

TELL EL-^cAJJUL 2000

SECOND SEASON PRELIMINARY REPORT

By Peter M. Fischer and Moain Sadeq

with contributions by Anne Lykke, Rainer Feldbacher, Michael Weigl and Christa Mlinar

I. PREFACE

The results of the first season of the renewed excavations at Tell el-^cAjjul in 1999 confirmed the high potential for continued archaeological research within the 5000 square metre area, which was fenced on the present summit of the tell (FISCHER and SADEQ 2000). Very little could be said at that time about the function of the architecture because of the limited exposed area. Many of the exposed sun-dried mud-brick walls without stone foundations were quite well-preserved. Remains of what were very likely four architectural phases were exposed. The number of well-stratified complete or almost complete objects was astonishing considering the size of the investigated area. The repertoire of pottery and small finds demonstrated again the cosmopolitan nature of the obviously rich societies of Tell el-^cAjjul (cf. the primary reports of PETRIE 1931–1934, and MACKAY and MURRAY 1952). Cypriote pottery dominated amongst the imported finds. Other finds came from Egypt, the Jordan Valley, the Mycenaean sphere of culture and maybe also from the northern Levant. The Cypriote-imported wares included Red-on-Black, White Slip I and II, Base-ring I and II, Red Lustrous Wheel-made and vessels of Bichrome Wheel-made Ware (FISCHER 2001). The Jordan Valley and southern Lebanon are the likely sources of the imported Chocolate-on-White Wares (FISCHER 1999). The alabaster vessels and the faience/glass objects very probably belong to the group of objects which were imported from Egypt. The scarabs may also have been imported from Egypt, or they were locally produced (Mlinar; Appendix to this report). Gold, silver, bronze and lead objects are no doubt also imports from different regions of the Eastern Mediterranean.

A cautious attempt to ascertain the chronology of the different architectural phases which were exposed in 1999 was based on well-stratified ceramic wares alone because absolute chronological dating procedures (e.g. dendrochronology, radiocarbon) to support the relative chronology and the provisional absolute chronology have not yet been utilized. The first half of the 13th century was suggested as the latest date of the most recent excavated occupational layers (H1, 1999). This date was

defined by a relatively late White Slip II bowl, and a Mycenaean-type piriform small jar which could be dated to the Late Helladic IIIB1 period. The date of the lowest layer of occupation (H4/5, 1999) so far to contain diagnostic pottery – virgin soil was not reached in 1999 – was calculated approximately to be the end of the Middle Bronze Age or the beginning of the Late Bronze Age. This date was supported by a number of imported wares, amongst which are Cypriote Red-on-Black, White Slip I, Bichrome Wheel-made, and Black Lustrous Wheel-made and Chocolate-on-White Eggshell Ware.

The second season at Tell el-^cAjjul started on 4 September and finished on 13 October 2000. The joint team included the authors as directors, the surveyor and draughtsperson Muwafaq Al-Bataineh, and the technical archaeologist Hikmat Ta'ani, who also acted as foreman of the local workers. Trench masters were Rainer Feldbacher, Doris Fellsner, Mats Johansson, Anne Lykke, Friedrich Schipper, Anna Selander and Michael Weigl. An average of 30 local workers/students were employed. With the kind permission of Pierre de Miroshedji, the co-director of the nearby Palestinian-French Expedition at Tell es-Sakan, the flotation of our soil samples of 502 litres for later paleobotanical analysis and for the detection of minor pieces of pumice was carried out by Margareta Tengberg.

II. THE SEASON 2000

1. Aims

The scientific aims of the continued excavations are as set out in the action plan which was outlined in 1999. They include the study of the Middle and Late Bronze Age societies of Tell el-^cAjjul which is beyond any doubt one of the most influential cities in southern Palestine. The study of Tell el-^cAjjul's identity and political relation to Egypt and its Palestinian neighbours by means of an examination of the material culture is also of importance. Trade and trade routes will also be investigated with the aid of provenance studies of the numerous imported objects. The re-interpretation of Petrie's and his assistants' excavations in the 30's will be undertaken as soon as sufficient stratigraphical evidence has been collected.

Special interest will be devoted to the synchronization of the cultures in the Eastern Mediterranean by means of a study of primarily pottery from Cyprus, Egypt and the Jordan Valley, and the establishment of a reliable absolute chronology through a study of scientific dating methods. The provenance study of the numerous samples of pumice from Tell el-^cAjjul with the support of neutron activation analyses (FISCHER in press) is of equal importance because it is expected to lead to the synchronization of the “Minoan” eruption of the Thera volcano with certain cultural layers and their finds at Tell el-^cAjjul and with those of other Eastern Mediterranean cultures (see Table 3).

Other general objectives include the training of students in archaeological theory and practical field work, the protection of the site, development

of cultural contacts, the promotion of public awareness of the cultural heritage, and employment opportunities.

2. The excavations

2.1. Strategy and documentation

Initially, eight trenches, Trenches 4–11, were opened immediately north-west of Trenches 1 and 2 from the previous year (Fig. 1). Two additional trenches, Trenches 12 and 13, were later opened west of Trench 1 because of unexpected discoveries during the course of the excavations (see below). A trial trench, Trench 14, was opened 30 m to the west of Trench 13 in order to investigate a modern cut where olive trees were planted: ancient remains

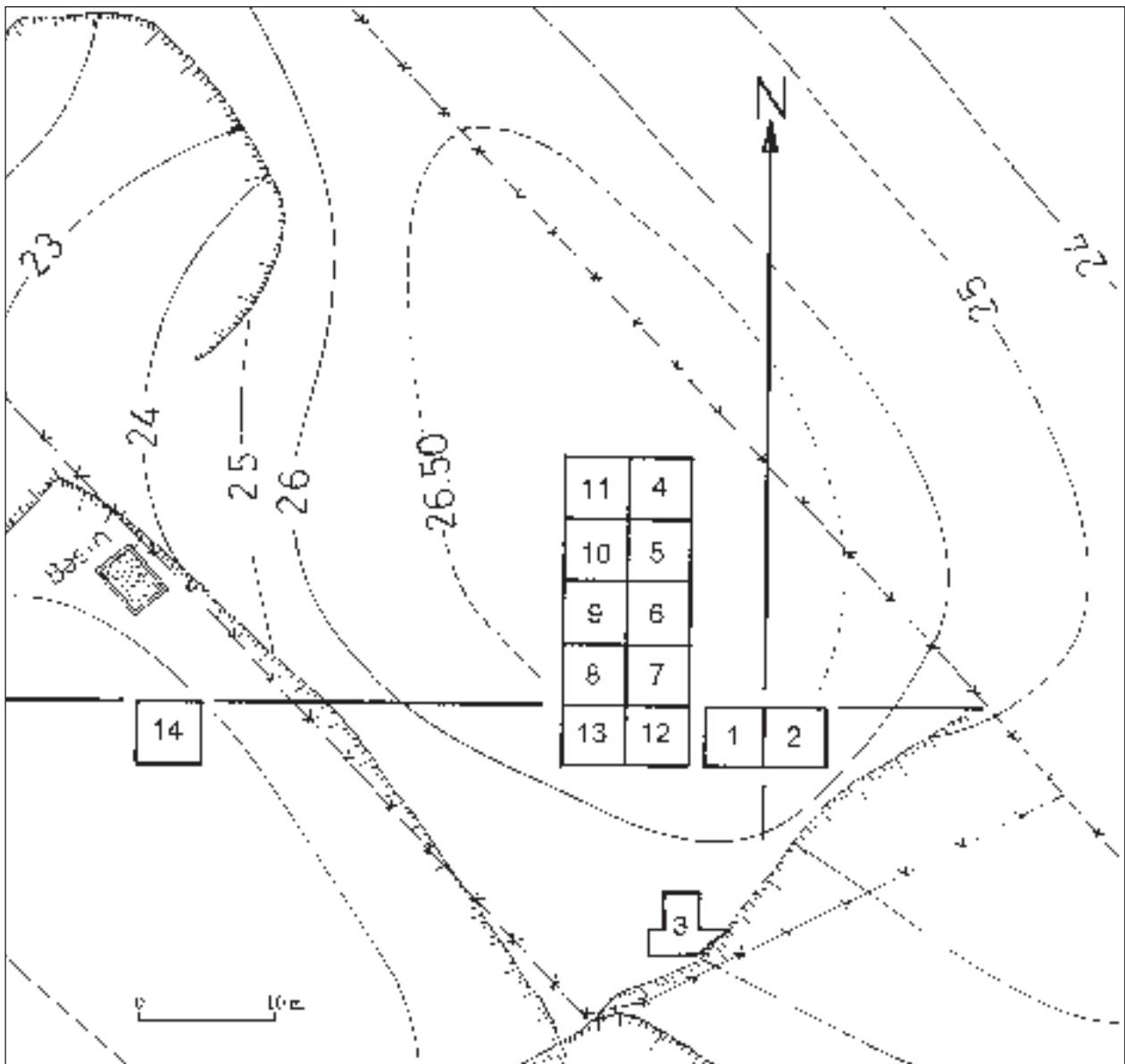


Fig. 1 Detail of topographic map: The position of the trenches

could not be discovered. It is very likely the entire area of the cut, which is approximately 2000 square metres in size, is badly damaged.

Each trench measures 4 m × 4 m and is separated from the next trench by a 1 m wide baulk. All the trenches were covered by a sun roof during the excavations. The entire area of excavation was back-filled at the end of the season.

The measurements for the plans, the drawings of the sections and find contexts were taken with the EDM total station. Three different cameras, one of which with a digital video recorder, were used for the photographic documentation. Conventional diaries for the recording of field observation were kept by the trench masters, each of whom was in charge of a trench of 4 m × 4 m. Each diary includes – on a day-by-day basis – all field observations, rough sketches of plans and sections, discussions and working hypotheses, and a register of the containers and bags for bones, shells, sherds, small samples and the samples of approx. 20 l each for the flotation of botanical remains and minor pieces of pumice. Finds were classified using a four-class system (see FISCHER and SADEQ 2000: 215–216).

All findings were fed into the expedition's database, POLDI 1.0, which was created by B. Rasch, using an alphanumeric code which is based on the code originally created during the excavations at Tell Abu al-Kharaz in the Jordan Valley (FISCHER 1991: 70–71). The code system was extended in order to fit any database and to contain as much information as possible in the alphanumeric code alone.

2.2. Preliminary results of the excavations

General comments

The different horizons (H) are described from the colluvial soil starting with H1. All the measurements in the plans and sections refer to heights above mean sea level. The height/thickness of the sun-dried mud bricks is 0.12 ± 0.02 m unless otherwise stated. Mud bricks of different colours within the same wall are more the rule than the exception. Most walls have bricks of two colours, usually laid alternately, but bricks of three colours within the same wall were also found.

2.2.1. Colluvial soil

The depth of the colluvial soil is between 0.4 m to 0.7 m. The upper part of the colluvial soil is sandy, quite soft and dry with many animal holes and plant roots. The north-western part of the area is especially sandy and soft. The lower part of the colluvial soil, except in the north-western area is yellow and harder. The

change from the colluvial soil to the underlying H1 is distinct. Sherds mainly of Late Bronze Age origin, but also Iron Age, Late Roman/Byzantine and Islamic pottery, were found. In addition to southern Levantine wares among which are Chocolate-on-White I and II and Eggshell Ware (FISCHER 1999), Cypriote imports of White Slip I and II, Base-ring I and II, White Painted V/VI, Red Lustrous Wheel-made, Bichrome Wheel-made Ware and Monochrome Ware should be mentioned. Other imports are Black Lustrous Wheel-made and red-slipped small carinated jars from upper Egypt (see below).

One sample of pumice was collected for later neutron activation analysis and provenance study.

2.2.2. Old excavations (Fig. 2)

Architecture and features

Unmistakable traces of earlier excavations were discovered in Trenches 4, 9, 10 and 11: in Trench 4 in a minor part close to the western section; in the entire Trench 9; in Trench 10 in approximately a quarter of the trench in the south-west, and in the entire Trench 11. The size of the old trenches seems to be 16 square metres which is the same as ours. The orientation of the old trenches is north-west to

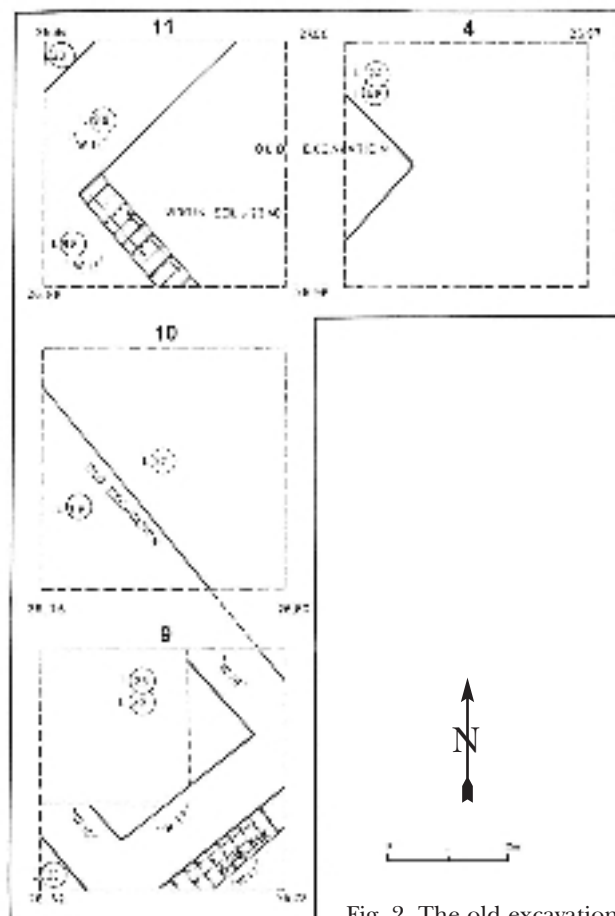


Fig. 2 The old excavations

south-east. A baulk, 1.5 m wide, and a staircase leading down from north-west to south-east were found in Trench 11. Another staircase leading down from south-west to north-east was exposed in Trench 9. Probing in Trench 11 indicated the depth of virgin soil at 22.4 m, i.e. approximately 4.6 m from the surface. The entire area occupied by the old excavations in this part of the tell is approximately 38 square metres of the 250 square-metre area which was investigated during this year. It is apparent that the old trenches were back-filled a considerable time ago. Architectural remains which were left by the former excavators were only found in Trench 9. They consist of three quite eroded mudbrick walls which are orientated north-west/south-east and north-east/south-west. Single bricks could not be distinguished and the original width of the walls excavated earlier was difficult to estimate.

Pottery and small finds

The back-filled soil contained in addition to numerous sherds of all periods at Tell el-Ajjul other inter-

esting finds: a cylindrical bead of bronze (Fig. 3:1), a bronze ring – twice folded – with a rounded knob (Fig. 3:2), a corroded piece of silver(?) with a hieroglyphic-style pictograph(?), a spherical dagger pommel of alabaster or calcite with four dowel holes and a square hollow space on the inside (Fig. 3:3), and an Egyptian-style shallow clay bowl (Fig. 3:4).

Two samples of pumice were collected for later neutron activation analysis and provenance studies.

Preliminary interpretation

It is possible that these trenches were dug (and back-filled?) by Petrie and his assistants in the 30s. However, there are no notes of any excavations in this area in the published reports.

2.2.3. Horizons 1A–B (Fig. 4)

Features

Seven pits, the largest of which is 4 m in diameter, belong to this layer. Some of the pits continue into H3. Locus 45 (L45) in Trench 4 is the only structure in this layer (see Appendix by A. LYKKE in this

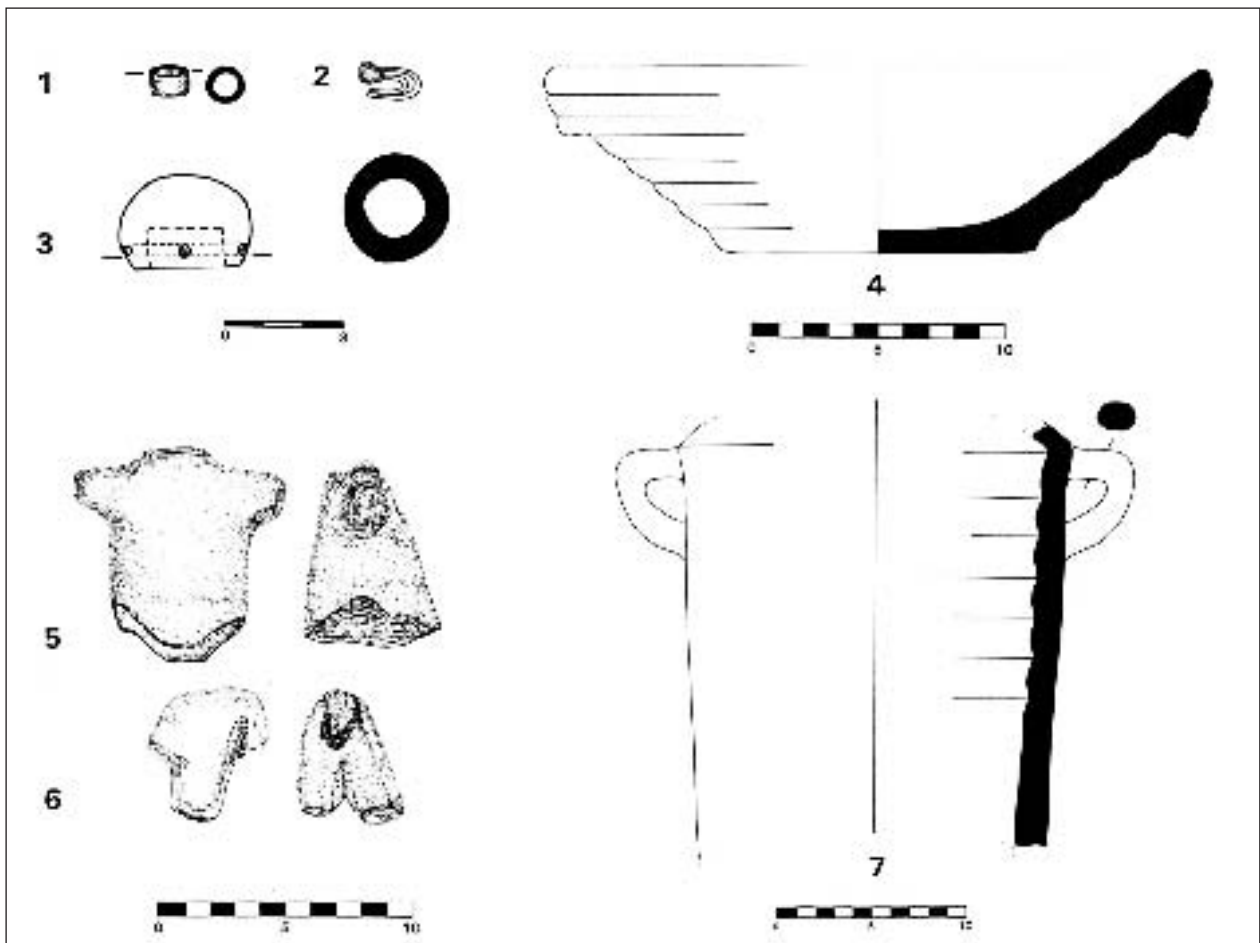


Fig. 3 1.-4. Finds from the old trenches; 5.-7. Horizon 1

report). It is strictly north-south orientated and made of sandstone, reused grinding stones of basalt and parts of a storage jar.

Pottery and small finds

The pottery is a mixture of vessels mainly from the second part of the Late Bronze Age and late Iron Age

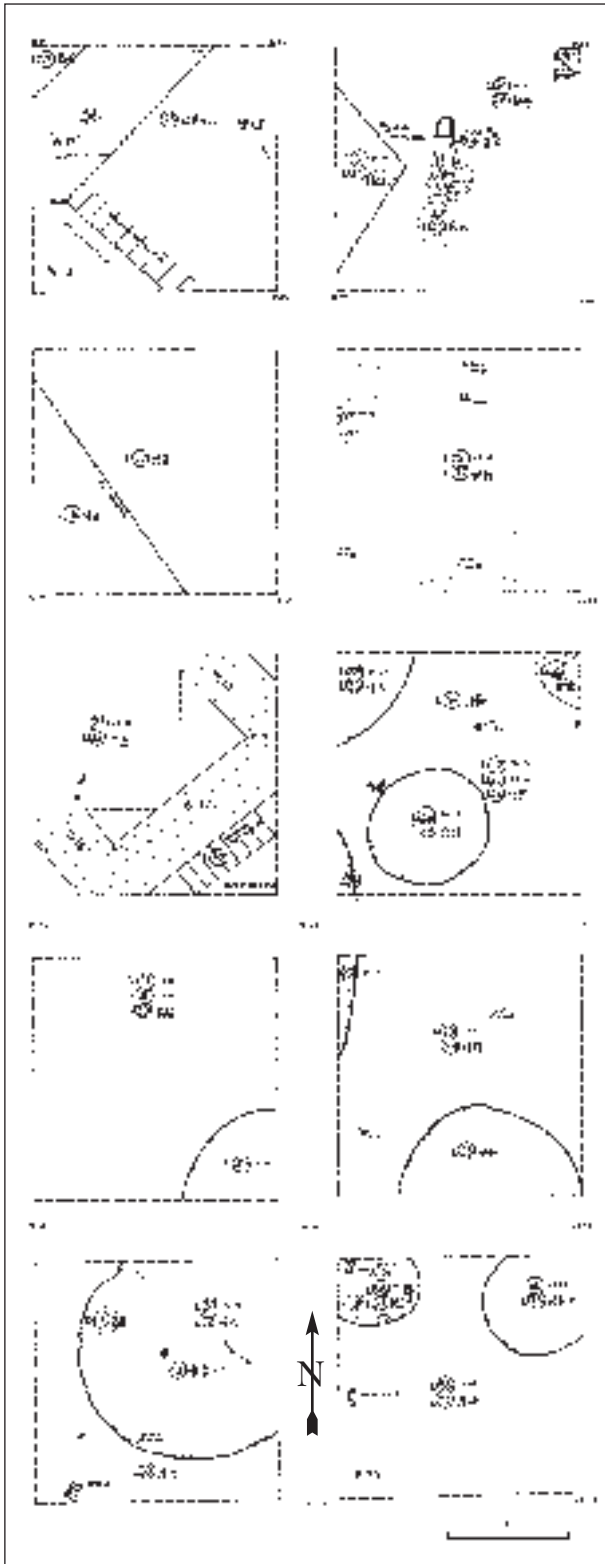


Fig. 4 Horizon 1

shapes. One representative of the latter is the sausage-shaped storage jar which is part of the construction of L45 (Fig. 3:7). Amongst the local Late Bronze Age shapes (Fig. 5:1–4) is a spinning bowl (Fig. 5:4).

Imports from Cyprus are frequent and consist primarily of White Slip II (Fig. 5:5) and Base-ring II (Fig. 5:6) together with sherds of Bichrome Wheel-made, Monochrome, Red Lustrous Wheel-made, Base-ring I, White Slip I and White Painted V/VI. Another import is Chocolate-on-White. Sherds of imported carinated jars from upper Egypt and a shallow bowl of Egyptian-type were also discovered.

Two clay figurines come from the vicinity of the structure: the torso of a human (Fig. 3:5) and the hind part of an animal with a short tail (Fig. 3:6). Metal objects from the Late Bronze Age include a disc-shaped pendant of silver with a crescent or a bull's horns (Fig 5:8; cf. MCGOVERN 1985: 70, Type VI.B.2), an arrowhead of bronze and a piece of armour, a limb cover of bronze (Fig 5:7).

Two samples of pumice were collected for later neutron activation analysis and provenance studies.

Preliminary interpretation and chronology

It seems that the area has been deserted for a considerable time after the most recent Late Bronze Age occupation. The numerous pits may have been dug during the latter part of the Late Bronze Age, the Iron Age or even later. These pits are certainly the reason for the numerous Late Bronze Age finds in the higher layers which came from deeper layers. To judge from the associated pottery, the structure L45 may represent a looted late Iron Age/Persian tomb. *Preliminary date of the structure L45: late Iron Age IIC–post Iron Age.*

Preliminary date of the pits: Late Bronze Age IIA/B¹ / Late Cypriote IIB/C / 18th Dynasty late (?).

2.2.4. Horizons 2A–B (Fig. 6)

Architecture and features

H2 is the most recent phase with architectural remains although these are quite eroded. There is an isolated wall in the north (W19/22) and part of a building in the south (W14, 15A, 23 and 24). W19/22 is a 1 m wide, isolated structure which runs from north-west to south-east through two trenches.

¹ Cf. Locus 5, a pit in Trench 1 from 1999, which contents include a Mycenaean-type IIB1 piriform jar (FISCHER and SADEQ 2000: 216, fig. 4; 218; 220, fig. 8: 8; 224).

The wall is constructed of mud bricks in two rows with upright bricks to the north-east. The size of the bricks is quite uniform and approximately L 0.7 m, W 0.3 m, Th 0.25–0.3 m. The wall was destroyed, repaired with smaller bricks, and then the northern end was destroyed again by looters after the area was abandoned.

Remains of an additional mudbrick structure are 7 m to the south-west of W19/22. It shows the same orientation as the northern structure. W15A and W 23 are approximately 0.7 m wide and constructed of two rows of bricks of different sizes, which may point to attempts at repair. W14 is a later addition built perpendicular to W15A. Its southern end was destroyed by a pit. The width of W24, which obviously separates two rooms, is 0.55 m and it shows only one row of bricks, alternately 0.55 m × 0.37 m and 0.75 m × 0.55 m. Three walls were already constructed in the previous phase and

reused in the H2: W15A which is an addition to the original W15B, W23 and 24. The building was finally abandoned after a conflagration from which traces of ash can be found everywhere in the area.

The tomb of an infant, with bones almost totally disintegrated, which was cut into H3, was found in the north-western part of T10. No burial gifts were discovered. Ten pits – the tomb excluded – the majority of which were already dug in H1, were found.

Pottery and small finds

Bowls dominate the southern Levantine vessel repertoire (Fig. 7:1–10). Those most frequently found are shallow bowls with rounded profiles and flat bases. Rounded, shallow and deep bowls with flat disk bases, concave disk bases and low ring bases also exist together with the more rarely found bowls with medium to high carinations. A miniature bowl

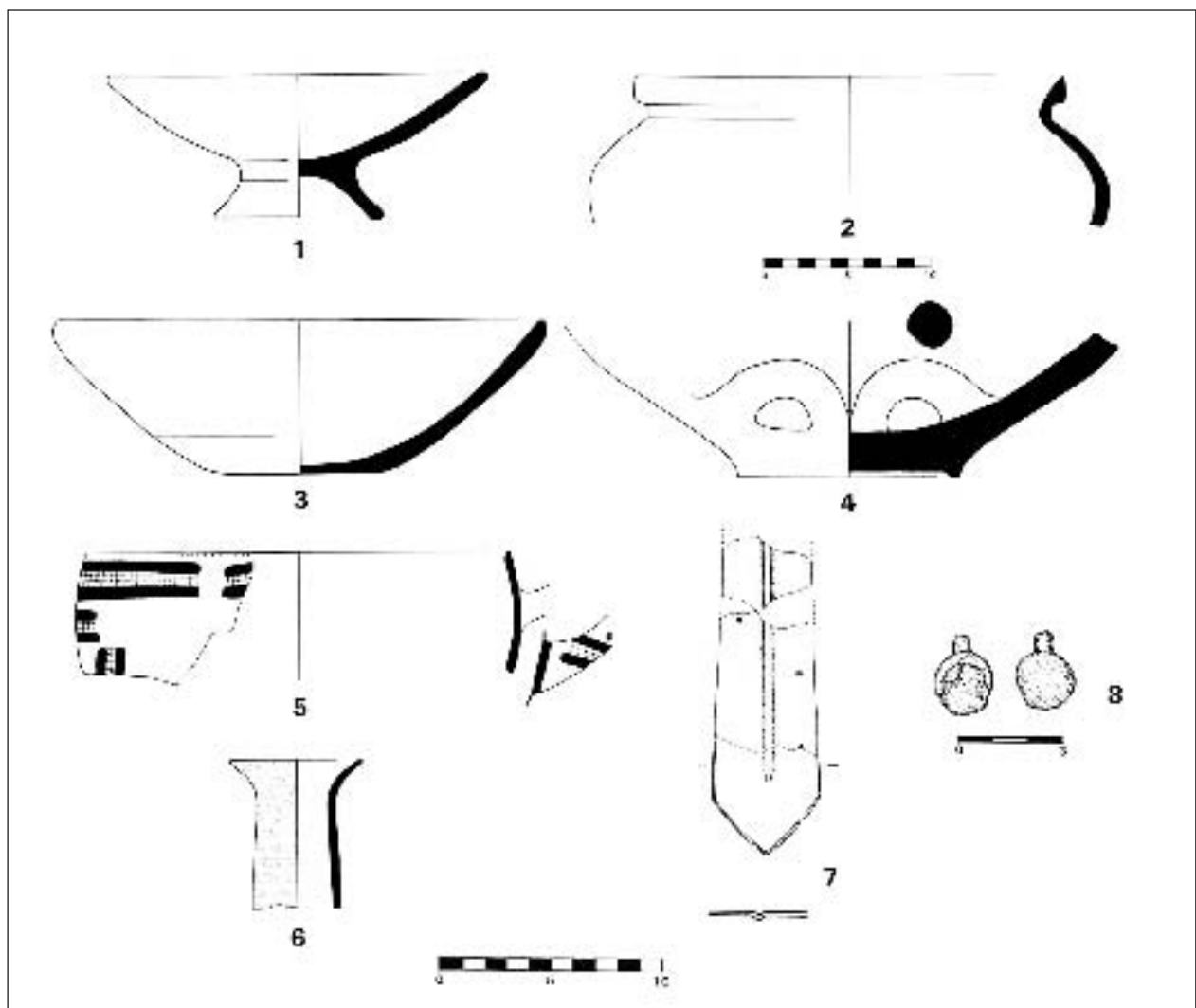


Fig. 5 1.–6. Pottery from H1. / 5. White Slip II. / 6. Base-ring II. / 7. Bronze limb cover. / 8. Silver pendant

belongs to the pottery repertoire (Fig. 8:1). Other shapes are cooking pots (Fig. 7:11–13), kraters (Fig. 8:3–5), jugs and juglets (Fig. 8:6–9), storage jars and lamps (one in Fig. 8:2).

Imports from Cyprus are frequent and consist primarily of White Slip II (Fig. 9:1–3) and Base-ring II

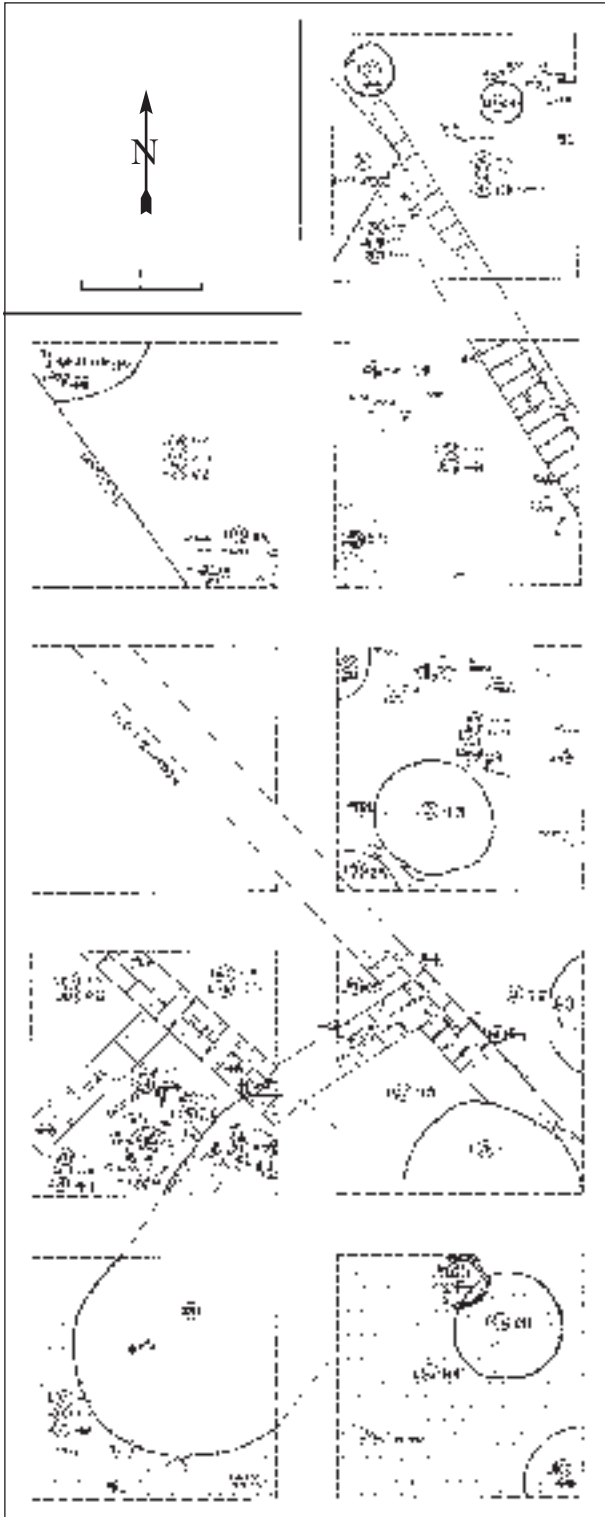


Fig. 6 Horizon 2

together with a number of sherds of Monochrome, Bichrome Wheel-made, Base-ring I (Fig. 9:4, 5), a few sherds of Red Lustrous Wheel-made, White Slip I and White Shaved, and one sherd of White Painted V/VI. Other imports are Chocolate-on-White and body sherds of Mycenaean-type vessels. Sherds of Egyptian-imported piriform jars, and shallow bowls of Egyptian type (Fig. 9:6–8), one of which is straight-sided with a hanging triangular rim, were also discovered.

Small finds include the lower part of an earthenware Egyptian-style figurine of a sitting human, ceramic gaming pieces (Fig. 10:6,8) and another ceramic object of unknown function which bears a crown-like painted decoration and a circular impression above it (Fig. 10:7; gaming piece?). Metal finds are a bronze dagger which is complete except for the missing tang (Fig. 10:2), bronze needles (Fig. 10:3–5) and a gold pendant (Fig. 10:1). The pendant is of sheet-gold with quite a naively incised image of the head of Hathor in repoussé (no good parallel in MCGOVERN 1985). Hathor is almost caricatured with extremely large ears and the typical Hathor coiffeur. The poor workmanship may point to the work of a young artist.

Six samples of pumice were collected for later neutron activation analysis and provenance studies.

Preliminary interpretation and chronology

The face of the isolated wall is built of upright mud-brick tiles which face north-east. Its function is not yet clear. A working hypothesis is that it may be the outer wall of a larger building, parts of which are also exposed in the south, and that the area between these structures was an open courtyard or a road via which other rooms could be reached. Whatever the case may be, traces of metal slag, many bones and remains of ovens point to an outdoor area which was very likely partly roofed (posthole in Trench 5). There are traces of at least one phase of repair after a partial destruction.

The find context in the southern half of Trench 8 within the building to the south may point to two possibilities (see also Appendix by R. FELDBACHER in this report): either a number of vessels and other finds were stored on the roof or it is a two-storey building. One room may have been used for the preparation of food because of the presence of many household vessels including a complete White Slip II bowl together with numerous bones and a circular hearth, approximately 0.7 m in diameter.

Some of the White Slip II bowls, of which one is almost complete, may contribute to the discussion on chronology. These bowls very likely belong to

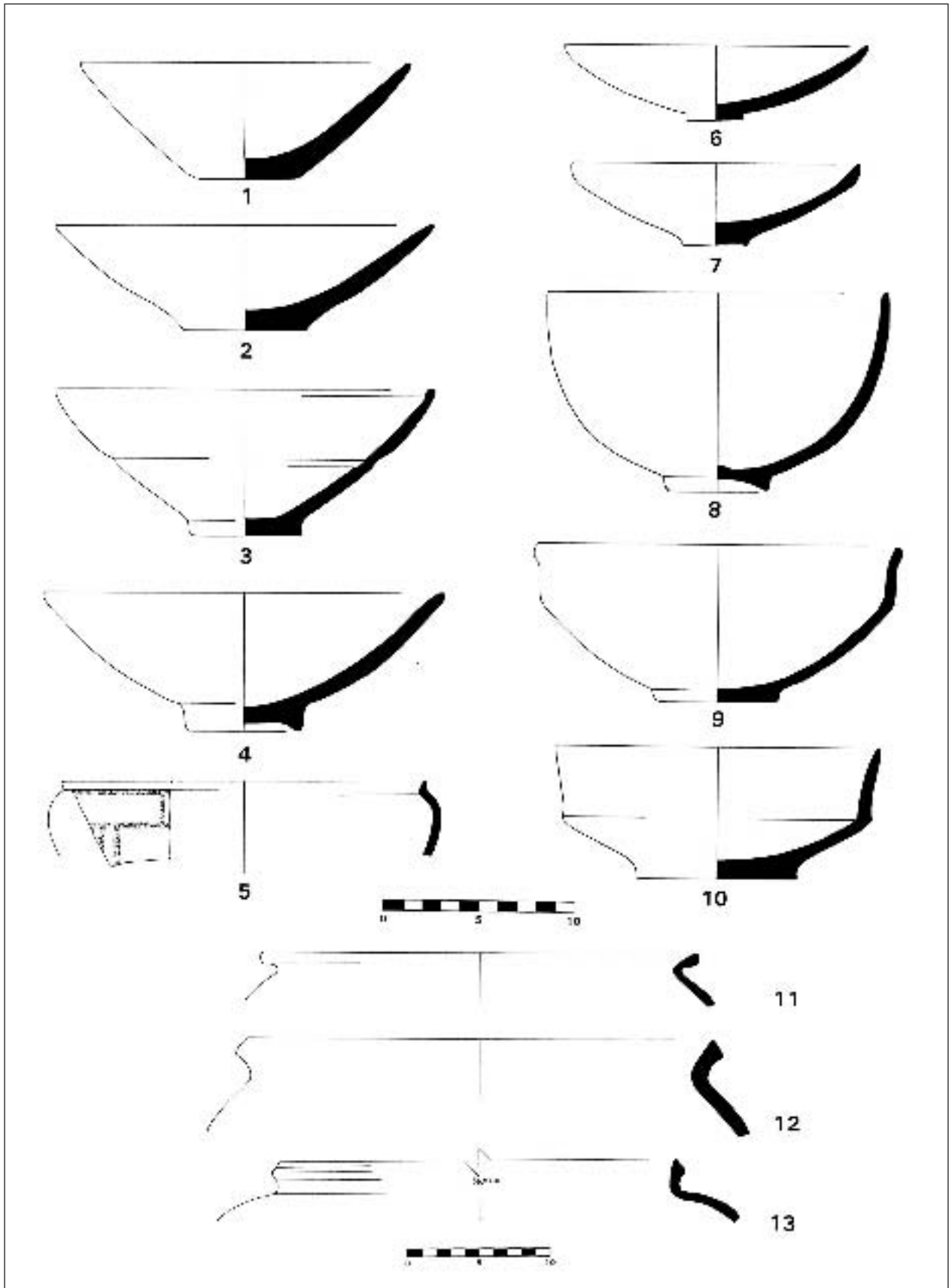


Fig. 7 Pottery from H2
1.-10. Bowls. / 11.-13. Cooking pots

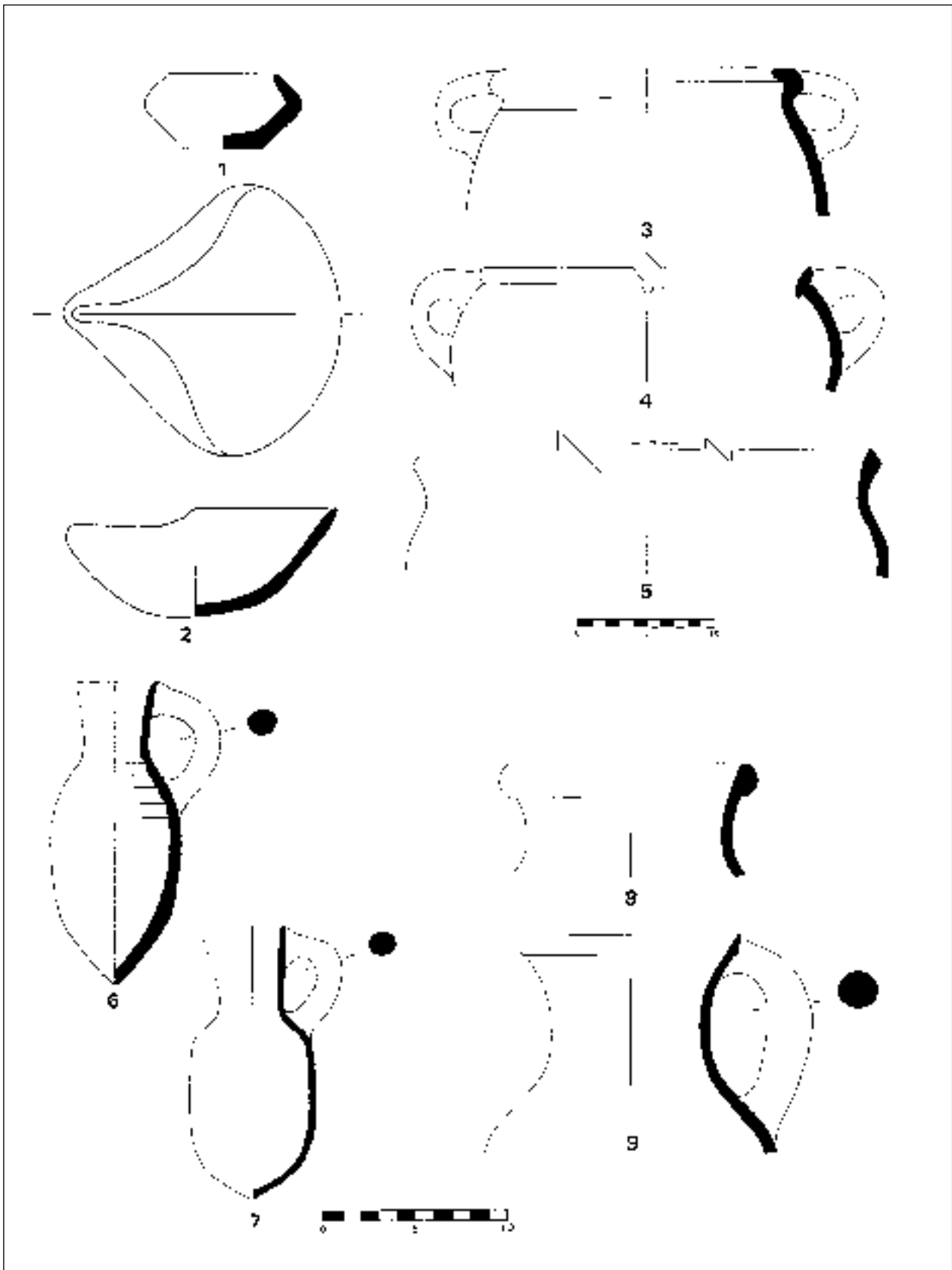


Fig. 8 Pottery from H2
1. Miniature vessel. / 2. Lamp. / 3.-5. Kraters. / 6.-9. Juglets and jugs

the group of White Slip II bowls, which are classified as “White Slip II, early stage” (POPHAM 1972: 447) on account of the bright slip, the neatly executed decoration and the quite thin walls. Sherds of Base-ring I belong to a juglet and a large jug with the decoration in relief which corresponds to ÅSTRÖM’s Motif 71 (1972a: 171). The Cypriote imports from this phase, i.e. White Slip II which dominates, Base-ring I and II, Monochrome, Red Lustrous Wheel-made and White Shaved, fit within

Late Cypriote IIA and very likely within IIA1 if we consider the presence of early White Slip II and if we accept Åström’s table (ÅSTRÖM 1972a: 700–701; for the life span of the Red Lustrous Wheel-made Ware see also ERIKSSON 1993: 149–153). It may be even possible very tentatively to push the date of this layer even a little higher, i.e. to Late Cypriote IB2 because of the early type of White Slip II and “occurrence (of White Slip II and Base-ring II) in small quantities” on Cyprus (ÅSTRÖM

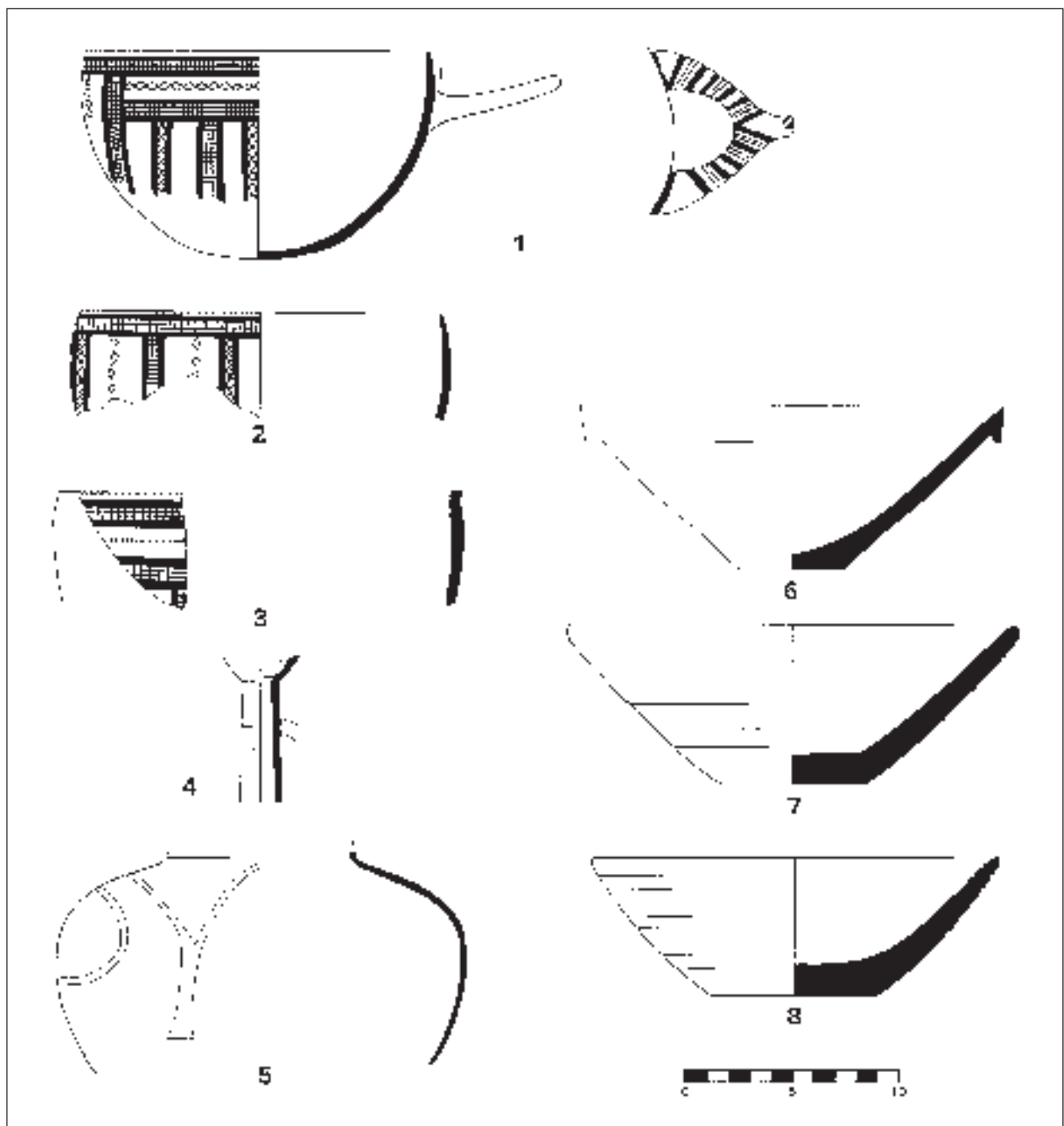


Fig. 9 Imported pottery from H2
1.–3. White Slip II. / 4., 5. Base-ring I. / 6.–8. Egyptian-style bowls

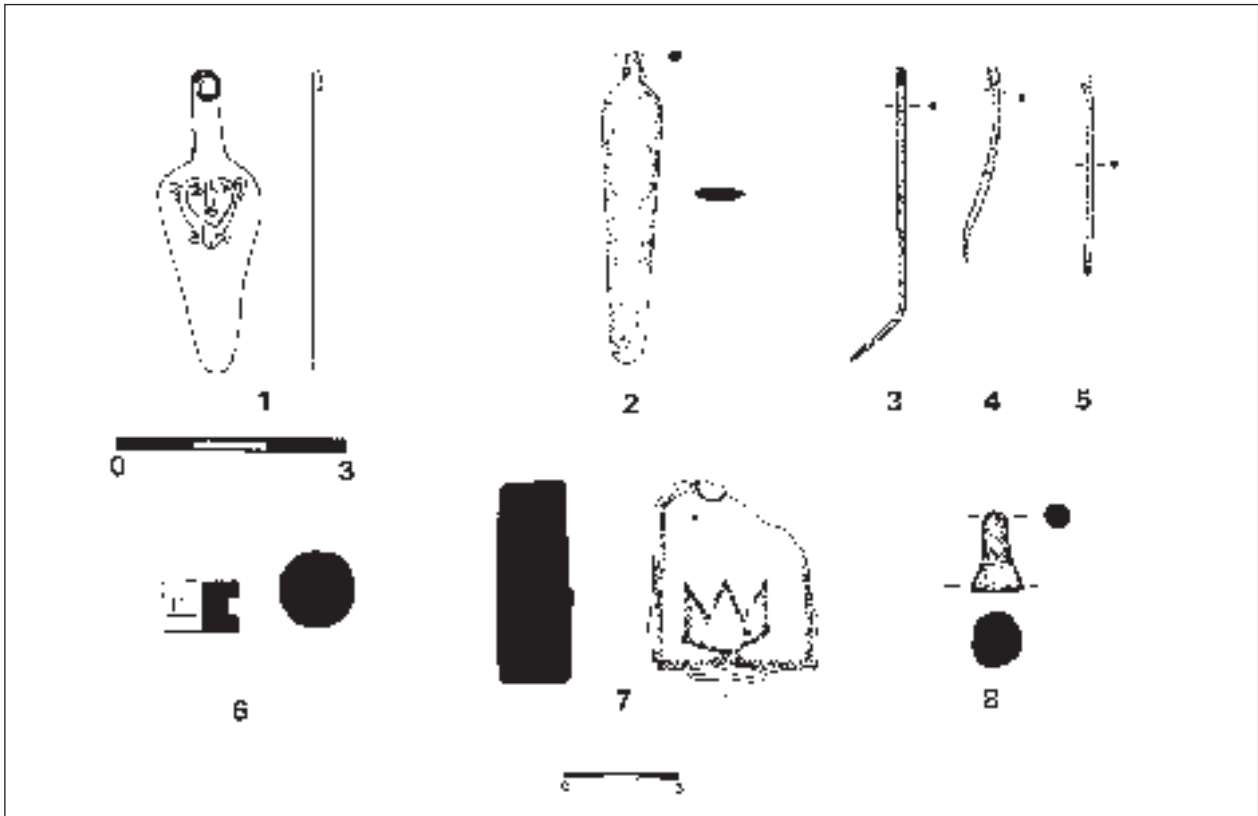


Fig. 10 Finds from H2

1. Gold pendant. / 2. Bronze dagger. / 3.–5. Bronze needles. / 6., 8. Ceramic gaming pieces. / 7. Ceramic gaming piece (?) with painted decoration

1972a: 700).² The southern Levantine wares fit well within the second half of the Late Bronze Age I.

Preliminary date. Late Bronze Age IB/IIA / Late Cypriote IIA–B / 18th Dynasty, middle.

2.2.5. Horizons 3–4 (Fig. 11)

Architecture and features

Overview: Structures which were built in the preceding phase H5 were reused and new partitions were constructed with supplementary walls. All walls are orientated north-west/south-east and north-east/south-west. In the north there is a massive mudbrick structure which consists of W30 and 31 and a fill of mudbrick between them. Approximately 2.5 m to the south-west and parallel to this structure lies a larger building constructed of W15B, 20, 21, 23–26, 28, 35, 36 and 46. A mudbrick pavement(?) and an oven were found in the southern part of the area. A disturbed tomb of an adult, of whom only

one femur and some small bones were left, was found close to W30. Two layers of destruction were found. Repair work was done after the first conflagration. The building was abandoned after the second conflagration. There are also five pits, only two of which were dug in this phase.

The north-west to south-east running W30 of the structure to the north is 1.2 m wide and bordered by upright bricks. The size of the bricks varies between 0.7 m × 0.5 m and 0.44 m × 0.36 m.

The partly exposed building to the south is orientated north-west to south-east and at least 14 m × 12 m in size as exposed. Most of the walls are 0.6–0.7 m wide except for W24 which is 0.5 m wide, and W20 and 21 which are 0.4 m wide. The latter two seem to have been added after the completion of the building. Most of the walls are built of single mud bricks except for W15B and 23 which are constructed of two rows of bricks (see above). W25, 26

² There are 18 sherds of Bichrome Wheel-made Ware in H2. Late Cypriote IB2 is the latest appearance of Bichrome Wheel-made Ware according to Åström (ÅSTRÖM 1972a: 700).

and 28 are all 0.6 m wide and built of alternating 0.7 m and 0.4 m long bricks, i.e. the same building technique as in W24. W46 and 35 are 0.6 m wide and built of bricks between 0.37 and 0.5 m long. The shallow W20 and 21 consist of longitudinally laid bricks which measure 0.7 m × 0.4 m. Plaster was found on the inside of some walls. Two postholes for roof supports were discovered: one is surrounded

by sherds and clay and the other by stones. Ash and fallen mudbricks were found everywhere inside and outside the building.

Pottery and small finds

The majority of the vessel shapes are similar to those of the succeeding H2. Bowls, platters and cooking pots are common (Fig. 12). Carinated bowls occur more frequently compared with H2. The carination is usually just above the mid-body of the vessels. Other vessels include a large spouted jar, a strainer and two shallow bowls with three stump legs, one of which has an excellent finish.

Cypriote imports are numerous and are in decreasing order of occurrence Monochrome (Fig. 13:4, 5), Bichrome Wheel-made with geometric and faunal motifs (Fig. 13:1–3), Base-ring I, White Slip I, Red-on-Red/Red-on-Black, and a few sherds of White Painted V/VI, White Slip II and Base-ring II. One excellently executed Bichrome Wheel-made Ware jug with one handle has a matt decoration of horizontal lines and bands, vertical bands, cross lines, a bird and two Maltese/Georgian-type crosses on a light yellow slip which was certainly once burnished but is now worn (Fig. 13:1). There are black lines on the rim (inside and outside) and on the outside of the handle. The neck is decorated with three sets of three horizontal lines each set having a black, a red and a black line. The body is decorated with four broad vertically aligned bands: each band has three black and two red lines. The other bands are triple black lines running diagonally. The upper part of the body depicts a sitting bird, a black Maltese/Georgian cross and a bichrome wheel with spokes in the shape of a black Maltese/Georgian cross (cf. EPSTEIN 1966: 37, fig. 2; 60, fig. 5; 86, fig. 6). There are a few sherds of White Painted V/VI, one of which may belong to an animal-shaped vessel. Three (intrusive?) sherds of White Slip II should be mentioned. Other imports are Black Lustrous Wheel-made and Chocolate-on-White including Eggshell

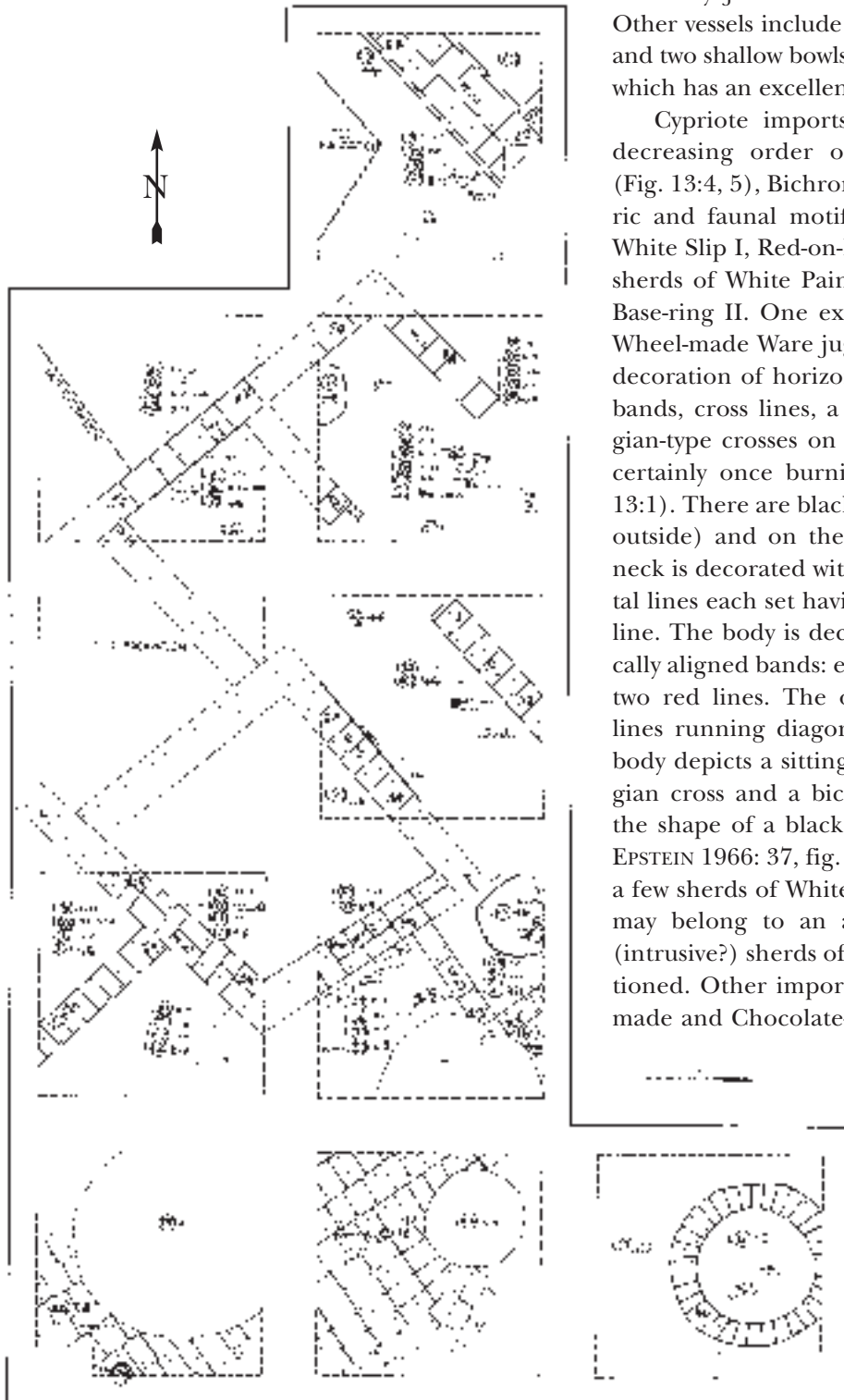


Fig. 11 Horizon 3–4

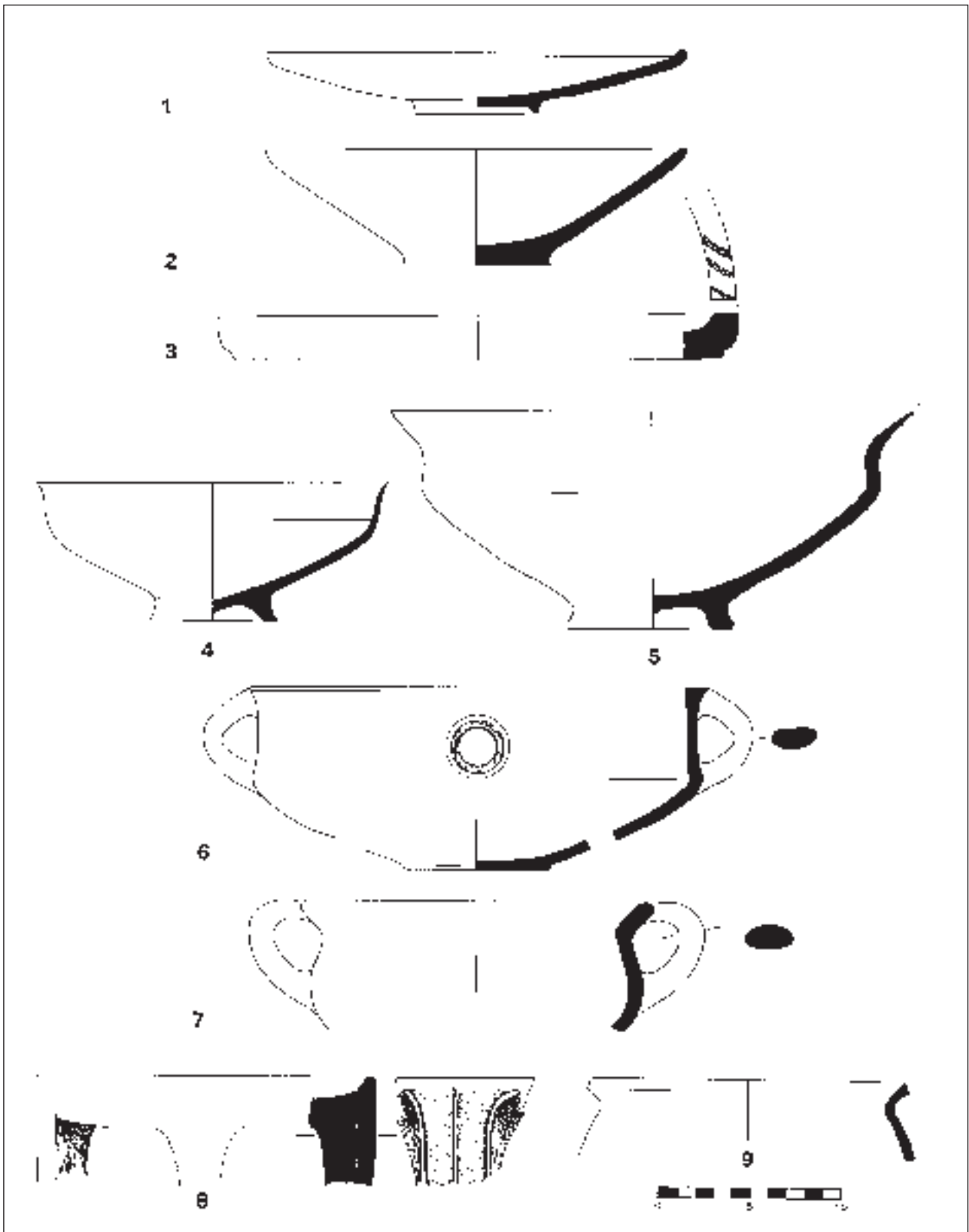


Fig. 12 Pottery from H3-4
1.-5. Bowls and platters. / 6. Spouted krater. / 7. Krater. / 8. Tripodal bowl. / 9. Cooking pot

Ware. An import from Upper Egypt is a complete carinated jar of the same type which was found in 1999 in the course of the preparation of Section 1 (cf. BOURRIAU 1981: 39, fig. 4; attribution to either Group 2: 10 or Group 3: 14 is possible). Both are red-slipped. The jar from this season is vertically

hand-burnished (Fig. 14:1) whereas the jar from the previous season is wheel-burnished (Fig. 14:2). Other Egyptian or Egyptian-style vessels are rounded/straight-sided shallow bowls (Fig. 14:3), a straight-sided deep bowl ("flower pot"; Fig. 14:4) and piriform jars with rounded bases, one of which

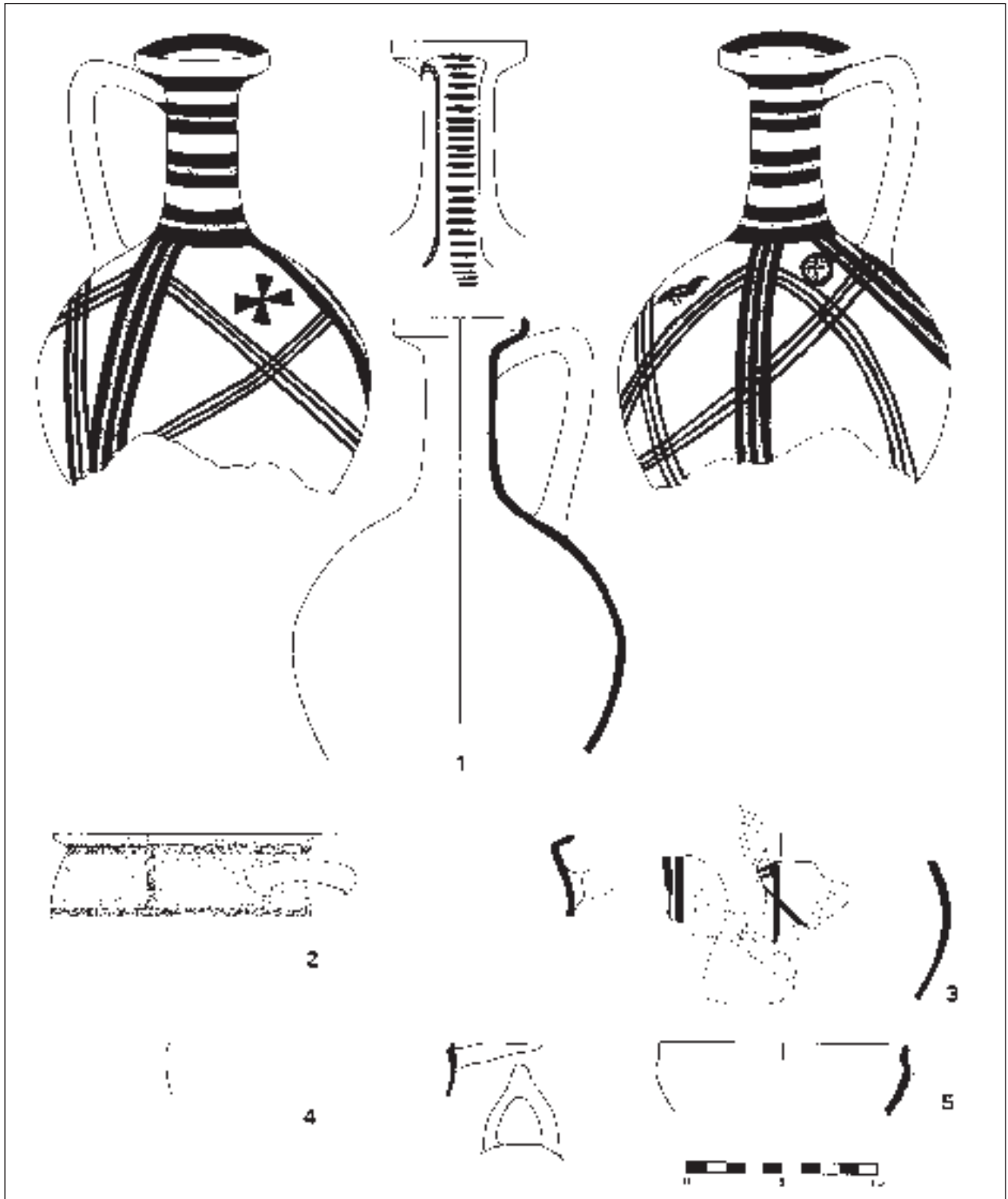


Fig. 13 Imported Cypriote pottery from H3-4
1.-3. Bichrome Wheel-made. / 4., 5. Monochrome

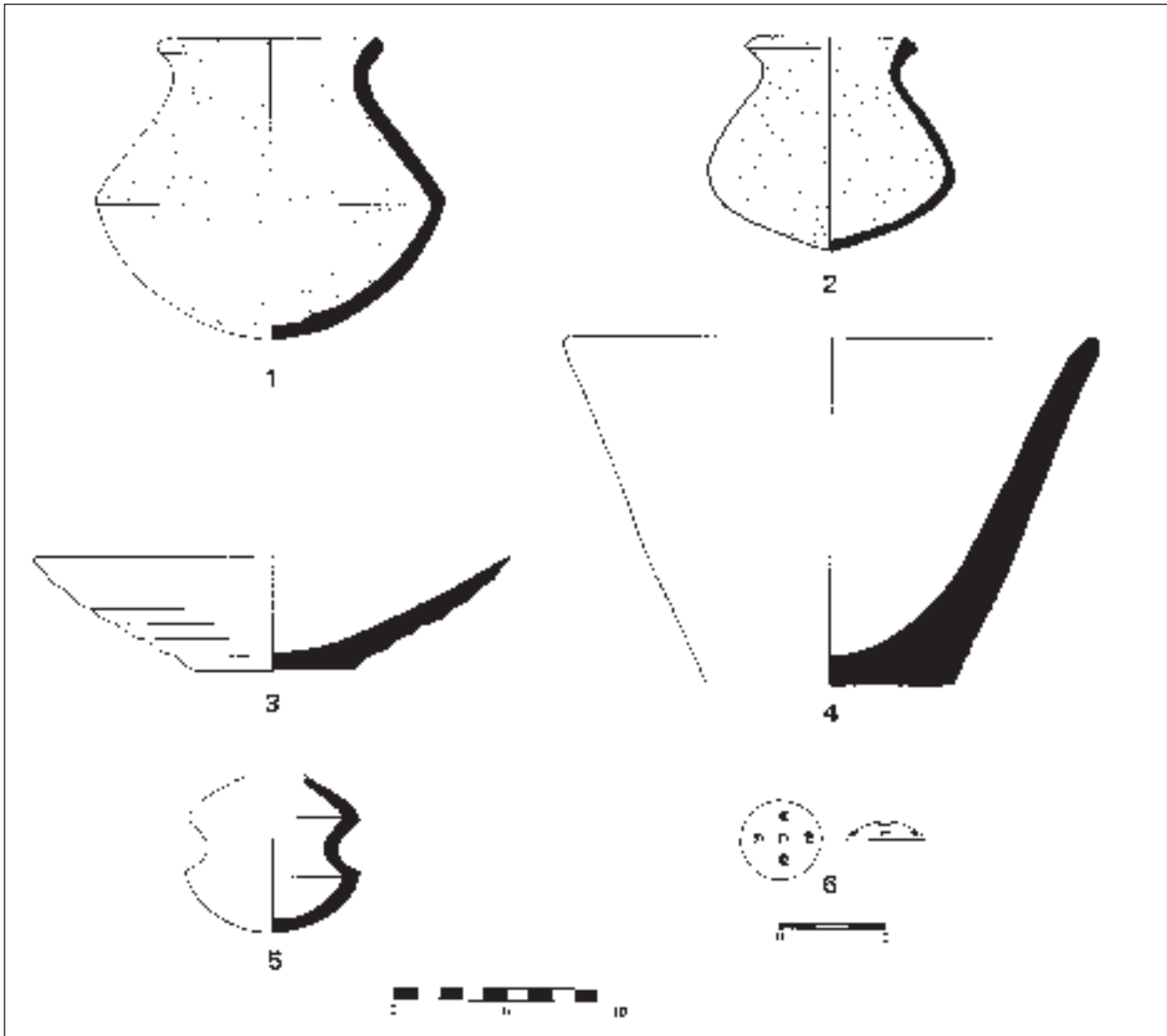


Fig. 14 Finds from H3-4
1.-4. Egyptian/Egyptian-style vessels. / 5. Ceramic rattle. / 6. Bone/ivory button



Fig. 15 Giant or Seba's Spider Conch/Scorpio Shell
(*Lambis truncata sebae*) from H3-4

is a storage jar. A sherd of Grey Ware derives very likely from the Middle Euphrates.

Small finds include a ceramic rattle (Fig. 14:5) and a polisher with an upright, pierced ledge handle. A button³ of bone or ivory with four symmetrically arranged drilled circles with a dot in the centre should be mentioned (Fig. 14:6). A 23 cm long and 17 cm high trumpet-shaped shell was found in

³ Buttons are here defined as centrally pierced circular objects with a perforation of less than 4 mm and a weight of less than 10 grams. Artefacts with a usually straight-sided centrally placed perforation with a diameter of no less than 4mm and a weight of at least 10 grams are considered spindle whorls. Cf. also CREWE 1998: 13-14.

the same room together with the complete carinated jar of Egyptian origin and the almost complete Bichrome Wheel-made jug. The shell is *Lambis truncata sebae*, the Giant or Seba's Spider conch or Scorpion shell (Fig. 15; pers. communication D.S. Reese; see also REESE 1995: 345, fig. 10.1). The

shell is from the Red Sea (or the waters to the east) and not from the Mediterranean Sea according to Reese.

Twelve samples of pumice were collected for later neutron activation analysis and provenance studies.

Preliminary interpretation and chronology

Only a minor part of the structure to the north has been exposed, which makes an interpretation difficult. It is, however, likely that this structure faces an open space/road to the south-west which is approximately 2.5 m wide. The disturbed burial site outside this structure is older than the structure itself. A date for the burial cannot be given because of the absence of any burial gifts.

A larger building, only parts of which are excavated, lies to the south of this open space. Two of the walls in the mid-part (W35 and 46 in Trench 6) of the building so far exposed have been re-used from the preceding phase. It seems that the building suffered from a conflagration. It has been repaired, altered and re-occupied, which is shown, for example, by two shallow walls (W20 and 21) which represent an addition to the original building. The building was finally abandoned after another conflagration: traces of ash, and burned and fallen mud bricks were apparent everywhere in the area. The interpretation of the function of the building, and the explanation of the purpose of the massive mudbrick pavement(?) in the most southerly part of the area have to await the results of the continued excavations.

This phase again provides the possibility of cross-dating because of the presence of Cypriote and Egyptian/Egyptian-style vessels together with southern Levantine wares. Two vessels are especially interesting because they are complete – the carinated jar from Upper Egypt, or almost complete – the Bichrome Wheel-made Ware jug with the bird/cross/geometric motifs. Both derive from the

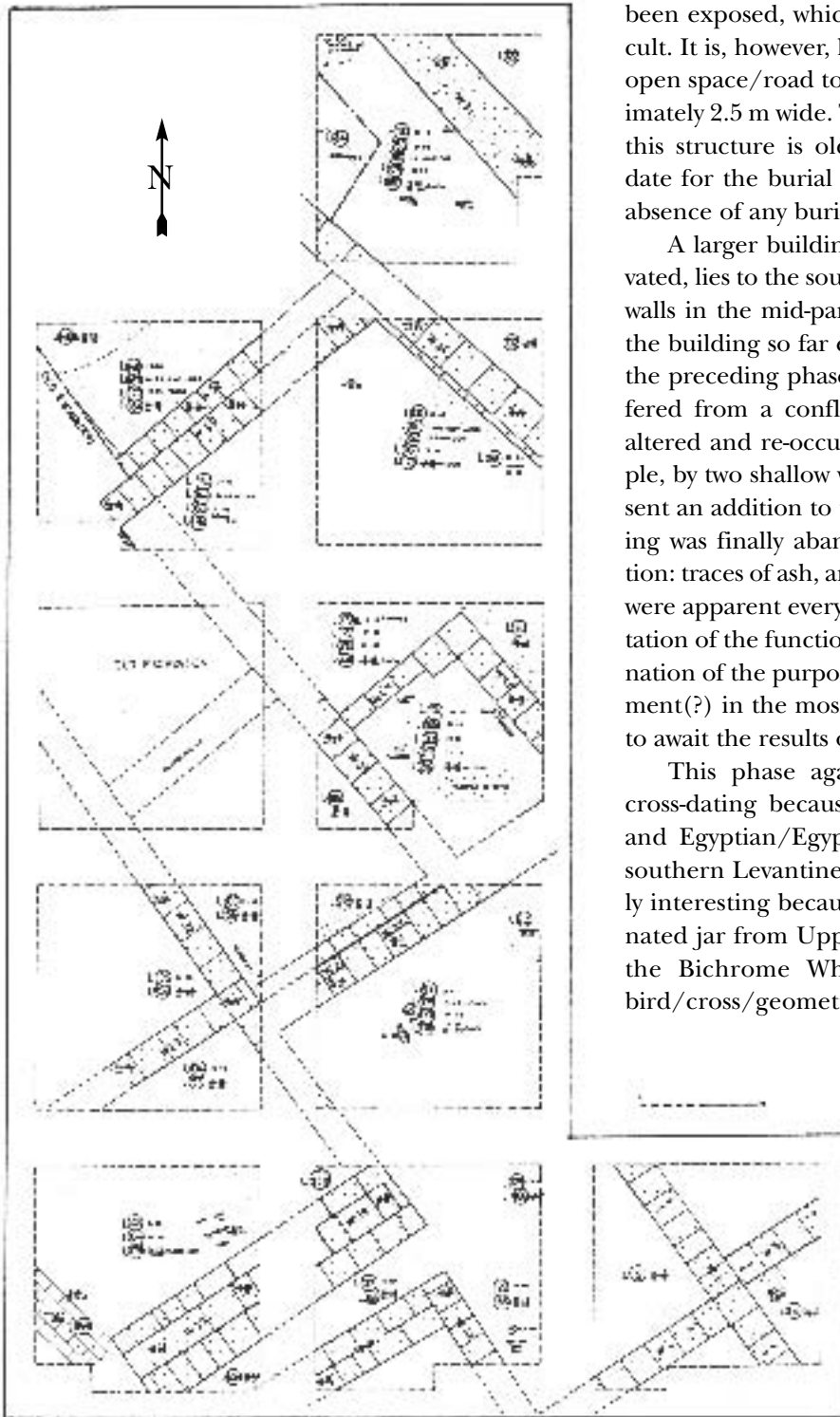


Fig. 16 Horizon 5

same room in Trench 7. We are therefore in the fortunate position of being able to utilize these two vessels from a closed context. This means that the risk of an overall misinterpretation based on the study of single sherds alone, which may be residual and thereby lower the chronology of certain vessel types (i.e. they are assumed to be later than their true age), is definitely reduced. The study of the datings of these wares within the original area of production, regardless the Tell el-ʿAjjul H3 context, results in the following chronological observations: ÅSTRÖM (1972a: 700, 762) dates the latest ascertained appearance of Bichrome Wheel-made Ware to Late Cypriote IB2. BOURRIAU (1981: 29, 30, 39, fig. 4) dates her “final group 3”, in which there is a vessel which is similar to our carinated jars, to the period from the end of the Second Intermediate Period up to the reigns of Hatshepsut–Thutmose III as the lowest possible date (Bourriau’s no. 14 in fig. 4). The locally produced pottery, in particular the shapes of the cooking pots and the carinated bowls, fits well into the Late Bronze Age IA pottery repertoire for which a closing stage of approximately 1450 BC has been suggested (cf. FISCHER 1997: 20). A date within the Late Bronze Age IA or possibly the transitional Late Bronze Age IA/B for the end of this phase of occupation is suggested. A destruction layer may be connected with the warfare of, for example, Thutmose III in Palestine.

Preliminary date: Late Bronze Age IA–IA/B / Late Cypriote IB / 18th Dynasty, first half.

2.2.6. Horizons 5A–B (Fig. 16)

Architecture and features

Overview: The general plan of the building, parts of which were used in the succeeding phase, was established in this phase. The orientation of the walls of this and the succeeding phase is identical, namely north-west/south-east and north-east/south-west. The general architectural pattern is also similar, however the detailed plan of the buildings differs mainly in a more “open” planning. In the north is a single(?) mudbrick wall (W31) and approximately 2.5 m to the south-west and parallel to this wall lies a larger building constructed of the following walls (from north to south): W34, 52, 40, 35, 46, 47, 27, 37, 32, 33, 39, 41 and 42, and W4, 5 and 6, the last three of which were excavated during the 1999 season. Repair work and reinforcements are visible.

W31, the single(?) mudbrick wall in the north, is approximately 1 m wide. Only a minor part of this wall has been exposed during this season. Therefore the description of the detailed construction of

this wall has to await the results of the continued excavations.

The building to the south covers an area of at least 20 m in the north-south direction and 15 m in the east-west direction which includes the architecture of Trench 1 from 1999. W34 in the north is 0.8 m wide and differs from all the others. It consists of one row of horizontally laid mud bricks, 0.7 m × 0.7 m in size, and vertically arranged facing bricks which are 0.7 m high and 0.5–0.6 m wide facing south-west. W34 is connected with the “double wall” W40 and W52; W52 has to be considered a bench/reinforcement of W40. These two walls together with W35 (see description above) surround an area of at least 30 square metres. A small room, approximately 7 square metres in size, is to the south. It is separated from the large space to the north by the small W47 (brick size 0.55 m × 0.35 m) which very likely represents a later addition. W35, 32 (brick size 0.6 m × 0.55 m) and 27/37 enclose another room of approximately 15 square metres as reconstructed. W33, 0.55 m wide, and W39, 1.5 m wide, are constructed of bricks of different sizes. This is also true of W41, 0.8 m wide, and W42, 0.5 m wide. A small corridor separates W39 and 41. It is evident that W42 and W4 (and W5 and 6) from Trench 1 form a room. Consequently, the architecture of Trench 1 implies that there are four additional rooms connected with this building (FISCHER and SADEQ 2000: 218).

There are unambiguous traces of two floor levels and two layers of debris of ash, fallen bricks, spots of white plaster, and signs of repair/reinforcement.

Pottery and small finds

Bowls, rounded and carinated, and cooking pots, together with jugs/juglets and storage jars, are the most common shapes (Fig. 17). Two shallow bowls (Fig. 17:3, 5), one of which belongs to the Eggshell Ware (Fig. 17:5), should be mentioned because of their excellent finish: hard fired and hand/wheel-burnished to a high lustre. The most significant change compared with H3–4 within this, the preceding vessel shape repertoire, can be seen in the shapes of the cooking pots (Fig. 18). The everted, straight or slightly outward curved, rounded rim dominates (Fig. 18:3–7). Nevertheless, the cooking pot shape with everted, straight or slightly outward curved, square or triangular rims, which dominates throughout the Late Bronze Age, is already in use (Fig. 18:1, 2). These two types were found in the same contexts. Oddities include two cooking pots with more upright rims and carinations on the neck (Fig. 18:8, 9). A very worn juglet of which only the

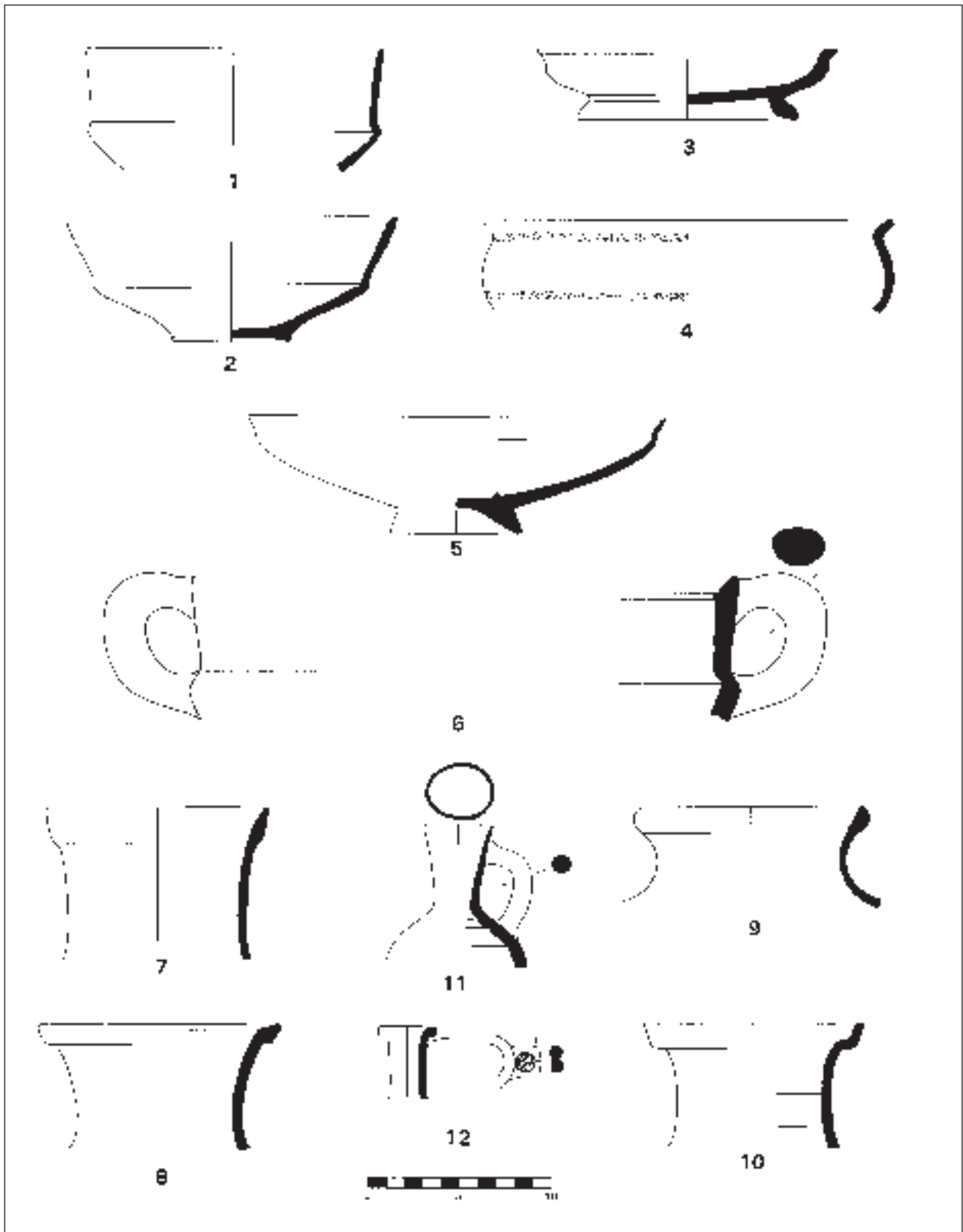


Fig. 17 Pottery from H5
1.-5. Bowls. / 6. Krater. / 7.-12. Jugs and juglets

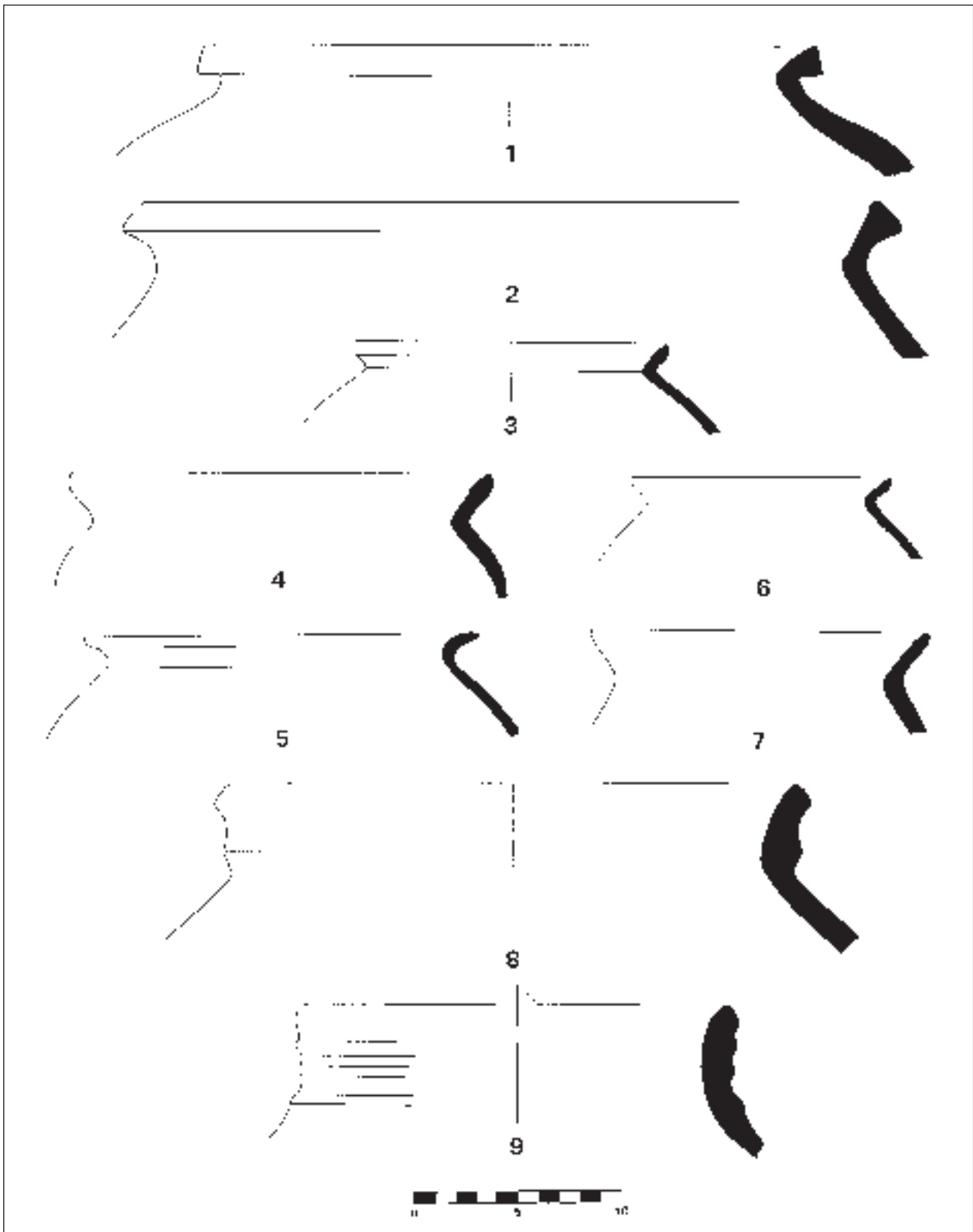


Fig. 18 Cooking pots from H5

neck, rim and the upper part of a twin handle with a knob-like decoration is preserved (Fig. 17:12), resembles the shapes of the “common” cylindrical juglets (cf. e.g. Pella Tomb 62, SMITH and POTTS 1992: pl. 55,6) or the shapes of the cylindrical juglets which belong to the Tell el-Yahudiya Ware (see e.g. KAPLAN 1980: fig. 10b).

Monochrome Ware dominates amongst the Cypriote imports (Fig. 19:3, 4). Other imports are in decreasing order of occurrence Bichrome Wheel-made (Fig. 19:5), bichrome-decorated White Slip I bowls (Fig. 19:1, 2), one of which appears to represent a very early type (Fig. 19:1), White Painted V/VI, Black Slip, White Shaved, Red-on-Black (Fig. 19:6), Red-on-Red, Red Lustrous Wheel-made and Base-ring I (Red and Black Burnished⁴). Other imports are Black Lustrous Wheel-made and Chocolate-on-White I/II, Chocolate-on-White Eggshell Ware and Chocolate-on-White Bichrome. Egyptian imports are five piriform jars (four in Fig. 19:7–10). There is one sherd of a large wheel-burnished Grey Ware bowl with a thickened and slightly inturned rim, which is an import from the Middle Euphrates and a link to Anatolia and northern Syria (pers. communication Gundula Kaschau). Small finds include a drop-shaped pendant of green-coloured faience (no parallel in MCGOVERN 1985).

Twenty-three samples of pumice were collected for later neutron activation analysis and provenance studies.

Preliminary interpretation and chronology

The plan of the larger building which is separated from a structure to the north by a 2.5 m wide passage has the same orientation compared with the succeeding phase, however the layout is different. The most different single architectural feature is the bulky W39 to the south which obviously together with W41 borders a small passage. This passage leads into a “room” at least 8 m wide. The small room in the middle of the area of excavation which is surrounded by W35, 46 and 27/37 originally had a 1.65 m wide entrance which was later closed by the small W47. Indicators of two sub-phases are the two floor levels, the two layers of debris of ash and fallen bricks and additional repair/reinforcement. The interpretation of the function of the building has to await the results of the continued excavations.

Cooking pots are usually an excellent chronological indicator. Three types prevail in H5 and were used simultaneously. One is the cooking pot with everted, straight or slightly outcurved, square or triangular rims, which dominates throughout the Late Bronze Age. The second is the cooking pot with the everted, straight or slightly outward curved rim, which dominates in the contexts of H5 excavated so far. The third is represented by two cooking pots with more upright rims and carinations on the neck. The second and third of these types are obviously representatives of an older tradition. Two other vessels, the excellently finished shallow bowls, one with the raised triangular ring-base and the other with an everted ring-base, may reflect the Middle Bronze Age tradition.

It is tempting to ascribe the evidence of destruction to the forays of Ahmose into southern Palestine after the defeat of the Hyksos at Avaris judging from the locally produced Middle/Late Bronze Age “transitional” pottery types. This hypothesis may have some support or at least is not contradicted by the Cypriote imports, for example, provided that their datings are correct (cf. ÅSTRÖM 1972a: 700, 762). The following wares from H5 are in agreement with the pottery repertoire, which according to Åström belongs to Late Cypriote IA2: Monochrome, bichrome-decorated White Slip I (early type), Base-ring I (Red and Black Burnished), Black Slip, Red Slip, Red-on-Black/Red-on-Red, Bichrome Wheel-made and White Painted V/VI. There are two sherds of Red Lustrous Wheel-made and White Shaved. The latter two wares have been found in Late Cypriote IA2 contexts although in small quantities according to Åström. ERIKSSON (1993: 149) agrees in her chronological conclusions about this date as the first appearance of Red Lustrous Wheel-made Ware.

Other imports are Black Lustrous Wheel-made and representatives of Chocolate-on-White Ware, namely Chocolate-on-White I/II and Eggshell Ware together with Chocolate-on-White Bichrome, which is very rare at the site. The dating of the Chocolate-on-White Wares, i.e. between the late Middle Bronze Age and the early Late Bronze Age (FISCHER 1999: 18), supports the dates provided by the local pottery types and Cypriote imports.

The Egyptian piriform jars also support our dating hypothesis. These jars are more frequently found in this phase compared with the later phases. Three

⁴ Cf. VAUGHAN (1991: 126–127): she distinguishes between Proto-Base-ring, Metallic Slip (our Black Burnished), Red Burnished, Matte Slip and Uncoated Base-ring.

of the jars, of which the upper parts are preserved, show incised double-lines just above the shoulder. The fourth has one incised line on the neck and only the rounded base is preserved of the fifth. Their general shape and the double incisions are similar to jars of Marl B Ware (Vienna System; NORDSTRÖM and BOURRIAU 1993: 178–179) from cemeteries in Upper and Middle Egypt, which were dated between the late Second Intermediate Period and Tuthmosis I (BOURRIAU 1997: 180, Fig. 6.19:9). A similar jar, although with three lines of incision, from the 1999 season of excavation at Tell el-ʿAjjul (FISCHER and SADEQ 2000: 221, fig. 9:6) has been classified as a Marl B product (pers. communication I. Hein).

It is difficult to classify the juglet, which resembles the Tell el-Yahudiya Ware shapes, properly, because it is very worn. However, even if it is not the Tell el-Yahudiya Ware proper, it is very much related to it. The Tell el-Yahudiya Ware was according to BIETAK (1997: 91) in use until the beginning of the New Kingdom which again would lend support to our dating hypothesis. A similar “common ware” juglet derives from Pella’s Tomb 62, which date is Middle Bronze Age IIC–Late Bronze Age I (SMITH and POTTS 1992: 69) or Middle Bronze Age IIC–Late Bronze Age IA/B (FISCHER forthcoming). It is also worthy of note that H5 is so far the most recent phase in which this type of vessel has been found.

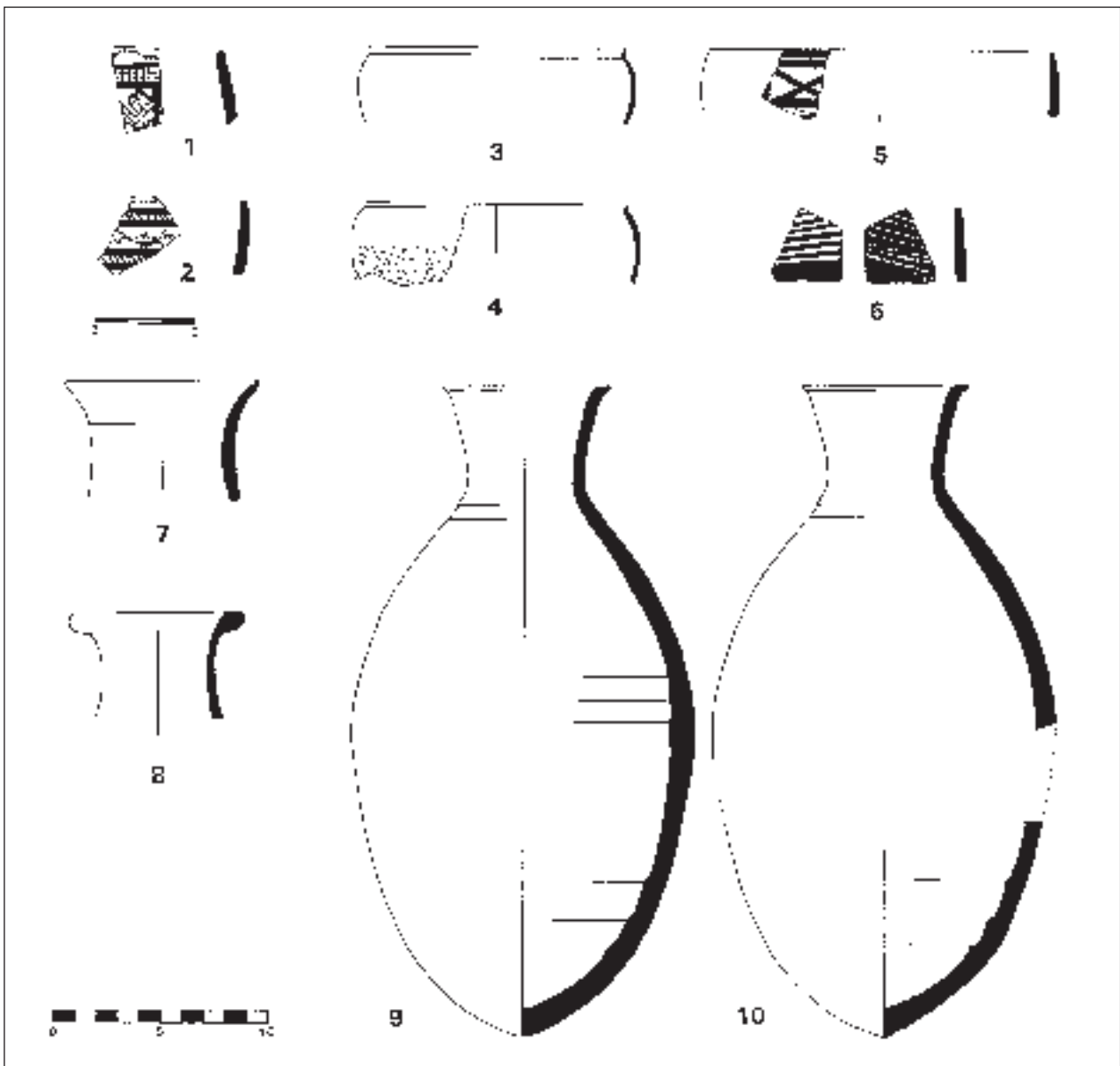


Fig. 19 Cypriote and Egyptian pottery from H5

1. Early White Slip I bichrome. / 2. White Slip I bichrome. / 3.–4. Monochrome. / 5. Bichrome Wheel-made. / 6. Red-on-Black. / 7.–10. Egyptian piriform vessels

The burnished Grey Ware bowl provides a connection with the Upper Euphrates, and Syria and Anatolia (cf. HAUPTMANN 2000: 148–149). Parallels come, for example, from Lidar Höyük Level 8 (pers. communication Gundula Kaschau, Haindorf 2001). Our bowl corresponds to “Ware J”, which date is the end of the local Middle Bronze Age III (approximately the end of the Middle Bronze Age IIC).

Preliminary date: Transition Middle/Late Bronze Age / Late Cypriote IA2/B / Second Intermediate Period, late/18th Dynasty, early.

2.2.7. Horizons 6 and 7 (Figs. 20, 21)

General information: The only trench in which the Horizons from H6 and down to H8 were almost completely exposed, is Trench 7. H6 and 7 are at present being treated collectively because the architecture of these two horizons may reflect the remains of a two-storey building or a building where the roof was used as an upper floor, and not two successive periods. Virgin soil on which H8 rests was only reached in Trench 7 at level 21.14 m (above mean sea level) and in Trench 12 at 23.91 m. Both measurements were taken in the centre of the trenches. It is interesting to note that the difference between the virgin soil levels is as much as 2.77 m in these two neighbouring trenches, i.e. that the natural mound was not flat, at least in this area, or that the mound was cut and levelled in the trenches north of Trench 12.

In consequence the discussion of the architecture is limited to the finds in Trench 7. However, interesting pottery and small finds from some of the other trenches where the same horizons are (partially) exposed will briefly be described.

Architecture and features

The orientation of the architectural remains in Trench 7 H6, i.e. W29 and 38, is the same as in H5. W29 is at least 1.2 m wide and consists of three rows of mud bricks, each of which is 0.6 m × 0.4 m in size. It is partly built against the natural mound which was very probably levelled, and partly resting on W43 (H7). W38 is 0.4 m wide; the brick size is 0.5 m × 0.4 m. A “floor” (see below) is associated with the walls. Grinding stones, a basalt bowl with three stump legs and the remains of an oven were found on this surface. The top of W54, a stone wall which belongs to H8, was maybe reused as a foundation for a mudbrick wall.

The plan of the architecture of H7 is similar. The partly exposed W43 lies below W29 and approximately 0.3 m to the north-west of it. W 44 rests partly on the second stone wall W49 (H8). The mud

bricks of W44 vary in size. W44 has exactly the same position and the same width as W38 but it is built of bricks of different size. Its function is to separate two rooms. The top of a stone wall (W48, H8) may have been reused as a foundation. A floor, which lies more than 1 m below the “floor” of H6, is associated with W43 and 44.

Pottery and small finds

S-shaped (recurved) bowls and carinated bowls dominate (Fig. 22:1–5). There is one vessel amongst the carinated bowls in H6 which shows a very pronounced and quite low carination (Fig. 22:5), however the majority of the carinated bowls have mod-

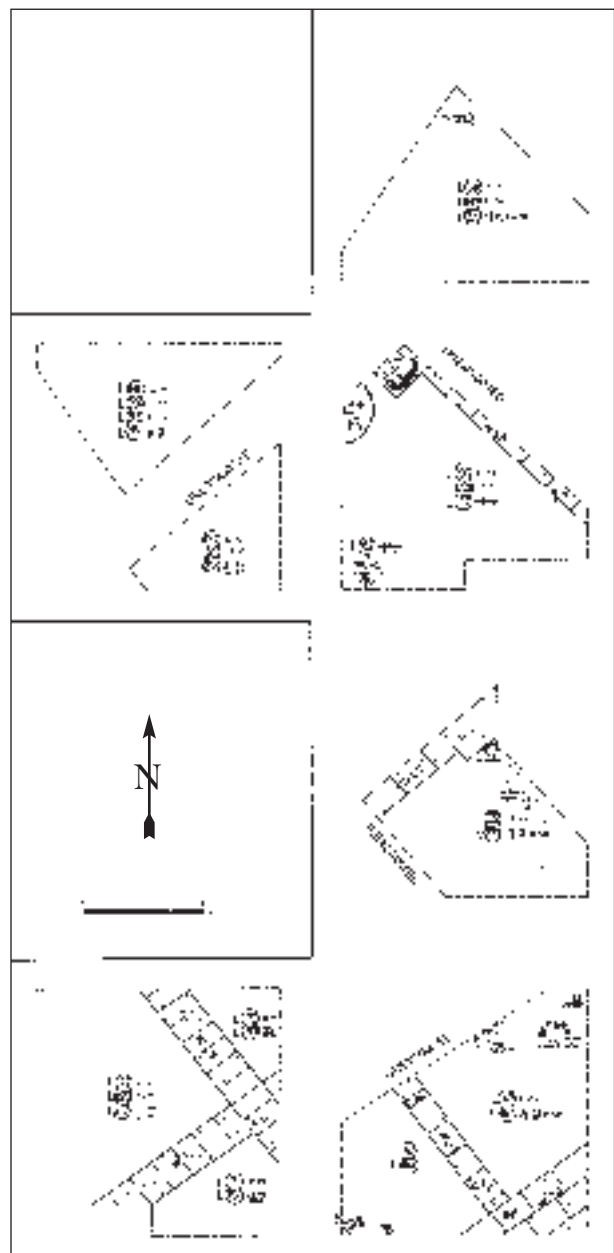


Fig. 20 Horizon 6

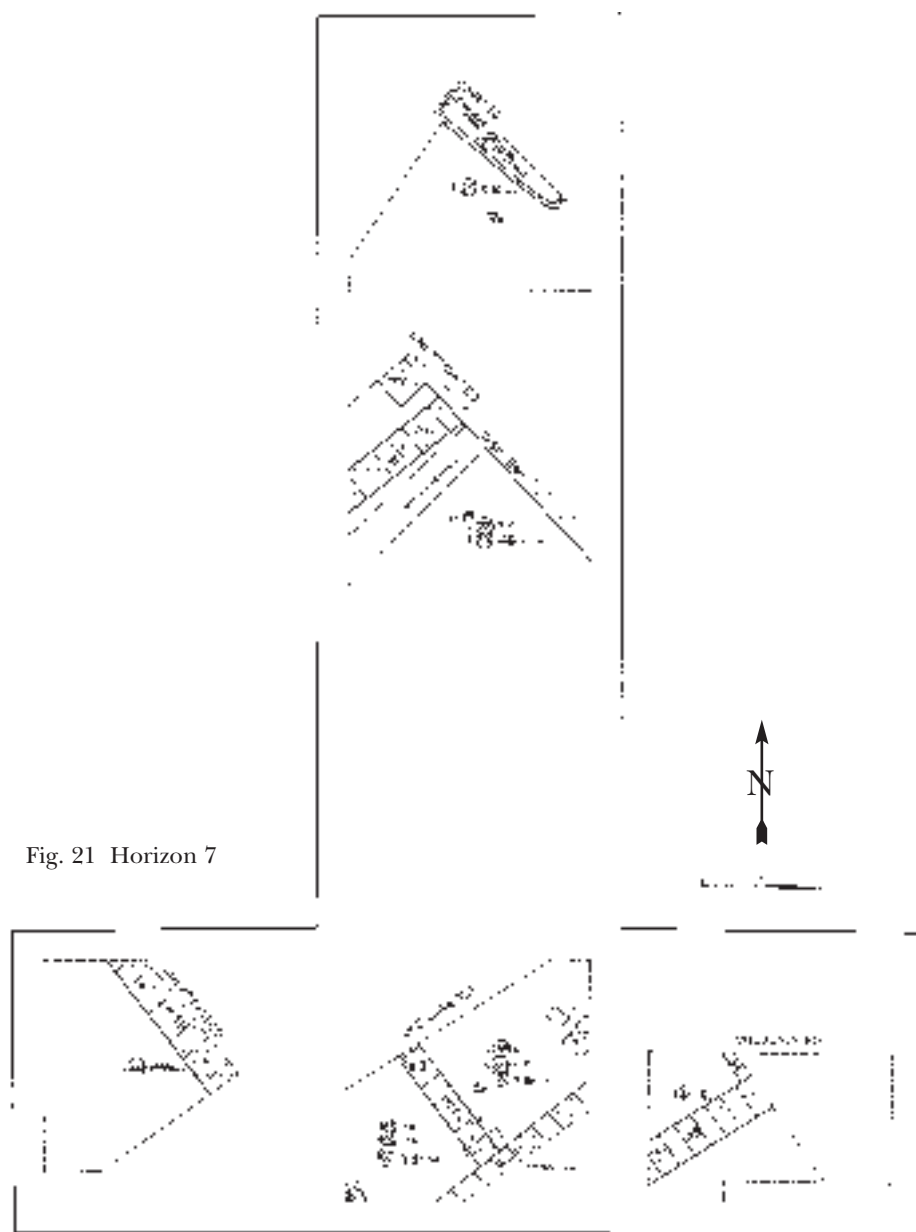


Fig. 21 Horizon 7

erate carinations on the mid-body or on the upper part. Two rounded bowls with triangular rims belong to H7. Other vessel shapes include cooking pots (Fig. 22:12–14), jugs (Fig. 22:6–10) and craters. The cooking pot shape which dominates in H6 and 7 is the one with the everted, straight or slightly outward curved and rounded rim. One neck and rim belongs to a cylindrical juglet (Fig. 22:11).

Cypriote imports are Red and Black Slip,

Bichrome Wheel-made (Fig. 23:3), Monochrome, Red-on-Red (Fig. 23:1), Red-on-Black and White Painted V/VI.⁵ There is a bowl of Black Lustrous Wheel-made (Fig. 23:2). Some diagnostic sherds of Egyptian or Egyptian-style piriform jars and a shallow bowl are also present.

Another find is a large, shallow, basalt bowl with three stump legs (in H6; Fig. 23:4). Small finds include two scarabs,⁶ one from H6 (Fig. 29:3) and

⁵ The type of White Painted will be further defined.

⁶ All scarabs from the 1999 and 2000 season of excavation are discussed in Appendix by CH. MLINAR in this report.

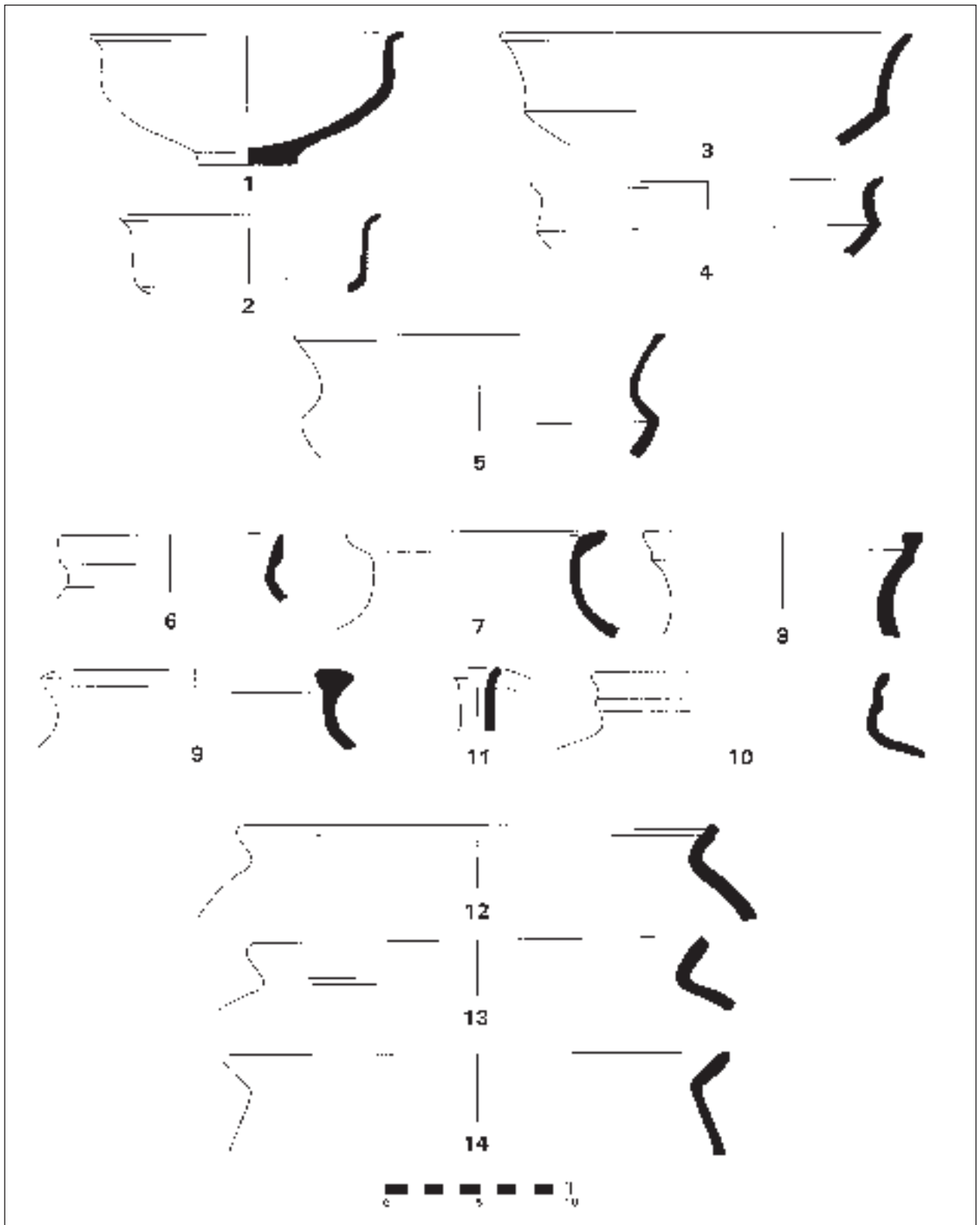


Fig. 22 Pottery from H6-7
1.-5. Bowls. / 6-10. Jugs. / 11. Cylindrical juglet. / 12.-14. Cooking pots

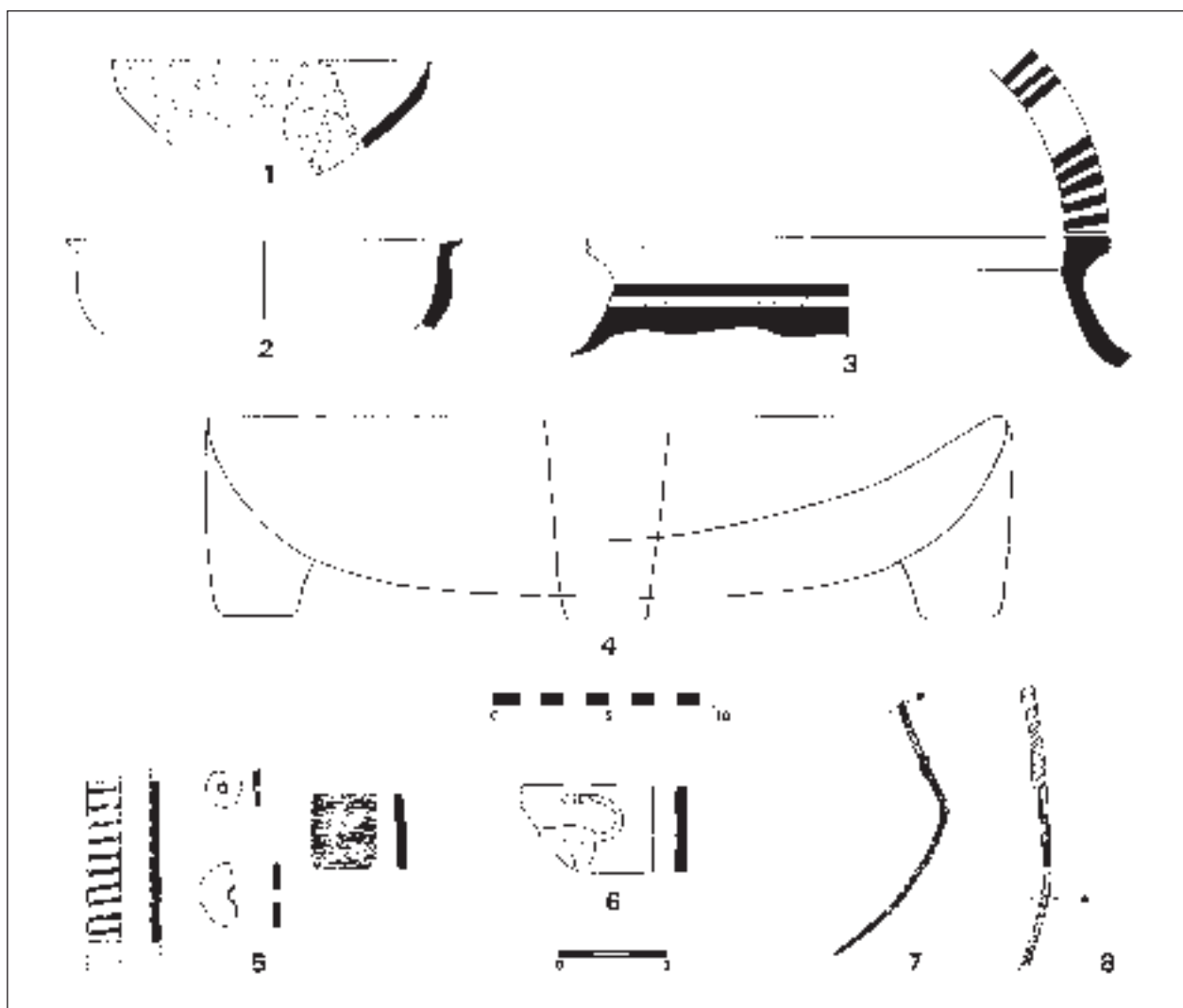


Fig. 23 Finds from H6-7

1. Cyproite Red-on-Red. / 2. Black Lustrous Wheel-made. / 3. Cyproite Bichrome Wheel-made. / 4. Basalt bowl. / 5.-6. Bone/ivory plaques. / 7.-8. Toggle pins

the other from H7 (Fig. 29:5), and incised and pierced bone/ivory plaques, one of which shows the hind part of a feline animal (H7; Fig. 23:5, 6). Bronze objects include two toggle pins (Fig. 23:7, 8). A bowl of silver (alloy?), approximately 8 cm in diameter and 2 cm high with a convex profile and a flat base, belongs to H6. Pumice was not found in H6-7.

Interpretation and preliminary chronology

It has been suggested above that there are three possibilities as regards the architecture of Trench 7. One is that we have exposed parts of a two-storey building with an upper floor. The second is a building where the roof was used as an "upper floor" (H6). The third is that we are dealing with two successive periods which are separated from each other only by a short break. We have to await the exposure

of a larger area in order to solve the stratigraphical riddle satisfactorily.

The pottery produced in southern Palestine, in particular the cooking pots, the S-shaped and the carinated bowls and the cylindrical juglet, can very well be classified as representative of the end of the Middle Bronze Age.

All Cyproite imports belong to the Late Cyproite IA1 according to Åström's table (ÅSTRÖM 1972a: 700) if we exclude Red-on-Red which is merely a less common variation of Red-on-Black (ÅSTRÖM 1972b: 228). White Slip, Base-ring and Red Lustrous Wheel-made Wares have so far not been found in this phase. This is in agreement with ÅSTRÖM (1972a: 700, 701) and ERIKSSON (1993: 149).

The shapes of the Egyptian piriform jars fit well within the categories which are dated to the late Sec-

ond Intermediate Period and continue into the period of the 18th Dynasty (e.g. BOURRIAU 1997: 180, fig. 6.19:9).

The two scarabs, A00T10H6L191N95 and A00T4H7L210N98, although they are a bad chronological indicator for a certain phase, are dated to late Middle Bronze Age IIB–early Middle Bronze Age IIC according to Mlinar (Appendix to this report). Mlinar reports that this date is supported by the slender shape of the cowroid N95 (cf. also KEEL 1995: 78). She also reports that the falcon (or owl?) flanked by two snakes in scarab N98 is a representation which does not occur before the 15th Dynasty. The latter is restricted to the second half of the 15th Dynasty at Tell el-Dab^a. Both scarabs were very likely made in southern Palestine. This claim is supported by the ungainly, angular signs of N95 which point to a seal cutter who is ignorant of hieroglyphic writing. N98 is an unusual large scarab (24.5 × 17.5 × 10 mm), which was very likely manufactured at Tell el-^cAjjul itself: 10 out of 29 parallels with falcons/owls flanked by two snakes are from Tell el-^cAjjul and were very likely made by the same seal cutter.

Preliminary date: Middle Bronze Age IIC / Late Cypriote IAI / Second Intermediate Period, late.

2.2.8. Horizon 8 (Fig. 24)

Architecture and features

H8 is the oldest phase of occupation in the area, and was excavated only in Trench 7. The orientation of the stone walls W48, 49 and 54 is somewhat different,

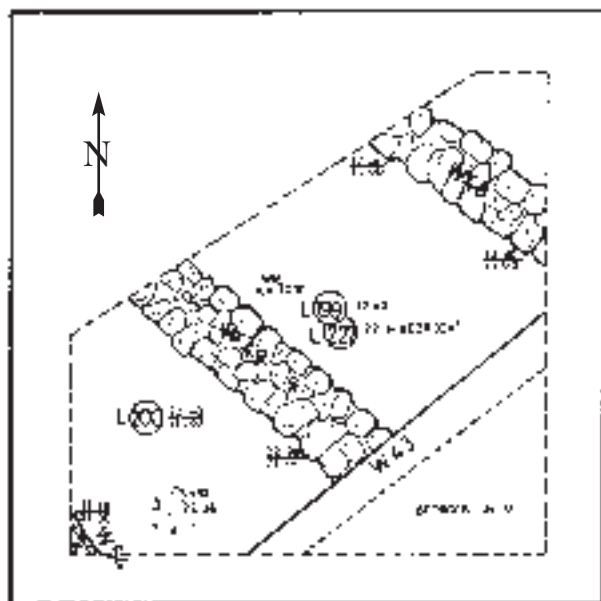


Fig. 24 Horizon 8

i.e. west-north-west to east-south-east. The walls are 0.6 m wide, still standing up to a height of approximately 1 m, and built of rounded stones of different size the largest one of which is 0.3 m × 0.2 m. The stones are arranged sparsely with clay between them. The stone walls are built against the natural mound which was cut and levelled and used as a wall-barrier on top of which W43 (H7) was built. These stone walls delimit two 1.8 m wide rooms with floors at approximately 22.30 m. The uppermost part of H8, i.e. the loci just below the floor of H7, contains ash, charcoal and sand. The sloping natural mound lies below level 22 m. It is covered by a thick fill in order to provide a flat level for the floor.

Pottery and small finds

Rounded, carinated and S-bowls (Fig. 25:1–3), a goblet with three carinations (Fig. 25:7), craters, cooking pots, jugs and juglets (Fig. 25:5, 6) and storage jars were found. A bowl shows a brown decoration with straight and wavy bands (Fig. 25:2). Collared cooking pots of a new type appear (Fig. 25:8, 9): upright rim which thickens at the end and a collar just below the very short neck. Imports are rare and consist of a sherd of an Egyptian-type piriform jar. Another find is a part of a crucible. Pumice was not found in H8.

Interpretation and preliminary chronology

The most striking difference between the constructions of the later periods, which are built entirely of sun-dried mudbrick, and that of the walls of H8 is the use of stone as a building material. It is interesting to note that the natural mound in this area is uneven and that the virgin soil levels differ by 2.77 m between Trench 7 and the adjoining Trench 12 to the south. The people who built the stone walls cut and levelled the steeply sloping mound and used the vertical part of the mound as a natural wall. The small size of the excavated area does not allow any reliable interpretation of the architectural remains. However, the end of this phase is marked by traces of a conflagration.

The locally produced pottery and the Egyptian piriform jar fit well into the second part of the Middle Bronze Age.

Preliminary date: a date within the second half of the Middle Bronze Age is plausible.

2.2.9. Isolated tombs

Construction and finds

The situation in the adjoining Trench 12 to the south is entirely different from that in Trench 7 (see also Appendix by M. WEIGL in this report). The nat-

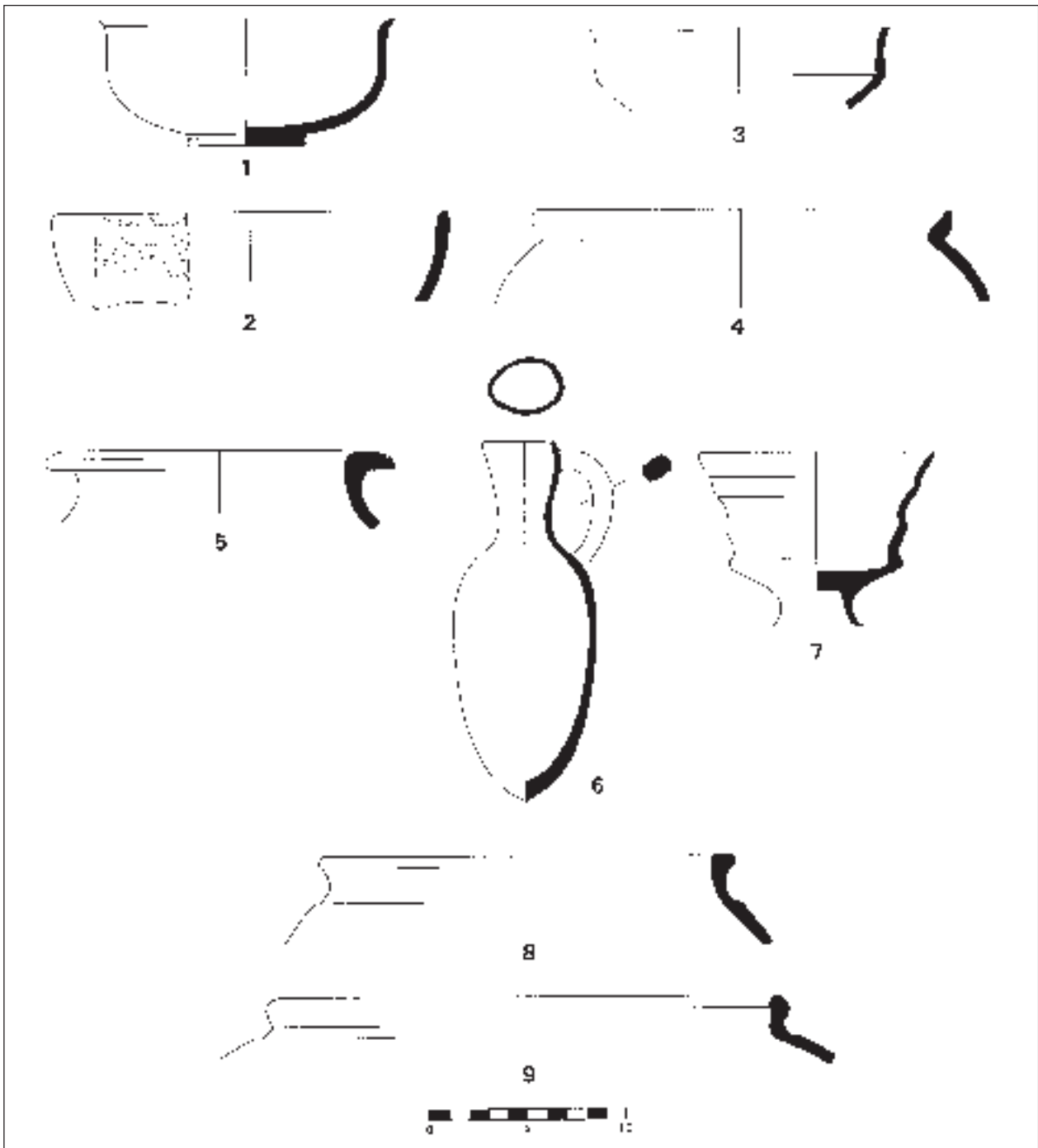


Fig. 25 Pottery from H8
1.-3. Bowls. / 4. Cooking pot. / 5., 6. Jug, juglet. / 7. Goblet. / 8., 9. Cooking pots

ural mound here lies 2.77 m higher than in Trench 7, that is 23.91 m as measured in the centre of the trench. The natural mound forms a kind of (artificially levelled?) platform into which two ascertained tombs and maybe two additional tombs were cut.

Tomb 1, L198, is a simple pit-tomb in the south-eastern corner of Trench 12 (Fig. 26 left). It contained the remains of a very young infant, maybe premature or still-born, who was partially buried in a bro-

ken storage jar. Associated burial gifts are a complete Bichrome Wheel-made Ware juglet (Fig. 27:1), a scarab (Fig. 29:4) and a button. One sample of pumice was collected.

Tomb 21, L205/218, in the north-eastern corner of Trench 12, is of a rectangular shape with rounded corners (length 1.86, width 1.3 m wide, depth 1.25 m), and orientated north-east/south-east (Fig. 26 left). The remains of an infant and some burial gifts

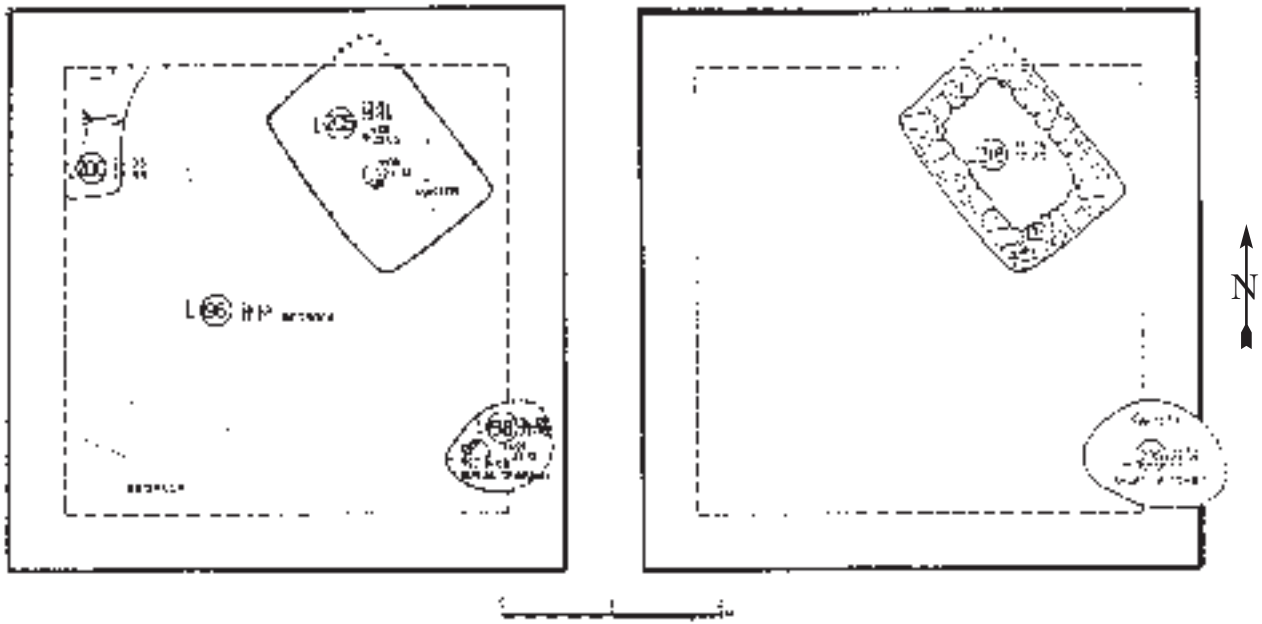


Fig. 26 Tombs from Trench 12

were found between 0.3 m and 0.6 m from the beginning of the cut (L205). The gifts consist of two complete vessels, a large one-handed jug with rounded base and a cylindrical juglet (Fig. 27:2), and a broken carinated bowl (Fig. 27:3). The disturbed fill of L205 contained parts of a handle of possible Red Lustrous Wheel-made Ware. Other

finds are an incised and pierced bone plaque (Fig. 27:4), a disk-shaped stone pendant and three larger lumps of pumice.

A 0.3 m wide stone lining (L218) was discovered just below the burial level of the infant in L205 (Fig. 26 right). The stones were carefully placed on the inside of the cut thus leaving a space of approximately

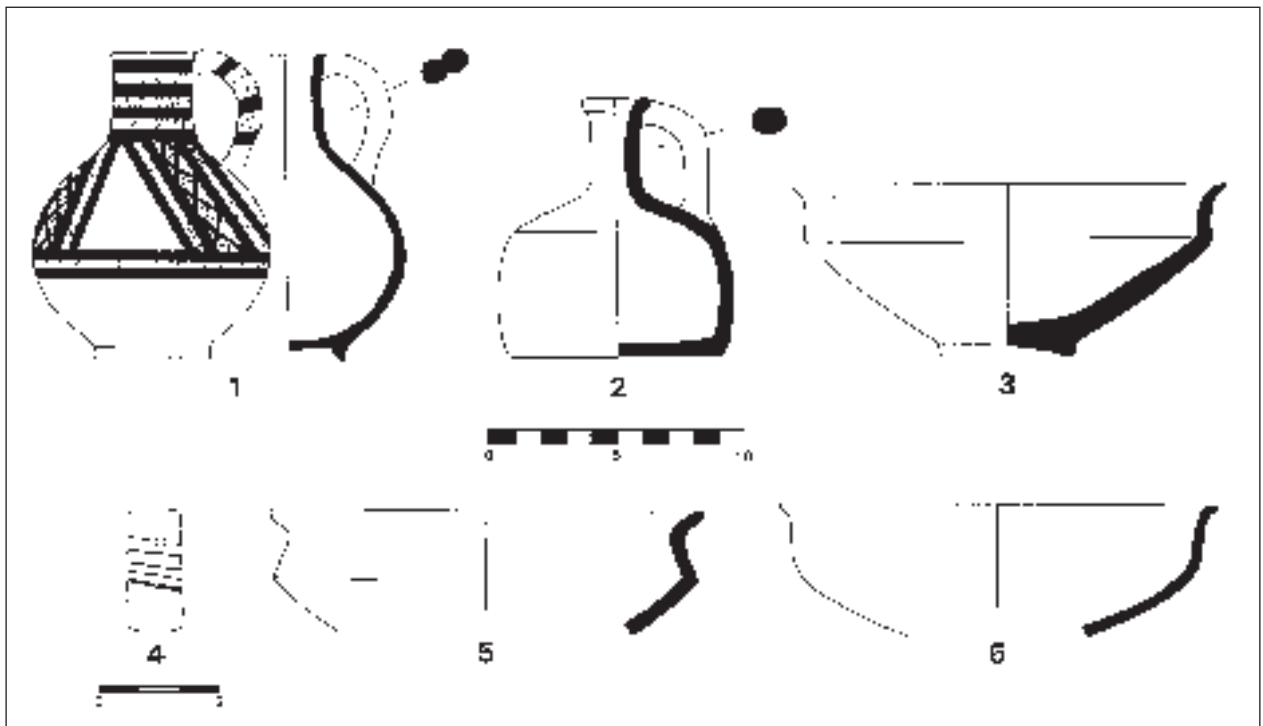


Fig. 27 Selection of finds from the tombs in Trench 12
Tomb L198: Bichrome Wheel-made juglet. / 2.-4. Tomb L205. / 5., 6. Tomb 218

1.3 m × 0.7 m. A layer of plaster covers the stones and the inner space. The fill below L205 included parts of a carinated bowl and a S-bowl (Fig. 27:5, 6). No other remains were found after the removal of the layer of plaster and the fill down to virgin soil. Virgin soil at the bottom of the cut is at 22.80 m.

A third cut, Tomb 3, L206, very probably represents a tomb, which was disturbed when W39 (H5) was built.

A fourth, slightly oval cut, Tomb 4 L228, was found to the south-east of L218 (Fig. 26 right). Only a part of it is in Trench 12: the major part lies in the baulk between the Trenches 1 and 12. The cut, approximately 1.1 m × 1 m in size, turned out to be the shaft what is expected to be a tomb, only 1.4 m of which were excavated at the end of the season. A button of a black material was found in the otherwise quite “sterile” fill of the shaft.

Interpretation and preliminary chronology

The most recent tomb (L198) seems to be the pit tomb of the very young infant, possibly premature or still-born. It is according to the associated pottery dated to the beginning of the Late Bronze Age. The scarab N97 from this tomb with the bee and the L-shaped crown is dated by Mlinar to the second half of the 15th Dynasty (see Appendix). It seems that the representation of the crown points to Palestine as the area of production.

The second tomb, L205/218, is a well constructed tomb with a stone lining. L218 was never used as a tomb and may represent a cenotaph. The layer of plaster, which covers the stone lining and the fill was deposited before the infant was buried. It may be the case that the people who buried the infant found the cut and suspected a burial beneath which they had no intention to disturb. They sealed the entire tomb with white plaster and used the remaining space of 0.6 m up to the top of the natural mound for the “new” burial. The infant of L205 is between 6 and 9 months old judging from the stage of the development of the deciduous teeth Nos. 51 and 52: their crowns are fully developed and a third of their roots are developed. This tomb seems to be somewhat older than L198 judging from the pottery. A date at the end of the Middle Bronze Age seems to be feasible.

The remaining, only partly excavated, possible burials L206 and L228, cannot yet be dated.

III. CONCLUSIONS AND FUTURE OBJECTIVES

Ten trenches, Trenches 4–13, to the north-west of Trenches 1 and 2 from the 1999 campaign at Tell el-ʿAjjul were opened during the season of 2000. Three of the trenches revealed traces of earlier excavations, maybe from Petrie’s campaigns in the 30s, of which any documentation is lacking.

Eight horizons, of which H8–H2 contain architectural remains, were exposed (see also two of the sections in Fig. 28). Five main phases of occupation – or possibly six if we consider H6 as a separate phase – were recognized, if H1 in the north of the area, which contains only one structure (tomb?), is excluded. There is also one sub-phase in each of H5 to H2 which can be seen from clear evidence of repair after a limited destruction. Each of the occupational phases H8–H2 came to an end through conflagrations. However, surviving walls were re-used and incorporated into new constructions. H8 is the only phase in which stone walls were built.

The preliminary interpretation of the architectural remains is so far limited to H5–H3 and to some parts of H2 because there is not enough exposed in the lowest horizons H8–H6 and too much eroded of the architectural remains above H3 to enable us to draw any reliable conclusions. All structures are orientated north-west to south-east. The basic building plans of H5 and H4–3 are similar. There is a structure to the north, only a minor part of which has been exposed, which makes an interpretation problematical. It is, however, likely that this structure faces an open space/road to the south-west which is approximately 2.5 m wide and which separates it from a larger building to the south. This building to the south covers an area at least of 20 m in the north-south direction and 15 m in the east-west direction which includes the architecture of Trench 1 from 1999. The interpretation of the function of the building has to await the results of the continued excavations.

The pottery provides the possibility of cross-dating because of imports from Cyprus, which dominate (a total of 830⁷ sherds/vessels in H8 to H1/Coll), and Egypt (a total of 31 sherds/vessels) and the Jordan Valley (a total of 55 sherds/vessels; see Table 1). Cypriote imports are Base-ring I and II, Bichrome Wheel-made, Red and Black Slip, Monochrome, Red Lustrous Wheel-made, Red-on-Black/Red-on-Red,

⁷ Black Lustrous Wheel-made is not included. Petrography is planned.

Table 1 The preliminary distribution of the imported wares⁸

Horizons:	Cell + H1	H2	H3 +	H6	H6 ⁹	H7 ¹⁰	H8 ¹¹	Total
<i>Cyprus²</i>								
Base ring I or II	58							58
Base ring I	4	13	27	2				46
Base ring II	31	72	2					105
Bichrome Wm	11	18	51	35	8			123
Black Slip ¹³				5	2			7
Monochrome	9	21	64	98	7	1		198
Red Lustrous Wm	5	7		2				14
Red Slip					13			13
Red-on-Black			3	3	1			7
Red-on-Red			2	2	2	1		7
White Dotted V/VI	2	1	2	5	1			11
White Shaved		2		4				6
White Slip I or II	5	1						6
White Slip I	4	8	32	23				67
White Slip II	70	89	3					162
Total	199	232	186	177	31	2	0	830
<hr/>								
Black Lustrous Wm	2	7	8	4	1			22
<hr/>								
<i>Jordan Valley/Southern Lebanon</i>								
CW Bichrome		1		1				2
CW I and II	7	3	11	10				31
Eggshell Ware		3	13	6				22
Total	7	7	24	17				55
<hr/>								
<i>Egypt/Egyptian-style</i>								
Carinated jars	2		2					4
Piriform jars		2	3	5	4	4	1	19
Shallow bowls ¹⁴	1	4	1			1		7
Deep bowl ¹⁵			1					1
Total	3	6	7	5	4	5	1	31
<hr/>								
<i>Anatolia/Syria (Middle Euphrates)</i>								
Mycenaean-type	1	(1) ¹²						1(4)
Total	212	252(4)	326	204	39	7	1	941(4)

White Painted V/VI, White Shaved, and White Slip I and II. There are also 22 sherds of Black Lustrous Wheel-made Ware. Egyptian and Egyptian-style pottery is represented by shallow bowls and piriform and carinated jars, the latter two of which were very

likely imports from Upper Egypt. Imports from the Jordan Valley/southern Lebanon are Chocolate-on-White Bichrome, Chocolate-on-White I and II, and Eggshell Ware (a total of 55 sherds). There are two sherds of Grey Ware bowls, which are imports from

⁸ This table includes all imports which were found in 1999 and 2000. The area of the old excavations and the tombs are not included in the statistics. The complete statistics which will include the classification of the wares of southern Levantine origin is forthcoming.

⁹ Trenches 6, 12, 13 are excluded because Horizon 6 is only partly excavated in these trenches.

¹⁰ Only Trenches 7 and 10 are included in the statistics

¹¹ Only Trench 7 is included in the statistics

¹² Further classification will certainly reveal sherds of Plain White Hand/Wheel-made Ware.

¹³ Black and Red Slip Wares will be further classified.

¹⁴ These are imported or locally made vessels of Egyptian shapes.

¹⁵ "Flower pot" type (Fig. 14:4); see Note 11.

¹⁶ These sherds are body sherds of possible Mycenaean origin.

the Middle Euphrates and a link to Anatolia and northern Syria. There are four body sherds of possible Mycenaean-type in addition to the partly preserved Mycenaean-type vessel from 1999.

Small finds include five scarabs – three from this season and two from the previous one – from the second part of the 15th Dynasty, four of which are from the area of occupation and one from a tomb. Others are objects of bronze, among them being needles, toggle pins, a limb cover (armour) and jewellery which includes a ring and a bead. A small bowl and a pendant of silver and one of sheet gold with the image of Hathor should be mentioned. Objects of stone include a calcite dagger pommel and bowls of basalt. There are also some figurines of earthenware, one of which is of Egyptian-style, and objects of faience. Finally some incised bone plaques should be mentioned. One of these depicts the hind part of a feline.

Horizons 8 to 2, which are the layers which contain architecture, are preliminary dated within the later part of the Middle Bronze Age and the Late Bronze Age I B. The detailed preliminary relative chronology of the sequence of occupation can be studied in Table 2.

There are four burials and three additional features which are very likely remains of burials. Only

Table 2 Preliminary relative chronology

Provenance	Palestine	Cyprus	Egypt
H1A	Iron and later	n.d.m.	n.d.m.
H1B	LB IIA/B	LC IIB/C	18 th Dyn. late (?)
H2A/B	LB IIB/IIA	LC IIA	18 th Dyn. middle
H3-4	LB IA IA/B	LC IB	18 th Dyn. first half
H5A-B	MB/LB	LC IIA2/B	SIIP late/18 th Dyn. early
H6 and 7	MB IIC	LC IAI	SIIP late
H8	MB II, 2 nd half	n.d.m.	n.d.m.

two of the burials are undisturbed and provide the possibility of dating by means of the associated burial gifts. The oldest burial is from the Middle Bronze Age IIC or perhaps its end and the second is from the beginning of the Late Bronze Age.

The objectives for the next season include primarily the extension of the excavations to the east.

The provenance study of the 48 samples of pumice from Tell el-ʿAjjul (from colluvial down to H5 and the tombs) with the support of neutron activation analyses (FISCHER in press) may turn out to be of great importance because it is our expectation that it will lead to the synchronization of the “Minoan” eruption of the Thera volcano with certain cultural layers and their finds at Tell el-ʿAjjul and with those of other Eastern Mediterranean cultures (see Table 3).

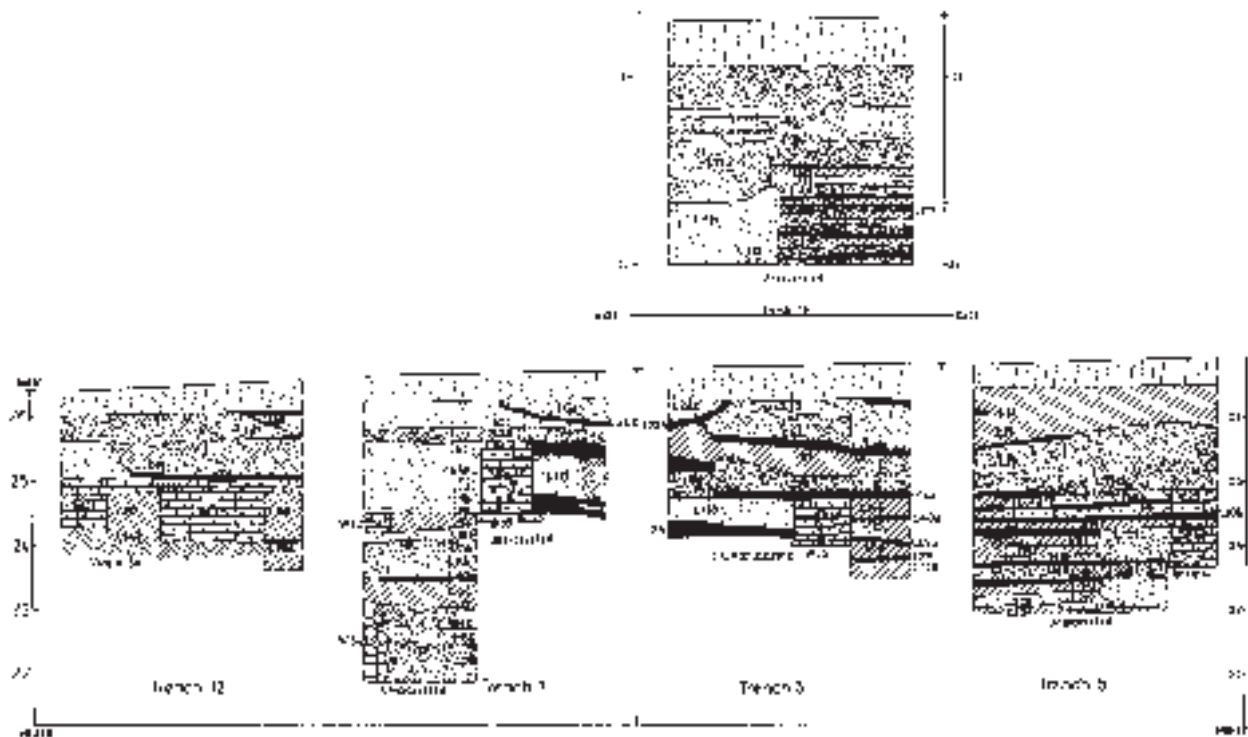


Fig. 28 Tell el-ʿAjjul 2000: some sections

Table 3 The distribution of the 48 pumice samples

Horizon	Number of samples	Percentage
Colluvial	1	2
Old excav	2	4
H1	2	4
H2	6	13
H3-4	12	25
H5	23	48
H6	none	—
H7	none	—
H8	none	—
Tomb (L198)	1	2
Tomb (L200)	1	2

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APPENDIX 1: A LATE IRON AGE STRUCTURE IN TRENCH 4

By Anne Lykke

The Structure

During the first week of the excavations a small, somewhat oval and strictly north-south orientated construction was found close to the highest spot in the area of excavation: L45 (heights 26.45 m–26.12 m above mean sea level; Fig. 4). The structure is approximately 1.6 m long, 0.7 m wide and about 0.4 m deep. It is made of irregularly cut sandstones and reused grinding stones of different sizes. One half of a cylindrical jar was placed at the northern end of the structure (Fig. 3:7). This structure is the only one in Horizon 1 in the entire area of the excavation. Several interpretations were initially made: a drain, a structure, which was used during Petrie's excavations, or a burial. Some of these suggestions could very soon be excluded. There is no support for the assumption that L45 is part of a drain, since it is not connected to any other structures, unless they had been disturbed or removed. The suggestion that it was used by Petrie's team, for example, as a water container, is also unlikely. A corner of one of Petrie's (?) old trenches had been discovered 0.5–0.6 m to the west of the structure. The soil in this part of the trench (L34) was very different from the soil around L45. The soil of L34, which represents a back-fill, was much softer and contained less pottery. It is more likely that the old trench just missed this structure and left L45 intact. The most probable identification of L45, in my belief, is that it represents a disturbed burial. The dating of the structure turned out to be difficult because it was empty at the time of the discovery and only the sides and the bottom of the structure were *in situ*. The pottery in the area was relatively scarce. The date of the structure is therefore totally depending on the built-in pottery, the fill within L45 and on the pottery from the same level in the surrounding L24. It could be argued that this is a cist tomb, however, the irregular shape of the structure makes this interpretation unlikely. An explanation for the fact that the soil inside L45 is the same as in L24 could be, that L45 was disturbed at a very early point, or eventually never finished. Another possibility is that it was disturbed in a later period and that the soil from the surrounding area was used as fill.

¹⁷ n.d.m. = no diagnostic and well-stratified material has so far been found.

The Pottery

The dating of L45 is further complicated by the multitude of sherds from different periods in the colluvial soil. It contains a mixture of Islamic, Iron Age, and Late Bronze Age sherds, the latter of which included some imports, and many unidentified sherds. However, Islamic material is absent in the lowest part of the colluvial soil just above L45, and Iron Age and – to a lesser extent – Late Bronze Age sherds dominate. The only pottery which is directly connected with the structure is the part of a storage jar (Fig. 3:7). A similar shape is published by PETRIE (1932: pl. 33, 1103) but any information about the context or the dating is not provided. It is well known that it is difficult to distinguish between late Iron Age IIC and Persian shapes (cf. STERN 1982: 17–18, 93 ff). It is therefore not possible to date this storage jar to one or the other period. A few sherds of Iron Age IIC date were found in the fill of L45. Amongst these are two rims of cooking pots, which are similar to the shape of the cooking pot from outside the structure. The sherds in L24, which encloses L45, include an Iron Age IIC cooking pot, an Iron Age IIC storage jar with a short neck, and five bowls with “T”-shaped rims, quite typical of the late Iron Age. The Late Bronze Age material consists primarily of sherds of bowls. The material in the soil in the lowest part of L45 still contains a high percentage of Iron Age material, however, Late Bronze Age sherds are now more abundant. The pottery from L48, which is the locus below L45 and which starts at 26.12 m in this spot, is approximately equally distributed between those of a Late Bronze Age and those of a late Iron Age date. Sherds from later periods than the Iron Age/Persian period were not identified in L45 or in the surrounding L24 which provides us with a *terminus ante quem* for the burial.

Conclusions

It is likely that L45 represent a looted or unfinished tomb – maybe for an infant – judging from its size, shape and isolation. The dating is based on the ceramic evidence alone. The structure belongs definitely not to the Bronze Age, material of which dominates at Tell el-ʿAjjul. It is either Iron Age or Persian and it confirms that there must have been at least a small, more or less permanent, occupation in a period later than the Late Bronze Age within the vicinity of the tell or at the tell itself.

¹⁸ This pit continues into H3.

APPENDIX 2: A KITCHEN IN TRENCH 8

By Rainer Feldbacher

The Find Context

An interesting find context was unearthed in H2 of Trench 8, approximately 1 m below the surface (26.07–25.20 m above mean sea level; Fig. 6). The following loci/walls belong to the same structure: L21A, L31, L39A, L47, L79, W23 and W24.

Ash covered the entire southern part of the trench. A number of finds, amongst which are bowls (e.g. Fig. 7:5, 9), appeared within and just below the layer of ash (L21A, L31 and L39A). These finds include imports from Cyprus (e.g. White Slip II, Fig. 9:2). Egyptian-style vessels are represented by bowls (Fig. 9:7, 8). Other finds include a lamp, grinding stones and many bones.

The loci were changed to L47 and later to L79 after the removal of a fill and the discovery of two mudbrick walls (W23 and W24). W23, approximately 0.7 m wide, runs north-west to south-east and was originally built in the preceding phase (H3) but reused in H2. It is constructed of two rows of bricks of different sizes. W24 runs north-east to south-west. W24 is 0.55 m wide and built of one row of bricks, alternately 0.55 m × 0.37 m and 0.75 m × 0.55 m. These two walls border a room (L47, L79). An accumulation of sherds, mainly sherds of bowls and storage jars, and a few cooking pots (one in Fig. 7:13) of the typical southern Levantine type of the Late Bronze Age, and many long bones and jaws of animals were found in L47. Storage jars, approximately 0.7 m wide and broken, served as containers for two complete bowls (Fig. 7:2, 3) and a number of bones. Next to the storage jars was the base of a chalice. An almost complete dagger (Fig. 10:2) together with a goat's/sheep's(?) mandible lay to the east of the storage jar and next to a destroyed hearth, which was surrounded by a thick layer of ash. Several stones lay amongst the other finds. An import from Cyprus is represented by an almost complete White Slip II bowl (Fig. 9:1; see FISCHER in this report), which was in a shallow pit.¹⁸

Preliminary Interpretation

The thick layer of ash is certainly due to a conflagration which destroyed this building. The find context offers the possibility that a number of vessels and other finds were stored on the roof.¹⁹ The

¹⁹ The possibility that it was a two-storey building may not be ruled out.

stones, which we consider fell down from a higher level, were very likely used to stabilize the roof. Many household vessels were destroyed when the roof collapsed as a result of the conflagration.

The numerous household vessels and bones together with the hearth indicate that this room was used for the preparation of food. This theory is further supported by the dagger which may have been used to kill and to cut up the animals.

The preliminary date of this building is Late Bronze Age IB/IIA (see FISCHER in this report).

APPENDIX 3: THE TOMBS OF TRENCH 12

By Michael Weigl

General situation

Trench 12 was opened after the closure of Trench 9 (due to unexpected traces of earlier, undocumented excavations, see FISCHER in this report). Trench 12 was found to contain significant elements of architecture. A number of pits disturbed the relevant contexts, especially in the eastern portion of the trench (L75, 25.57–25.02 m; L107, 25.06–24.85 m; L114, 25.06–24.25 m). After their proper documentation and removal virgin soil was reached in most of the trench at 23.91 m (lowest part of L196 as measured in the centre of the trench).

At this elevation, only the area in the north-eastern and the south-eastern corner of the trench respectively still yielded significant amounts of an artificial accumulation of soil, which turned out to be rather rich in pottery. The fill contained large sherds of mostly storage jars and cooking pot rims of the Late Bronze Age as well as Cypriote Bichrome and Monochrome ware in significant amounts (see FISCHER in this report).

Tomb 1: L198 (Fig. 26 left)

A new locus (L198), which turned out to be a simple pit tomb, was opened at 24.09 m in the south-eastern corner of the square, immediately adjacent to the artificial staircase. A large portion of one or two storage jars (body sherds, handles) covered a complete Bichrome Wheel-made Ware juglet (Fig. 27:1). The globular Bichrome Wheel-made Ware juglet has a double handle and a base ring. It displays a light-yellow, burnished slip, and matt black and red decoration. The double handle shows black and red bands. The decoration on the neck consists of alternating black and red horizontal bands. The upper part of the body has a metope arrangement of hanging rhombs with dots, which are framed by black/red/black bands and bor-

dered by a horizontal band with the same band pattern just below mid-body (see also FISCHER in this report). In direct association with the Bichrome juglet the almost totally disintegrated skeleton of a child was found after the removal of the protecting pieces of pottery which had doubtlessly been put into place with consideration. The skull of a very young child – most possibly premature or still-born (see FISCHER in this report) – was positioned outside the jar. The Bichrome juglet was placed at the western side of the infant's skull, whereas the post-cranial skeleton had been buried in a (the same?) storage jar. A significant amount of burnt material was found scattered inside the burial jar. It was collected for later radiocarbon analysis. A scarab (dated to the second half of the 15th Dynasty, see the appendix by MLINAR; Fig. 29:4) and a button were discovered in direct association with the infant's burial. The fill above the burial contained a number of painted, possibly figurative, body-sherds as well as cooking pot rims of the Late Bronze Age type with square/triangular rims, Cypriote Bichrome and Monochrome pottery and a piece of pumice.

Tomb 2: 205/218 (Fig. 26 left and right)

After levelling the entire square, a rectangular structure with rounded corners became clearly visible in the north-eastern corner of Trench 12. The outline of yet another tomb, orientated north-west/south-east, was clearly recognised (length: 1.86 m; width: 1.3 m; depth: 1.25 m). The tomb was excavated as L205 (23.91, 23.25 m) and L218 (23.25, 22.80 m). In the fill of L205 one bronze needle and one bronze object of unclear function were discovered. A radiocarbon sample was taken. At 23.30 m a complete cylindrical juglet (Fig. 27:2) was found, positioned slightly north to a large one-handed jug with rounded base (23.32 m). These were found directly associated with the remains of a very young infant buried in a broken storage jar at the same elevation (see FISCHER in this report). In addition, in the fill of L205, an incised and pierced bone plaque (Fig. 27:4), a disk-shaped stone pendant, parts of a S-bowl and a broken and incomplete carinated bowl (Fig. 27:3) were discovered. A large piece of pumice was taken as sample.

Locus was changed to L218 immediately after a line of stones, arranged in a deliberate sequence, appeared alongside the western edge of the burial cut. The predominantly large and carefully arranged stones were found to follow the contours of the burial pit, narrowing it to approximately 1.3 m × 0.7 m. The face of the stone lining was

entirely covered by a layer of plaster, which after circa 15 cm also started to cover the entire floor of the structure. The thickness of the plaster was much more significant alongside the north-western face of the stone lining than at its south-eastern end. This suggests the act of deliberately pouring it into the construction from the northern side and thereby sealing the floor in order to prepare it for another(?) burial. Underneath the layer of plaster the soil was almost sterile and yielded little except insignificant amounts of pottery, among it a few fragments of an oven, and some seeds which are going to be subject to botanical analysis. No indications of a usage of the tomb L218 were uncovered. These are persuasive arguments to consider L218 as a cenotaph. Virgin soil was reached at 22.80 m.

Tomb 3: 206 (Fig. 26 left)

A more or less oval cut was pursued as L206 (23.91 m, bottom left unexcavated at 23.59 m) alongside the northern half of the western baulk-line. The structure disappears into the baulk. It was filled with a substantial amount of animal bones, but yielded hardly any pottery. The cut was disturbed during the construction of W39 (see FISCHER in this report). Its original purpose has not been determined so far but it may be a disturbed tomb.

Tomb 4, L228 (Fig. 26 right)

The eastern section, which borders Trench 1 (1999), indicated that virgin soil had been artificially cut and had later been refilled. Therefore, yet another burial was expected. It was excavated as L228 (23.70m; bottom left unexcavated at 22.30m). The cut is oval in shape and approximately 1.1m × 1.0m in size. The fill of L228 produced no noteworthy pottery or small finds with the exception of a button made of a black material. L228 is very likely a shaft leading to a tomb located in the baulk between Trench 12 and Trench 1. A probe indicated an additional depth of approximately 1–1.5m. The shaft will most likely be examined during the next season of excavations.

APPENDIX 4: THE SCARABS FROM THE EXCAVATIONS OF 1999 AND 2000 AT TELL EL-^cAJJUL²⁰

By Christa Mlinar

Scarab 1 (Fig. 29:1)

Context: A99T1H1/2L1/5N4

Dimensions: 17 × 11.5 × 7 mm

Material: Steatite

Date: late MB IIB–MB IIC = late 15th Dynasty; locally produced.

Plain back (= Shesha-type²¹), the separation from the pronotum to the wings is indicated on the side by two small grooves, bean-shape head with single trapezoidal clypeus, the side flaps are identified by a single bending line.

No legs: the scarab-body squats directly on the base area.

The bulk of the base area is destroyed, though the motif can be reconstructed despite the few line residues. A lotus blossom is clearly represented above. Below, on the left, is one half of an *hm*- or *s3*-like sign, the loop being closed below; next to it is the bottom part of the same sign so that a third one can directly be reconstructed on the right side. Below the three signs a horizontal line is also detectable and is no doubt supposed to represent the top edge of the *nb*-basket. At this point this *nb*-basket usually stands, virtually as a base for various signs.

The three signs in the centre are likeliest to be interpreted as an *s3*-sign, as this means protection. And that is what a scarab is supposed to bring, after all both for the living and the dead.

The rather rough execution of the back and sides are fairly sure to make for a dating to the late MB IIB–MB IIC (2nd half 15th Dynasty).

There are a few parallel examples for the iconography:

1) *Megiddo* (LOUD 1948: pl. 150, 58–Area BB– O15, Field b 572, Tomb 3077 – Str. XI–X–IX/2, ca. 1700–1500 BC): Instead of the lotus blossom stands an inverted *nb*-basket, the loops are being open at the bottom (Fig. 30:1)

²⁰ My thanks go to Mr. and Mrs. Melman, who have translated the text from German into English.

²¹ According to Petrie, who named the smooth back with

the two side notches Shesha-type, because most of the scarabs of the Hyksos king Shesha have this distinctive feature.

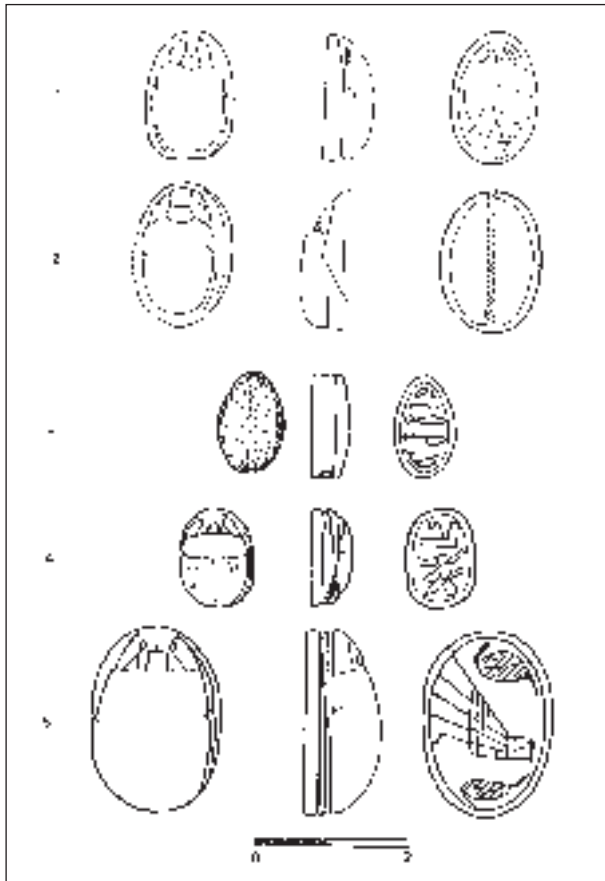


Fig. 29 Scarabs from the excavations in 1999 and 2000
 1. A99T1H1/2L1/5N4. / 2. A99T2H1/2L4N7 /
 3. A00T10H6L191N95 / 4. A00T12L198N97 /
 5. A00T4H7L210N98

2) *Pella* (RICHARDS 1992: 112, 113; pl. 8 – Tomb 62): This scarab is almost identical, only the loops are opened below. The back is smooth, the head trapezoidal and the legs have Tufnell-Code e11,²² that means they are delineated by two circular lines. These distinctive features all refer to late MB IIB–MB IIC. (Fig. 30:2)

3) *Jericho* (KIRKBRIDE 1965: fig. 297, 6 – Tomb J 12 – Group IV): The *s3*-loops, open below are flanked above and below by platform-type signs. (Fig. 30:3)

4) *Tell el-Ajjul* (PETRIE 1931: pl. 13, 5 and KEEL 1997:Nr. 5 – Field A, Room Q – Str. II, late MB IIB): The base area of the cauroid is almost identical, the *s3*-signs are added hatching inside and are open below. The upper sign is not, as Keel questions, a winged sun disk but a lotus blossom. (Fig. 30:4)

5) *Tell el-Ajjul* (PETRIE 1933: pl. 3, 23 and KEEL 1997: Nr. 393 – Field B/D, Room BM, 740“ – Str. III–II): There is a disturbance where the lotus blossom is anticipated. The three open *s3*-signs below stand above an *nb*-type structure. (Fig. 30:5)

6) *Tell el-Ajjul* (PETRIE 1933: pl. 4, 12 and KEEL 1997: Nr. 488 – Cemetery IV, Tomb 327): Under the lotus blossom is an owl with angular hook above a *nb*-basket, in front of which is a *s3*-sign. (Fig. 30:6)

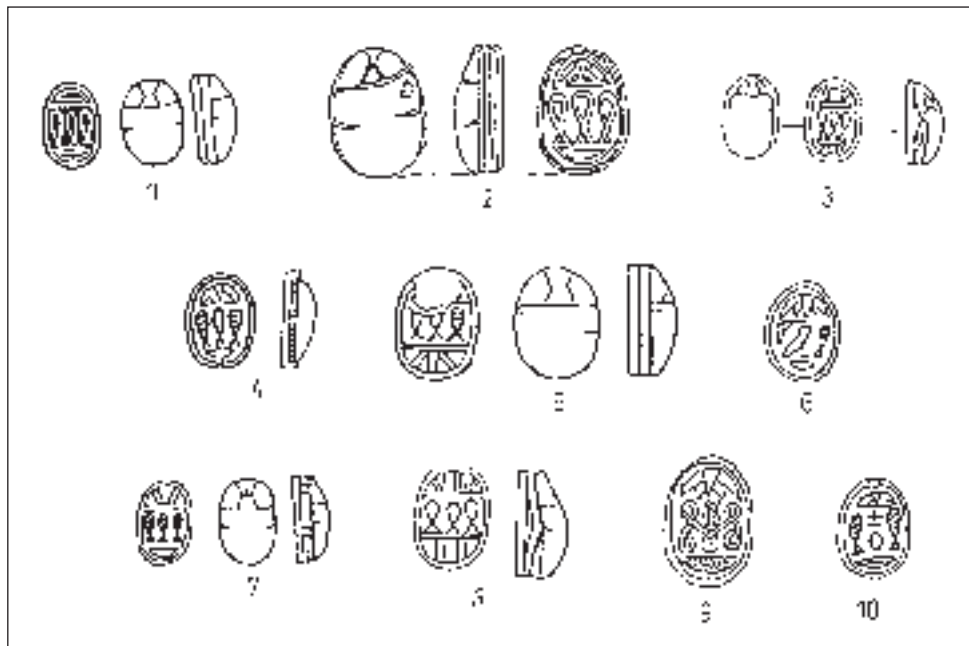


Fig. 30 Parallels of scarab No. 1

²² TUFNELL 1984: I, 36–38 (side types).

7) *Tell el-Ajjul* (PETRIE 1934: pl. 9, 366 and KEEL 1997: Nr. 923 – without context): An inverted platform instead of the lotus blossom. (Fig. 30:7)

8) *Tell el-Ajjul* (PETRIE 1934: pl. 9, 381 and KEEL 1997: Nr. 937 – without context): The three *s3*-signs stand between angular patterns. (Fig. 30:8)

9) *Gedekol* (FIRTH 1912: 42b, 14 – Cemetery 76, Tomb 54): The lotus blossom is located above a looping part. The tomb is from the 18th Dynasty. (Fig. 30:9)

10) *Aniba* (STEINDORFF 1937: Taf. 56, 98 – Tomb S 14 – 18th Dynasty): Two closed *s3*-signs flank a *nfr*-sign, above which is the lotus blossom and below which is the *nb*-basket. (Fig. 30:10)

Scarab 2 (Fig. 29:2)

Context: A99T1/2H2LAN7

Dimensions: 19 × 13.5 × 7.5 mm

Material: Steatite

The separation of the pronotum from the wings is delineated on the side by small notches (what is called Shesha-type); head and clypeus are almost trapezoidal, somewhat rounded; two incisions on the side flaps;

The legs are very schematised: a gable-combination is likely to mark the front and middle pair of legs.

The base area is broken off. The straight (and unintended) drilling channel is visible. As the frilling channel runs straight, the drilling is likely to

have been done from one side only and not from both, as is usually common practice.

Nothing worthwhile can be said about the dating.

Scarab 3 (Fig. 29:3)

Context: A00T10H6L191N95

Dimensions: 14 × 8.5 × 5 mm

Material: Steatite

Date: late MB IIB–MB IIC = late 15th Dynasty; locally produced.

Slender cowroid with very smooth back (Type I according to KEEL 1995: 78);

Five hieroglyphs to the CBABC scheme are incised in horizontal composition on the base area. Identical letters mean identical signs. There is in the middle a *w3d*, that is flanked by a *nfr* and an *ʿ*-like sign.

Two arguments favour a dating to the (later) 15th Dynasty:

1. The slender shape of the cowroid: KEEL (1995: 78) rightly asserts that the cauroid shape becomes slenderer towards the end of MB IIB and in LB I. The index (length : width) at this time becomes 1.5–1.6: 1 unlike the earlier pieces which have an index of approx. 1.2:1. The index of this cowroid is 1.65:1. The development of these proportions appears conclusive to me as the pieces from Amenophis' III. age become even longer and assume proportions of 1.8–2.2:1.

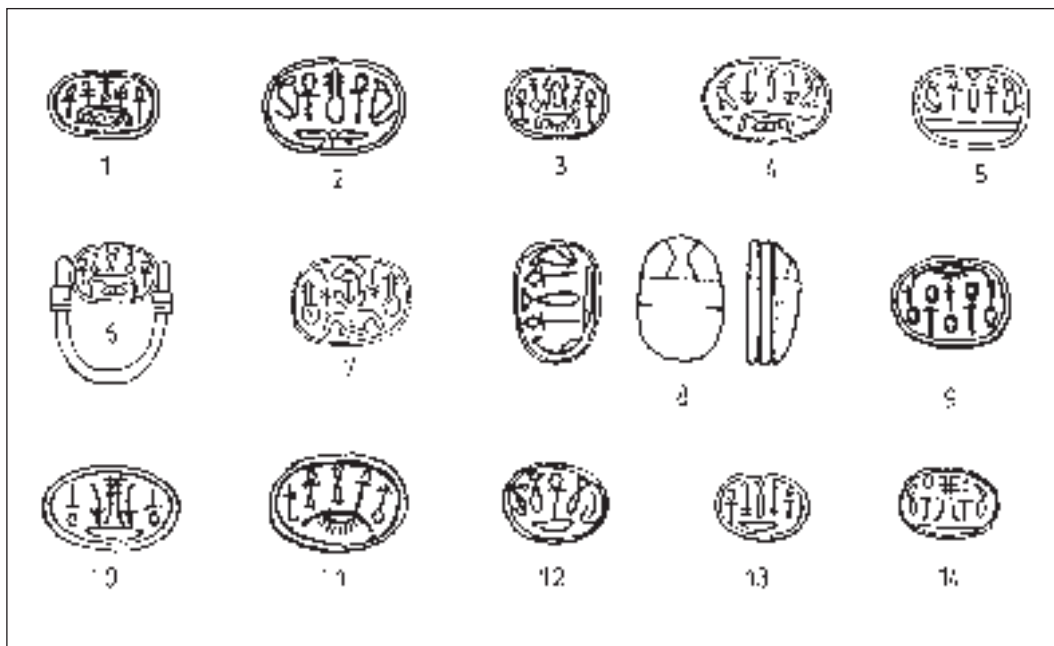


Fig. 31 Parallels of Scarab No. 3

2. The execution of the signs, that display ungainly, angular shapes, as the *nfr*- and the 𐎗-like signs are wide spread in the MB IIB and point to someone ignorant of hieroglyphic writing and hence certainly to the making in southern Palestine.

No exact parallel can be established, though there are several examples (14 pieces) from excavations, which are structured to the scheme CBABC. However, these various “Neferzeichen” are usually accompanied by a long *nb*-basket or by the gold-diadem. The nearest example of these parallels is Figure 19:8.

1) *Gezer* (MACALISTER III 1912: pl. 209, 28 – Impression on a vessel handle): The *nfr*-sign is flanked by the *sw*-plant and the 𐎗-*nh*-sign: below this is a gold-diadem. (Fig. 31:1)

2) *Tell el-ʿAjjul* (PETRIE 1931: pl. 13, 48 and KEEL 1997: Nr. 44 – Field A? – Str. II, late MB IIB): The *nfr*-sign is flanked by an 𐎗-*nh* and by *ureai*, under which is a small winged sun disk (Fig. 31:2)

3) *Tell el-ʿAjjul* (PETRIE 1931: pl. 13, 70 and KEEL 1997: Nr. 64 – Field C (near B/D) CBB, 615“ – Str. III, early MB IIB, mid 13th–15th Dynasty): A scarab is flanked by *nfr* and 𐎗-*nh*, below which is a gold-diadem. (Fig. 31:3)

4) *Tell el-ʿAjjul* (PETRIE 1931: pl. 14, 119 and KEEL 1997: Nr. 113 – Field A, tomb 21, in room AV): A *w3d*-sign is flanked by *sw* and a falcon with the red crown, below which is a gold-diadem. (Fig. 31:4)

5) *Tell el-ʿAjjul* (PETRIE 1934: pl. 5, 67 and KEEL 1997: Nr. 627 – Field J, 750“ – Str. II, late MB IIB): A *w3d*-sign is flanked by 𐎗-*nh* and *ureai*. The five signs stand above a double line. (Fig. 31:5)

6) *Tell el-ʿAjjul* (PETRIE 1934: pl. 11, 468 and KEEL 1997: Nr. 1019 – without context): *w3h?* flanked by *nfr* and 𐎗-*nh*, below which is a gold-diadem. (Fig. 31:6)

7) *Tell el-Farah South* (PETRIE 1930: pl. 10, 68 – Tomb 556): A scarab is flanked by *sw* and 𐎗-*nh*, below which is a gold-diadem. (Fig. 31:7)

8) *Tell el-Farah South* (STARKEY and HARDING 1932: pl. 52, 154 – Tomb 934): This piece is the most similar to the one of *Tell el-ʿAjjul* although it does not strictly adhere to the scheme CBABC, but represents CBABD. The *w3d*-sign is flanked by 𐎗-*nh*, the same 𐎗-like sign on the left side as from *Tell el-ʿAjjul* and an *uraeus* on the right. These signs stand above a narrow long drawn *nb*-basket. (Fig. 31:8)

9) *Tell el-Yahudiya* (PETRIE 1906: pl. 9, 151): A *nfr*-sign is flanked by 𐎗-*nh* and *nfr*, above which is a narrow gold-diadem. (Fig. 31:9)

10) *Esna* (DOWNES 1974: 61, Group 145, 3): A *dd*-pillar is flanked by *sw*-plants and inverted 𐎗-*nh*. The whole group of signs stand above a *nb*-basket. (Fig. 31:10)

11) *Esna* (DOWNES 1974: 62, Group 221, 8): *w3d* is flanked by 𐎗-*nh* and *nfr*, above a gold-diadem. (Fig. 31:11)

12) *Esna* (DOWNES 1974: 62, Group 223, 5): 𐎗-*nh* flanked by *w3d* and *Uraei*, above a *nb*-basket. (Fig. 31:12)

13) *Qurta* (FIRTH 1927: pl. 36, 123 – Cemetery 118, Tomb 40): *w3d* flanked by *sw* and 𐎗-*nh*, above a *nb*-basket. (Fig. 31:13)

14) *Aniba* (STEINDORFF 1937: Taf. 56, 122 – Tomb SA 13–18th Dynasty): *dd*-pillar flanked by 𐎗-*nh* and *w3d*. (Fig. 31:14)

Scarab 4 (Fig. 29:4)

Context: A00T12L198N97

Dimensions: 13 × 9.5 × 6 mm

Material: Steatite

Date: late MB IIB–MB IIC = late 15th Dynasty; locally produced.

The back is somewhat worn down so that the simple separation of the wings is rather difficult to detect. Wings from the pronotum being demarcated by one line.

The legs are represented very schematised by lines.

The base area has a horizontal arrangement, for example there is an L-shaped crown to the right and a fairly exactly engraved bee, with four legs and two antennae on the left. Often the bee is represented with three legs and one antenna only due to shortage of space or nowhere to add such fine notches.

The bee with the L-shaped crown can be rated as an exceptional piece. The L-shaped crown with other signs appears relatively frequently, namely 32 ×. Its prevalence extends from Taanach to Nubia. No geographical concentration is traceable. At *Tell el-Dabʿa* it is recorded only once in Str. E/1 (1620–1590 BC) and once in a secondary deposit. However, it is assumed that this type of representation of the crown was a creation of the Palestinian area and was prepared even earlier, perhaps as early as the end of the 13th Dynasty: e.g. in *Tel Aviv*, *Rishon Lezziyon*, *Megiddo* and *Lachish* and one piece from *Tell el-ʿAjjul*. In Nubia the majority of the L-shaped crowns occur in contexts from the 18th Dynasty.

There is no exact parallel, however, two scarabs

are known from Tell el-^cAjjul,²³ that have a *sw*-reed engraved instead of the L-shaped crown, giving the title *nsw bjtj*.

I would date the scarab to the 2nd half of the 15th Dynasty, on the basis of the very schematised side views.

- 1) *Taanach* (Keel-Corpus 35: unpublished) (Fig. 32:1)
- 2) *Tel Aviv* (LEIBOVITCH 1955: fig. 16, 15 – Tomb 18) (Fig. 32:2)
- 3) *Rishon Lezziyon*: unpublished (Fig. 32:3)
- 4) *Rishon Lezziyon*: unpublished (Fig. 32:4)
- 5) *Jericho* (KIRKBRIDE 1965: fig. 286, 7 – Tomb G 37 – Group II) (Fig. 32:5)
- 6) *Gezer* (GIVEON 1985: 114, Nr. 10) (Fig. 32:6)
- 7) *Gibeon* (Keel-Corpus 61: unpublished) (Fig. 32:7)
- 8) *Lachish* (TUFNELL 1958: pl. 32, 118 – Tomb 153 – MB III, 1700–1675 B.C.) (Fig. 32:8)
- 9) *Lachish* (TUFNELL 1958: pl. 32, 124 – Tomb 153) (Fig. 32:9)
- 10) *Tell el-^cAjjul* (PETRIE 1933: pl. 3, 85 und KEEL 1997: Nr. 453 – Field K, Square KL, 900^o – probably Str. III, early MB IIB): The L-shaped crown is to be found under a multitude of hieroglyphs as a secondary motif; based on the relatively clean execution and the accompanying leg- and back-features I would date the piece to the 2nd half of the 13th Dynasty = MB IIA/B and early MB IIB. (Fig. 32:10)
- 11) *Tell el-^cAjjul* (PETRIE 1934: pl. 7, 163 and KEEL 1997: Nr. 723 – Feld T, TAQ, 850^o – Stratum III–II, probably mid 13th–mid 15th Dynasty) (Fig. 32:11)
- 12) *Tell el-^cAjjul* (PETRIE 1934: pl. 7, 192 and KEEL 1997: Nr. 752 – Feld T, TCI, 870^o – Stratum II, late MB IIB) (Fig. 32:12)
- 13) *Tell el-^cAjjul* (PETRIE 1934: pl. 11,429 and KEEL 1997: Nr. 984 – unknown context – probably mid 13th–beginning of the 15th Dynasty, early MB IIB) (Fig. 32:13)
- 14) *Tell el-^cAjjul* (MACKAY and MURRAY 1952: pl. 10, 102 and KEEL 1997: Nr. 1128 – Feld G, Square 3–2, 848 – 15th Dynasty. (Fig. 32:14)
- 15) *Tell el-Dab^ca* (unpublished – A/II-m/11, tomb 11 – Str. E/1, 1620–1590 B.C.) (Fig. 32:15)
- 16) *Tell el-Dab^ca* (unpublished – A/II-m/13 – no clear context) (Fig. 32:16)
- 17) *^cEzbet Rushdi* (ADAM 1959: pl. 16,2) (Fig. 32:17)
- 18) *Tell el-Yahudiya* (GRIFFITH 1890: pl. 10, 28) (Fig. 32:18)
- 19) *Tell el-Yahudiya* (PETRIE 1906: pl. 9, 128) (Fig. 32:19)
- 20) *Mostagedda* (BRUNTON 1937: pl. 69, 21 – Tomb 1830) (Fig. 32:20)
- 21) *Koptos* (PETRIE 1896: pl. 24, 126) (Fig. 32:21)
- 22) *Koptos* (PETRIE 1896: pl. 24, 133) (Fig. 32:22)
- 23) *Nubt* (PETRIE/QUIBELL 1896: pl. 80, 73) (Fig. 32:23)
- 24) *Nubt* (PETRIE/QUIBELL 1896: pl. 81, 94 – 18th Dynasty) (Fig. 32:24)
- 25) *Esna* (DOWNES 1974: 61, Group 198, i2 – 18th Dynasty) (Fig. 32:25)
- 26) *Esna* (DOWNES 1974: 63, Group 242, 2) (Fig. 32:26)
- 27) *Esna* (DOWNES 1974: 64, Group 283, 4) (Fig. 32:27)
- 28) *Kubban* (FIRTH 1927: pl. 35, 50 – Cemetery 110, tomb 111) (Fig. 32:28)
- 29) *Aniba* (STEINDORFF 1937: Taf. 55, 89 – Tomb S 4) (Fig. 32:29)
- 30) *Buhen* (RANDALL-MACIVER and WOOLLEY 1911: pl. 56, 10041 – Tomb H 21) (Fig. 32:30)
- 31) *Buhen* (RANDALL-MACIVER and WOOLLEY 1911: pl. 59, 10193 – Tomb J 42) (Fig. 32:31)
- 32) *Semna* (DUNHAM and JANSSEN 1960: pl. 122, 38 – Tomb S 552) (Fig. 32:32)

The *distribution* of the L-shaped crown (the number of the pieces found is in brackets): Taanach (1), Tel Aviv (1), Rishon Lezziyon (2), Jericho (1), Gezer (1), Gibeon (1), Lachish (2), Tell el-^cAjjul (5), Tell el-Dab^ca (2), ^cEzbet Rushdi (1), Tell el-Yahudiya (2), Mostagedda (1), Koptos (2), Nubt (2), Esna (3), Kubban (1), Aniba (1), Buhen (2), Semna (1).

²³ KEEL 1997: Nr. 45 and 1071.

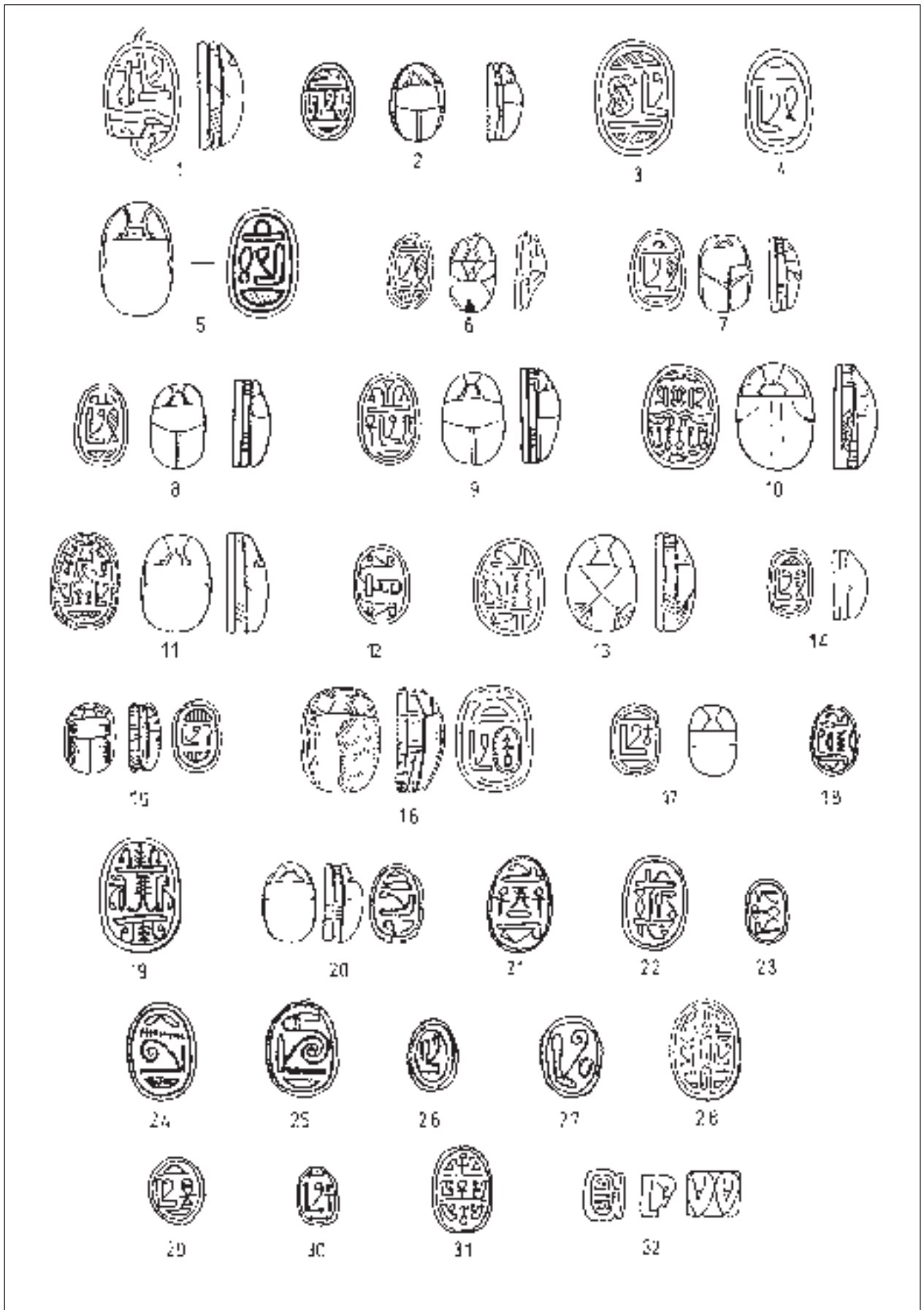


Fig. 32 L-shaped crowns

Scarab 5 (Fig. 29:5)

Context: A00T4H7L210N98

Dimensions: 24.5×17.5×10 mm

Material: Steatite

Date: late MB IIB–MB IIC = late 15th Dynasty.

The back is plain. The separation from the pronotum to the elytra is indicated on the side by two small notches (=Shesha-type); the square head is framed by trapezoidal lines. The additional vertical strokes indicate the eyes. Single trapezoidal clypeus.

The legs are delineated very schematically by two circular grooves (e11-legs).

The base area shows in vertical arrangement a falcon (or owl?) flanked by two snakes. The three figures are deeply cut with fine hatching inside. The ureai have a branch-like inner pattern and the falcon a fine net pattern. Such representations certainly do not occur before the 15th dynasty. At Tell el-Dab^ca they are not recorded until the 2nd half of the 15th dynasty. A similar is to be found at Tell el-Dab^ca in Str. D/3 (1590–1560 B.C.). The back and the side view are identical. However, the three-figure composition stands on a crocodile in this case.

Altogether, I was able to find 29 examples from excavations where a falcon (also uncommonly an owl) is flanked by ureai. Most, namely 10 pieces, are found at Tell el-*c*Ajjul itself. The nearest piece is No. 19 but neither this has been clarified as a falcon or an owl. As the other distinctive features are also almost identical, I would assume that the same seal cutter made this piece. Tell el-*c*Ajjul could be described as the origin of this representation.

It is quite a common occurrence in the late MB IIB or MB IIB/C for the falcon to be confused with the owl. Thus there are also several examples in the motif of the falcon with angular hooks where there is the owl instead of the falcon.

It is of great significance that almost all parallel pieces display the same side view (e11 legs according to Tufnell). The legs are delineated by two circular lines. The few exceptions (Nos. 1, 2, 17, 29) also have very schematised legs only.

The back is smooth in all cases up to No. 4 (Shesha-type).

The head has a trapezoidal shape in every parallel piece.

All examples are deeply cut. In the majority of cases, the animal bodies, particularly the falcon, have a net pattern. Only Nos. 5, 16, 19 and 22 have a hatching instead of the net pattern.

The size of the type discussed here is striking.

Though parallel examples have an average length of 18–19 mm, this scarab has the considerable length of 24.5 mm.

1) *Megiddo* (LOUD 1948: pl. 150, 79 – Tomb 3175 – Str. X–IX/2) (Fig. 33:1)

2) *Megiddo* (GUY 1938: pl. 137, 3 – Tomb 37) (Fig. 33:2)

3) *Tell Esur* (GOPHNA and SUSSMANN 1969: fig. 10, 3) (Fig. 33:3)

4) *Sichem* (HORN 1973: fig. 1, 66) (Fig. 33:4)

5) *Tel Jerishe* (GIVEON 1988: 64, Nr. 66): Scaraboid (Fig. 33:5)

6) *Shilo* (BUHL and HOLM-NIELSEN 1969: 78, pl. 24, 195) (Fig. 33:6)

7) *Amman* (WARD 1966: pl. 19, J.6229): Back animal-shaped. (Fig. 33:7)

8) *El-fisir* (ORY 1946: 37, pl. 13, 52) (Fig. 33:8)

9) *Jericho* (KIRKBRIDE 1965: fig. 301, 4 – Tomb H 13 – Group V) (Fig. 33:9)

10) *Jericho* (KIRKBRIDE 1965: fig. 301, 5 – Tomb H 13 – Group V) (Fig. 33:10)

11) *Jericho* KIRKBRIDE 1965: fig. 288, 9 – Tomb J 14 – Group II+IV) (Fig. 33:11)

12) *Gezer* (GIVEON 1985: 120, Nr. 29) (Fig. 33:12)

13) *Gezer* (MACALISTER III, 1912: pl. 209, 67): seal impression (Fig. 33:13)

14) *Tell el-*c*Ajjul* (PETRIE 1931: pl. 13, 60 and KEEL 1997: Nr. 54 – Field A? Stratum II, late MB IIB, 1600–1530 B.C.): base-view only (Fig. 33:14)

15) *Tell el-*c*Ajjul* (PETRIE 1931: pl. 14, 167 and KEEL 1997: Nr. 161 – without context): base-view only (Fig. 33:15)

16) *Tell el-*c*Ajjul* (PETRIE 1931: pl. 14, 168 and KEEL 1997: Nr. 162 – without context): base-view only; in this case, an owl is clearly represented instead of the falcon; the hatching inside is engraved horizontally only (Fig. 33:16)

17) *Tell el-*c*Ajjul* (PETRIE 1934: pl. 5, 59 and KEEL 1997: Nr. 620 – Field T, court TDZ, 740“ – Stratum III–II, MB IIB, 1700–1520 B.C.) (Fig. 33:17)

18) *Tell el-*c*Ajjul* (PETRIE 1934: pl. 7, 204 and KEEL 1997: Nr. 764 – Field T, court TCP, 887“ – Stratum II, late MB IIB): base-view only (Fig. 33:18)

19) *Tell el-*c*Ajjul* (PETRIE 1934: pl. 9, 319 and KEEL 1997: Nr. 880 – Field H, 733“ – probably Stratum II

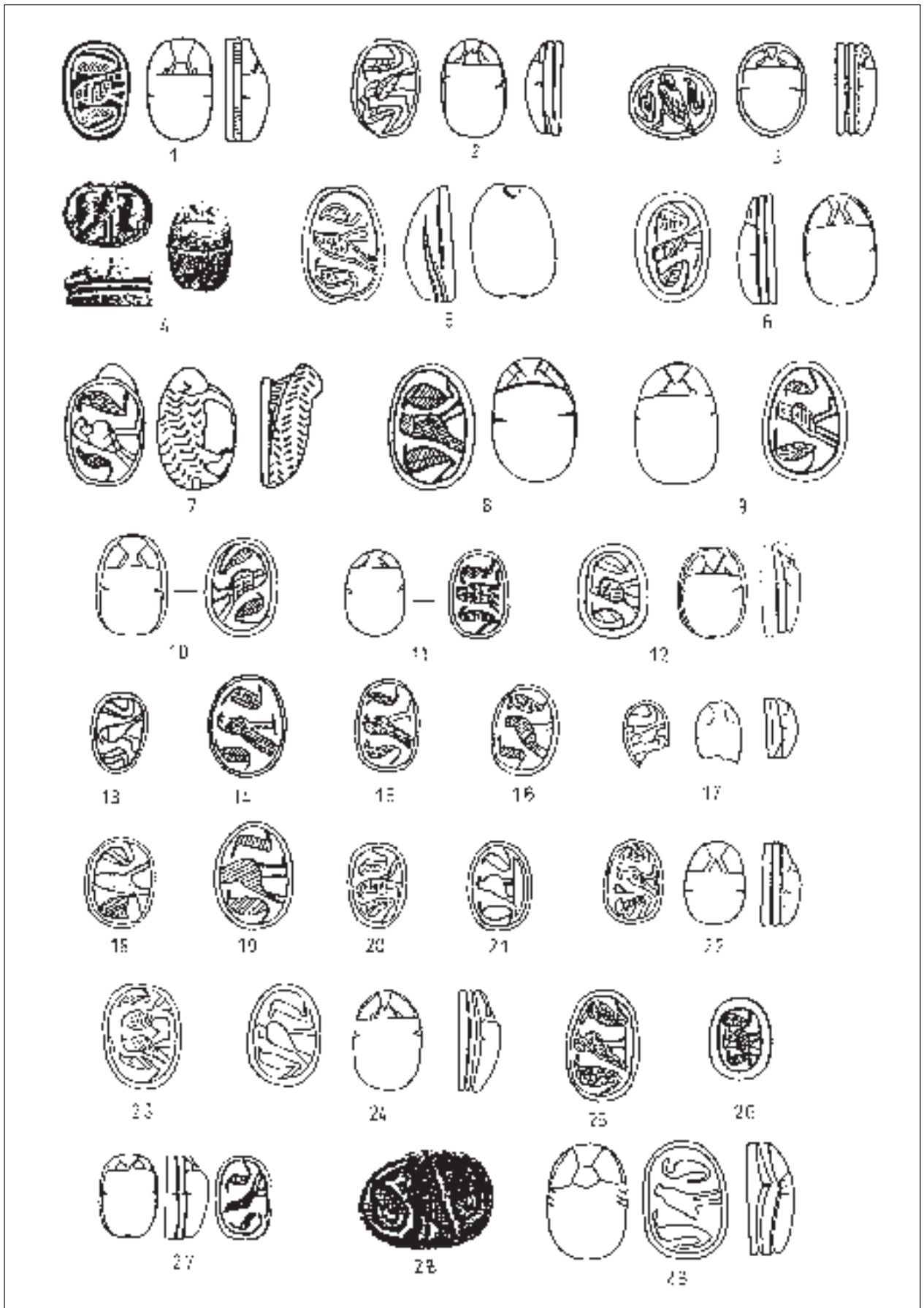


Fig. 33 Parallels of scarab No. 5

– late MB IIB): This is the nearest parallel piece. The bird in the middle can be defined as a falcon or owl; the hatching is identical and also the back- and leg- features coincide (Fig. 33:19)

20) *Tell el-ʿAjjul* (MACKAY and MURRAY 1952: pl. 10, 123 and KEEL 1997: Nr. 1149 – Field G, court GBU, 862^{cm} – Stratum III–II, MB IIB): base-view only (Fig. 33:20)

21) *Tell el-ʿAjjul* (MACKAY and MURRAY 1952: pl. 10, 124 and KEEL 1997: Nr. 1150 – Field G, Tomb 2097, in room GBW/GAS, 897^{cm} – MB IIB/C): base-view only (Fig. 33:21)

22) *Tell el-ʿAjjul* (MACKAY and MURRAY 1952: pl. 10, 125 and KEEL 1997: Nr. 1151 – Field G, without context – MB IIB) (Fig. 33:22)

23) *Tell el-ʿAjjul* (MACKAY and MURRAY 1952: pl. 10, 126 and KEEL 1997: Nr. 1152 – Field G, GAK, 889^{cm} – Stratum II, late MB IIB): There are two falcons opposite each other (Fig. 33:23)

24) *Tell el-Farah S* (WILLIAMS 1977: fig. 37, 8 – Tomb 559): The 10 scarabs found in this tomb all point to the 2nd half of the 15th Dynasty (Fig. 33:24)

25) *Tell el-Yahudiya* (GRIFFITH 1890: pl. 10, 14) (Fig. 33:25)

26) *Tell el-Yahudiya* (PETRIE 1906: pl. 9, 154) (Fig. 33:26)

27) *Mostagedda* (BRUNTON 1937: pl. 69, 37) (Fig. 33:27)

28) *Mirgissa* (VERCOUTTER *et al.* 1970: pl. 26, 5 – Tomb KT 2) (Fig. 33:28)

29) *Semna* (DUNHAM and JANSSEN 1960: pl. 121, 24 – Tomb S 520, 18th Dynasty) (Fig. 33:29)

Distribution of the falcon flanked by ureai (Fig. 34):

Megiddo (2), Tell Esur (1), Sichem (1), Tel Jerishe (1), Shilo (1), Amman (1), EL-Jisr (1), Jericho (3), Gezer (2), Tell el-ʿAjjul (10), Tell el-Farah S (1), Tell el-Yahudiya (2), Mostagedda (1), Mirgissa (1), Semna (1).

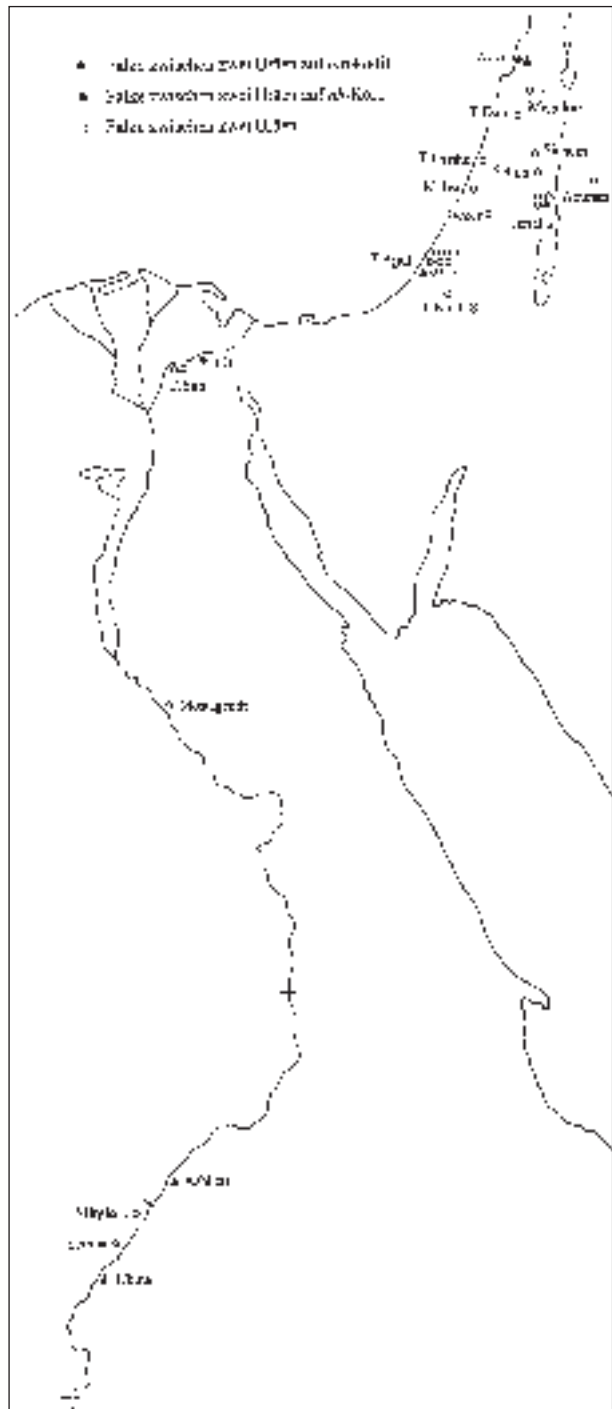


Fig. 34 Distribution of Scarab No. 5

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