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The Swedish Jordan Expedition 2013 at Tall Abu al-Kharaz

Preliminary results from Areas 9, 10 and 11

Abstract**
The Swedish excavations at Tall Abu al-Kharaz, a twelve-hectare tell in the central Jordan Valley, continued in 2013 in order to shed further light on the Iron Age occupation of this city that was first settled around 3200 BC, corresponding to the conventional Early Bronze Age IB. The Iron Age occupation lasted from the 12th century BC until 732 BC, when the city was conquered by the Neo-Assyrians. From 2009 to 2012, excavations in Area 9 revealed an exceptionally well-preserved two-storey compound dating from Iron Age I (local Phase IX), i.e. around 1100 BC. The stone compound was exposed for a length of 46 m. It consists of 21 rooms, with walls still standing to a height of more than 2 m. Several hundred complete vessels and other objects point to the extensive contacts of a fairly rich society. Contacts with the Aegean and Cyprus, through offshoots of the Sea Peoples/Philistines, and with Egypt and Phoenicia, were ascertained. At the end of the 2012 season, the eastern limit of the compound was reached. In 2013, complementary excavations were carried out to the north and east of the compound. The eastern extension revealed a defence system which had originally been built in the Early Bronze Age IB/II around 3100 BC but had been reused as a part of the Iron Age I defence structures. Test trenches in the north-eastern part of Area 10 and in Area 11 north-east of Area 10, i.e. a hitherto unexplored area of the city, revealed remains from the Late Bronze Age and the Early and Late Iron Age.

Keywords: Iron Age, Bronze Age, figurine, tomb, burial, palette, textile production

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The excavations at Tall Abu al-Kharaz, financed by the Royal Swedish Academy of Letters, History and Antiquities, were carried out with the kind support of the Department of Antiquities of Jordan in September and October 2013. The 2013 team included P.M. Fischer from the University of Gothenburg (director), T. Bürge (assistant field director), D. Blattner (assistant), H. Ta'ani (foreman, trench master), and M. Al-Bataineh (surveyor, draughtsperson). The trench masters were R. Árnadóttir, D. Kofel, A. Lindqvist and B. Stolle. The representative of the Department of Antiquities was M. Es-Shalabi. Additional support was provided by S. Esbeihat (cook), Y. Suleiman Musa (pottery washing) and M. Mohammed Ahmad (transport). Nine local workers from Pella, Mashare'a and Yabis were engaged in the excavations. The Royal Court of Jordan, represented by T.R.H. Prince Raad Ibn Zaid and Princess Majda Raad, and the Swedish Embassy in Amman, headed by the recently appointed ambassador H. E. Helena Gröndahl Rietz, visited the excavations. T.R.H. showed sincere interest in the project and promised continued support.

Introduction

The 16th season of excavation at Tall Abu al-Kharaz was mainly devoted to shedding further light on the Iron Age occupation of the city. One of the objectives was to explore the area east of the two-storey compound, which was dated to Phase IX (Iron Age I). The excavations of this compound began in 2009 and lasted until 2012 (for the location of Tall Abu al-Kharaz in the Southern Levant, see *Fig. 1*). The compound was completely uncovered for a length of 46 m. A total of 21 basement rooms, which correspond to the lower storey and were arranged in a cell-plan layout, were exposed. In 2011 a western annex was opened which added additional 20 m to the compound.[1] The area east of the compound that was uncovered in 2013 includes Trenches LIXE and F (Area 9), LXA and B, and LXIA and D (the latter four are in Area 10; for the position of the trenches and areas see *Fig. 2*).

Another important task was consolidation work on the compound, which started in 2010 and concluded in 2013. The 21 rooms with walls which are still standing to a height of more than 2 m were cleaned and consolidated with a fairly soft mixture of one-third each of quartz sand, lime and cement.[2]

[1] See Fischer & Feldbacher 2010 and 2011; Fischer 2012; Fischer & Bürge 2013.

[2] This mixture is generally used in Jordan in accordance with instructions by the Department of Antiquities.

A further objective was to explore selected parts along the eastern edge of the upper plateau of the tell (Area 11) in order to trace additional Iron Age structures and a possible continuation of the Phase IX compound from Area 9. This part of the city had not yet been investigated.[3]

Table 1. Phasing of Tall Abu al-Kharaz.[4]

Phases	*Duration BC*	*Periods*
IA–B	3150–3050	EB IB
IIA–B	3050–3000	EB II
IIIA–B	3000–2900	EB II
Lacuna	2900–18th cent.	EB III–MB I
IV/0	18th cent.	MB I
IV/1	*c.* 1600	MB III
IV/2	1600–1525	MB/LB
V	1525–1450	LB IA
VI	1450–1400	LB IB
VII	1400–1350	LB IB/C–IC
VIII	1350–?	LB IC–II
Lacuna		LB II
IX	1100–1050	IA IB
X	1050? –930	IA IB/(IIA)
XI	930–850	IA IIA
XII	850–800	IA IIA/B
XIII	800–770	IA IIB
XIV	770–732	IA IIB
XV	732–600	IA IIC
	c. 4th cent. AD	Roman
	c. 4th–7th cent. AD	Byzantine
	c. 8th–10th cent. AD	Islamic/Abbasid

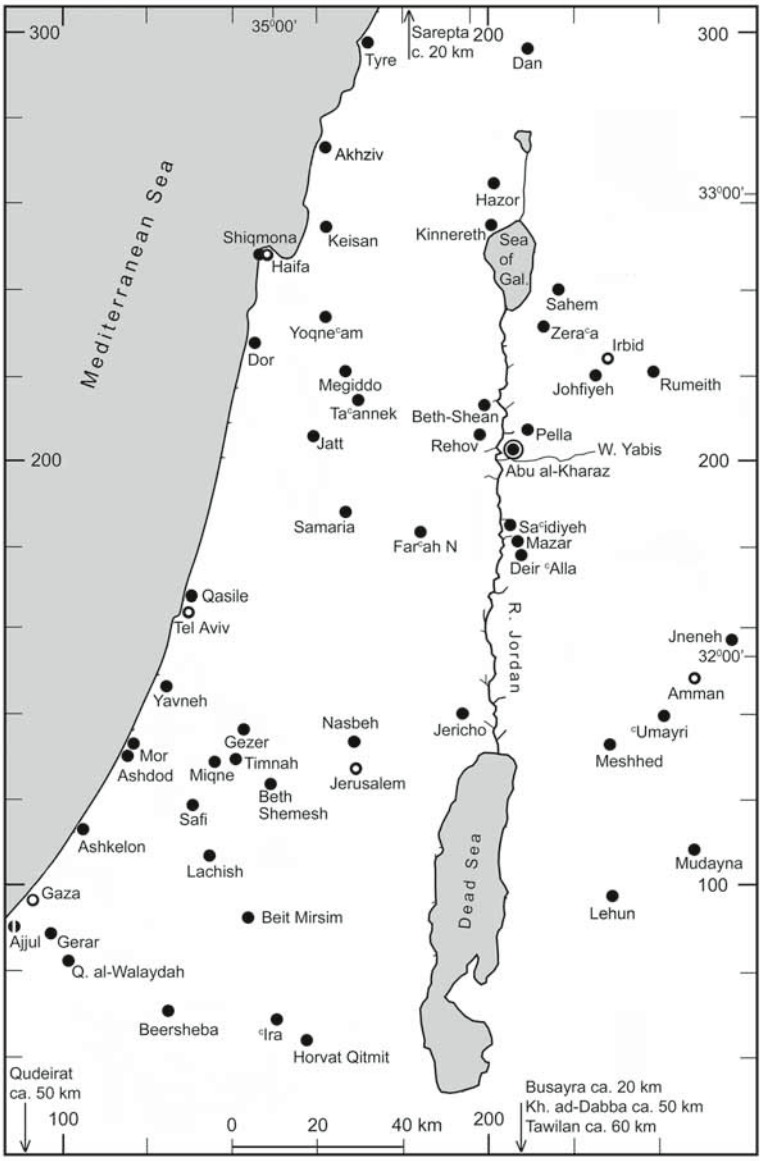

Fig. 1. Selected Iron Age sites in the Southern Levant (drawing by T. Bürge).

[3] Information on all investigated areas dated to the Early Bronze Age can be found in Tall Abu al-Kharaz, Volume 1 (Fischer 2008), the Middle and Late Bronze Ages in Volume II (Fischer 2006), and the Iron Age (including the recently uncovered Phase IX compound of Area 9) in Volume III (Fischer 2013).

[4] Pre-Iron Age periodization according to Fischer 2006, 362–374 and id. 2008, 340–385. Phase numbers have only been given to settlement periods from the Early Bronze Age (Phase I) up to the Iron Age (Phase XV for the latest Iron Age squatter occupation), i.e. in accordance with the final publications (*Table 1*; see also note 3). The detailed phasing and dating of post-Iron Age periods has to await further exposure of the upper part of the tell in Area 10.

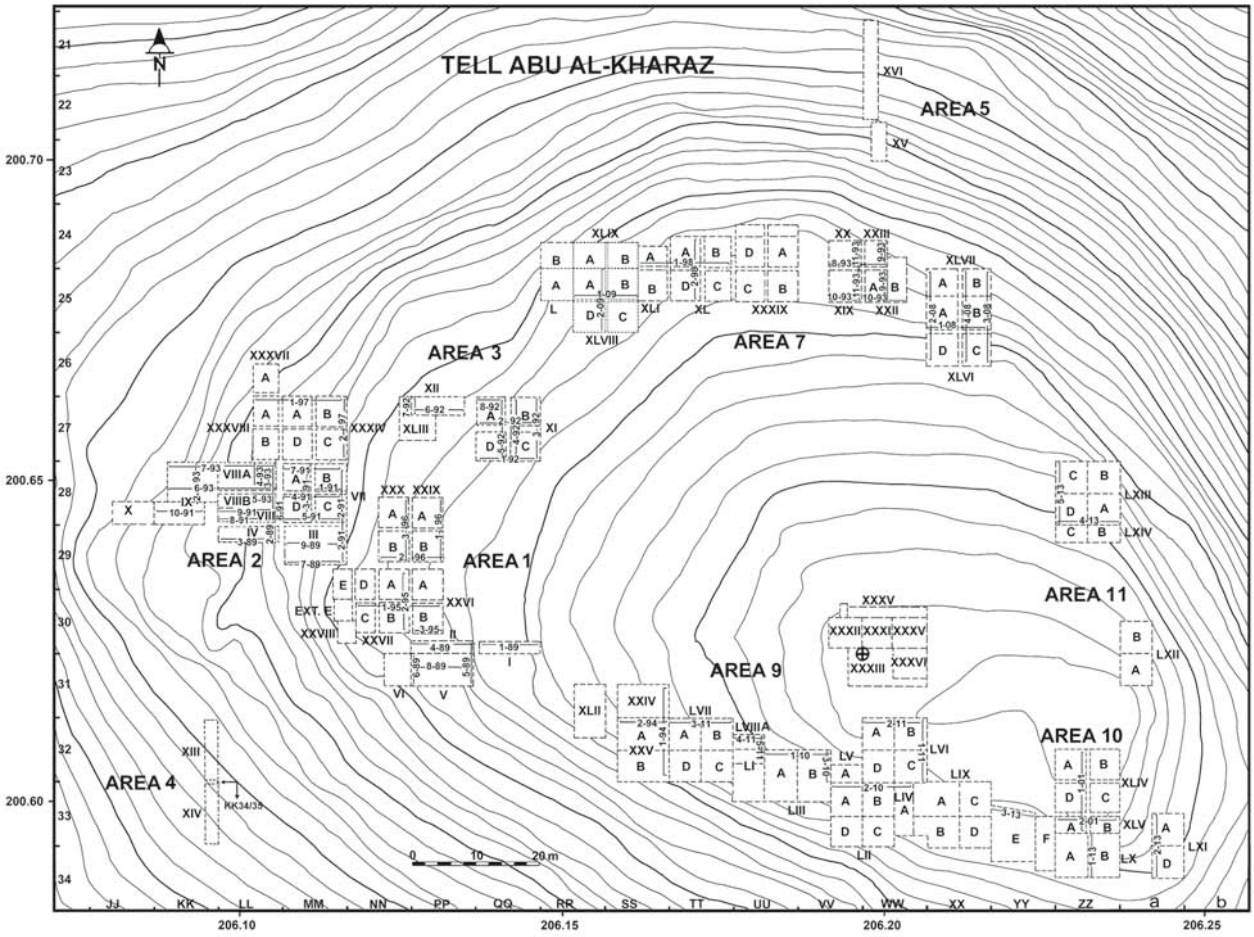

Fig. 2. Tall Abu al-Kharaz. Topographic map with overview of areas, trenches and sections (drawing by M. Al-Bataineh and T. Bürge).

Results from the excavations in Areas 9 and 10 (Trenches LIXE and F, LXA and B, LXIA and D)

LATE ROMAN, BYZANTINE AND ISLAMIC/ABBASID (*c.* AD 300–969)

The later Iron Age phases, namely Phases XII–XV, were not present because of the intensive use of this area in Late Roman/Byzantine[5] and Islamic (Abbasid) times. The architectural remains are difficult to interpret because of disturbances, rebuilding and the proximity to today's surface. There is, however, one find from the Late Roman period (around AD 300) which should be mentioned, namely a complete small glass bottle (*unguentarium*; N1462). The glass is of high quality—there are almost no signs of corrosion (*Fig. 3*).

Fig. 3. Late Roman unguentarium of glass (N1462) from Area 9 (photograph by P.M. Fischer, drawing by M. Al-Bataineh).

[5] A distinction between these two periods according to the ceramic remains is not possible.

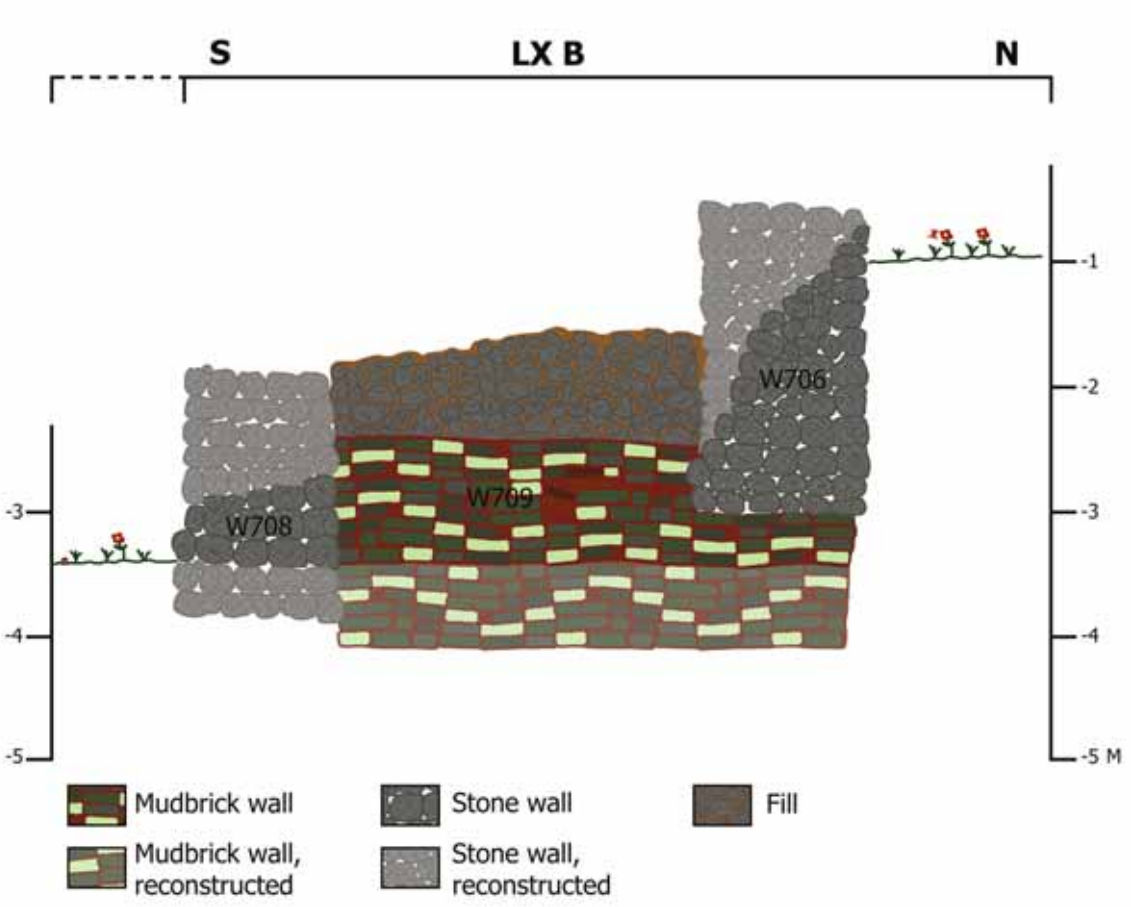

Fig. 4. Area 10, reconstructed section through the reused Early Bronze Age defence system; see position of section in Figs. 7b and 7c (by T. Bürge).

IRON AGE

Phase XI (930–850 BC)

The northern part of a walled space, which is ascribed to Phase XI, was exposed in Trench LIXE (W697 with parts of the mudbrick superstructure still preserved, W711 and W696). There is a 0.8-m-wide entrance in the eastern part of W711. The southern part of this space is not preserved due to erosion. Small finds from the area north of the room include a reused spindle whorl of basalt, which was originally manufactured in the Early Bronze Age (N1464), and a millstone of basalt, which lay in a hearth. Another hearth was found 1.8 m northwest of the first.

Phase X (1050–930 BC)

Room P, which was excavated in 2012,[6] was further exposed to the north (W699/725, W722 and W721). It is partly stone-paved. Room Q, which was discovered in 2012, was partially exposed to the north (W697/721, W694/711 and W720). It became evident that the walls and floors of these rooms were built directly on top of the Early Bronze Age II city wall (see below).

Phase IX (1100–1050 BC)

Remains from the phase of the two-storey high cell-plan compound north of Rooms 19, 20 and 21 were not present except for stray sherds. The settlers of the following Phase X obviously cleaned the area down to the top of the Early Bronze Age city wall.

THE IRON AGE DEFENCE SYSTEM, PHASES IX–XII (1100–800 BC; RECONSTRUCTION IN *FIG. 4*)

These trenches are directly east of the Phase IX compound. The colluvial soil, approximately 10 cm thick, contained sherds mainly from the Early Bronze Age, but sherds from the Middle and Late Bronze Ages, the complete Iron Age sequence, and the Late Roman, Byzantine, Islamic (Abba-

[6] Fischer & Bürge 2013, 315, fig. 6.

sid) and Mamluk periods were also found.

It came as a surprise that the sherds from below colluvial soil date exclusively from the Early Bronze Age (sic!), whereas material from below colluvial soil, from the part of Area 9 that had been excavated earlier, stems from the Iron Age (i.e. Phases IX–XII), and the explored portion from 2013 contained only material from the local Phases I and II. These two phases correspond to the conventional Early Bronze Age IB and II, i.e. roughly 3150–3000 BC.[7] Nevertheless, this conundrum was satisfactorily solved during the course of the campaign.

Meticulous stratigraphic investigation demonstrated that around 1100 BC the builders of the Phase IX compound cut through the entire Early Bronze Age defence system (*Figs. 4*, *5*) and deposited the foundation walls of their structures on the same level as the previous foundation of the Early Bronze Age and later defence systems. This procedure provided the people of Phase IX with two advantages: they were able to use a stable surface, namely the lower part of the stone-built Early Bronze Age II city wall, for the foundation of their massive two-storey compound (*Fig. 6*), and they gained building material for their new structures. (The latter could be proved by studying the building elements made of stone from these two settlement periods, approximately 2000 years apart in time, which in principle were identical.)

The easternmost wall of the Phase IX compound, W702, was erected approximately 1 m from the Early Bronze Age defence system

Fig. 5. Area 9, Trench LIXE: spot where the Phase IX compound (left) cut through the Early Bronze Age glacis (right; photograph by P.M. Fischer).

Fig. 6. Area 9, Trench LIXE: architecture of Phases IX and X, which was built upon the Early Bronze Age II city wall (between red arrows; photograph by P.M. Fischer).

[7] The Early Bronze Age occupation at Tall Abu al-Kharaz, namely Phases IA–IIIB, dates from 3150 BC to 2950/2900 BC according to 16 radiocarbon dates; see Fischer 2008, 381–382; Stadler & Fischer 2008; cf. Fischer & Bürge 2013, 309, table 1 which includes a synopsis of all phases.

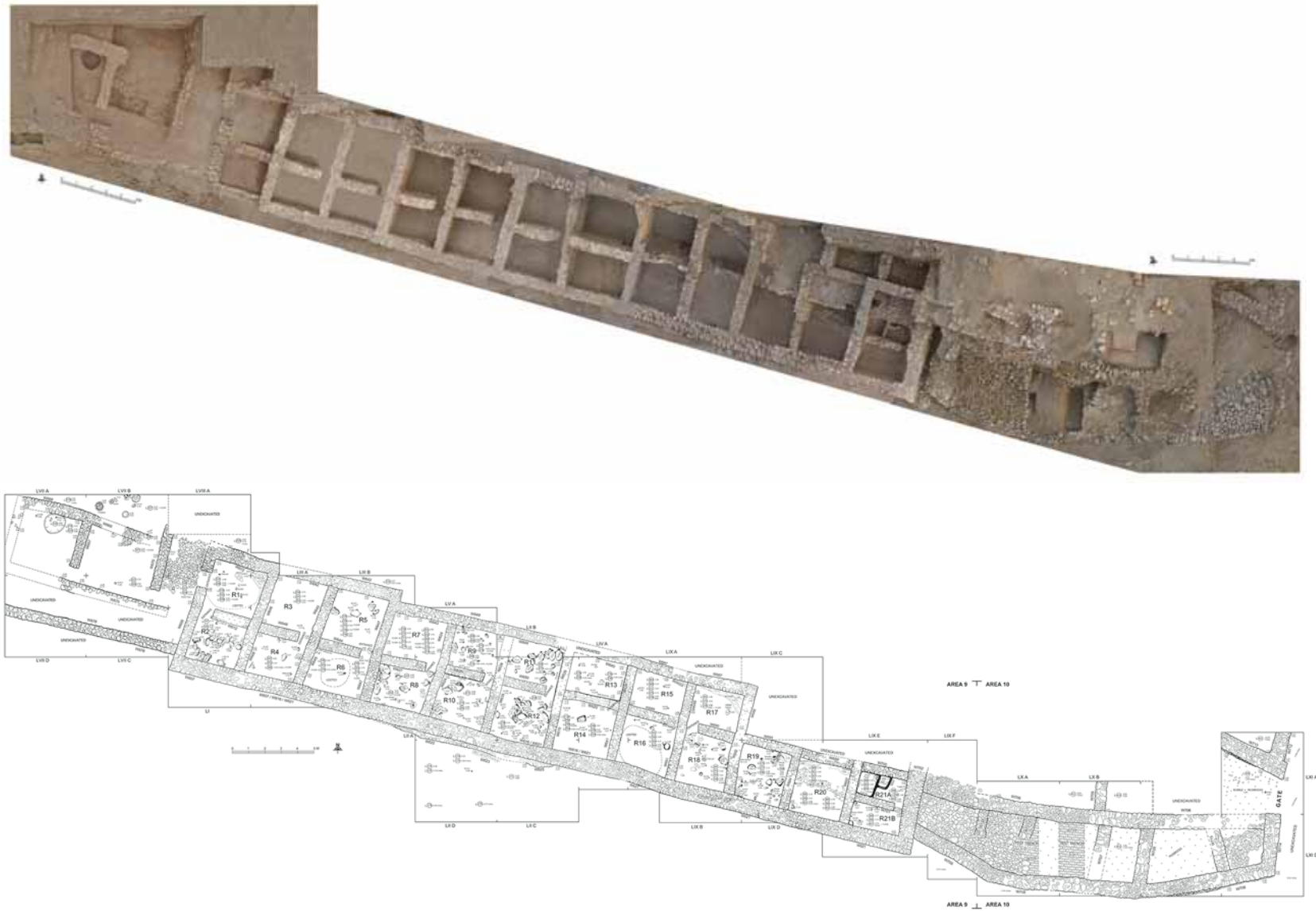

Fig. 7a (above). Aerial photograph of Areas 9 and 10: the completely exposed Phase IX compound with the western annex and the defence system to the east (compiled by T. Bürge).

Fig. 7b (below). Areas 9 and 10: the completely exposed Phase IX compound with the western annex and the defence system to the east (drawing by M. Al-Bataineh).

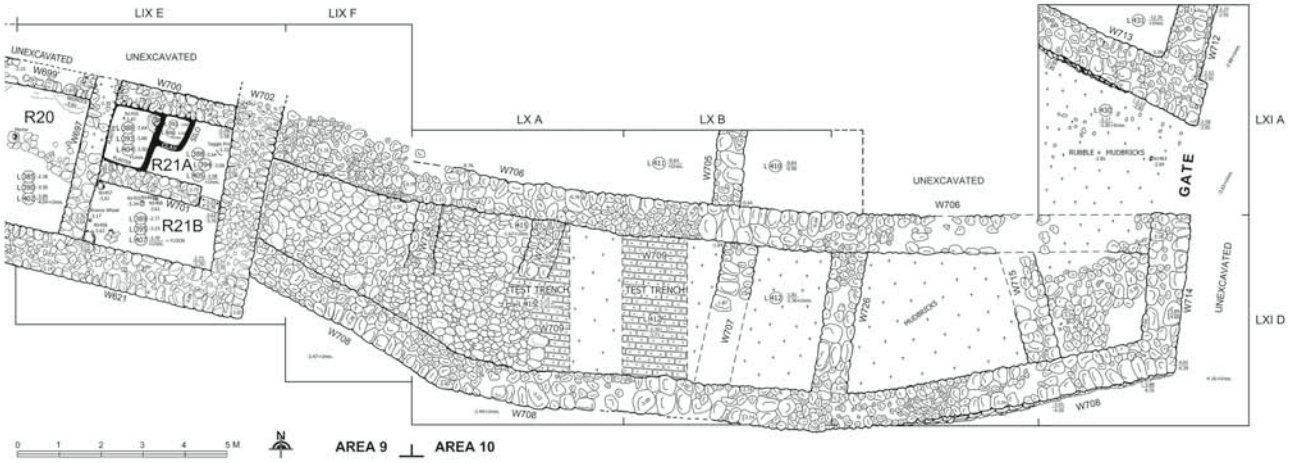

Fig. 7c. Areas 9 and 10: eastern part of the Phase IX compound and defence system (drawing by M. Al-Bataineh).

to the east, which was left intact. After the completion of the two-storey compound, the gap facing the Early Bronze Age defence system was filled with stones and mud, which reinforced the Phase IX structures. It may be that the Iron Age people altered/repaired the Early Bronze Age glacis to the east (see below). Nevertheless, the original Early Bronze Age structure was kept largely as it was designed 2,000 years earlier and became an integrated part of the Iron Age defence system (*Fig. 7a–c*).

EARLY BRONZE AGE

The Phase II/Early Bronze Age II defence system (3050–3000 BC)

The reused Early Bronze Age stone structures to the east of the Iron Age compounds consist of two horizontal, fairly parallel walls (W706 and W708) which run west–east and are approximately 5 m apart (*Fig. 7a–c*). The upper northern wall (W706), which is still preserved to a height of approximately 2.5 m, was supported by six perpendicular walls, W724, W723, W707, W726, W715, and W714, the latest of which also represents the southern part of the Early Bronze Age city gate. Consequently, the section of this stone-built arrangement has impressive dimensions—3 m × 5 m (see *Fig. 4*). The spaces between the perpendicular walls were filled with stones, thus creating a defence glacis that slopes steeply towards the south. At the south-easternmost corner of the upper plateau of the tell, the glacis turns sharply towards the north (W714) where it is interrupted by a 2 m wide gap – the city gate (*Fig. 8a*; see also the section from the area of the city gate in *Fig. 8b*).

Fig. 8a. The Early Bronze Age II city gate from Area 10 (between the red arrows; photograph by P.M. Fischer).

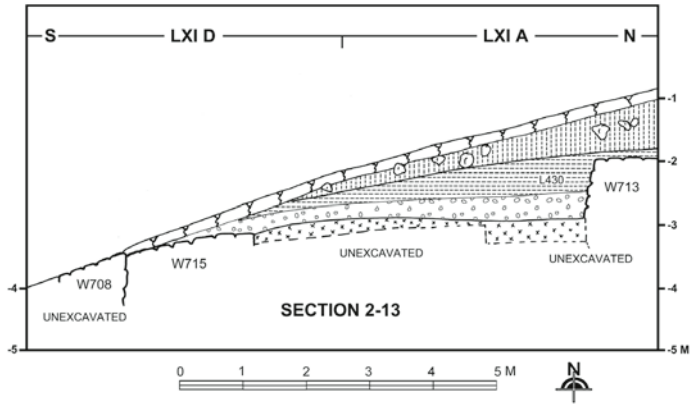

Fig. 8b. Section through the area of the Early Bronze Age II city gate (drawing by M. Al-Bataineh).

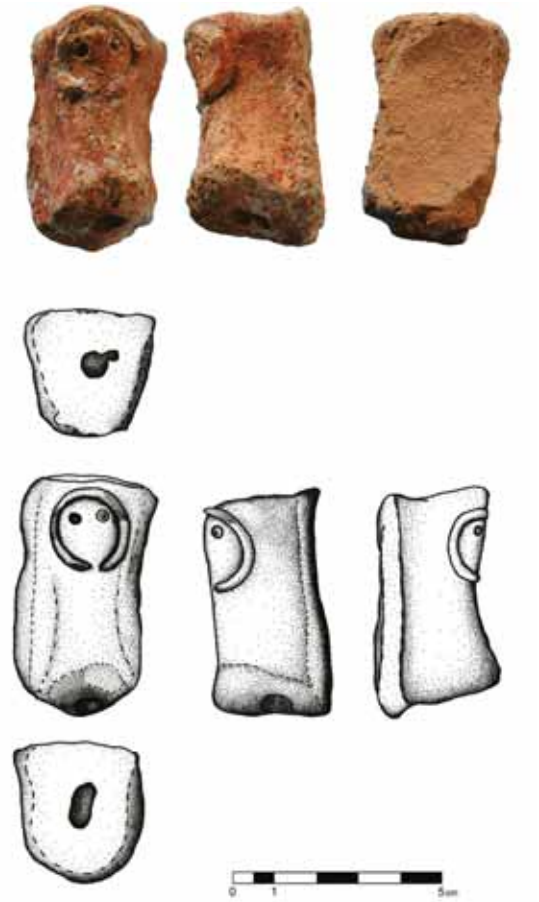

Fig. 9. Early Bronze Age figurine (N1463) from inside the Early Bronze Age II city gate (photograph by P.M. Fischer, drawing by T. Bürge).

Only the corner of the structure north of the city gate could be exposed (W713 and W712).[8] The city gate is located at the part of the settlement which is closest to the Wadi al-Yabis, the most important water resource for the people of Tall Abu al-Kharaz during all periods. It is most likely that the road to the Wadi al-Yabis started here. One find from inside the city gate is a figurine, the clay of which comes from the Early Bronze Age (N1463; *Fig. 9*).

An Early Bronze Age II tomb (3050–3000 BC)

North of W706, i.e. north of the spot where W706 is supported by W707 and 726, a tomb was uncovered (L429; *Fig. 10*). An infant skeleton with badly preserved bones was also unearthed, facing north-west. It was lying on an ellipsoid bed of carefully arranged pebbles, and it was in a flexed position with the arms probably crossed over its chest. In contrast to

Fig. 10. Early Bronze Age II tomb of a 7±1-year-old infant in Area 10 (photograph by P.M. Fischer).

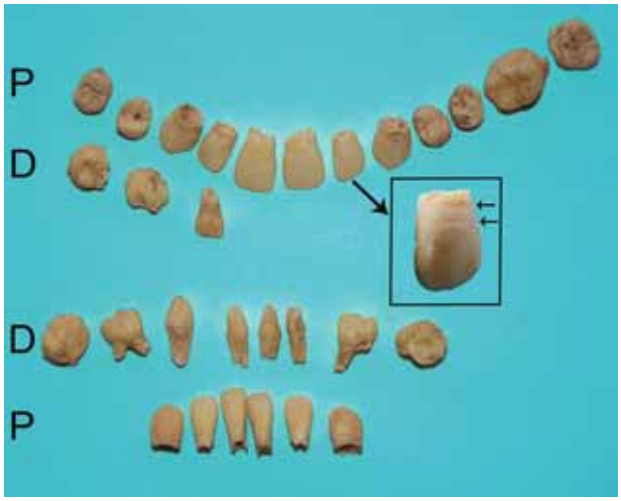

Fig. 11. Teeth of 7±1-year-old infant from Early Bronze Age II; P = permanent teeth, D = deciduous teeth; enlarged: tooth 22 (left upper second incisor) with enamel hypoplasia (photograph by P.M. Fischer).

the bones, the remaining teeth (both the deciduous (primary) and permanent) were well preserved. The estimated age of the infant is 7±1 years according to the eruption sequence of the permanent and remaining deciduous teeth. The aesthetically appealing permanent front teeth exhibit 2–3 lines of enamel hypoplasia close to the enamel-cement border, which suggests either periods of illness with high fever or nutrition deficiencies, or both (*Fig. 11*).[9]

There were no personal adornments, and the only tomb gift was a large jar of Grain Wash ware (*Fig. 12*). It was obviously broken on purpose during the funeral but is almost complete. This type of jar appears in both Phases IB and II at Tall

[8] This was due to lack of time.

[9] Cf. Fischer 1986, 12.

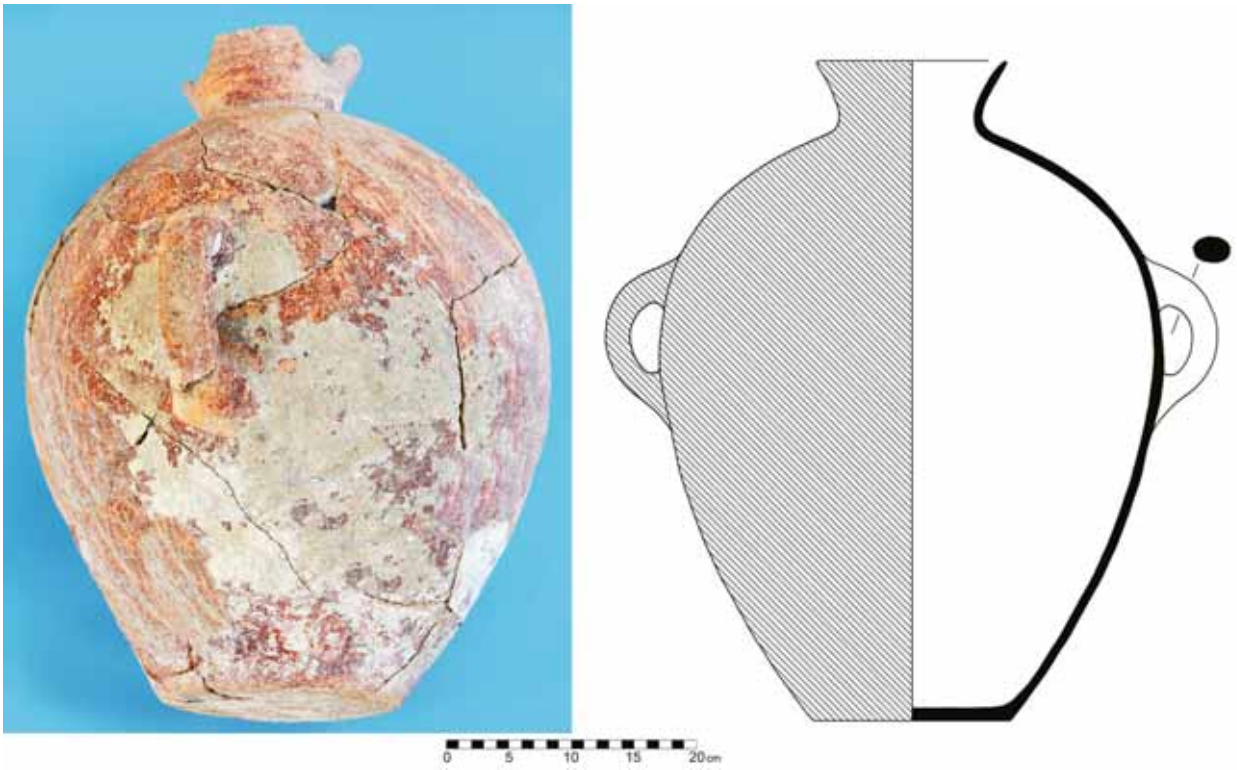

Fig. 12. Storage jar (L424-1) from an Early Bronze Age II tomb in Area 10 (photograph by P.M. Fischer, drawing by M. Al-Bataineh).

Abu al-Kharaz.[10] However, the stratigraphical position of the tomb only permits a date in Phase II, namely the Early Bronze Age II (3050–3000 BC).

PHASE IB/EARLY BRONZE AGE IB (3150–3050 BC)

Two test trenches, each 1.5 m wide, were opened in Trenches LXB and LXIA. The upper part of the stone glacis was removed in order to trace the earliest Bronze Age structures.[11] Earlier observations were once again confirmed:[12] the defence system of Phase II rests on a substantial mudbrick foundation—the first city wall, which was originally built in Phase IB (*Fig. 13*).

Fig. 13 (right). Area 10: stone-built Early Bronze Age II city wall from Phase II resting on Early Bronze Age IB, Phase I, city wall made of mudbricks (photograph by T. Bürge).

[10] Fischer 2008, 276–278.
[11] The trenches were backfilled at the end of the season and the original glacis was restored.
[12] Fischer 2008, 213–214.

Fig. 14. Islamic hairpins from Area 11: upper (N1476) as found; lower (N1465) cleaned and preserved (photograph by P.M. Fischer, drawings by M. Al-Bataineh and T. Bürge).

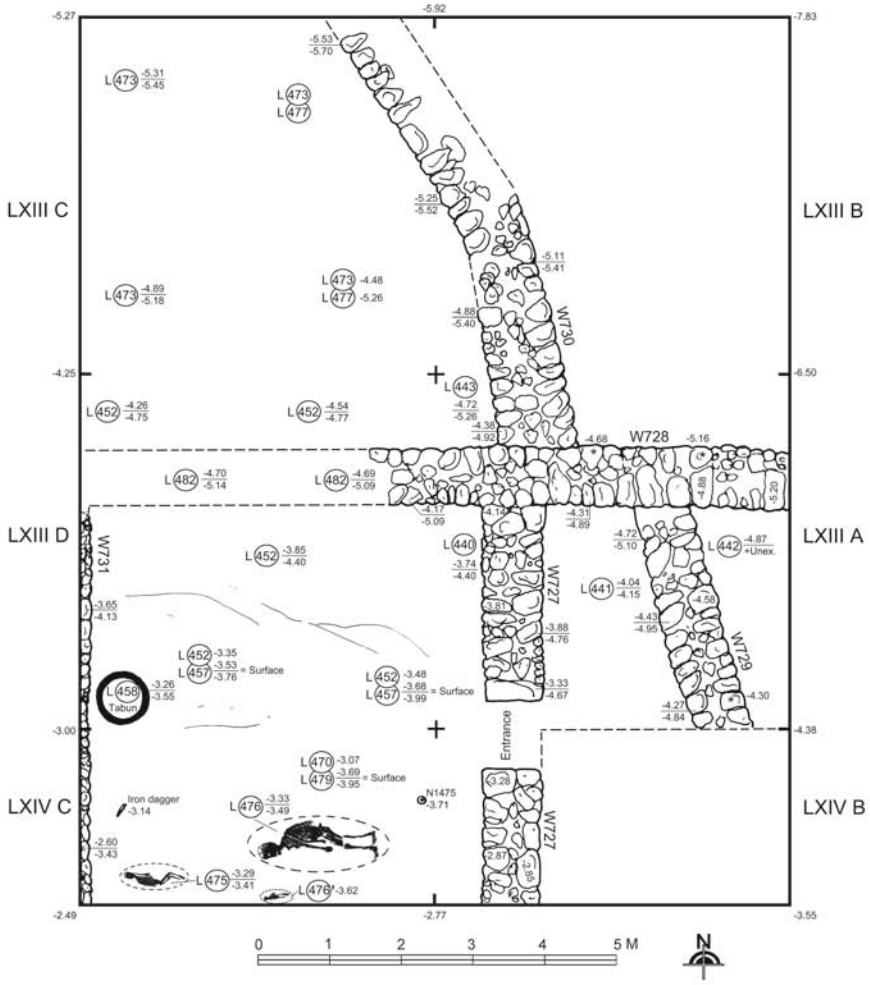

Fig. 15 (below). Area 11: Late Roman burial place (drawing by M. Al-Bataineh).

Results from the test trenches in Area 11 (Trenches LXIIA and B, LXIIIA–D and LXIVB and C)

ISLAMIC (ABBASID; AD 750–969)

Abbasid pottery was found all over the area of the test trenches. The limited exposed area, namely 150 m^2, does not allow the badly preserved structures to be dated explicitly to this period (see *Fig. 15*). There is a tabun (oven, L458) which contained Abbasid sherds. Another find from this period is a well-preserved hairpin of bronze (N1465; *Fig. 14*, lower). The context is clearly domestic. The Islamic settlers were obviously not aware of the burials to the south (see below).

LATE ROMAN (*c.* AD 300)

The interpretation of the Late Roman structures, which were exposed in Trenches LXIIIA–D and LXIVB and C, is incomplete because of limitations of exposure and certain disturbances, especially from the Islamic period. Nevertheless, there is a structure, strictly oriented north–south/east–west, which was entered from the east via a 0.8-m-wide entrance (W731, W728 and W727; *Figs. 15–17*). This walled space is preliminarily interpreted as a Late Roman burial place that was reused for domestic purposes in Islamic (Abbasid) times.

Three skeletons were found in the southern part of the exposed area (*Fig. 18a–c*). They are tentatively ascribed to the Late Roman period although there are sherds in the vicinity of the skeletons which are Islamic (Abbasid). At present, however, these are considered intrusive. All of the skeletons were found in simple graves that had obviously been dug directly into the soil—there were no remains of organic substances surrounding the skeletons.

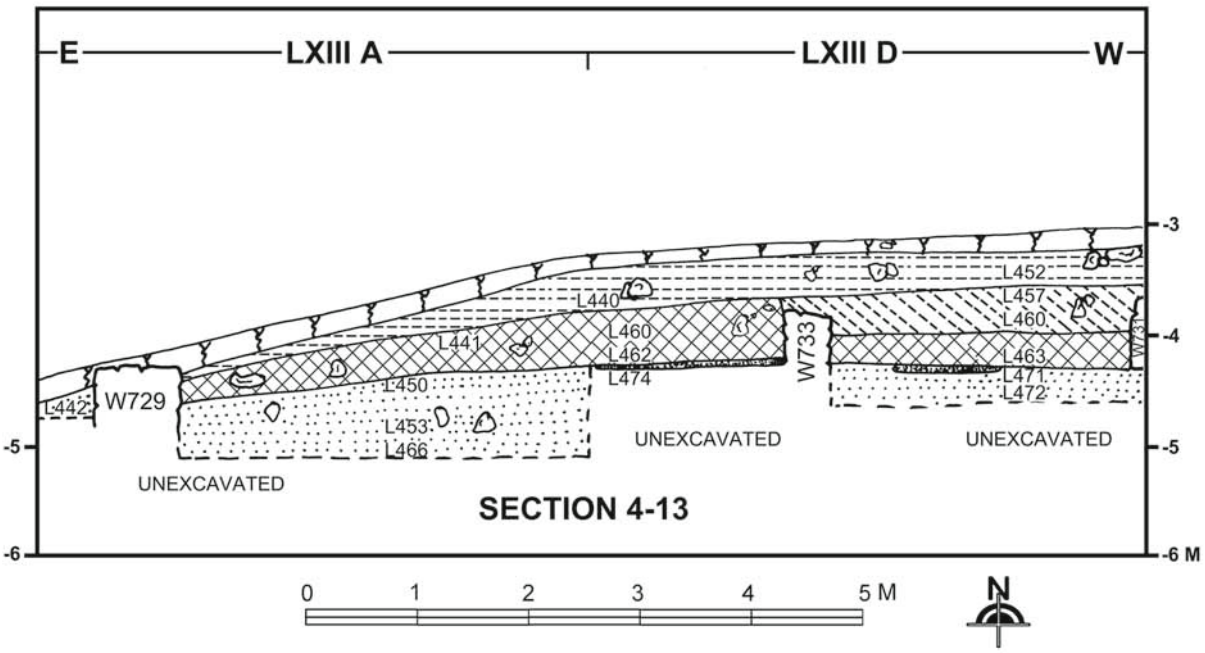

Fig. 16. East–west section of Area 11 (drawing by M. Al-Bataineh).

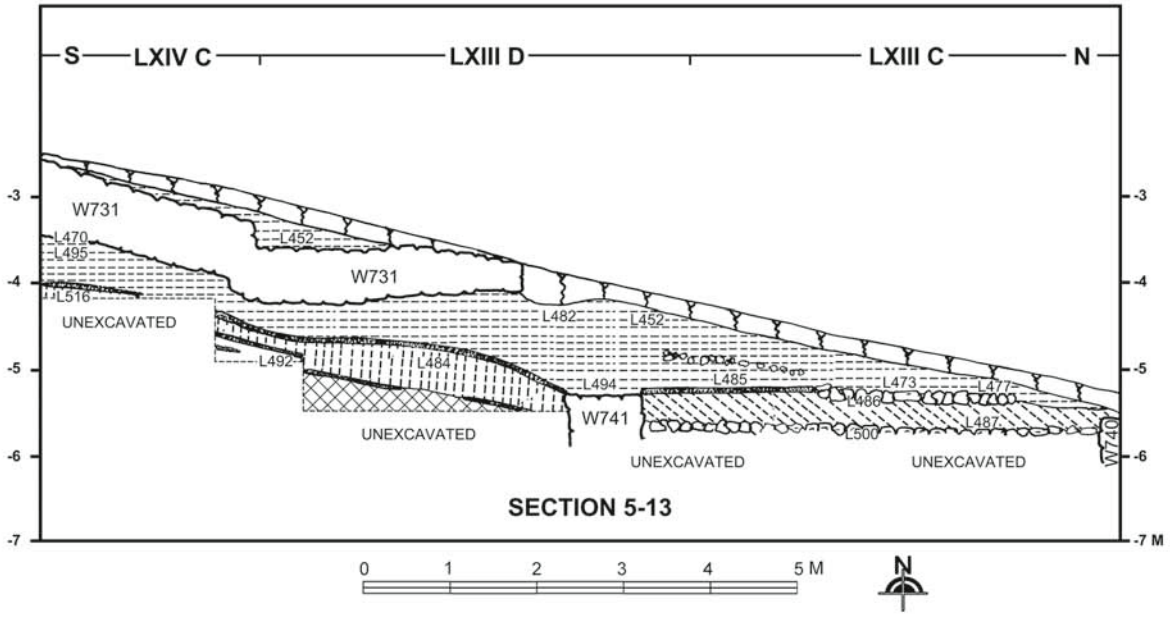

Fig. 17. South–north section of Area 11 (drawing by M. Al-Bataineh).

Fig. 18a. Late Roman skeleton of an approximately 60-year-old female from Area 11; upper enlarged picture: vertebra with marginal lipping; lower enlarged picture: scapula with osteoporosis (photo by P.M. Fischer).

Fig. 18b. Late Roman skeleton of a 4–5-year-old infant from Area 11 (photo by P.M. Fischer).

Fig. 18c. Late Roman skeleton of a 3–4-year-old infant from Area 11 (photo by P.M. Fischer).

The first well-preserved skeleton is a mature female that was lying in an outstretched west–east position facing south-southwest. She was toothless and suffered from severe degenerative problems with her back and joints, namely osteoarthrosis. Severe osteoporosis is noticeable, for instance, on the scapulae (lower enlarged photo in *Fig. 18a*). Some of her vertebrae exhibit a particular degree of osteophyte formation on the articular surface (marginal lipping; upper enlarged photo in *Fig. 18a*). This pathological finding is certainly the result of the repeated carrying of heavy loads and other arduous activities such as farming. Her age at death is estimated at around 60 years. Her stature *in situ* was estimated at 1.6 m. However, from calculations with respect to the size of the fibula, her stature would have been 1.66 ± 0.36 m.[13] There is no physical evidence for the cause of her death.

To the west of the mature female is the well-preserved skeleton of an infant, which is lying in an outstretched position facing north (*Fig. 18b*). The infant's age at death is within the range of fairly precisely 4–5 years, judging by the evolution of the teeth. The erupted dentition consists exclusively of deciduous teeth, 19 in total (tooth 18 is missing). There is damage on the right os parietale, namely a hole with bone fragments inside the cranium, and just below the missing primary tooth the cortical part of the mandible is damaged. Both instances of damage are interpreted as post-mortem traumata. There is no physical evidence for the cause of the infant's death.

To the west of the mature female is another skeleton of a very young infant, which is poorly preserved (*Fig. 18c*). It was lying on its stomach in a west–east position. The age at death was 3–4 years, judging from the dentition. There is no physical evidence for the cause of the infant's death.

[13] White 2012, 420.

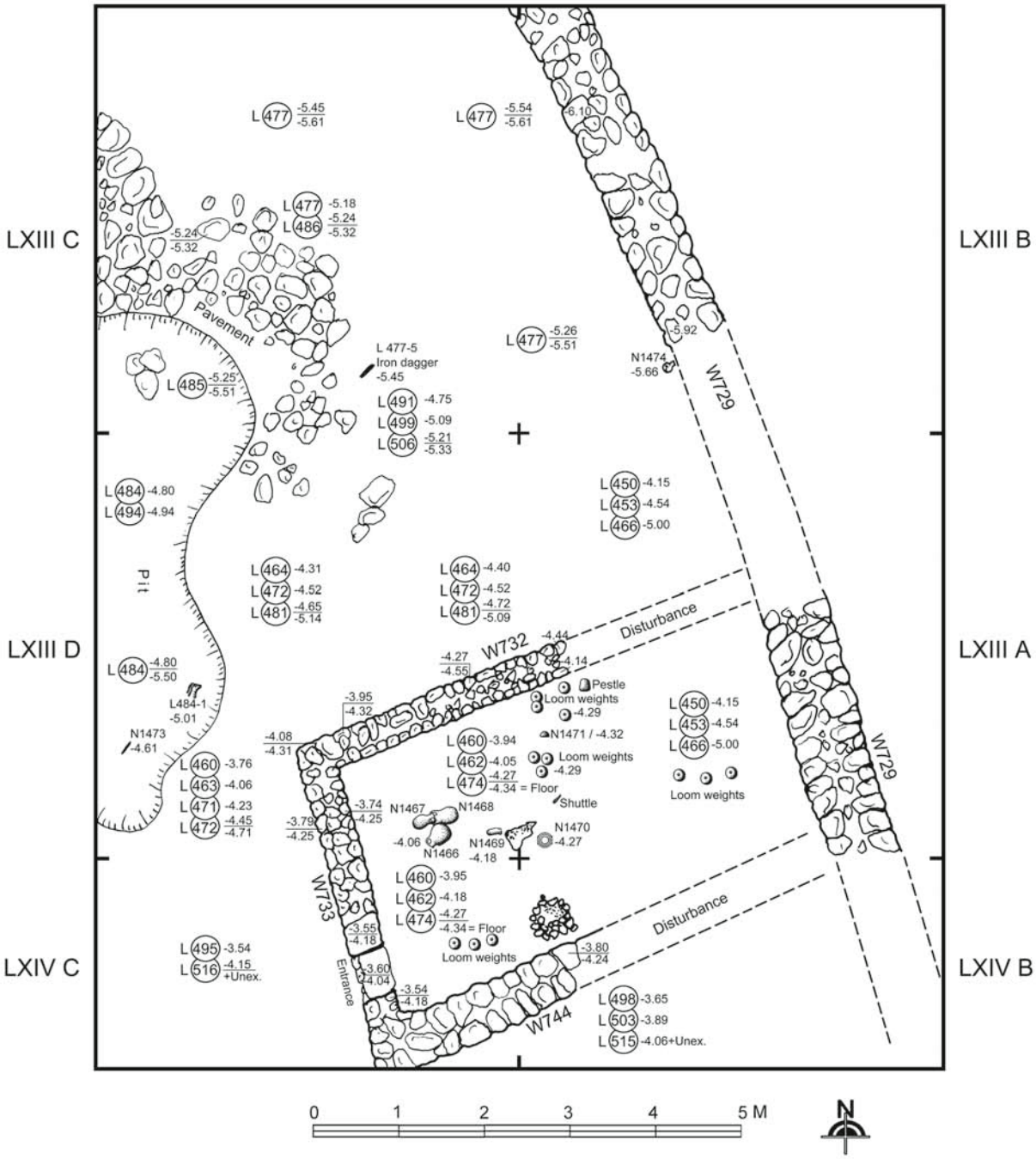

Fig. 19. Area 11: partly exposed four-room house to the south (drawing by M. Al-Bataineh).

IRON AGE

Phase XIV (770–732 BC)

A partly excavated walled space (L474 for the floor) of a possible four-room house was exposed in Trenches LXIIIA and D, and LXIVB and C (*Fig. 19*). It is bordered by W733, W732, W729 and, to the south, by W744. The eastern limits are disturbed by W727, which dates to Late Roman/Abbasid times (see above). There are several complete or almost complete finds from this room, all of which were embedded in a substantial destruction layer with much ash: four juglets (N1466–1469; *Fig. 20*), a complete cooking pot (L462-3; *Fig. 21)*, a hole-mouth jar, and objects which are related to textile

Fig. 20. Iron Age IIB juglets from the four-room house in Area 11, Phase XIV (from left to right: N1469, N1467, N1468 and N1466; photo by P.M. Fischer, drawings by M. Al-Bataineh).

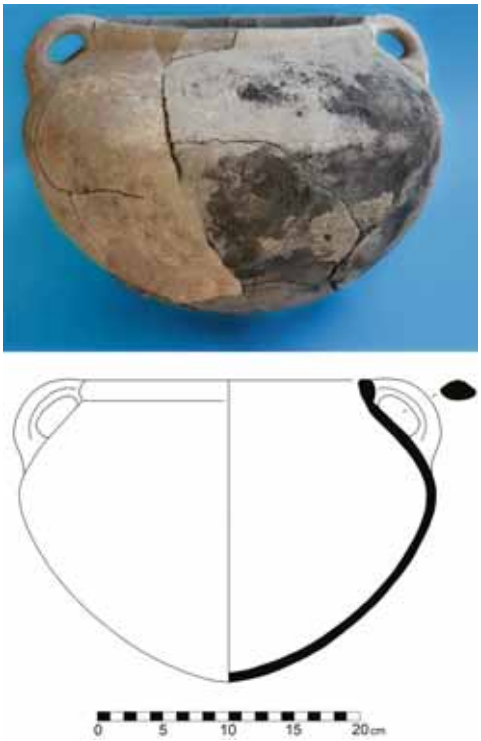

Fig. 21. Iron Age IIB cooking pot (L462-3) from four-room house in Area 11, Phase XIV (photograph by T. Bürge, drawing by M. Al-Bataineh).

production: spindle whorls, loom weights and shuttles (*Fig. 22*). An extraordinary find is represented by an intact cosmetic palette of limestone (N1470; *Fig. 23a*): the originally white stone has been blackened by the fire which caused the collapse of the burning roof. At Tall Abu al-Kharaz, previously excavated cosmetic palettes derive from Phase XII–XIV contexts, namely 850–732 BC (*Figs. 23b:1*, N1110; *23b:2*, N1314; *23b:3*, N954).[14] An almost exact parallel to the cosmetic palette from this season comes from Phase XIV in Area 1 (see *Fig. 23b:3*, N954). The palettes had a double function: they were—as the name implies—used for grinding and mixing cosmetics (or medicines) which would have been placed in the central depression, but they also functioned as lids for a (perishable) container when turned upside down (see reconstruction in *Fig. 23c*).

To the north of this room are a number of finds which are not connected with any architectural structures. These include an iron dagger (L477-5), an iron arrowhead (N1477) and a juglet (N1474). To the west of this area is a large pit which was dug in Islamic times.

Fig. 22. Textile production tools from Phase XIV, Area 11: loom weight (left), spindle whorls and shuttles (photograph by P.M. Fischer).

[14] Fischer 2013, 535–537.

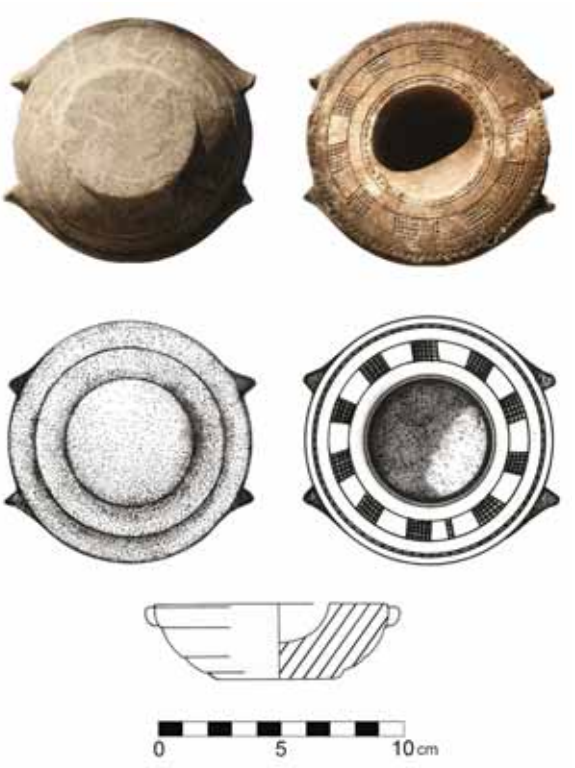

Fig. 23a. Cosmetic palette (N1470) from Phase XIV, Area 11 (photograph by P.M. Fischer, drawing by M. Al-Bataineh).

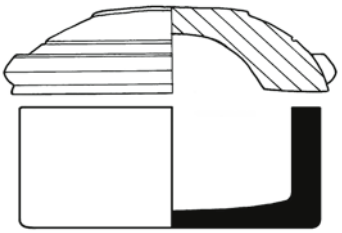

Fig. 23c. Reconstruction of a cosmetic palette used as a lid (drawing by P.M. Fischer).

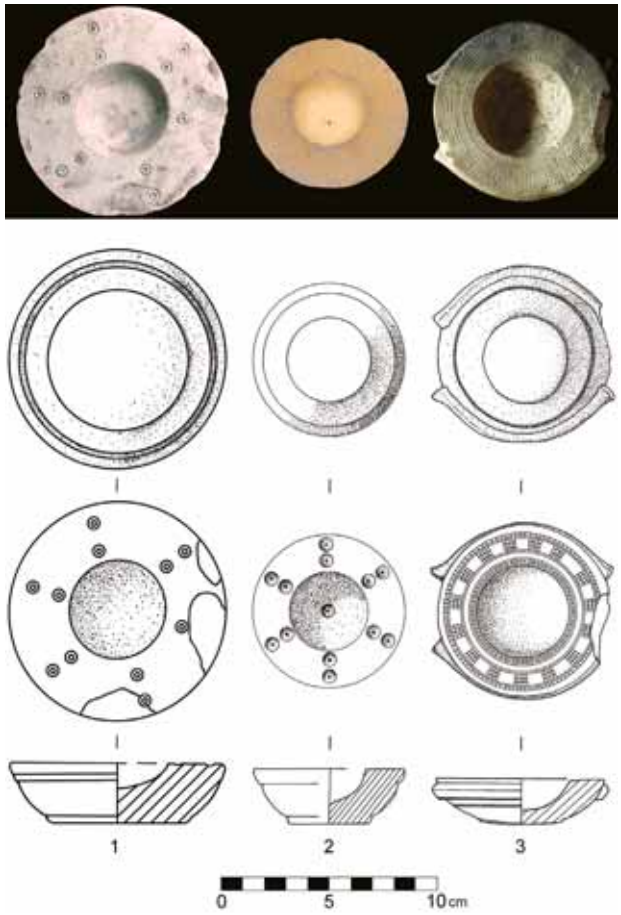

Fig. 23b. Cosmetic palettes from Tall Abu al-Kharaz, Phases XII–XIV. 1: N1110, Phase XII, Area 7; 2: N1314, Phase XIII, Area 7; 3: N954, Phase XIV, Area 1 (photos by P.M. Fischer, drawings by M. Al-Bataineh).

Phase XIII (800–770 BC)

This phase of occupation is represented in Trenches LXIIIA–D and LXIVB and C. The function of several, only partly excavated, walls and stone pavements to the north cannot be interpreted. A small test trench was opened up inside the Phase XIV room (see above). Two remarkable finds were retrieved from below the floor level of Phase XIV: one is a bichrome-decorated jug (N1461; *Fig. 24*)—the first of its kind at the site—and the other is a pierced stamp of limestone with an incised sign (N1479; *Fig. 25*).

Fig. 24. Bichrome-decorated jug (N1461) from Phase XIII, Area 11 (photograph by P.M. Fischer, drawing by M. Al-Bataineh).

Phases IX or X (1100–1050 BC/1050–930 BC)

This period is represented in Trenches LXIIA and B. There is a walled, trapezoidal space bounded by W735, W736 and W742 (*Fig. 26*). This space contained a mortar of limestone, where dark lilac pigmenting on the interior suggests that black olives were crushed there (*Fig. 27*). Another find is an almost complete, typical Iron Age I cooking pot with a triangular rim section (L488-4; *Fig. 28*). Numerous holes made by animals have disturbed much of the context. To the south is another walled space, from which a scarab of turquoise or serpentine derives (N1478; *Fig. 29*).

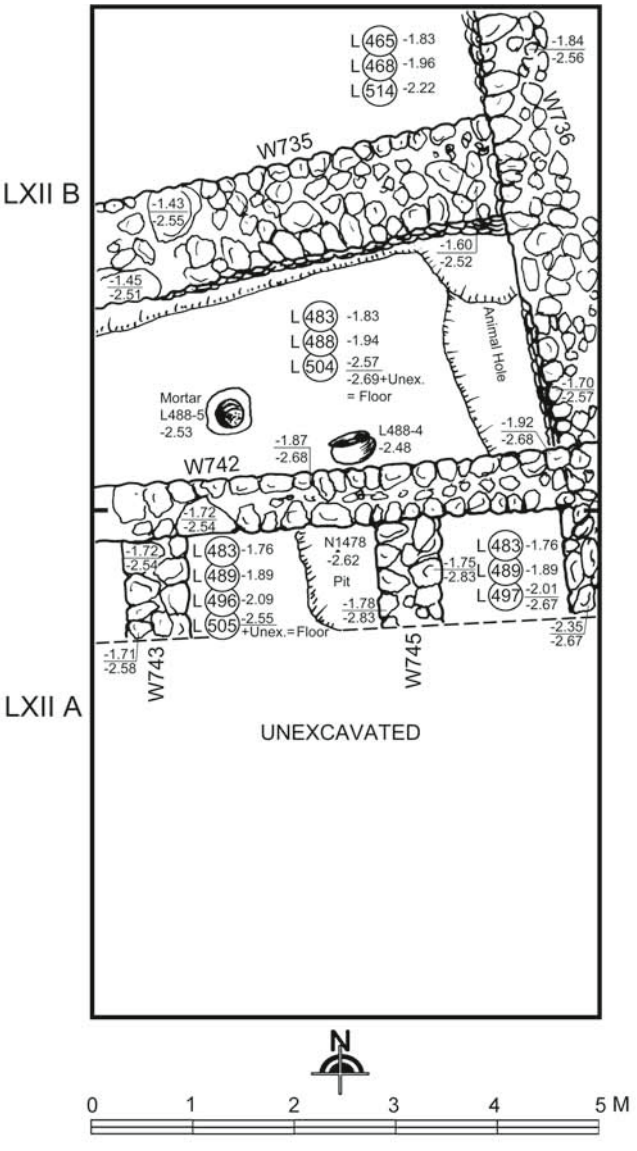

Fig. 26. Area 11: Phases IX/X in Trenches LXIIA and B (drawing by M. Al-Bataineh).

Fig. 25. Pierced limestone stamp with incised sign (N1479) and impression, from Phase XIII, Area 11 (photograph by P.M. Fischer, drawing by M. Al-Bataineh).

Fig. 27. Mortar (L488-5) with traces of lilac colour (from black olives) from Phase X or IX, Area 11 (photo by P.M. Fischer).

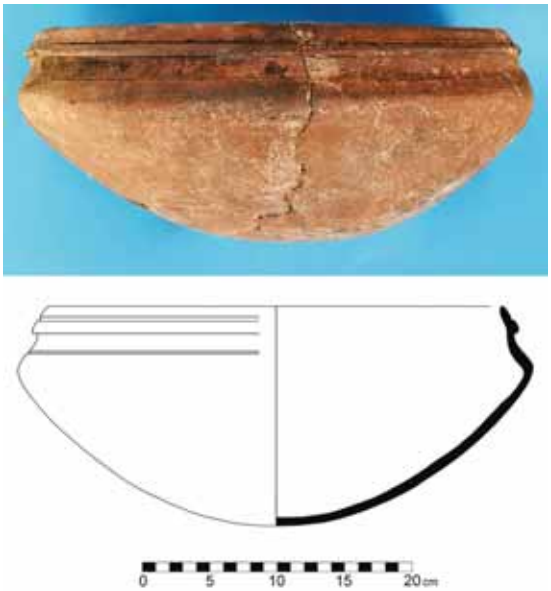

Fig. 28. Iron Age I cooking pot (L488-4) from Phase X or IX, Area 11 (photograph by T. Bürge, drawing by M. Al-Bataineh).

LATE BRONZE AGE

Phase V (1525–1450 BC)

A test trench was dug between the Phase XIII walls W740, W742 and W729. Just below the stone pavement of Phase XIII, a well-preserved domestic context was exposed which contained several complete finds. According to the pottery this context is clearly Phase V, namely the beginning of the Late Bronze Age: there is a Chocolate-on-White Ware juglet with a thick, white, burnished slip and the typical abstract tree motif (triangles) included in a metope decoration (N1472; *Fig. 30*); a frying pan (L521-1; *Fig. 31*); a cooking pot; a storage jar; and a bead of glass. All the finds were embedded in a substantial destruction layer.

Fig. 29. Scarab of turquoise or serpentine (N1478) from Phase X or IX, Area 11 (photograph by P.M. Fischer).

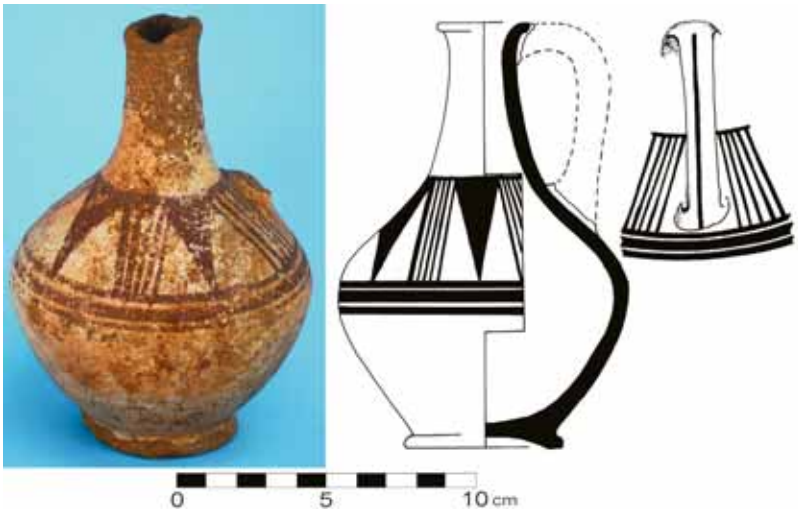

Fig. 30. Chocolate-on-White Ware juglet (N1472) from kitchen of Phase V, Area 11 (photograph by P.M. Fischer, drawing by M. Al-Bataineh).

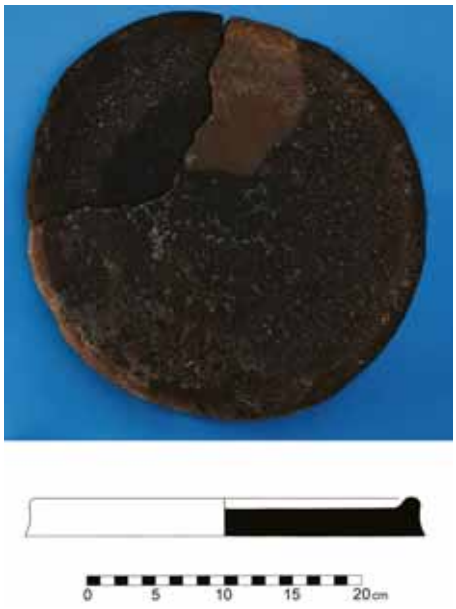

Fig. 31 (above). Frying pan (L521-1) from kitchen of Phase V, Area 11 (photograph by P.M. Fischer, drawing by M. Al-Bataineh).

MIDDLE BRONZE AGE

Phase IV/0 (18th century BC)

From a disturbed context in Trench LXIIA (at a higher level than the loci shown in plan *Fig. 26*) derives a sherd of early Tell el-Yahudiyeh ware, which is the first ever recorded at Tall Abu al-Kharaz (L446-2; *Fig. 32*).

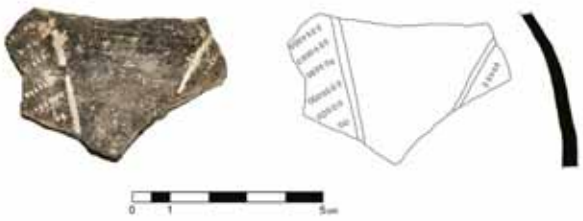

Fig. 32. Tell el-Yahudiyeh ware jar from Area 11 (photograph and drawing by T. Bürge).

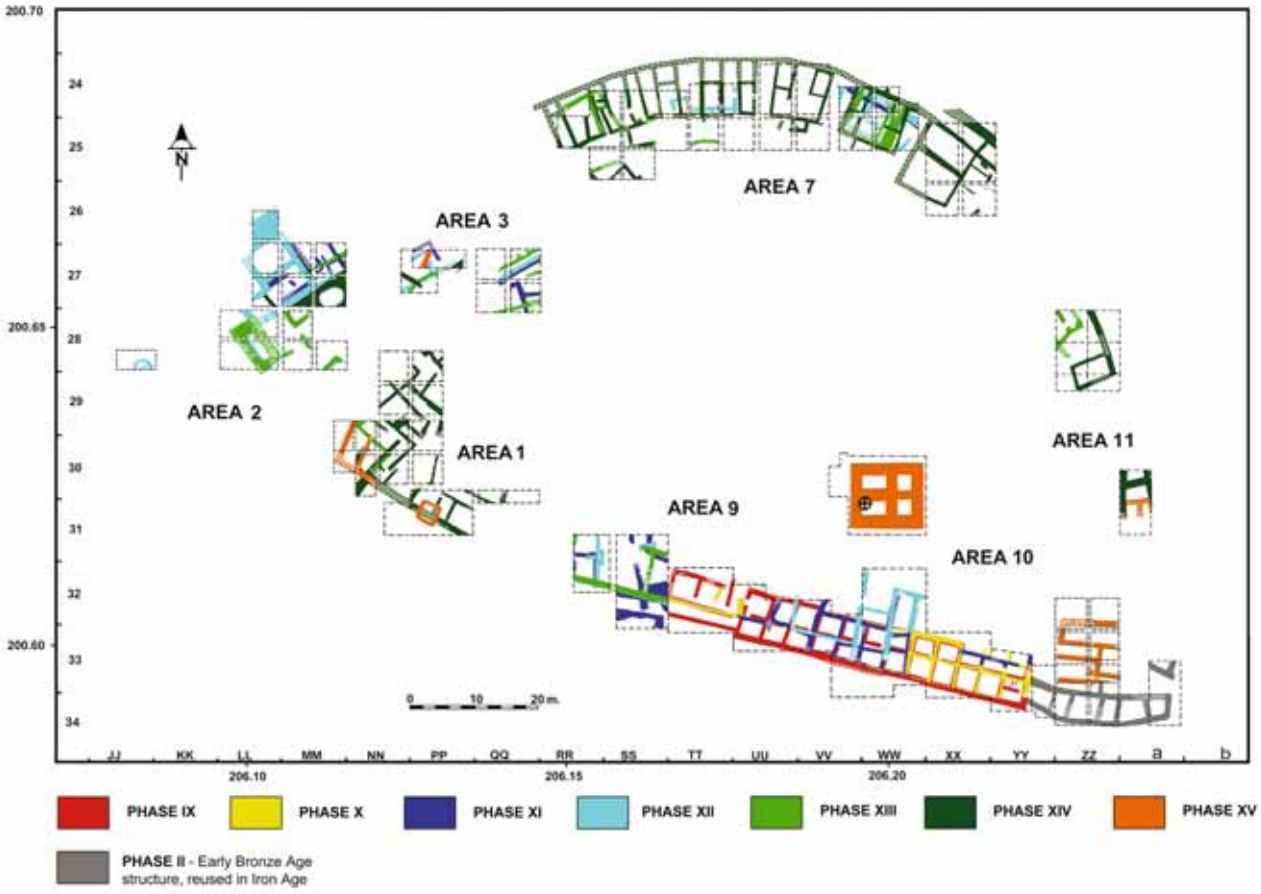

Fig. 33. Schematic overview of all exposed Iron Age structures at Tall Abu al-Kharaz (compiled by T. Bürge).

Conclusions

The main objectives of the 2013 season of excavation at the city of Tall Abu al-Kharaz were fulfilled. The Iron Age occupation, which dates from roughly the 12th to the 7th century BC and corresponds to Phases IX–XV, was further explored. The schematic overview of all exposed Iron Age structures at Tall Abu al-Kharaz can be studied in *Fig. 33*. New insights were gained: one, for instance, is related to the early Iron Age defence structures in Areas 9 and 10; and another relates to the occupational sequence of the hitherto unexplored eastern margins of the city.

It was indeed interesting to find out that around 1100 BC the settlers of Phase IX cut through the entire Early Bronze Age II defence system from *c.* 3000 BC (Phase II) and deposited the foundation walls of their substantial two-storey compound on top of the Early Bronze Age II stone-built city wall. As well as gaining easily accessible building material, the people of Phase IX were also able to use this as a stable surface on which to build their structures. Although originally constructed 2000 years earlier, the Early Bronze Age II glacis, which was reinforced with perpendicular walls—its section being 5 m long and 3 m high[15]—was kept largely as it was designed around 3000 BC, and it became an integrated part of the Iron Age defence system. Excavations to the north-east of the Phase IX compound in Area 11 exposed remains from the Islamic (Abbasid), Byzantine/Late Roman periods, namely 4th–10th century AD, together with Iron Age structures from Phases XI and X, namely 1050–930 BC. There were, however, no additional Phase IX structures, which were obviously removed in later periods.

[15] Three metres in height as preserved. The original height of the Early Bronze Age II defence system has been estimated at 6–8 m, including the superstructure of mudbrick and wood; Fischer 2008, 345.

At the south-easternmost corner of the upper plateau of the tell, an opening in the Early Bronze Age II glacis represents a city gate. The gate is conveniently located at the spot closest to the Wadi al-Yabis, the most important water resource for the people of Tall Abu al-Kharaz during all periods, and it is to be expected that the road to the Wadi al-Yabis started here. Just to the north and inside the Early Bronze Age city wall, an Early Bronze Age II tomb of an infant was exposed. The date is supported by the only tomb gift, a jar of Grain Wash ware. Specific observations during previous seasons, namely that the stone defence system of the Early Bronze Age II was assembled on top of a substantial mudbrick foundation constructed in the preceding period (Early Bronze Age IB), were once again confirmed.

Test trenches were opened in Area 11, with the objective of exploring the easternmost part of the city. These trenches were quite rewarding, considering the small exposed area. Remains from the Islamic (Abbasid) and Late Roman period, and Iron Age and Late Bronze Age were found. The Islamic structures from around AD 900 are domestic in nature. The Late Roman structure from *c.* AD 300 is preliminarily interpreted as a burial place, where three skeletons without tomb gifts were found.

The Iron Age in the test trenches of Area 11 is represented by Phases XIV (770–732 BC) and XIII (800–770 BC). The former revealed part of a probable four-room house with some extraordinary finds: one of these finds is an elaborate cosmetic palette of limestone with geometric incisions, and another is an iron dagger. Other finds are related to textile production. Phase XIII produced a vessel of high quality which is unique at the site so far: it is bichrome-decorated in red and black and has fairly large vertical handles and a pointed base. Our search for close parallels has not been successful.[16] Another find from Phase XIII is a pierced stamp of limestone with an incised "sign". It has not been possible to decipher this as of yet. Nevertheless, it resembles a fish, but it may also be a decorative symbol without any meaning.

At the very end of the season of 2013, a test trench was dug between some of the Phase XIII walls just below a stone pavement from this phase. It seems that all Iron Age phases from XII–IX and the Late Bronze Age Phases VIII–VI are missing, because we hit directly a well-preserved domestic context from Phase V (1525–1450 BC) that corresponds to the beginning of the Late Bronze Age at Tall Abu al-Kharaz. The context contained several complete finds, amongst them a Chocolate-on-White Ware I juglet[17] with a thick, white, burnished slip and the typical abstract tree motif included in a metope decoration in chocolate-brown colour, a frying pan, a cooking pot, and other objects. All finds were embedded in a substantial destruction layer, which confirms our earlier observation that Phase V was destroyed by a severe conflagration that obviously affected the entire city:[18] the same situation was found, for instance, in the westernmost exposed part of the tell, namely in Area 2 which is approximately 150 m to the west of Area 11.

One could assume after 16 seasons of excavations that, in principle, the entire occupational sequence of Tall Abu al-Kharaz and the typology of finds would be well established. Nevertheless, the 2013 season of excavation produced—for the first time ever at the site—early Tell el-Yahudiyeh ware. This find shortens the length of the suggested occupational lacuna between the Early Bronze Age II (after 2900 BC) and the Middle Bronze III (*c.* 16th century BC),[19] because early Tell el-Yahudiyeh ware should be placed in the 18th century BC.[20] In addition, the latest four seasons of excavations brought to light new evidence on the historical periods following the Iron Age, and the beginning of the Iron Age, as well as numerous unique finds which are exciting but, by their very uniqueness, present certain problems in finding parallels.

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[16] However, pottery resembling our vessel is illustrated in Amiran 1970, 249, pl. 83.

[17] See the typology, chronological distribution and provenance (petrography) of the six groups of Chocolate-on-White pottery in Fischer 1999, 2003, and 2006, 268–280.

[18] Cf. Fischer 2006, 372–373.

[19] See Fischer & Bürge 2013, 309, table 1.

[20] We are much obliged to M. Bietak for the typological and chronological classification.

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