term Early Bronze IV also takes into consideration the archaeological phasing of Syria, which are reflected in Northern Palestine and in the Jordan Valley (on this important issue see Oren 1973; Nigro 1999b: 215-218; *contra* Amiran - Kochavi 1985).

scholars' attention, thanks to the continuous increase of data made available by excavations (many of which, unfortunately, illegal). However, the site was not available for excavation and the necropolis, settled by Palestinian refugees in 1948, was at a large extent destroyed.² Since 1997 new excavations, carried out jointly by the Department of Archaeology of the National Authority of Palestine (directed by Hamdan Taha) and Rome University "La Sapienza", have begun to shed further light on this topic.³

1. THE RURAL VILLAGE ON THE *TELL*: TOPOGRAPHY, STRATIGRAPHY, AND CHRONOLOGY

Remains of an EB IV occupation on the very mound of Tell es-Sultan were recorded by all of the expeditions which worked there.⁴ Hereby a survey of data collected by the first three missions on Tell es-Sultan is followed by an overall summary in the light of the results of the fourth Italian-Palestinian Expedition.

1.1. *Finds of the Austro-German Expedition (Ernst Sellin and Carl Watzinger, 1907-1909)*

A cultural horizon called "Spätkanaanitisch" was identified for the first time by the Austro-German archaeologists Ernst Sellin and Carl Watzinger during their excavations at Tell es-Sultan in 1907-1909.⁵ Materials remains from this period were so clearly distinguished,⁶ and their stratigraphic location, immediately over the ruins of the previous city, was so evident, that they easily recognized them. However, because of the Biblical oriented dating to the time of Joshua of the collapsed and burnt Early Bronze Age city-walls, visible on top of the *tell*, they erroneously attributed this cultural *facies* to the Late Bronze Age (i.e. the "Spätkanaanitisch" Period). Only many years later, with laudable intellectual honesty, Carl Watzinger corrected this dating, as the correspondence of the "Kanaanitische Periode" with the Early Bronze Age had become clear.⁷ The way in which they precisely described the EB IV ceramic horizon⁸ is still today a proof of the accuracy of this early excavation, even though one wonders if this phase would have had such an attention, if these Biblical archaeologists were aware of its real date (i.e. that it was not the city conquered by Joshua!).

² The plundering of the necropolis continued under the Israeli administration. Several tomb furnishings from Jericho are presently on exhibit in the shops of the antique dealers in Jerusalem.

³ The Italian-Palestinian Excavations are preliminary published in the series *Quaderni di Gerico* (Marchetti - Nigro 1998; 2000).

⁴ A few EB IV pottery (nowadays preserved by Palestine Exploration Fund, London) were also collected on the *tell* by Chapt. Ch. Warren, the pioneer explorer of Palestine, who tunnelled the southern and western sides of Tell es-Sultan in 1867. Especially in its southern shaft, he possibly cut EB IV layers just on top of the EB III city-walls (the shaft was identified by Kenyon in Trench III: Kenyon 1981: pl.).

⁵ Sellin - Watzinger 1908: 45; Sellin - Watzinger - Nöldecke 1909; Sellin - Watzinger 1913: 46-47, 108-110, fig. 25.

⁶ Sellin - Watzinger 1913: 46, pl. 22, ns. 1, 2a, 2b.

⁷ Watzinger 1926: 133-134; Albright 1929: 5-6.

⁸ Sellin - Watzinger 1913: 108-112.

According to Sellin, the *tell* was sparsely dwelled during the EB IV (fig. 1); some houses were built re-employing bricks from the collapsed city-walls, while other were reconstructed upon previously existing buildings. The majority of data were collected in the area excavated on the northern *plateau* and on the northern slope of the *tell*.

A series of houses was brought to light across the northern EB III city-walls. The first house was uncovered just upon the North-West Tower and the facing Outer Wall ("Vormauer"), where two crossing walls, each made of a single row of greenish bricks, represented the south-east corner of a rectangular room (fig. 2); the northern wall of the house remained unexcavated, being partly buried under a stone paved staircase from the late Iron Age II.⁹ In the area just north of the north-west corner of the Tower a small jar containing a group of sixteen copper tools was found (fig. 3), perhaps intentionally buried under the floor of the house.¹⁰

A second house was identified a few meters to the north, built over the massive mudbrick structure, which is possibly part of the EB II fortification system.¹¹ This house lies at a lower elevation in respect of the first one, thus indicating that the EB IV village also extended over the northern slope of the *tell*. The plan of this house could not be clearly determined, although it may be reconstructed as a rectangular unit with a small compound on the eastern side.

A third house was uncovered roughly at the middle of the northern side of EB III city wall (fig. 4), built over both the Inner and the Outer Wall,¹² and abutting on a buttress of the latter.¹³ It is built of yellowish bricks, with a wall orthogonal to the Inner Wall and another superimposed to the Outer Wall.¹⁴ The house extends also to the north, with a room paved by bricks; in the north-east corner a stone paved hearth was instead brought to light; the southern room has a floor made of bricks too. This possibly is due to the

⁹ The walls are visible on the foreground right of Sellin - Watzinger 1913: pl. 4b, and on the background (b) of Sellin - Watzinger 1913: pl. 6a; see also Sellin - Watzinger 1908: fig. 4 in the foreground.

¹⁰ Sellin - Watzinger 1913: pp. 116-119, figs. 104-105. This bronze (arsenical copper) hoard deserves a careful examination. It apparently belongs to the second phase of development of the EB IV on Tell es-Sultan (Period IIIId2, 2200-2000 BC), and collects weapons and instruments, among which a broad fenestrated axe, several javelins and spear heads. The presence of the fenestrated axe of the earliest type (Tubb 1982) is noteworthy, since this prestigious object is absent in the necropolis. This may be explained by the fact that the vast majority of tombs with copper weapons belong to Period IIIId1 (see below). One may put forward various hypotheses concerning the significance of such a hoard, basing upon comparisons with similar finds, which are always from religious compounds (Byblos, Tell ed-Duweir, Tell el-Hesi: Kenyon 1955b). This, of course, also goes into the real function and interpretation of the house.

¹¹ This mud brick wall, width more than 5.0 m, lies under the EB III double city-wall, protruding northwards from the north west corner of the city (Sellin - Watzinger 1913: plan II, inked in purple).

¹² Sellin - Watzinger 1913: pl. 6a (c).

¹³ This is called "Futtermauer" in Sellin - Watzinger 1913: pls. 4a, III, D6, and possibly represents the stone foundation of a buttress, projecting from the Outer Wall.

¹⁴ Sellin - Watzinger 1913: 25, bl. 4a-b, 6c, III.

large quantity of collapsed bricks available in the area of the previous city-walls, which were proficiently re-employed by the EB IV settlers.

A fourth house was excavated but not recognised in D7, in the same stratigraphic location of the others, i.e. lying just over the Outer Wall.¹⁵ It was successively re-excavated by John Garstang, who attributed it to his Middle Bronze Age (City B).¹⁶

The major EB IV installation excavated by the Austro-German Expedition lies at the eastern end of the northern side of the preserved EB III city-wall, in square D8.¹⁷ Here, the Outer Wall was apparently lacking (or intentionally removed) and the area was occupied by an irregular building, consisting of two large trapezoidal rooms (fig. 5). The plan of this structure (fig. 6) is unclear as well as its precise stratigraphic attribution. The eastern wall, according to the excavators, should belong to an earlier phase, while the western overruns the southern one; no entrances are visible on the plan, and the western wall of the western room is a rebuilding of a previously existing cross-wall between the Inner and the Outer Wall. This suggests that the Outer Wall itself abutted northwards, and that it is to be identified with the presumed northern wall of the EB IV building. Moreover, since the eastern wall was attributed to the early Canaanite phase (inked in purple on the general plan of the tell), to the west clearly corresponding with EB II, it seems more reasonable that the entire installation belongs to EB III; its western part possibly to EB IIIB. In any case, since EB IV materials were found in it, one might hypothesise that the building was re-used during the last phase of the Early Bronze Age. A stone mortar, of a very common type during the entire Early Bronze Age at Tell es-Sultan, was found set into the floor of the main room. Its central position and the way it was fixed into the floor, suggest that it might have had a different utilization as base for a wooden pillar supporting the roof of the house.

Three parallel walls brought to light along the southern limit of the area excavated on the northern *plateau* of the *tell* were attributed by Sellin to the "Late Canaanite Period" (= EB IV). They may be related with some sparse remains identified in Area F by the Italian-Palestinian Expedition, which we will deal with below. What is here important to stress is that for Sellin and Watzinger not only the slopes of the mound and especially the area of the impressive ruins of the EB II-III fortifications, but also the northern *plateau* were inhabited during EB IV.

1.2. *Finds of the first British Expedition (John Garstang, 1930-1936)*

At some extents Garstang's expedition was provoked by the – at the time crucial – debate about the "Spätkanaanitische Periode", since it was carried out with the explicit aim of challenging the important change in the chronology established by the Austro-

¹⁵ Sellin - Watzinger 1913: pl. 4a, on the background.

¹⁶ Garstang 1935a: pl. XXIII.

¹⁷ Sellin - Watzinger 1913: figs. 10-11; note that the city walls are gradually eroded on top following the *tell* slope towards the east, so that there is no evidence left of the north-eastern corner of the city (Sellin - Watzinger 1913: fig. 11, 25).

German expedition, courageously proposed by Carl Watzinger in 1926.¹⁸ The German archaeologist had honestly recongnized that, on the basis of W. F. Albright results at Tell Beit Mirsim,¹⁹ what was previously thought to be the Late Canaanite Period (i.e. the period in which Jericho was brought to a violent end by Joshua), basing upon material culture (and especially pottery) had to be instead attributed to the last part of the Early Bronze Age. Against this view, Garstang decided to resume excavations on the site in order to establish the Biblical chronology of the city-walls.²⁰ He immediately identified a Late Bronze Age reconstruction of the city-walls ("City D Wall") on top of the EB IIIB massive mud-brick structures.²¹ Actually, examining its records, and taking into consideration his erroneous chronological grid, it appears pretty clear that in some spots the structures he identified on top of the destroyed "City B Wall", which he attributed to the Late Bronze/Joshua Age, actually belonged to Early Bronze IV. This may be suggested for a wall excavated in Trench *e-e'* (Squares K3-4), visible in section (fig. 7),²² and for some structural remains brought to light to the north.²³ More interesting, because unexpected, is the discovery by Garstang of an EB IV occupation underneath the Middle Bronze Age Palace on the eastern flank of the Spring Hill.²⁴ This datum has been sound confirmed by Italian-Palestinian excavations in Area G (see below). A more complicated question is whether he really identified a layer of occupation of the same period in the area at the foot of the Spring Hill, where a group of private houses were found cut by the massive stone and brick works of the Eastern Tower. The latter is a huge building, built in front of the spring, which is presently dated to the beginning of the Middle Bronze Age. Houses below the Tower should be dated to EB IIIB,²⁵ even though a diagnostic EB IV goblet with the classic combed decoration of the second part of this period (Sultan IIId2) was reported by Garstang as a distinguished find from this area (fig. 8).²⁶

¹⁸ Watzinger 1926.

¹⁹ Albright called this material culture horizon "Middle Bronze I" corresponding to strata I-H at Tell Beit Mirsim (Albright 1932: 5-6; 1933: 62-67, Pls. 19-21; 1938). Several years later Albright also proposed an absolute chronology for his "Middle Bronze I" (Albright 1962).

²⁰ Garstang 1930: 123-124. Moreover, after the First World War, one should not underestimate the political significance of the return of the site under British investigation.

²¹ Garstang attributed the "City B Wall" (i.e. the EB III double wall system) to the Middle Bronze I (Garstang 1931: 186, pl. I), even though the pottery found in related contexts dates back from EB IIIB (Garstang 1932a: 14, pl. I). In 1935 he corrected his previous dating of the "City B Wall" (in his own words: "Wall B covers the culture period which may now be called Eb3" Garstang 1935b, note 1), without changing, however, the date of the supposed LB "City D Wall", which was originally established as a consequence of the date of the latter (Garstang 1935a: 147; 1935b: 61).

²² Garstang 1930: 130, pls. IX-X; Garstang 1931: 190, pls. III-IV.

²³ Here Garstang states that to the north "the bottom courses [of the City B Wall] were adapted to the sloping bed" and did not show any stone of foundation (Garstang 1932a: 13). This either means that he actually did not reach the foundation, or that these structures did not belong to the main wall, but to successive superimposed buildings.

²⁴ Garstang 1935a: 147.

²⁵ Garstang attributed these houses to his EB II, on the basis of the retrieval of some pottery vessels, which can be now attributed to EB IIIB (Garstang 1932a: 9-10, pl. XII, ns. 18, 22). Actually dating these finds remains very problematic, since they were found below the floor of the houses.

²⁶ Garstang 1932a: 10, fig. 4.

1.3. Finds of the second British Expedition (Kathleen M. Kenyon 1952-1958)

The identification of what Kathleen M. Kenyon called the “E.B.-M.B. Intermediate Period” was one of the major outcomes of her worldwide known excavations at Tell es-Sultan.²⁷ This was mainly due to the important historical interpretations which descended from these discoveries, and which still represent the most classic contribute of Kathleen Kenyon.²⁸ Even if the largest and most impressive data for this phase were collected in the necropolis, nevertheless, from a historical-archaeological point of view, those obtained on the *tell* itself potentially have a richer meaning, because - when stratified - convey a diachronic information not provided by tombs.

Layers referred to as “E.B.-M.B. Intermediate Period” were distinguished in all of the three major trenches excavated on the western, northern and southern slopes of the mound, as well as in squares HI-II. No more finds were recorded in other areas.²⁹ The interpretation given by Kenyon was that the EB IV occupation was limited to the outer slopes of the mound, when squatters re-settled the ruins of the EB IIIB city. A complete abandonment was then provoked by a violent earthquake, which occurred after about a century of continuous occupation. This interpretation is, however, contradicted by finds of other expeditions, which demonstrates that also the upper part of the *tell* was inhabited, and that the main earthquake of the second part of the 3rd millennium occurred towards the end of EB IIIB.³⁰

Trench I

The EB IV occupation was detected in Trench I, Stages XLI-XLII, in two separated spots:³¹ on top of the EB IIIB Outer Wall (Wall M) to the east, and on a terrace at the bottom of the slope to the west.³²

The earliest layers (Stage XLI) were silt and small rubble horizontal deposits, interpreted as the gradual filling of the previous EB IIIB “W” shaped ditch (Ditch VI),³³

²⁷ Kenyon expressed in a coherent and archaeologically (not only biblically) supported way the “invasions theory”, which attributed the cultural changes of EB IV to the arrival of the nomad Amorites (Kenyon 1956: 41-42; 1966).

²⁸ On Kenyon’s “invasion approach” and its fortune, which was actually anticipated by W.M.F. Petrie, W.F. Albright, and R. De Vaux, see Palumbo 1990: 8-11.

²⁹ This may seem quite strange for square EIII-IV, where both the preceding and following expeditions found remains of the EB IV occupation. It is possible, however, that when Kenyon excavated this area, the uppermost layers had already been eroded or cut away by previous expeditions. Moreover, since EB IV structures are often very flimsy, being on top of the stratigraphy it is also possible that they were not identified.

³⁰ Evidence of a violent earthquake was also identified by the Italian-Palestinian Expedition, which destroyed the Sultan IIIc2 (EB IIIB) city. This tragic event took place around 2350 BC, according to radiocarbon dating. Then the city was repaired and occupied for at least one generation, envisaging a progressive abandonment.

³¹ This is due to the erosion at the middle of the slope, although it is not clearly appreciable on Kenyon 1981: pl. 236.

³² Kenyon 1981: 16, 105, pl. 236. No structures are visible on top of Wall M; there is no plan of Stage XLI.

as a result of seasonal occupation of the area.³⁴ Actually, the fact that the EB III ditch is filled up with layers containing EB IV pottery, may be alternatively interpreted as an intentional filling in order to regularize the lower terrace of the western slope for building houses, occurred when a further area for settlement was needed.³⁵ In this case the distinction between Stage XLI and XLII seems a bit arbitrary, being the terracing and building of the houses a unique activity, and Stage XLI rather should be attributed to an early occupation (seasonal?) of the upper western area of the trench. There is, in fact, no definitive proof that the settlement of the lower terrace antedates the earliest occupation of the area upon the city-walls, as Kenyon's interpretation silently implies, hinting at a gradual settlement of nomad groups starting from the lower fringes of the EB III mound. Conversely, a priority in occupation of the upper terrace is suggested by the fact that the soil employed in filling up the previous ditch did contain EB IV pottery materials, and thus resulted from the clearance of a pre-existing EB IV settlement reasonably on top of the slope (see below the discussion on paragraph 1.4.2.).

On the upper terrace to the east, houses were found again on two different steps. One is cut against the western face of the EB III Outer Wall (Wall M),³⁶ while another lies about 2 m higher, using the city-wall as a basement.³⁷ Wall JD marks a 1.85 gap in elevation, standing against the western face of Wall M, and partly cutting it to the south. Two rooms were distinguished west of JD, delimited by wall JE and JF/JK (fig. 9).³⁸

On the lower terrace there were two rows of houses lying at a slightly different elevation. These houses had thin walls, each made of a single course of greenish bricks. The wall of the easternmost house (JA) was cut into the EB III slope. The western limit of this house is unclear. According to Kenyon wall JB was at the same time the western wall of the eastern house and the eastern wall of the western house.³⁹ It seems clear, however, that since it lies at a lower elevation and exhibits a different orientation in respect of JA, it can be only attributed to the western house (fig. 10). The latter was subdivided into two rooms by wall JC, on both sides of which a plastered *pisé* block

³³ This definition ("W"-shaped) seems at some extent misleading, since it is a V shaped ditch excavated not at the foot of the slope (where it would have been expected), but roughly at one third of its height (Kenyon 1981: pl. 236, between 23 and 28 m).

³⁴ The seasonal occupation of a slope seems quite uncomfortable. Kenyon also infers that there should have been a similar occupation with "no solid structures" to the east in the same Trench (Kenyon 1981: 105).

³⁵ A direct examination of the north section of Trench I has confirmed that layers within Ditch VI are not horizontal as described by Kenyon on pl. 236, thus suggesting that it was filled up and regularized by a voluntary operation.

³⁶ Kenyon 1981: 106, pls. 88a, 231, and 236, between 13 and 17 m.

³⁷ The floor of this house sealed the collapse layer of Wall M (Kenyon 1981: 106-107, pl. 88b).

³⁸ Kenyon rightly postulated the existence of a further terrace wall to the west, connecting this area with the lowest houses (Kenyon 1981: 107).

³⁹ Kenyon 1981: 105-106, pls. 86a, 231a.

was found. The hypothesis that they were altars was corroborated by other finds, indicating that the house was in fact a small shrine.⁴⁰

Two main reconstructions were identified on both terraces, including reparations of walls and raising of floors, without significant alteration of the architectural units. The uppermost layer is a filling of collapsed bricks and other materials, attributed by Kenyon to an earthquake, which possibly was also responsible for the gully, which obliterated EB IV deposits in between the two terraces.⁴¹

Data obtained in Trench I may be summarised as follows: 1. the ruins of the Early Bronze III city-walls were regularised and settled in terraces by the inhabitants of Tell es-Sultan; 2. there is evidence that a group of houses also existed on top of the tell, which was levelled by filling the ditch belonging to the latest EB III city-walls; 3. a small shrine was erected in the central terrace on the slope, looking west.

Trench II

Some remains of a house already identified and partly excavated by Sellin and Watzinger on top of the northern outer city-wall were dug by Kenyon and attributed to Trench II, Stage XXI.⁴² A succeeding phase of abandonment was then distinguished (Stage XXII). As in Trench I, the house cuts into the collapse layer of the outer EB IIIB city-wall,⁴³ and is bounded by flimsy walls, consisting of a single course of dull bricks laid as stretchers. Two rooms can be distinguished with a doorway connecting them.⁴⁴ In the western room three hollowed-out stones set into the floor and a bin, built against the northern face of wall OEG, were brought to light (fig. 11).⁴⁵ The house was destroyed by a violent conflagration, as it shown by remains of burnt timbers and reeds and various pottery vessels found scattered on the floor. The following layer is erosion debris, also containing EB IV materials.⁴⁶

⁴⁰ A four-lips bowl was found buried within the southern block (Kenyon 1981: fig. 12.1). In the southern room, also a cist, a child burial, and a bin were found, which were interpreted as cult installations (Kenyon 1954: 56, 58, pl. XIII; 1981: 106, pls. 86-87).

⁴¹ Kenyon 1981: 108.

⁴² Kenyon 1955a: 116, pl. XVIII, 2; 1981: 120, 166-167, pl. 255a.

⁴³ Sellin - Watzinger 1913: pl. II, square D7, "Vormauer"; the same is referred as Wall OCV/OEA in Kenyon 1981: pls. 254b-c (note that wall OCV is to be read ODV); the stones visible in the plan are the foundation of the last rebuilding of the city-wall. The label "levels destroyed" on Kenyon 1981: pl. 255a indicates the limits of erosion of the Austro-German excavations on that spot.

⁴⁴ A door socket was found at the junction of wall OEF with wall OEH.

⁴⁵ The bin, as similar fittings excavated by the Austro-German Expedition, had a brick paving; the pierced stone placed in front of the bin was likely a mortar; the other pierced stones may be interpreted as bases for posts supporting the roof, being located along the central axis of the room; one is in fact faced by a pier abutting on wall OEG (Kenyon 1981: 166, pls. 107a-b).

⁴⁶ This, according to Kenyon, would support the following reconstruction: 1) EB IV sparse occupation on the EB IIIB remains, which in the slope results in an accumulation of EB IIIB building materials mixed with EB IV pottery (sic!); 2) building of the house (of wall OEG) cutting on the previous layers to the south and terracing to the north; 3) destruction of the house; 4) final erosion of the EB IV layers (Kenyon 1981: 167).

Trench III

EB IV remains identified on the southern slope of the mound by Kenyon were again superimposed and, perhaps, cut into the EB III Inner (NFG+NFB) and the Outer (NFJ) city-walls. The first layer of occupation (Stage XXI) is, according to Kenyon, represented by a ditch dug into the EB III collapse layer.⁴⁷ This would support the hypothesis that a village did exist on the *tell* summit at the beginning of the period. The plan of the ditch would suggest that it was a path for ascending the mound. It is also likely, however, that it simply was an erosion channel between the two collapsed city-walls, during a period of abandonment of this part of the *tell*. Successively, very poor houses flanked the path. Remains of EB IV dwellings were found north and south of the filled-up ditch, but were left unpublished. In the west section two walls are shown, NNA and NNB.⁴⁸ The first lies on top of NFG and its collapse layer, thus proving that it belonged to the earliest re-occupation of the site, after the complete collapse of its city-walls; the latter (NNB) is quite questionable, being plotted on top of wall NFD, partly covered by wall NFJ (the Outer Walls respectively of the EB IIIA and of the EB IIIB fortifications).⁴⁹ At a direct examination (fig. 12), what seems instead more reasonable is that NNB is either a part of the stone foundation of NFJ, or an upper repair of NFD, which, it has to be stressed, was the main supporting wall at the foot of the built up EB III rampart.⁵⁰ A third possible interpretation is that NNB was a supporting wall of the Period IVc (MB III) rampart, as many others identified on the slopes of the *tell*.⁵¹ If this is the case, the thick layer labelled by Kenyon on the west section⁵² "fallen green bricks" and interpreted as collapse of EB IV houses, at least in its southern part has to be included into the rubble fill of the overlying MB III rampart.

Sparse finds in other areas

Layers testifying to an EB IV frequentation were excavated by Kenyon on the Spring Hill, in Square H II, even though the British archaeologist claimed that there was no evidence indicating an occupation of the eastern slope of the *tell* during this period.⁵³

Kenyon did not find any EB IV structure in Squares E III-IV, where a complete stratigraphic sequence through the entire urban Early Bronze Age was established.⁵⁴ In the same area Sellin and Watzinger, Garstang and the Italian-Palestinian Expedition (Area F) actually brought to light several EB IV finds. The absence of such finds in

⁴⁷ Kenyon 1981: 213-215, pl. 270b.

⁴⁸ Kenyon 1981: pl. 273.

⁴⁹ As it has been clarified by the Italian-Palestinian excavations in Areas B and B West (Marchetti - Nigro 1998: 89-91, fig. 1:15; 2000: fig. 2:2) Wall NFD is the Outer Wall of Period IIIc1 (EB IIIA), built parallel to NFB, while Wall NFJ is its reconstruction of Period IIIc2 (EB IIIB), associated with the Inner Wall NFB. Since in section NNB is clearly covered by NFJ, Kenyon surmised a stratigraphic separation among the stones visible between 11.5-13.7 S. and 13.5 H. This line is instead not evident at a direct examination.

⁵⁰ Marchetti - Nigro 2000: 217-218, figs. 5:59-60.

⁵¹ Marchetti - Nigro 1998: 86 (W.113, fig. 3:10; W.71 and W.72 fig. 4:39).

⁵² Kenyon 1981: pl. 273.

⁵³ Kenyon 1981: 339.

⁵⁴ Kenyon 1981: 310.

Kenyon's excavations is possibly due to the presence of some huge Byzantine refuse pits, which destroyed the upper layers in Square E III-IV, and to the heavy erosion suffered by the southern edge of Garstang's big trench, which collapsed obliterating the upper stratification down to EB IIIB layers.

1.4. The EB IV occupation at Tell es-Sultan: An overall summary in the light of the Italian-Palestinian Expedition results

The Italian-Palestinian excavations (1997-2000) provided new data concerning topography, stratigraphy and chronology of the EB IV occupation on the site (fig. 13). In the general archaeological periodization of Tell es-Sultan, Early Bronze IV corresponds with Period IIId, thus hinting at its stratigraphic and partially cultural continuity in respect of EB III (Period IIIC).⁵⁵

1.4.1. Topography

Remains of an EB IV permanent occupation were uncovered in Area F, just aside the houses discovered by the Austro-German Expedition on the northern *plateau*.⁵⁶ A thin wall made of greyish mud bricks was brought to light in BfII10+BfII11, flanking a round silos (S.310; fig. 14).⁵⁷ To the north a *tannur* (T.412) was excavated in 1999, cut into W.306+W.304 of Period IIIC1 (fig. 15). It apparently belonged to a Period IIId house, excavated by Sellin. As noted above, three walls uncovered by the Austro-German expedition on the southern edge of their excavations (inked in hatched blue on the general map of the site; fig. 1) may be attributed to a group of houses in this area, to which also the silos and the oven belonged. A thin mud brick wall excavated by the Austro-German expedition in the northern east-west trench cut through the site in 1909 (inked in blue in the plan) may be also attributed to Period IIId (EB IV). The attribution is confirmed by the fact that this structure is overlaid by a wall excavated by the Italian-Palestinian Expedition (W.431), ascribed to Period IVA (MB I).⁵⁸ These finds indicate that sparse houses were present on the *tell* well inside the northern line of the EB III fortifications. The majority of these structures show the same orientation of the underlying Period IIIC (EB III) houses, because of the general topography of the site, with a street descending the slope from the south-west towards the north-east.

In the central area, the *tell* was occupied by houses too, as it is demonstrated by the discoveries of Kenyon on the lower and upper terraces of Trench I (see above), and by a oven (T.606) with in *situ* EB IV pottery materials brought to light in Area G, on the south-western summit of the "Spring Hill". The latter find is in a very clear stratigraphic position, sealing the collapsed layers of Period IIIC2 (EB IIIB), and being cut by a mud brick-built tomb (D.641), ascribed on the basis of its pottery assemblage and of two

⁵⁵ Marchetti - Nigro 1998: 13-14, note 6, tab. 1.

⁵⁶ Sellin - Watzinger 1913: pls. I-II; see above.

⁵⁷ Marchetti, Nigro 2000: 18, figs. 1:12.19-22, 1:13-14.

⁵⁸ The wall can be located in Square BgII15 of the Italian-Palestinian grid; as it is shown in the detailed plan (Sellin - Watzinger 1913, Bl. 19). Its stratigraphic location below W.431 is compatible with an attribution to Period IIId, to which also hints at its building technique with a single row of bricks.

“Canaanite” scarabs to the very end of Period IVa (MB IB, c. 1825 BC).⁵⁹ Due to erosion and superimpositions it is impossible to state that a built structure was uncovered here, however, complete vessels found *in situ* (fig. 16) apparently belonged to a domestic assemblage.

The existence of an EB IV occupation on top of the southern slope of the mound (Area B) was confirmed by the identification of a layer of frequentation (L.32a-c) sealing the collapsed structures of Building B1. Associated pottery materials and objects testify to an occupation during Period IIId (EB IV).⁶⁰ A similar situation was discovered in Area B West, where, as also noted by Kenyon in the nearby Trench III,⁶¹ remains of an EB IV occupation on top of the collapsed city-walls were evident (fig. 17).

These topographic data indicate that during Sultan IIId the area previously encircled by the city-walls was almost completely, albeit irregularly, occupied. However, it is impossible to evaluate the limits of this occupation, if one does not distinguish its diachronic development with the help of stratigraphy. When structures are confidently attributed to layers, activities and phases, then it becomes possible to draw out the development of the rural village established by the ‘Ain es-Sultan in this period, as it had already happened many times in the history of this site.

A few topographic elements may be underscored: 1. the hearth of the village was the Spring: it marked the separation between the inhabited area (the small mound looking ‘Ain es-Sultan, called the Spring Hill) and the irrigated oasis (just below and east of it); so that it could never be completely included inside the town; 2. the *tell* and the town upon it had a sloping profile; for this reason houses were built on terraces, degrading from west to east, and the main street was a crescent ascending the Spring Hill from the south-east and descending it towards the north-east.

1.4.2. Stratigraphy

Stratigraphic data are too sparse and complicated to be put together forming a comprehensive picture. However, a basic periodization may be put forth on the grounds of stratigraphy. The earliest EB IV materials or structures retrieved lie directly upon - or cut into - the destroyed remains of Period IIId (EB IIIB). This, of course, does not surely imply a direct chronological succession, as the ruins were always razed and regularized before new installations; anyway, in the central area of the *tell*, on the Spring Hill and on the northern summit, EB IV structures are built directly upon Sultan IIId collapsed buildings, pointing at a short interval occurred between the definitive abandonment of the site and the new settlement. The Sultan IIId (EB IIIB) flourishing city was apparently brought to an abrupt end by a violent earthquake, which struck it around 2350 BC.⁶² A certain time span seems to have elapsed (one or two generations?)

⁵⁹ Marchetti - Nigro - Yasin - Ghayada 2000: 83.

⁶⁰ Marchetti - Nigro 1998: 26, figs. 1:4, 1:33.4, Activity 3.

⁶¹ Kenyon 1981: 107.

⁶² This is, of course, an occasional cause, which acted together other long-duration factors provoking the collapse of the first urbanization in Palestine (Dever 1989; Esse 1989).

before the new occupation occurred (around 2300 BC), because no further repairs of the previous impressive buildings or fortifications are attested to.⁶³ In the earliest EB IV stratigraphic phase (Sultan IIId1, 2300-2200 BC) no major razing operations are detectable. The new settlers simply flattened the ruins on top of the *tell*, and erected a small village with sparse dwellings. The walls of these poor and irregular houses are often lined with re-employed EB IIIB mud bricks, as well as floors or bins found in them.⁶⁴ The duration of this early flimsy occupation is maximum a century, and, being the settlement limited to the summit and the slope of the Spring Hill, it seems not surprising that it is almost absent in the trenches excavated on the north, south, and west by Kathleen Kenyon. Moreover, since the same area was heavily dumped during the Byzantine Period, this already ephemeral occupation is very scanty documented in the archaeological record.

In the second phase, Sultan IIId2 (EB IVB, 2200-2000 BC), the village grew up in dimension and houses denseness, and some important works were undertaken all around the site slopes. Outside the line of the previous city fortifications, i.e. at the foot of the earthen embankment supporting the Outer Wall, houses were built on the filled up EB III ditches (to the west), or on terraces made regularizing the ruined EB III city-walls. Since ditches and terraces also included in various spots layers of natural erosion, this suggests that there was a gap in occupation before the slopes of the *tell* were inhabited. Buildings on terraces already existed on the eastern flank of the Spring Hill, where they were a classic feature of the central quarter of the city during Period IIIC.⁶⁵ However, the transformation of the western, southern and northern flanks of the *tell* was a new achievement of Period IIId2, clearly indicating the gradual transformation of the village into a rural town. In the area excavated by Sellin and Watzinger to the north, and in Kenyon's Trench II, this situation is pretty evident: in one case, the slope rearrangement included the complete dismantling of the Outer Wall, in order to build a large house. The houses of Period IIId2 show the same distinguished building technique all over the site, with the employ of light greenish mud bricks on a single row. Installations, such as platforms, mortars set into the floor, grinding slabs are in many cases identical to those in use during the preceding Sultan IIIC2 phase (EB IIIB).

From a stratigraphic point of view, Period IIId reproduces a situation typical of Tell es-Sultan, where the earliest phase is usually found on the higher spot, while the following one is detected on the flanks of the *tell*. This is due to two basic reasons: 1. the existence of an extraordinary occupation in prehistoric periods, which raised the height of the *tell* itself up to almost 9.0 m on the natural rock; 2. the construction of a massive double

⁶³ One should stress that during the last EB III phase (Sultan IIIC2), the city-walls underwent many restorations (Kenyon 1981: 14-15, 117-120, 176-177, 223-224), and it is thus reasonable to surmise that if they were useful in some ways, the new settlers would have tried to rehabilitate them.

⁶⁴ See above the house excavated by Sellin and Watzinger at the centre of the northern side of EB III city-walls (fig. 4).

⁶⁵ Palace G has two rows of rooms at different elevations (Marchetti - Nigro - Yasin - Ghayada 2000: 83) and a group of houses of the same period (EB IIIB) was excavated by Garstang in the area facing the 'Ain es-Sultan (see above note 24).

mud brick fortification during the Early Bronze Age (again with an estimated height of at least 8.0-10.0 m). These two factors conditioned the following topographic and stratigraphic development of the site, since in each period the newcomers started settling the *tell* summit, in front of the Spring, and then spread over the surrounding areas and the slopes, which were, of course, at a lower elevation.

1.4.3. Chronology and Pottery Assemblages

Up to now no radiocarbon dates are available for fixing in absolute chronology the two main stratigraphic phases identified, even though both Areas B and G have provided very precise references for the end of the preceding Period IIIc2, thus offering a suitable *terminus post quem* around 2300 BC.⁶⁶

The only material available for a preliminary chronological arrangement of finds is pottery. It gives a help for correlating different contexts, but cannot solve the problem of absolute dating, which remains fluctuant within the limits 2300-2000 BC.⁶⁷ Stratified pottery assemblages from the Italian-Palestinian excavations in Areas B, D, F, G, and comparative analysis with materials retrieved by previous expeditions⁶⁸ allow to distinguish two slightly different ceramic horizons, tentatively corresponding to Period IIId1 and IIId2.⁶⁹

Period IIId1 Pottery (Early Bronze IVA, 2300-2200 BC)

The earliest EB IV pottery is roughly hand-made and has a limited typological inventory. Fabrics show big calcite and straw inclusions, and there are no combed decorations. Pots walls are unevenly modelled, and also the firing is irregular, so that the outer surface presents a coloured pattern of alternating oxygenation and reduction. Scrabbled lines on the upper part of hemispherical cups (fig. 18:1, 5) or barrel shaped beakers (fig. 19:2, 20: 1-2) are the only decorations attested to. The use of the wheel, albeit limited to the neck of closed shapes, is not yet noticeable. This early horizon marks a distinct break in the ceramic development of the site, since virtually all of the specialized wares (Red-Polished Ware, Khirbet Kerak Ware, Red Painted Ware) of Sultan IIIc cease to be produced. The typological variability of Simple Ware is oversimplified (bowls, beakers, four-lips lamps, small jars with S profile and flat bottom); the only shape, which continues to be produced is the bowl with flat base (fig. 20: 1-2). As regards Preservation Ware, the hole-mouth jar is the only large container in

⁶⁶ In Area G also a carbonised wooden beam was discovered useful for dendrochronology, but its 120 years sequence could not be located in a previously known tree rings series.

⁶⁷ Stager 1992: 41 proposes 2250-2000 BC.

⁶⁸ Sellin - Watzinger 1913: 14, 46-47, 108-112, 116-120; pl. 22:1, 2a, 2b. A diachronic analysis of EB IV pottery materials was already proposed by Dever (1980), and reiterated by Palumbo (1990: fig. 26-28).

⁶⁹ In the traditional presentation by R. Amiran (1960; 1970: 79-83, pls. 22-24) three ceramic groups were distinguished (Northern, Southern and of Megiddo). Further studies increased the pottery groups (or families, initially improperly exchanged with ethnic groups) number and differentiation (Dever 1970; 1971; 1973; 1987), thus demonstrating the high range of regionalism of the Early Bronze IV culture (Dever 1980; Richard 1980; Palumbo 1990: 81, 132).

use (fig. 21:1-3). Ledge handles are barely attested to on jars and teapots, being squatted in an envelope-like shape.

Period IIIId2 Pottery (Early Bronze IVB, 2200-2000 BC)

The following ceramic horizon, albeit showing a strong continuity as regards types and clays, is characterized by the introduction of the fast wheel for the realization of jar necks, which were applied upon hand-made bodies; the junction ridge was incised with a wooden comb (with five to seven teeth) in order to hide it. This caused a change in the shape of the necks, which often resulted stemmed out of an acute angle (fig. 24). Bowls with vertical walls were also refined on the wheel (fig. 21: 3-4), sometimes by means of the same thin comb used for wavy bands also on small jars shoulders (fig. 19: 4-6). Small jars often exhibit a couple of lug-handles applied between the shoulder and the neck (fig. 22: 1). Hole-mouth jars have a peculiar rope-like applied ridge all around the cut in rim (fig. 23: 1-3). Spouted jars are also common (fig. 23: 4), which balance the absence of proper jugs in the inventory.

A diagnostic feature of this phase is the introduction of the combed tool for decorating with horizontal and wavy bands small and medium size jars on the shoulders.

The two ceramic horizons here very schematically synthesized are an easy tool for examining the coeval pottery from the necropolis, with the aim of giving temporal depth to this large *corpus* of materials.

2. THE NECROPOLIS: BURIAL CUSTOMS AND SOCIAL ORGANIZATION IN A DIACHRONIC PERSPECTIVE

2.1. Archaeological investigations in the necropolis

The existence of a huge necropolis on the limestone spur west and north of Tell es-Sultan was discovered by John Garstang in 1930. However, he was not immediately aware of the extension of the necropolis - one of the largest of the entire Near East - concentrating his investigations in the area surrounding the *tell*, on both sides of the road ascending Jebel Quruntul. The major Garstang's find in the necropolis was Tomb A, a collective burial, roughly 5.0 by 5.0 m, excavated in the limestone *plateau* with a reserved pillar in the middle. Tomb A hosted at least one hundred burials,⁷⁰ with a rich pottery assemblage dating from the Early Bronze II-III.⁷¹ Basing upon these ceramic materials, the utilization of this tomb ceased with the destruction of the Period IIIc2 (EB IIIB) city, even though a few vessels may be ascribed to the last phase of life of the city, after the great earthquake destruction of around 2350 BC (see above). Other tombs excavated by Garstang all date to the Middle Bronze Age.

⁷⁰ Three hundred according to Garstang (1932a: 20).

⁷¹ Garstang 1932a: 18-22, fig. 7, pls. II-VIII; Garstang 1932b: 41-43, pls. XXVI-XXVIII.

2.2. Kathleen Kenyon's tomb groups in the light of the Italian-Palestinian excavations on the tell

During the systematic exploration of the Jericho necropolis in the years 1952-1958,⁷² Kathleen M. Kenyon and her team identified at least 364 EB IV tombs.⁷³ Dame Kenyon subdivided them into groups according to location, shape of the rock cut chamber and shaft, burial custom and furnishings.⁷⁴ Seven tomb groups were, thus, distinguished at the end of the exploration:

1. "Dagger Type": the buried person is flexed on a flank allied with a copper dagger (in female burials a nail and some beads); tombs of this group were discovered only in area A;⁷⁵
2. "Pottery Type": the skeleton is disarticulated; tomb furnishing is represented by a few pottery vessels: double handled small jars, and, rather often a four-lips lamp; tombs of this type were excavated in all areas;⁷⁶
3. "Square-Shaft Type": represented by a few tombs, characterized by the perfectly square shape of the shaft; buried corpses are either flexed or disarticulated; furnishing is usually constituted by some pottery vessels, except one case where a bronze spear-head was found; tombs of this typology were excavated in areas D, G, J, and O (a single one with no fittings);⁷⁷
4. "Bead Type": small chamber very roughly excavated, grave-goods consisting of a few beads, small bronzes, and sometimes, a few pottery vessels; the burial is disarticulated; tombs of this type were excavated in areas K, A, G, J;⁷⁸
5. "Outsize Type": a few tombs of very large dimensions (the shaft is up to 6.0 m deep), hosting one or two disarticulated burials with a rich funerary assemblage, including pottery, bronzes, and other wooden furnishings; these tombs were found only in areas O and P;⁷⁹
6. "Composite Type": ten tombs which show elements of the burial customs of the other groups, discovered in areas L and M (plus one tomb in Area G);⁸⁰
7. "Multiple Burials": exemplary illustrated by Tomb M 17, with three burials and a rich pottery assemblage, including open shapes.⁸¹

⁷² Kenyon 1960: 180-262; Kenyon 1965: 33-166.

⁷³ It is impossible to evaluate the number of tombs plundered by modern robbers. An approximate estimation based on the aerial photos suggests that at least 40 tombs can be added to those excavated by Kenyon, the whole group reaching the number of 400.

⁷⁴ Kenyon 1960: 180-185; 1965: 33-38.

⁷⁵ Kenyon 1960: 186-199; Kenyon 1965: 50-57.

⁷⁶ Kenyon 1960: 199-262; Kenyon 1965: 57-80.

⁷⁷ Kenyon 1965: 87-92.

⁷⁸ Kenyon 1965: 81-87.

⁷⁹ Kenyon 1965: 92-143.

⁸⁰ Kenyon 1965: 143-157.

⁸¹ This tomb was compared by Kenyon with those of Cemeteries 100-200 and 1500 of Tell el-Ajjul (Kenyon 1956).

Actually, one wonders if further exploration of the necropolis may add new groups, as it seems to be the case judging from some tomb assemblages from Jericho studied in recent years.⁸² For instance, Gaetano Palumbo identified at least 13 tomb groups, comparing burials, sex, social *status* and tomb fittings.⁸³ He isolated the indicators of a stratified society, as well as the coexistence of different “ethnic” (I would prefer “social”) groups (see also below).⁸⁴

Scholars have been discussing if these groups should be given a social significance, and of which kind (large families of semi-nomad shepherds, warriors gangs, the *tell* settlers, etc.); if a hierarchy between burials is detectable; which was the social complexity of the community using this necropolis; which was the burial custom (especially in the case of intentionally disarticulated burials); how to connect the different ceramic families attested to in the pottery equipment of the tombs with the ceramic horizon of EB IV Palestine. Two basic questions, however, have been quite surprisingly left apart: 1. Which was the relationship between the necropolis and the nearby settlement? 2. Which was the date of these tombs, otherwise fluctuating in a time span of at least three centuries? Since in the vast majority of cases, EB IV tombs had a single utilization, they should be - at least tentatively - attributed to a definite chronological phase. A chance to achieve this goal is given by the comparison with stratified data obtained on the *tell*; a task which would accomplish also the first question. This, of course, deserves a long and complex study; however, some general indications may be anticipated, which show that differences between tomb groups (and perhaps social groups they represent) also reflect a chronological differentiation between them. One may, however, raise the objection that it is not sure that pottery destined to burial furnishings was the same in use in domestic contexts on the site, and that, consequently, the two sets of materials are not reliably comparable. This is not true, since usually vases and lamps clearly show the traces of use; moreover, there are examples of repaired vessels added to some tomb assemblages.⁸⁵

In the light of the excavations on the *tell* summarised above, tomb groups may be preliminary ascribed to the two main stratigraphic phases of Sultan IIId1 and IIId2 as follows:

⁸² See Nigro 1999a for a comprehensive summary on this topic.

⁸³ Palumbo 1986. This scholar also proposed the identification of some new ceramic families in Transjordan, highlighting the strong regionalism of the EB IV culture (Palumbo - Peterman 1993). On Jericho groups see also Robinson 1995.

⁸⁴ Palumbo 1987; see also the not fully convincing critical remarks of E. Baxerani (1995: 87-91); unfruitful, because not considered in a chronological perspective, are the analyses of T. Shay (1983), as already noted by Palumbo (1987; see also the answer of Shay 1989).

⁸⁵ This is for example the case of a bowl, which shows the holes for a reparation with four copper rivets: Nigro 1999a: 34, fig. 5:4, pl. VIII.

Period Dating	Sultan IIId1 (EB IVA) 2300-2200 BC	Sultan IIId2 (EB IVB) 2200-2000 BC
Tomb Groups	"Bead Type" (<i>several uncertain</i>)	
	"Dagger Type"	
	"Pottery Type" Type P.A.	"Pottery Type" Type P.E.
	"Square-Shaft Type"	
	"Outsize Type"	
	"Composite Type"	"Composite Type" M13, M16
		"Multiple Burial"

Tombs belonging to the "Bead Type", "Dagger Type", "Square-Shaft Type", "Outsize Type" and "Pottery Type" (sub-type P.A.) can be confidently attributed to Period IIId1, even though only a few comparisons may be detected between ceramic materials found in them and the limited inventory available from the site for this early phase. This is partly depending on the gap in occupation, which followed the abandonment of the Sultan IIId2 city. In the meantime, this may suggest that the necropolis, and especially the 'Ain es-Sultan had become a symbolic burial place also for semi-nomadic groups. However, as people buried in tombs of this period are maximum 300 individuals during a time span of a century (3 per year), one cannot exclude that the users of the necropolis were the few settlers of the village. The hypothesis of a use by semi-nomadic groups seasonally visiting the Jericho Oasis is mainly based on the examination of tomb fittings, and namely on the presence of copper weapons, javelins, pins and nails, which are not found on the *tell* in this early phase, and which would indicate that the nomads had a special skill in handling metallurgy. They were, at some extent, responsible of the transmission of copper technology to the Middle Bronze Age culture (see below conclusions).

The gradual transformation of the material cultural horizon of Sultan IIId2, may be distinguished in some tombs of the sub-type P.E. of the "Pottery Type", and of the "Composite Type" (Tomb M 13 and M 16).

What seems noteworthy is that the entire group called "Multiple Burial" exhibits ceramic materials belonging to the Sultan IIId2 horizon, which find striking comparisons among stratified pottery of the *tell*.⁸⁶ The presence of open shapes in the ceramic assemblages of these tombs, the number of individuals buried in them, and the constant re-utilization by members of the same family or social group, indicate that a change was occurring in burial practices, perhaps depending upon the cultural development of a fully settled community.

The attribution of these tombs to Sultan IIId2 (EB IVB) is confirmed by the fact that many of them were re-used in the Middle Bronze Age, as happened to Tombs B 48A, J 39, D 13, D 22, P 17. This datum hints at a certain continuity between the Early and Middle Bronze Age culture at Jericho,⁸⁷ which is, however, very difficult to be discerned

⁸⁶ This point was already stressed by Kenyon (1965: 157).

⁸⁷ Palumbo 1990: 133-134.

on the *tell* itself. From this perspective, one has to stress that the earliest Middle Bronze strata were excavated only in the area just in front of the Spring, showing that a mud brick fortification existed before the erection of massive ramparts towards the end of Sultan IVa (MB I, 2000-1850 BC).⁸⁸

Conclusions: Archaeological Periods, A Rural Village (of a Dimorphic Society) and Its Necropolis

In conclusion, data provided by renewed excavations at Tell es-Sultan allow to put forward a preliminary periodization of the Early Bronze IV on this site, distinguishing an early phase (Sultan IIId1), when, after a certain gap in occupation, a small rural village arose on the summit of the Spring Hill, and a second phase (Sultan IIId2), when the village became a small town, and also the slopes of the *tell* were inhabited after having been appropriately terraced. This pattern of development also enlightens the too uniform horizon of the contemporary necropolis. Comparison of pottery types between tomb assemblages and stratified materials allows to attribute tomb groups to the abovementioned phases, giving to this large amount of data a diachronic depth, essential for its historical interpretation. The subdivision of the Early Bronze IV into two phases, an earlier formative one (EB IVA, 2300-2200 BC), during which the North is under the influx of the coeval Painted Caliciform Culture of Syria,⁸⁹ and a second longer flourishing one (EB IVB, 2200-2000 BC), in which several local horizons co-existed, stems out from the study of Tell es-Sultan and its necropolis. This periodization also takes into account that of Syria, where the urban system does not undergo a crisis as like as in Palestine.⁹⁰ In the latter region, a complete reversal to an agricultural and pastoral economy took place, and Tell es-Sultan, for its location by a perennial spring and at the border between complementary ecosystems (the desert and the oasis), was a favourite site for a dimorphic society to flourish. The sedentary peasants of the oasis and the nomad shepherds exchanged their goods by the Spring of 'Ain es-Sultan: the symbolic place of this relationship was the necropolis, which both groups living in symbiosis used. However, this model was not a fixed one, and the situation evolved from an initial prevalence of nomadic pastoralism towards a progressive sedentarization, which ended in a renewal of the urban society in the following historical period.⁹¹ As much as fascinating (and fitting the evidence) this interpretation is, however, it does not take into account the number of people involved. As stated above a maximum number of 500 to 600 individuals buried over a time span of at least three centuries means three burials *per* year, a number which gives no room for extra ("nomadic") groups, more than the inhabitants of the rural village on Tell es-Sultan. The villagers, thus, seem, at any extent, the most suitable owners of the tombs of the Jericho necropolis. The different ceramic traditions identified may be more simply attributed to different periods of development of the local pottery horizon, as shown by the comparison with the stratified *corpus* of

⁸⁸ Marchetti - Nigro 2000: 165-179.

⁸⁹ Braidwood - Braidwood 1960: 442-446, 521.

⁹⁰ A cogent comparison of Syria and Palestine during the urban Early Bronze Age was offered by S. Mazzoni on the basis of the Ebla sequence (Mazzoni 1985).

⁹¹ Palumbo 1990: 133-134.

the *tell*, as well as, for other respects, to different potters. Similarly, the dimorphic organization of the Jericho society may be interpreted as a different behaviour of the same people (the inhabitants of Tell es-Sultan), who during winter were mainly shepherds and in summer agriculturalists. The gradual sedentarization occurred during Sultan IIId1. In the following Sultan IIId2 the dimorphic society with two complementary social elements (sedentary/agriculturalists - nomadic/pastoralists) living in symbiosis,⁹² became a society the members of which were for a season pastoralists and for the other agriculturalists. This would better explain the introduction of food offerings in tombs of Sultan IIId2 (indicated by the presence of open shapes in the their ceramic assemblages), as well as the progressive shift to collective/familiar burials.

EB IV finds at Tell es-Sultan, if seen in their proper temporal dimension, show the gradual growth of an agricultural society based upon the domestic mode of production, which, as a hint at its complex structure, is capable to produce metal objects and tools.⁹³ No invasions or prevalence of nomadic elements are reflected in material culture, the diversities of which are probably to be included within the normal inner variability of a non-standardized domestic material culture horizon. On the contrary, the correspondence between the *tell* and the necropolis points to a complex stratified social organization. Different burial customs depends on different social status, and - more significantly - on the different chronology of tombs.

If in the light of this interpretation we enlarge our perspective to the whole Palestine, the dimension of time highlighted by this Jericho contribution has to cope with regionalism, which characterized the EB IV culture. This means that each regional cultural *facies* has its slightly different chronological setting, within a complex net of sloping horizons. A general chronological subdivision seems, anyway, a helpful research tool, and, as regards the Jordan Valley, probably reflects a real step in cultural transformation as noted as early as thirty years ago by E.D. Oren, after his study of the necropolis of Beth Shan.⁹⁴ The subdivision between EB IVA and EB IVB historically marks the end of the sedentarization of nomadic groups, which settled the Jordan Valley some decades after the collapse of the EB IIIB urban culture. Then a rural multimorphic society developed establishing a new agricultural productive system, which was at the basis of the following rebirth of the city-states in the Middle Bronze Age.⁹⁵

⁹² This dimorphic society was already functioning during the "urban" Early Bronze Age in Palestine: Finkelstein 1990; 1995.

⁹³ Tell es-Sultan certainly was one of the centres exploiting the copper of the 'Arabah during this period (Rothenberg - Glass 1992). The EB IV was the period during which tin bronze was first produced in the Near East (Muhly 1985).

⁹⁴ Oren 1973: 36-37.

⁹⁵ Finkelstein 1989: 137.

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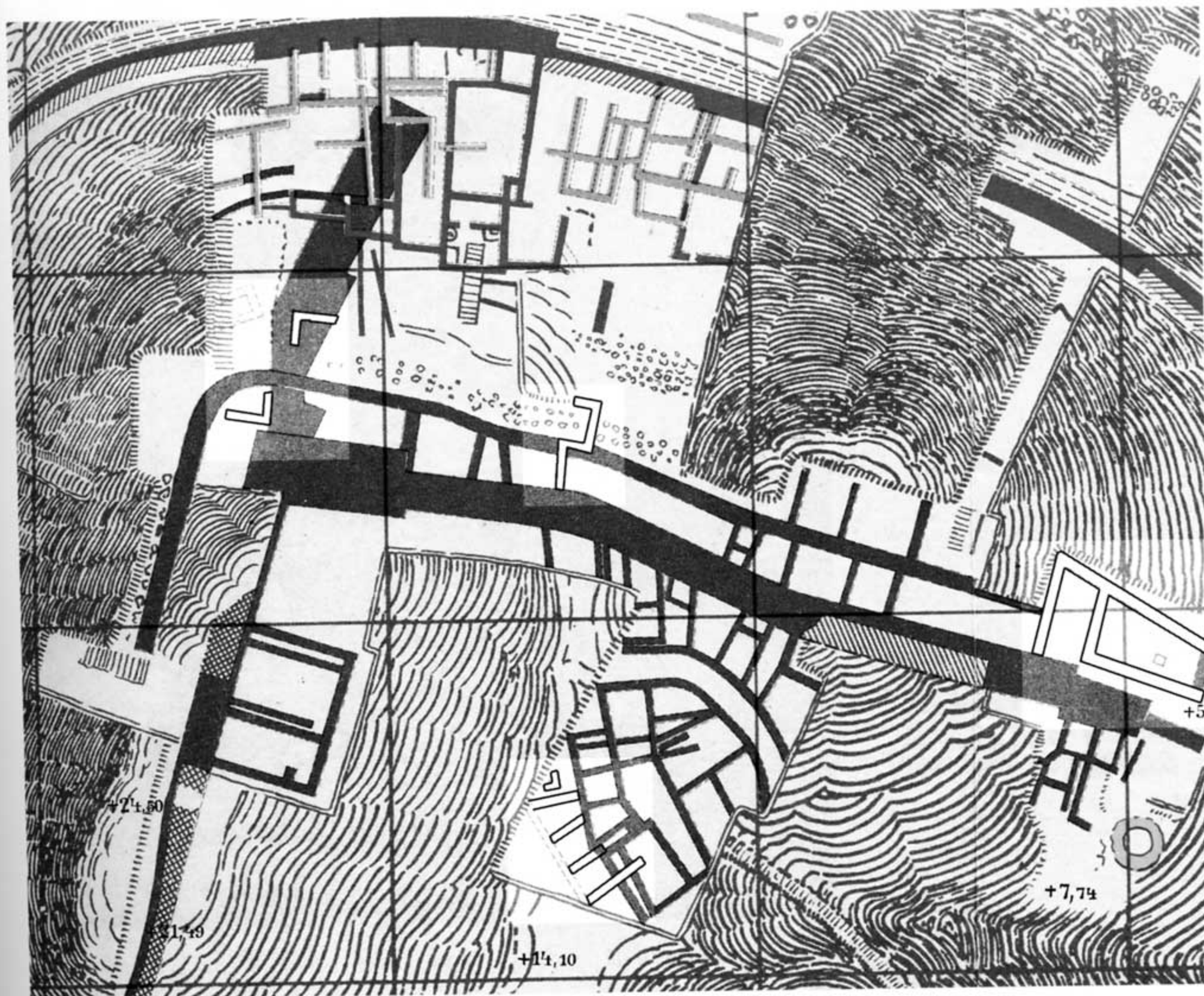
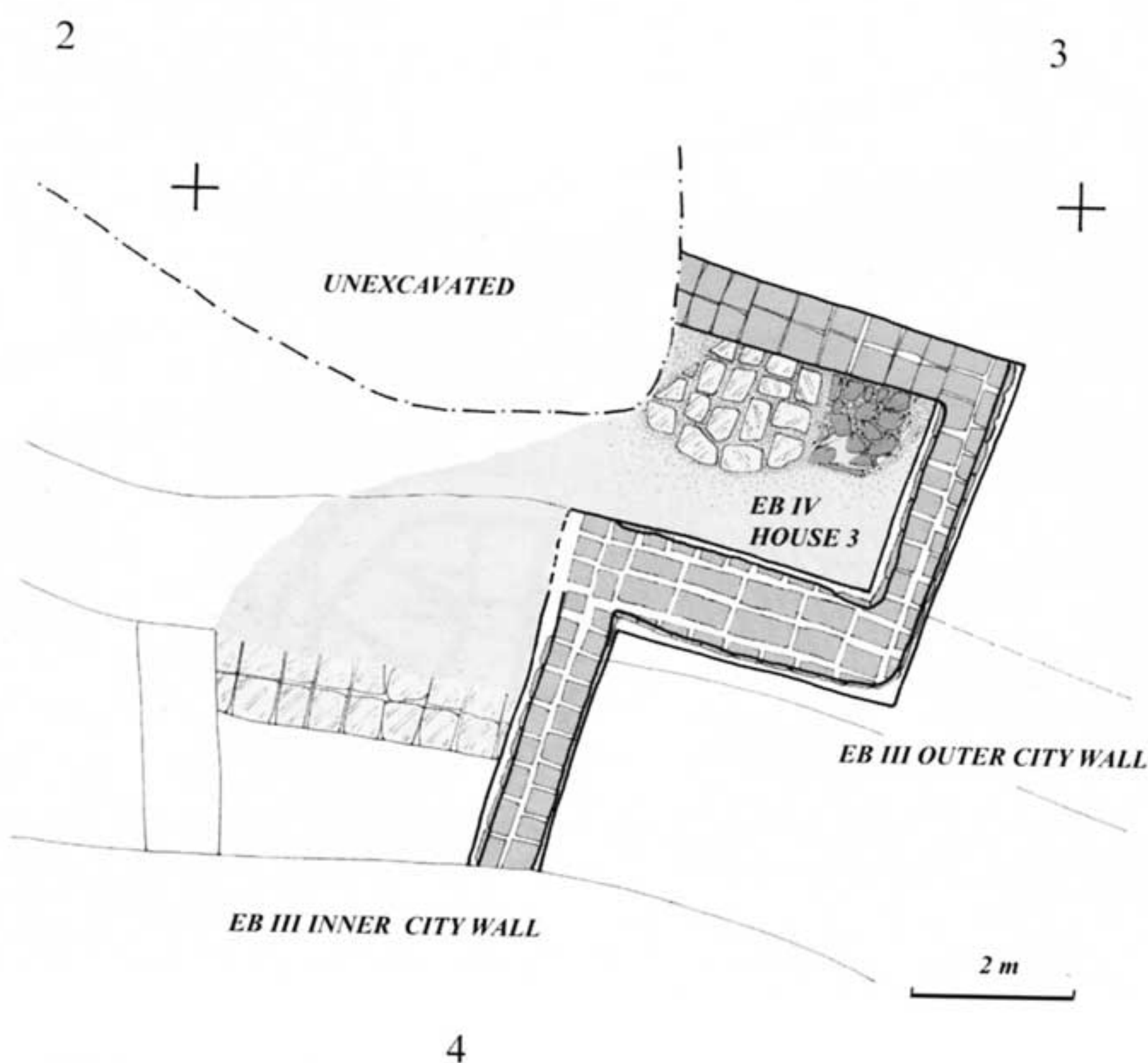
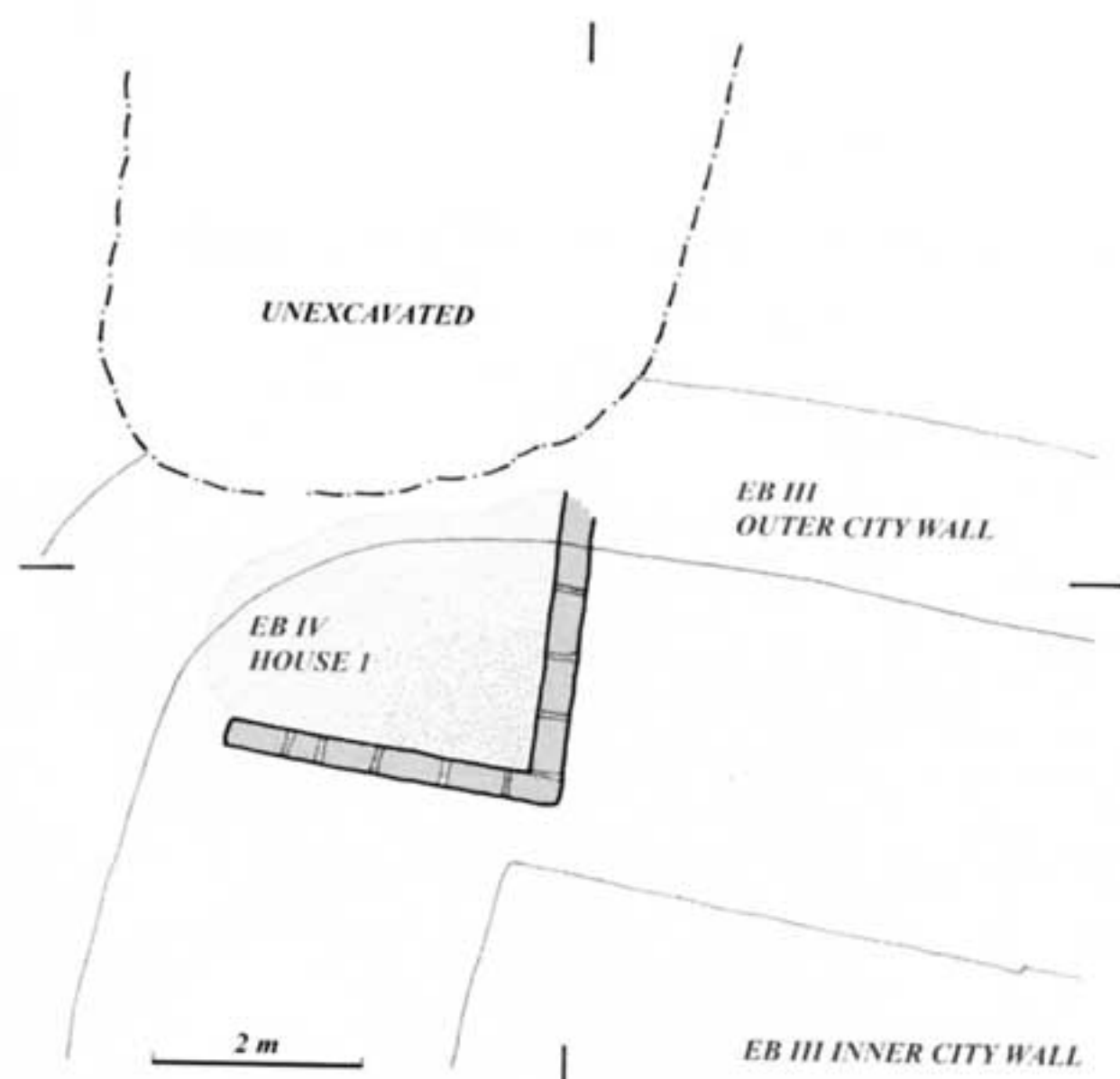
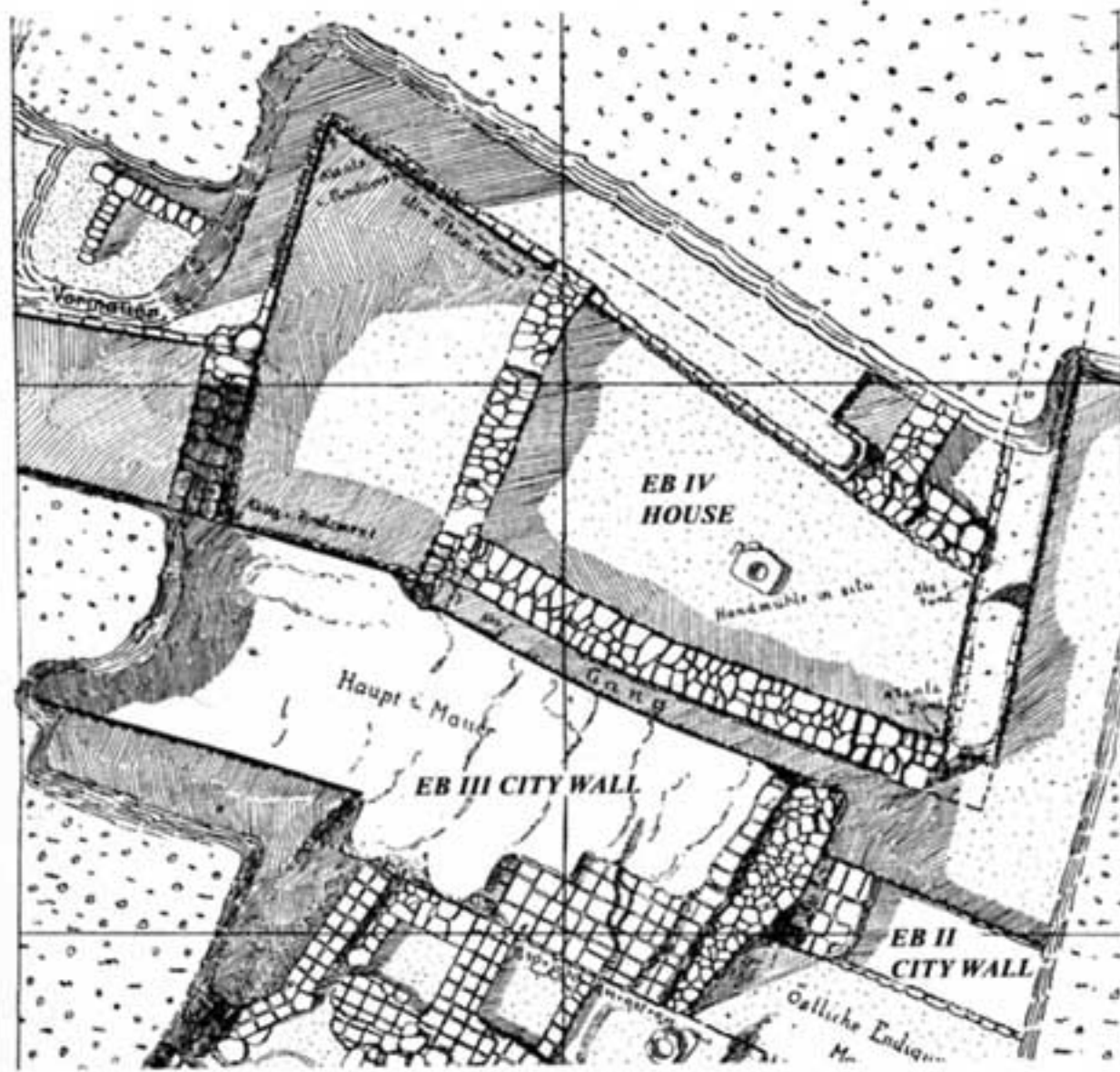


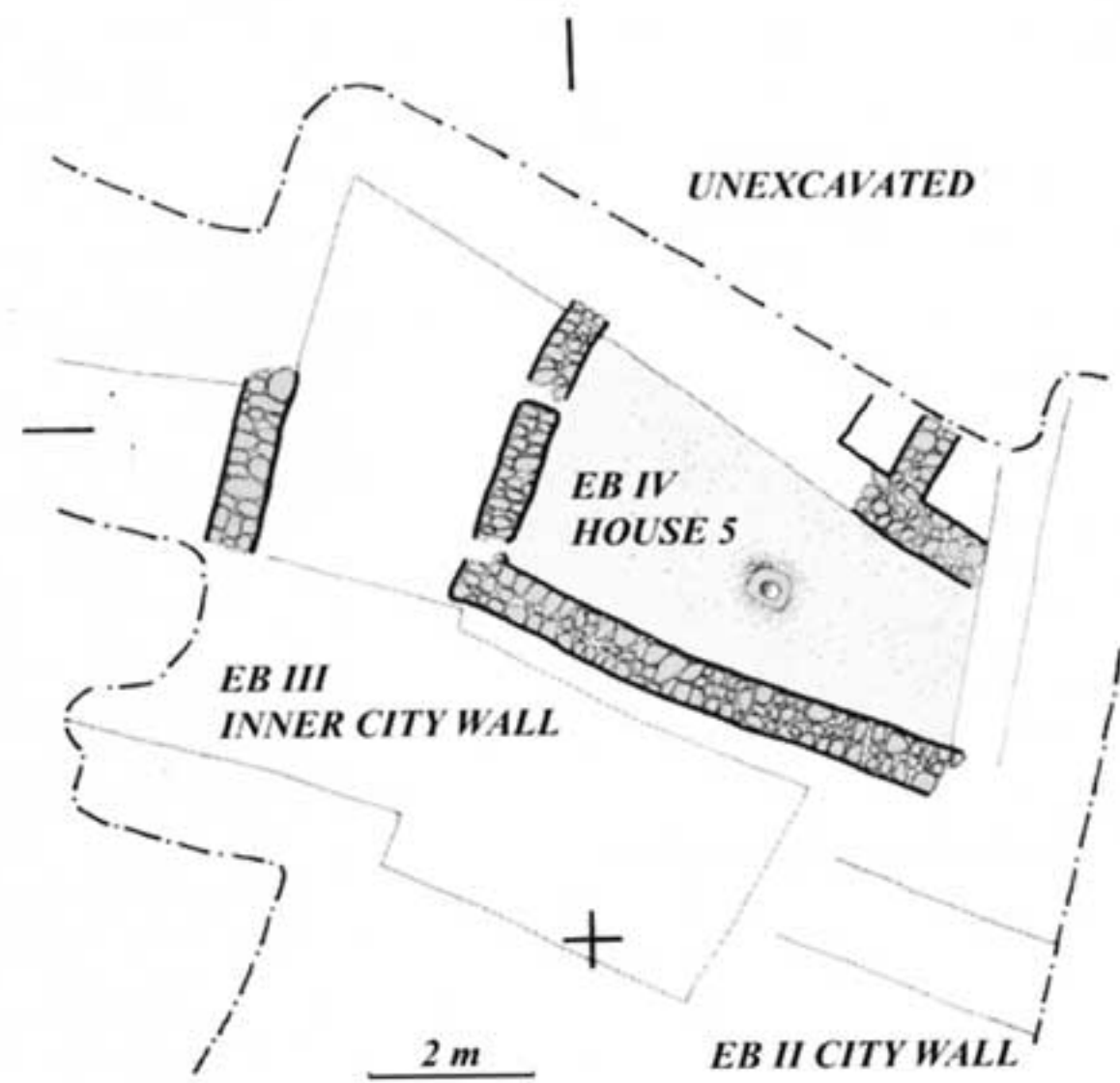
Fig. 1 - Plan of the Austro-German Expedition showing the "Spätkanaanitische" remains in the northern half of the tell (after Sellin-Watzinger 1913: plan I).



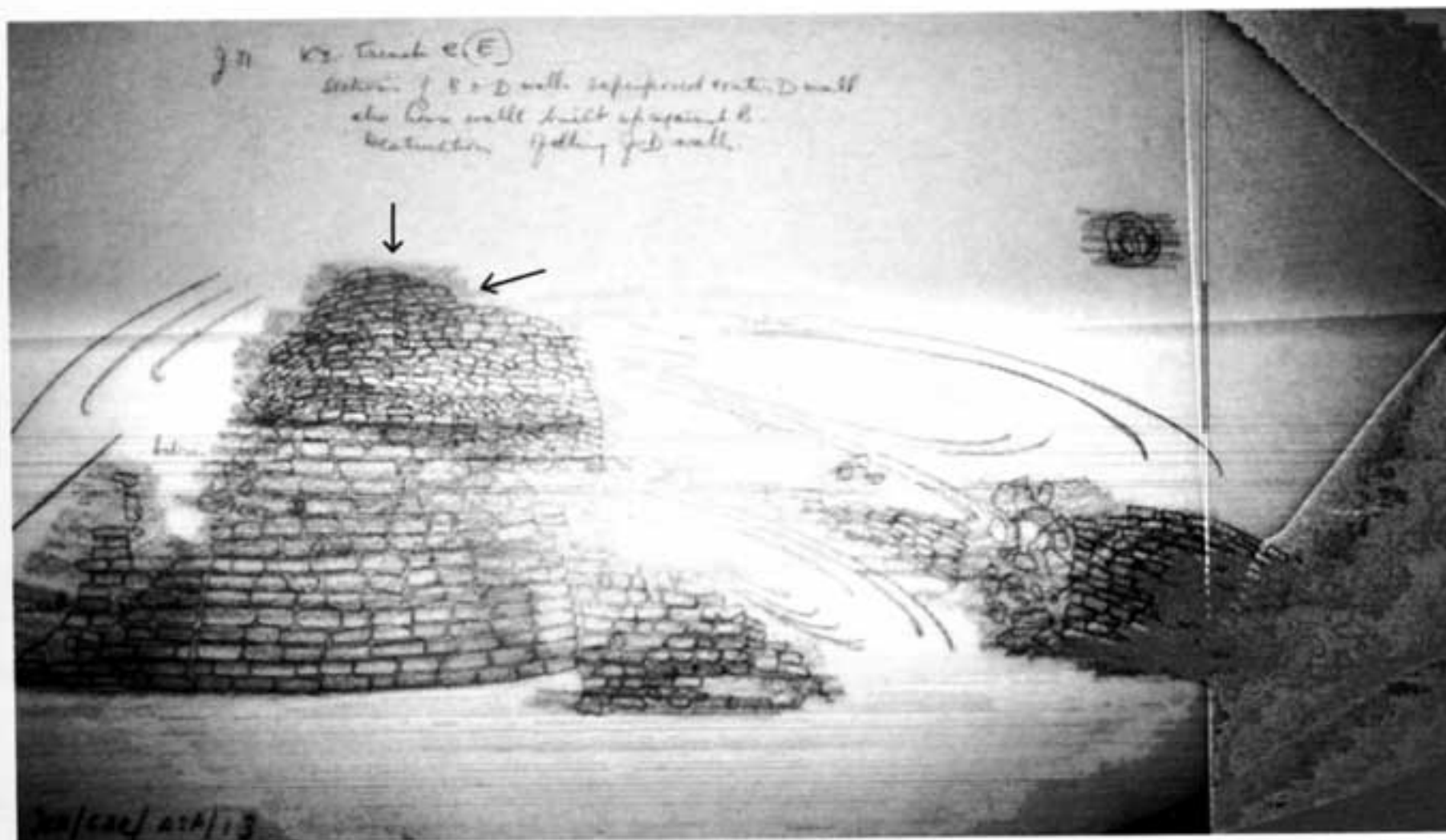
- Fig. 2 - Plan of the house excavated by the Austro-German Expedition in the nearby of the North-West Tower.
- Fig. 3 - A selection of Sultan IIIId2 (EB IVB) bronzes retrieved in a jar buried in the nearby of the north-western corner of the NW Tower (after Sellin-Watzinger 1913: fig. 104).
- Fig. 4 - Plan of the house excavated by the Austro-German Expedition roughly at the middle of the northern side of the EB III city-walls.



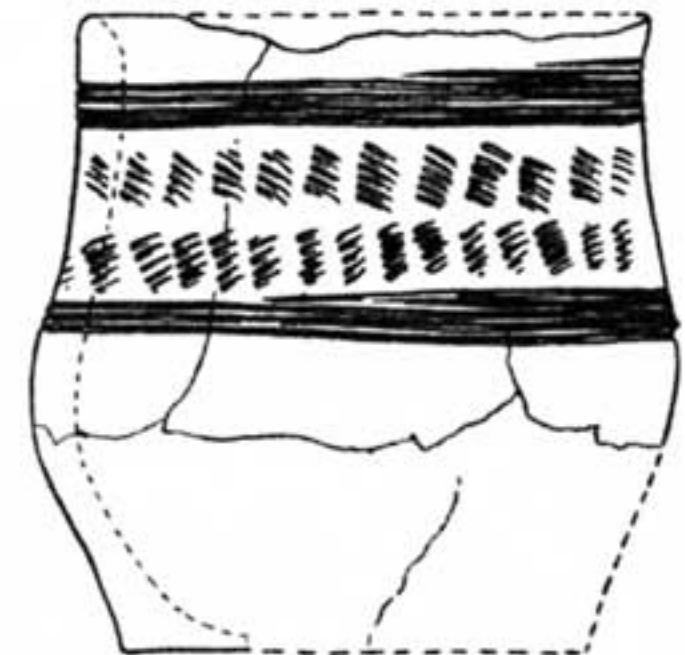
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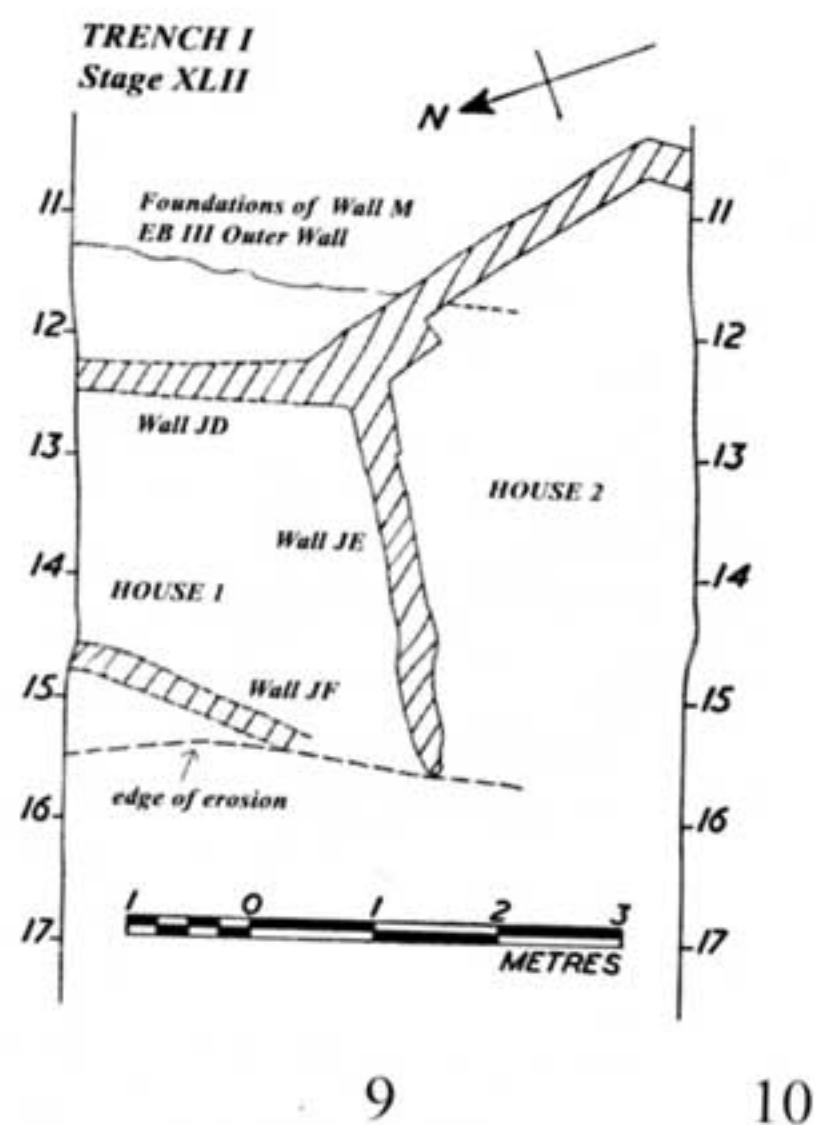
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Fig. 5 - The large house excavated by the Austro-German Expedition at eastern limit of the northern EB III city-walls (after Sellin, Watzinger 1913: fig. 10).

Fig. 6 - Redrawn plan of the house excavated by the Austro-German Expedition at eastern limit of the northern EB III city-walls.

Fig. 7 - Section of the EB IIIB city-walls (Garstang's "City B Walls") in trench *e-e'*, showing repairs erroneously attributed to the Late Bronze Age and possibly belonging to EB IV (Original drawing: courtesy of the Palestine Exploration Fund).

Fig. 8 - The EB IV small jar retrieved by Garstang in the area just east of the East Tower (after Garstang 1932: fig. 4)



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- Fig. 9 - Two houses on top of the Outer Wall (Kenyon's Wall M) in Trench I (after Kenyon 1981: pl. 231).
- Fig. 10 - Bin and altars made of *pisée* in the house west of wall JB (after Kenyon 1981: pl. 86a).
- Fig. 11 - House with two limestone mortars set into the floor excavated in Trench II just on top of the EB IIB Outer Wall (after Kenyon 1981: pl. 107b).



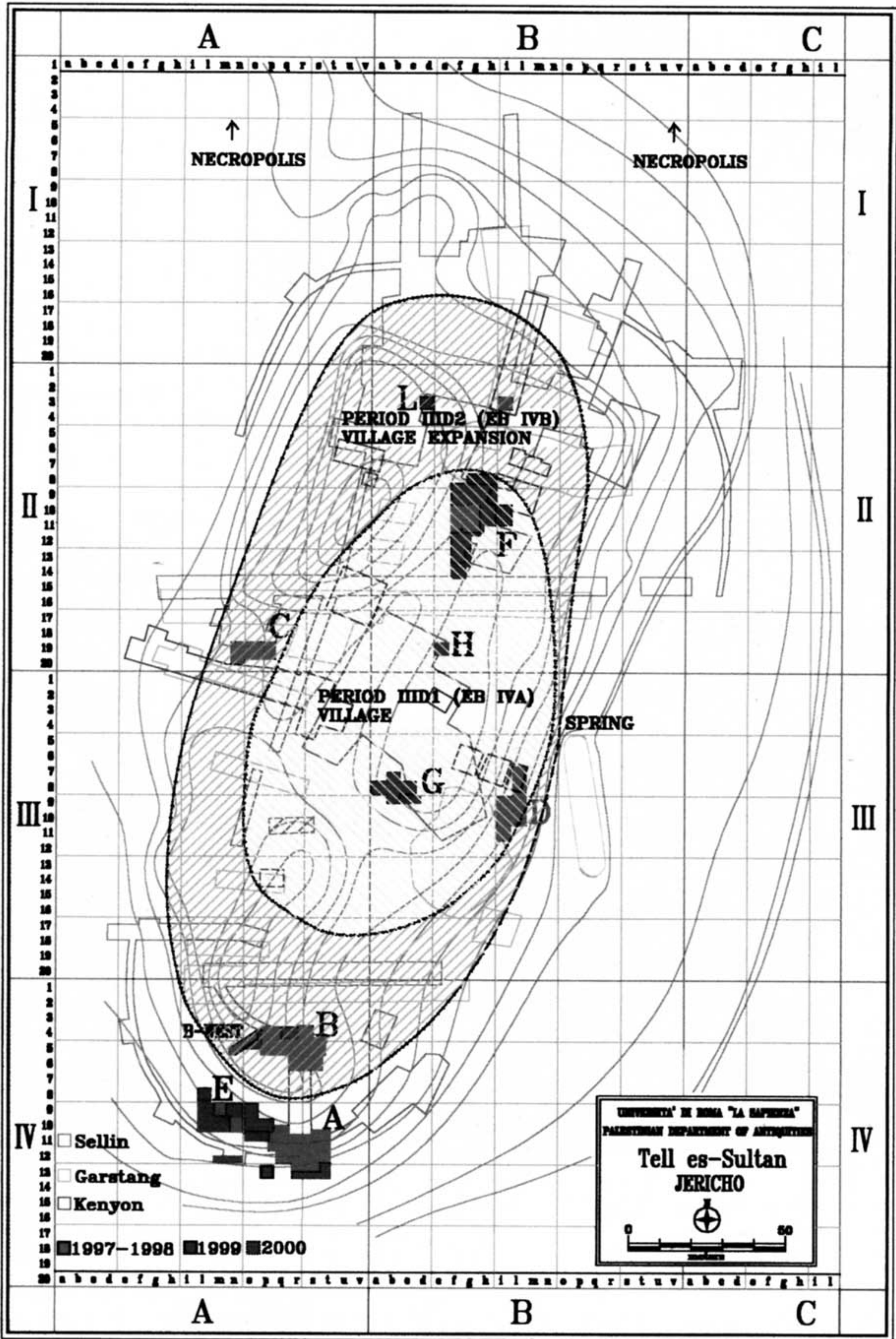
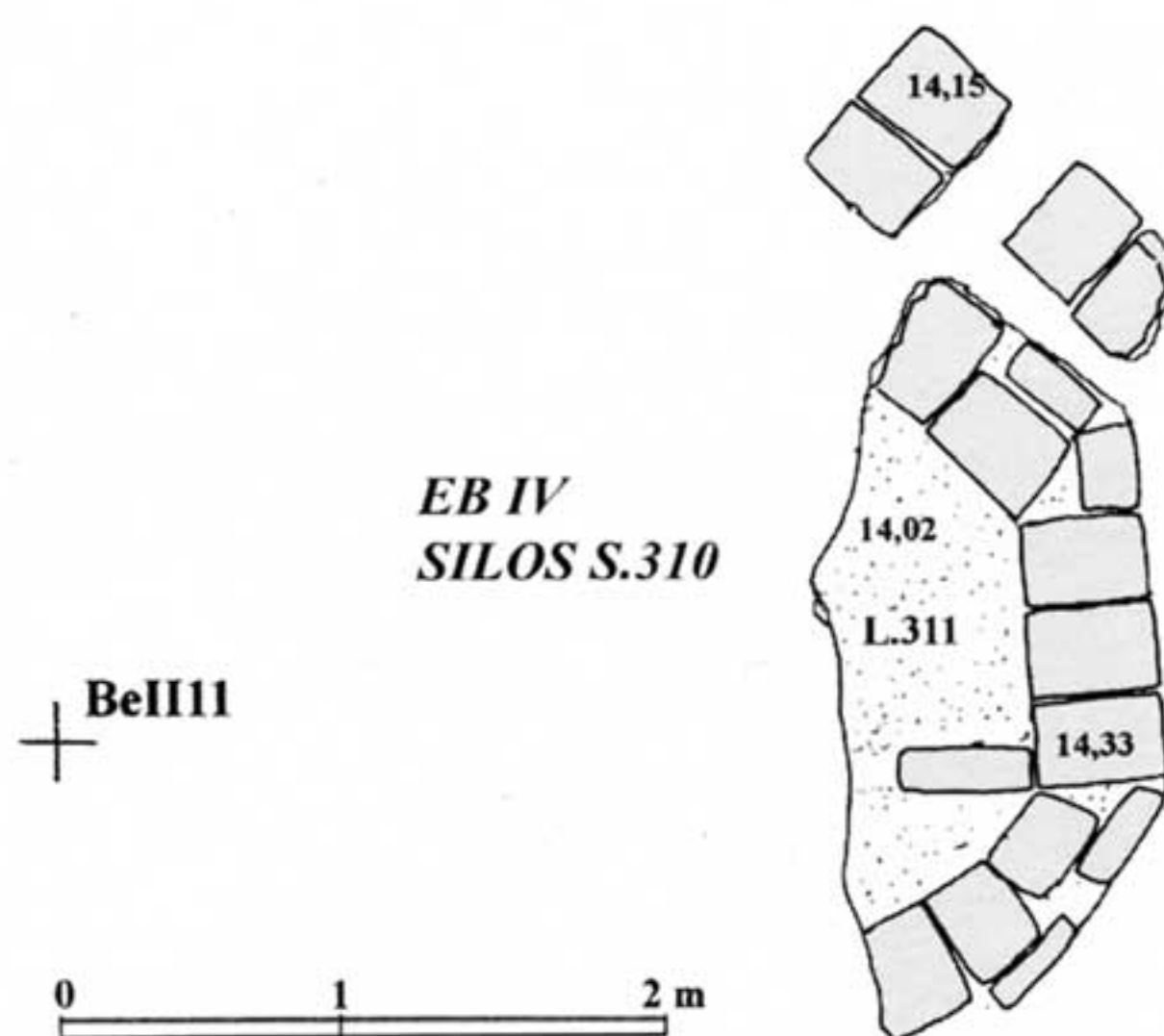


Fig. 13 -General plan of Tell es-Sultan with the area of Period IIIId1-2 village/town.



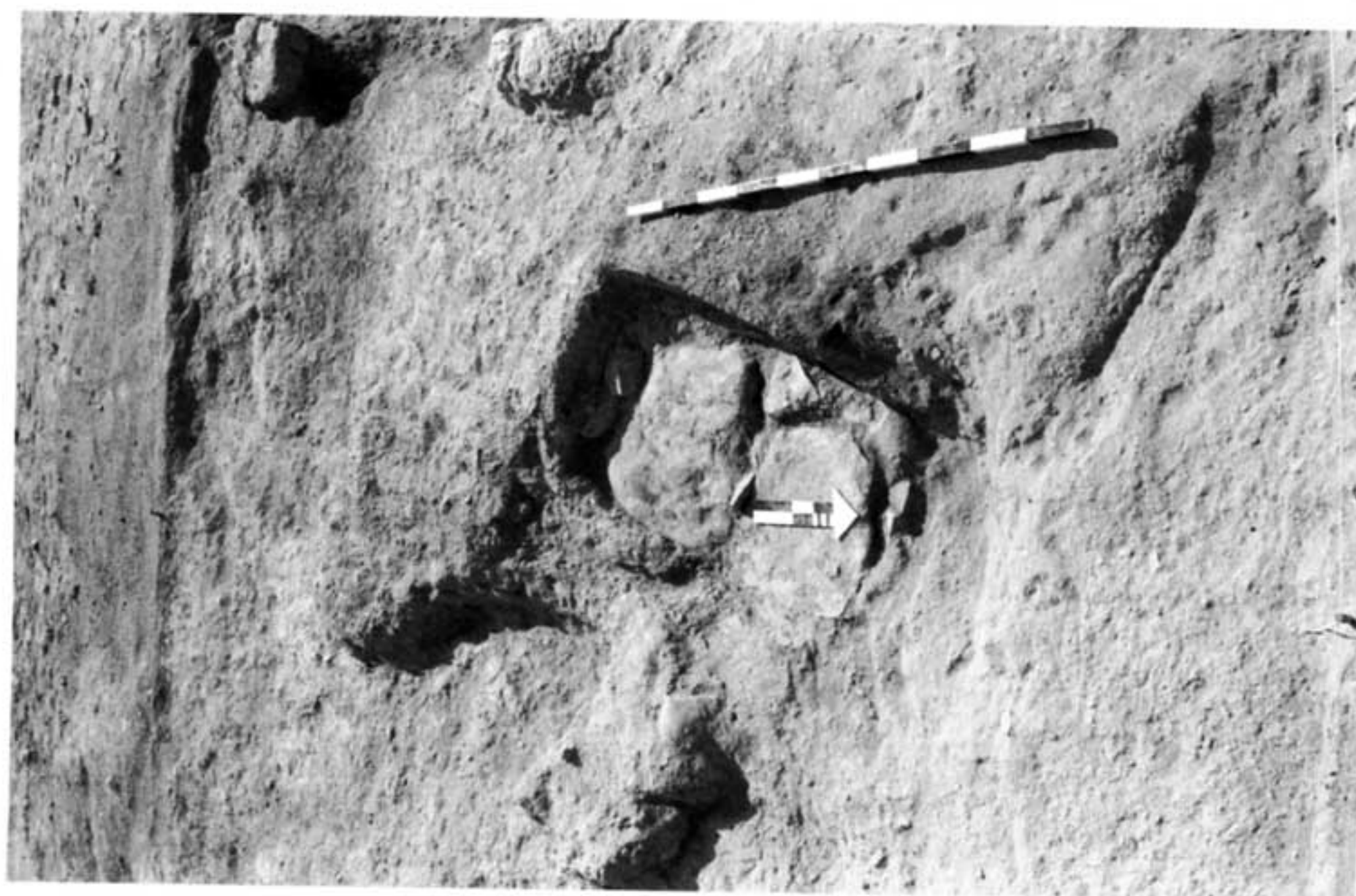
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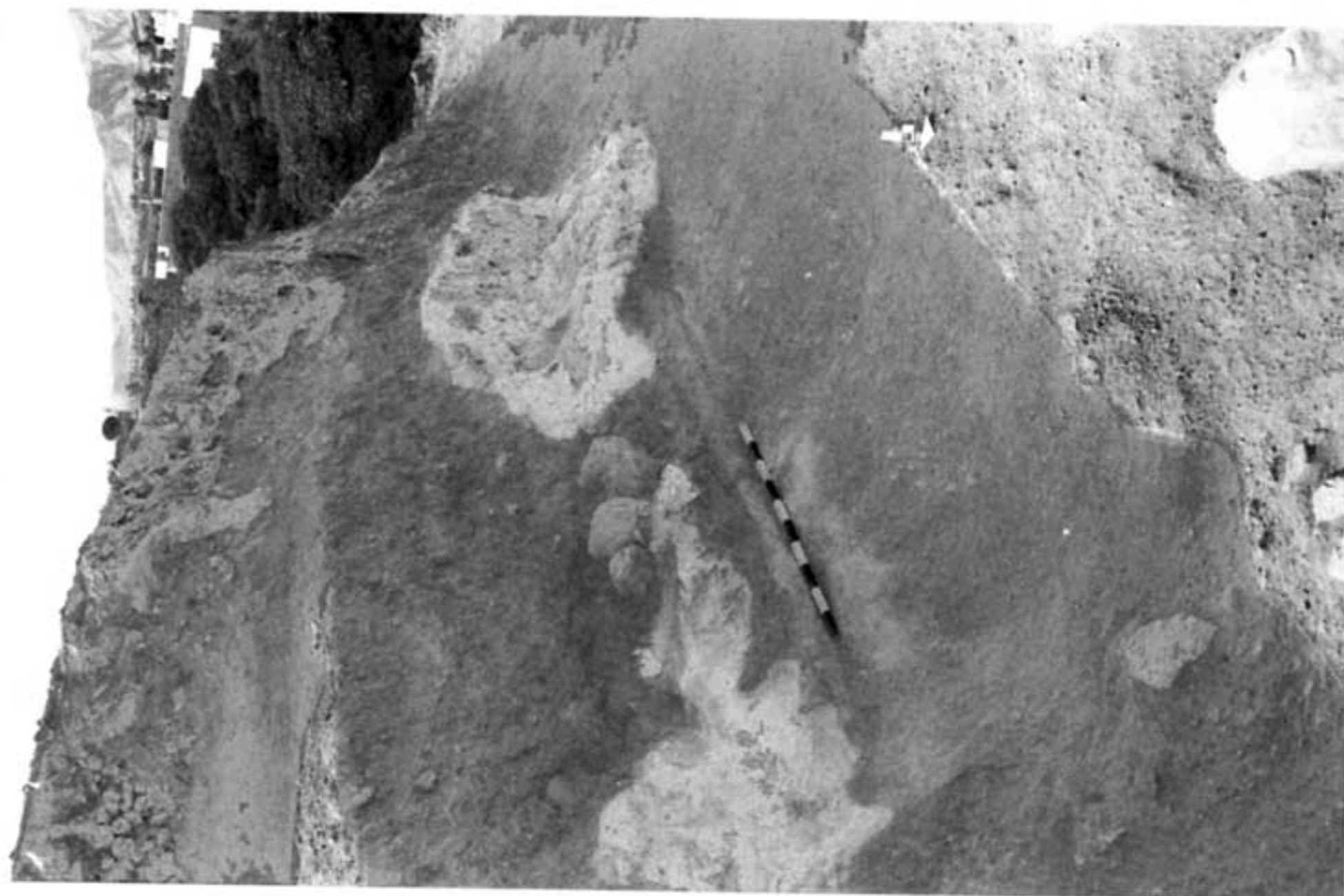
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Fig. 14 - Tell es-Sultan, Area F: Silos S.310 and the adjacent installations in Area F (Sultan IIIId, EB IV, 2300-2000 BC).

Fig. 15 - Tell es-Sultan, Area F: oven T.412 (black arrow) belonging to Period IIIId occupation, set into Period IIIc2 wall in House L.303.



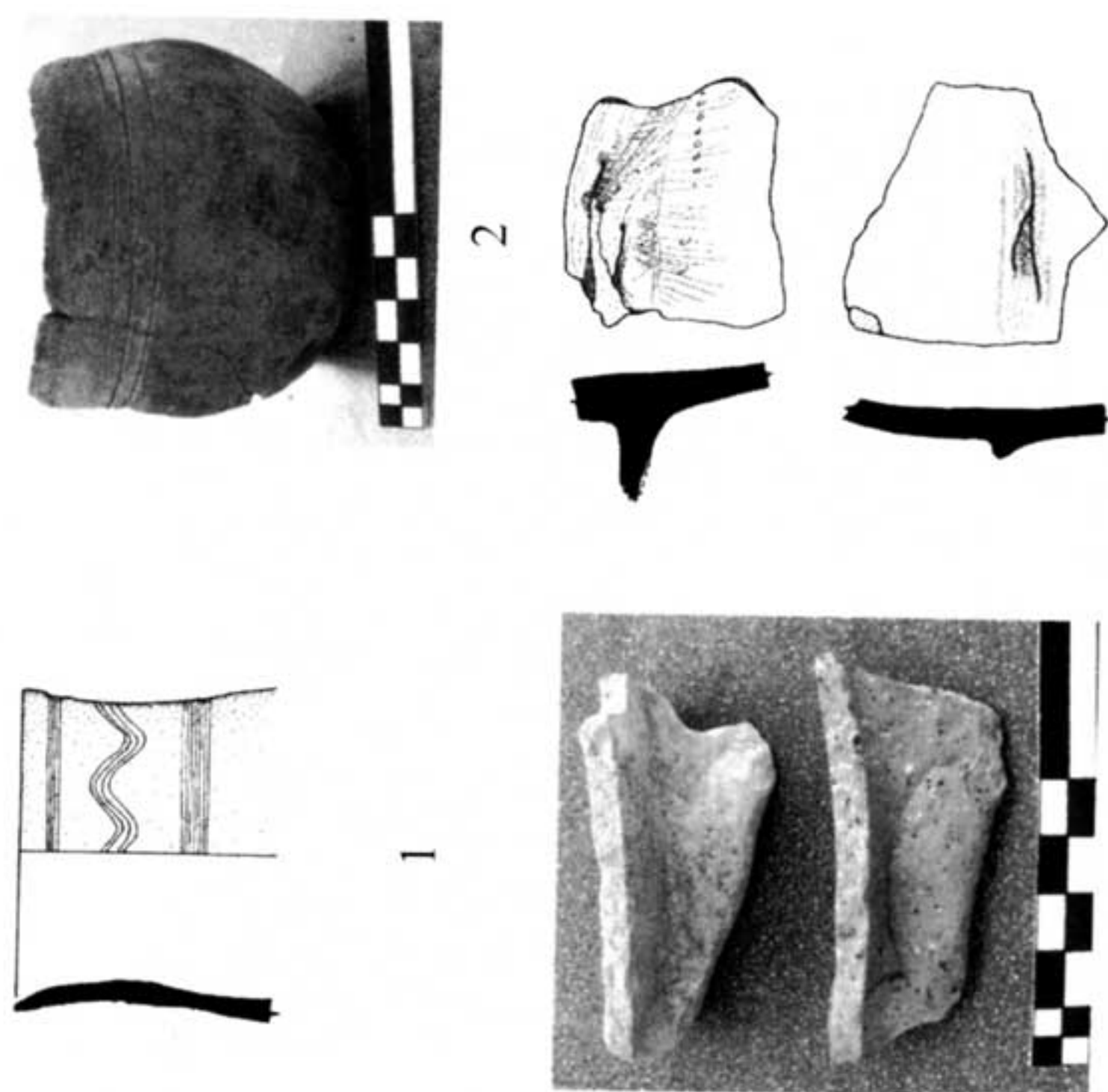
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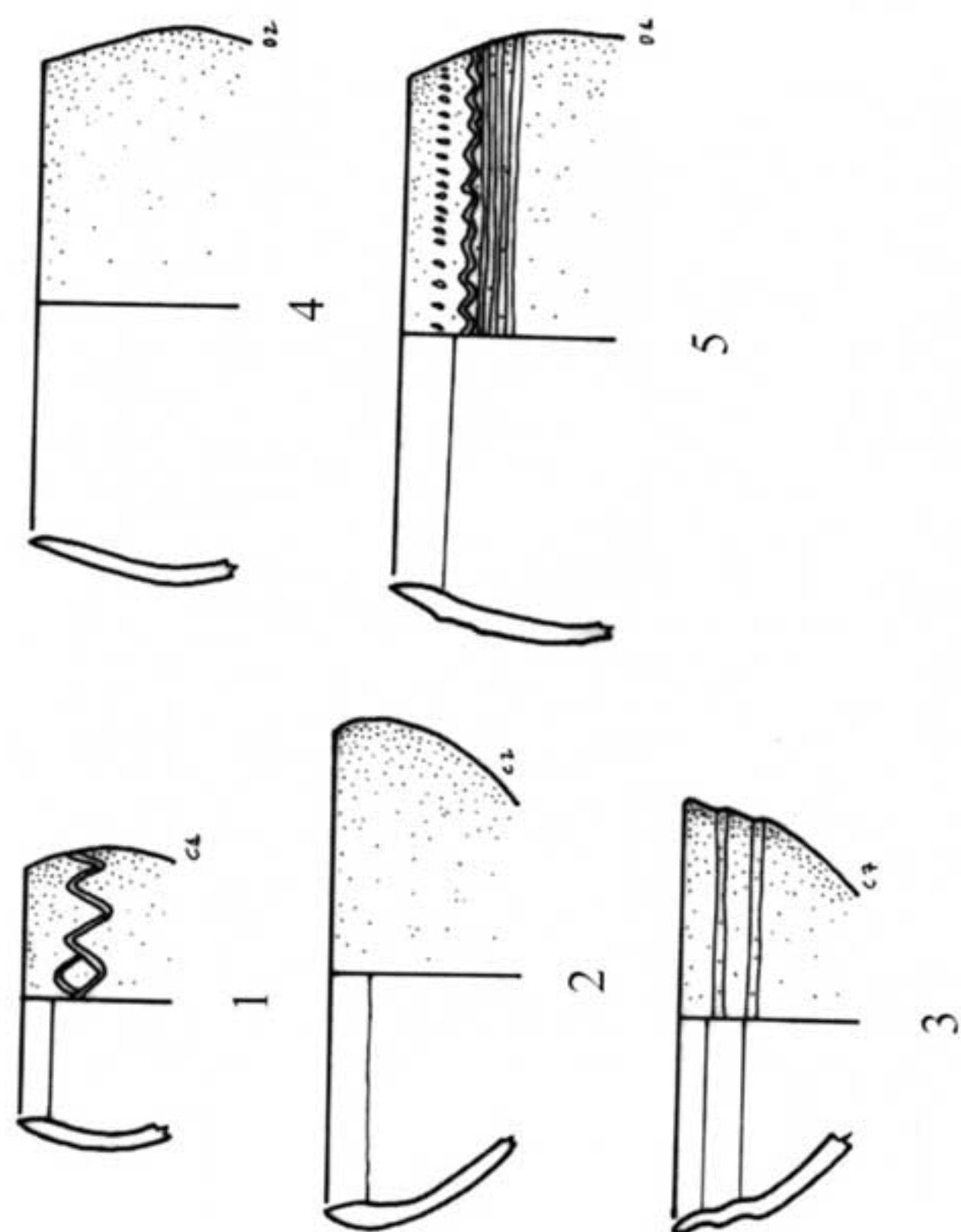
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Fig. 16 - Oven T.606 in Area G from the North.

Fig. 17 - East Section of Area B West: pit P.543, cut into the collapsed Period IIIc2 city-wall in Period IIIId1 (EB IVA, 2300-2200 BC).

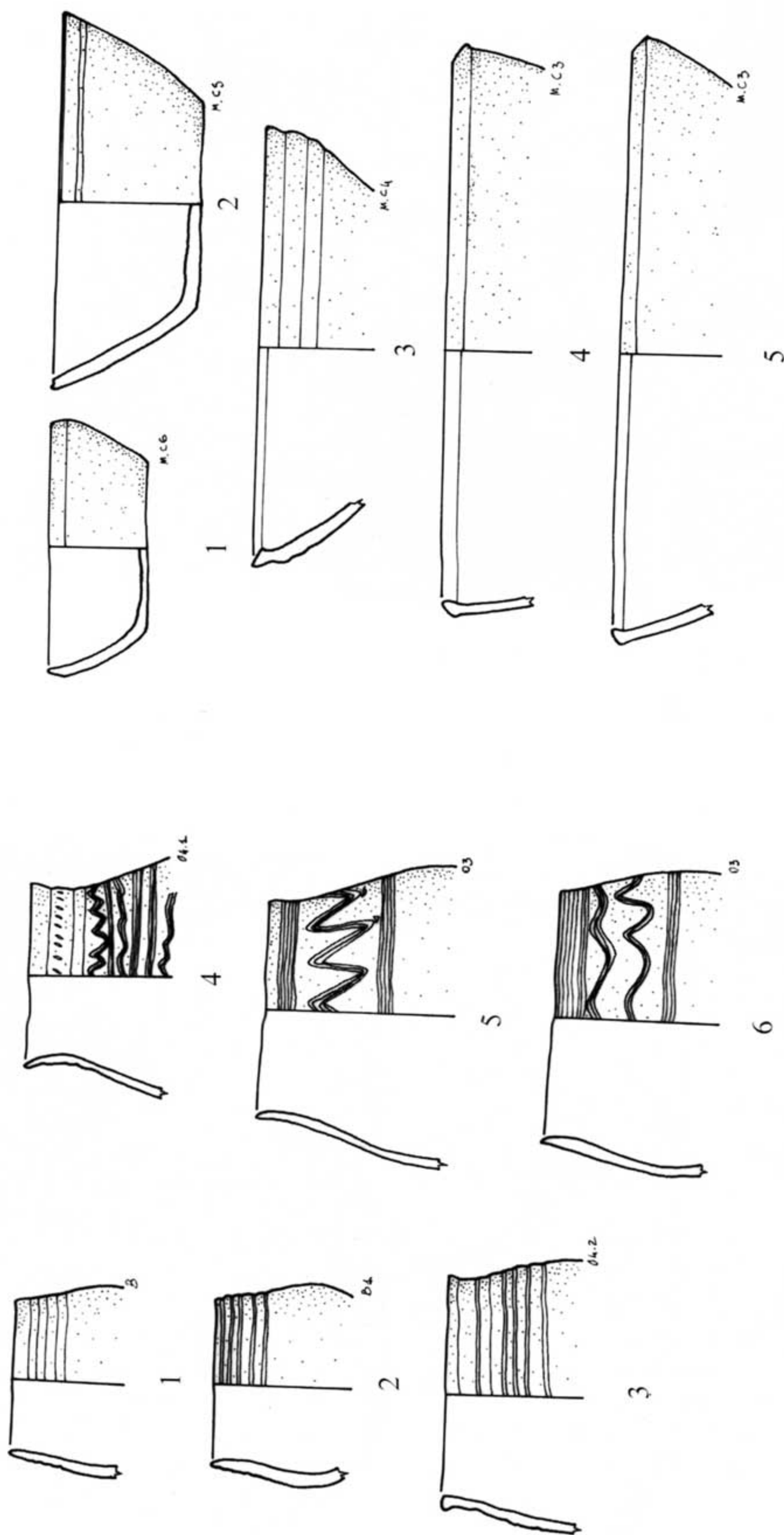


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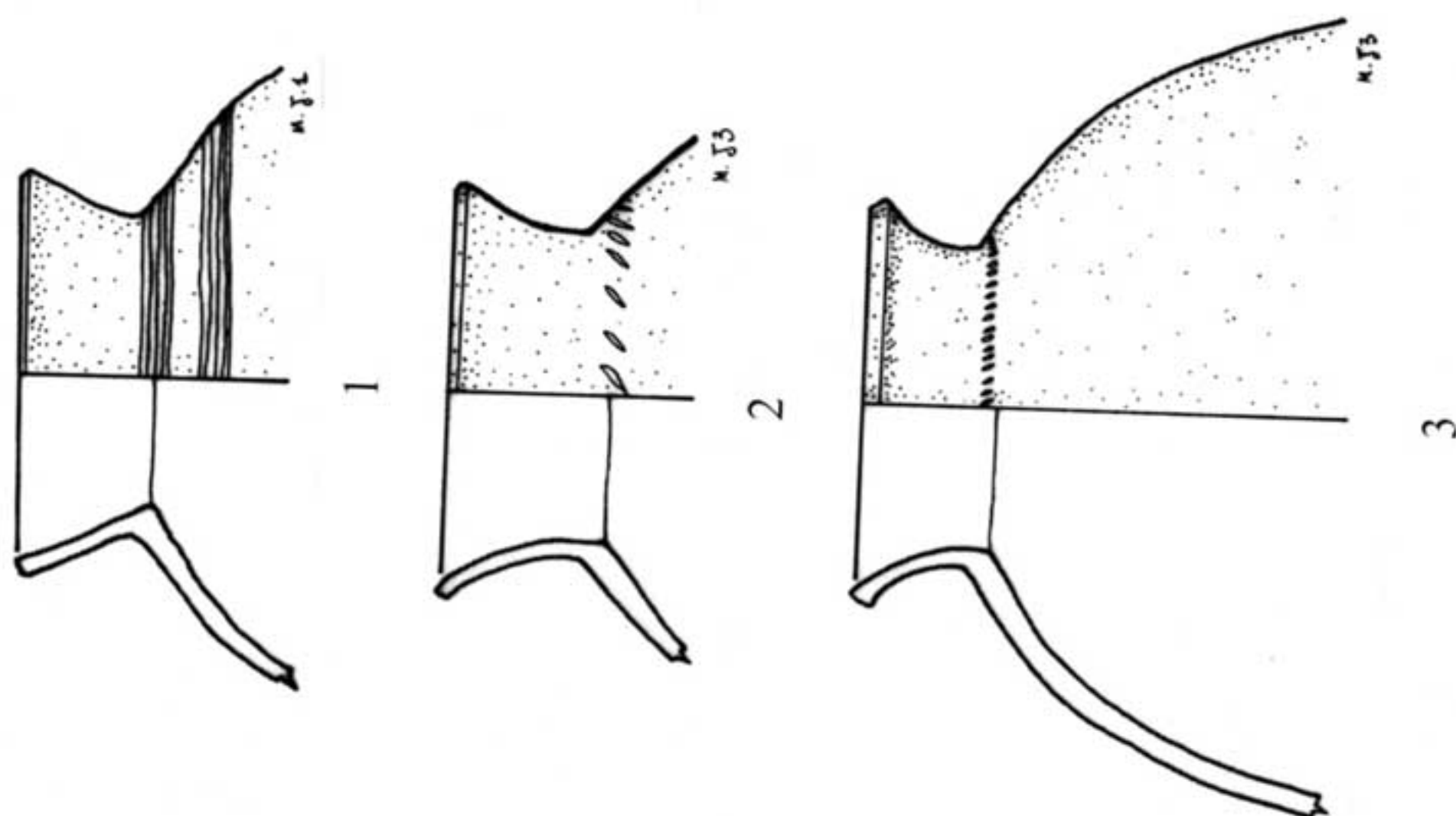
Fig. 18 - Sultan IIIId (EB IVA, 2300-2200 BC) pottery open shapes from the *tell*.
 Fig. 19 - Pottery from the *tell*: 1) IIIId1 beaker with horizontal lines; 2) IIIId1 beaker with scrubbed horizontal lines; 3) IIIId1 ledge handles.



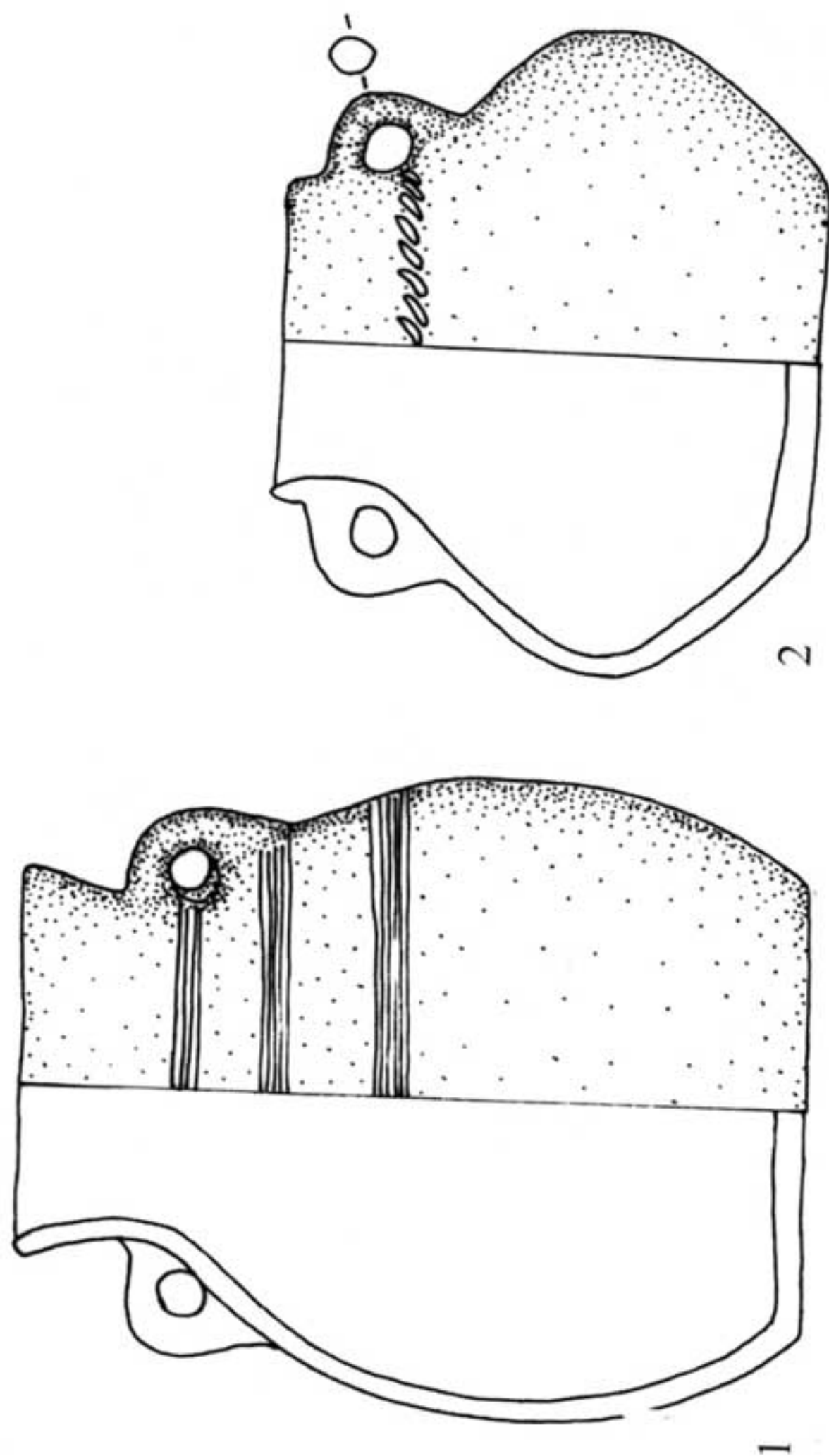
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Fig. 20 - Period IIIId Pottery from Tell es-Sultan: beakers and small biconical jars.
 Fig. 21 - Period IIIId Pottery from Tell es-Sultan: 1-2) Sultan IIIId1 (EB IVA, 2300-2200 BC); 3-5) Sultan IIIId2 (Eb IVB, 2200-2000 BC).



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Fig. 24 - Period IIIId (EB IV, 2300-2000 BC) pottery from Tell es-Sultan: flaring neck jars with incised or combed decoration.
 Fig. 25 - Period IIIId (EB IV, 2300-2000 BC) pottery from Tell es-Sultan: double handled small jars.

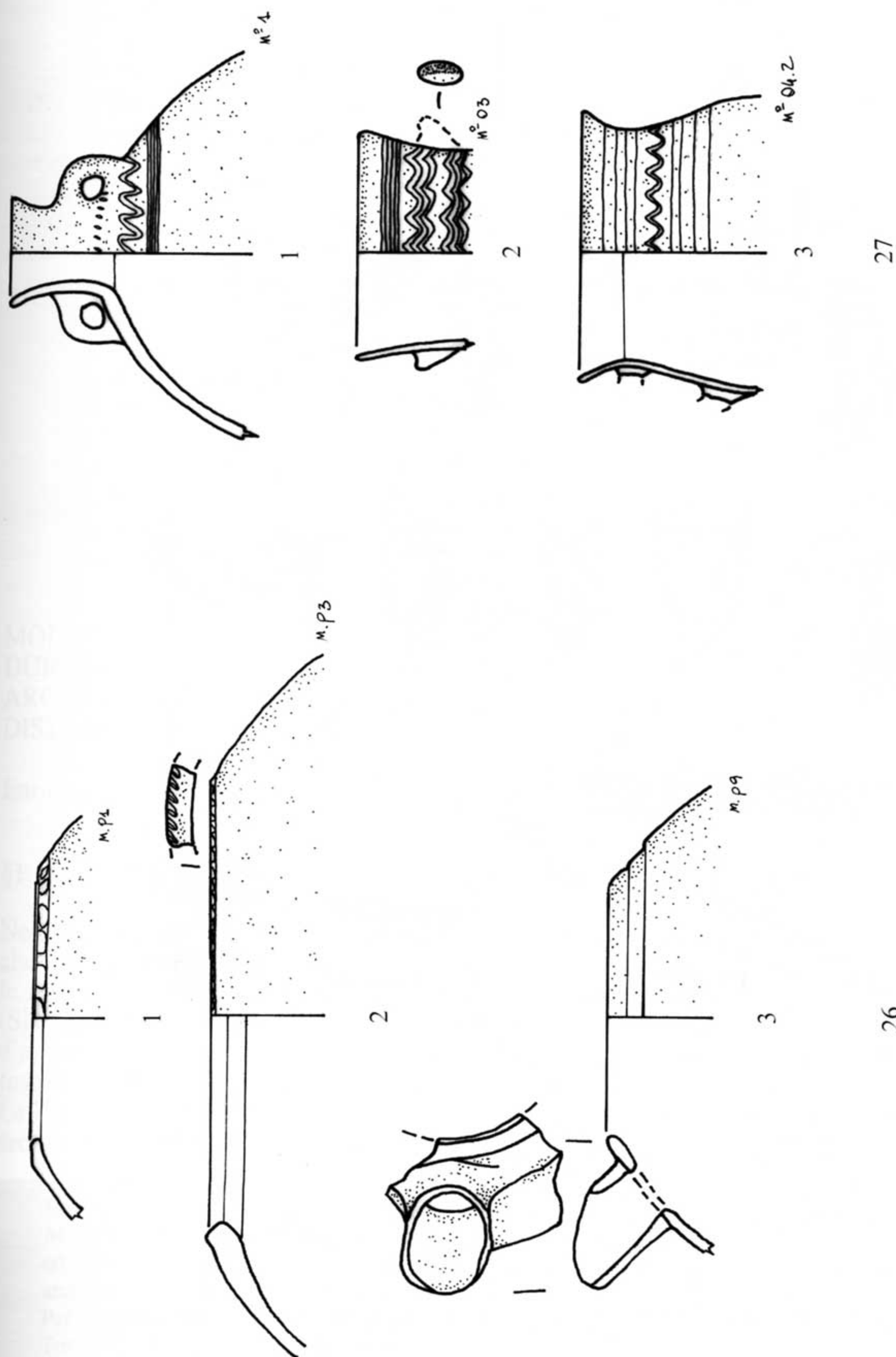


Fig. 26 - Period IIIId (EB IV, 2300-2000 BC) pottery from Tell es-Sultan: hole-mouth jars with decorated rims.
 Fig. 27 - Period IIIId (EB IV, 2300-2000 BC) pottery from Tell es-Sultan: 1) flask; 2-3) handled beakers with combed decoration.

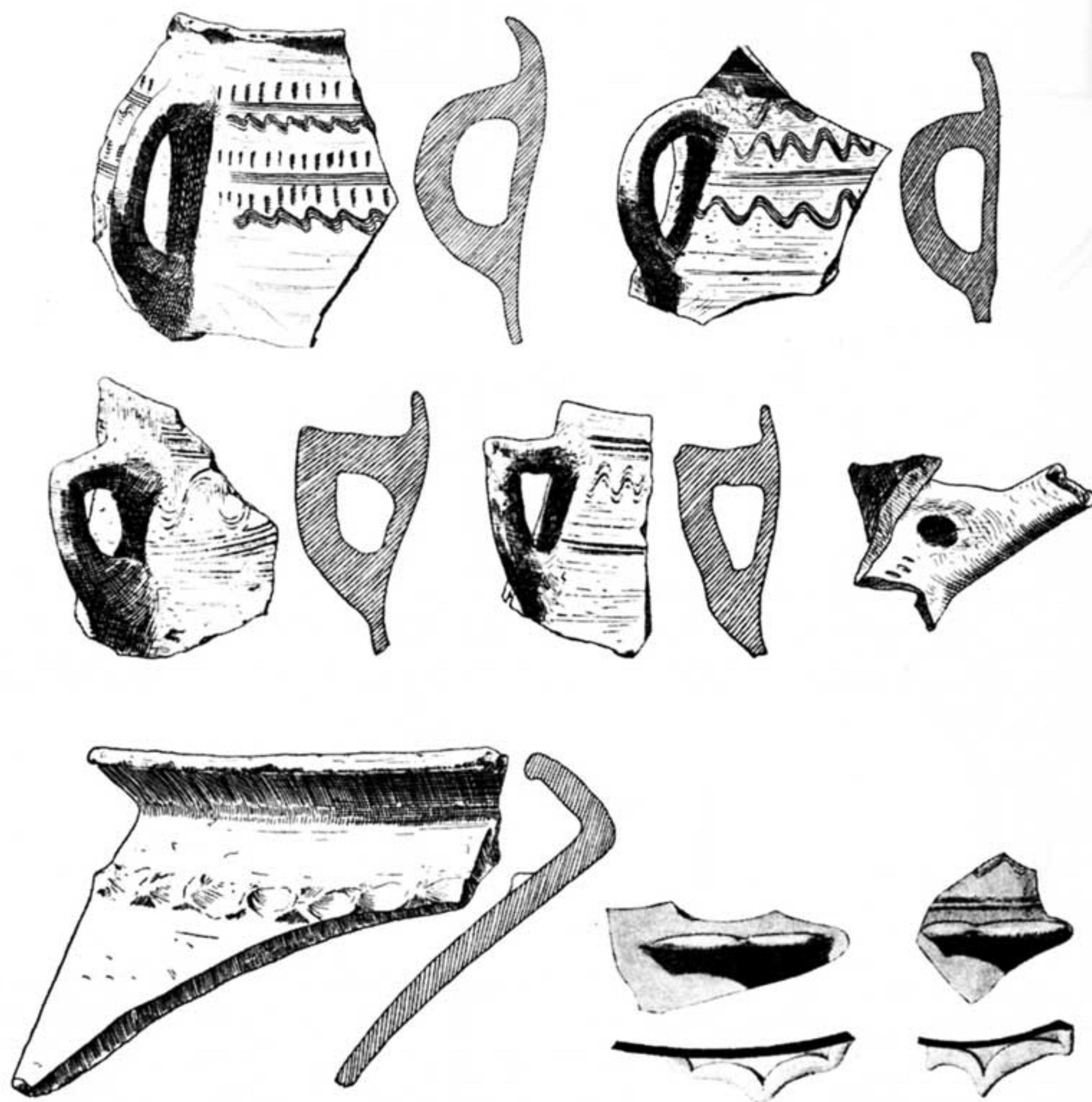


Fig. 28 - Period IIIId (EB IV, 2300-2000 BC) pottery from Sellin and Watzinger's Excavations.