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“Sea Peoples” at Tall Abū al-Kharaz, Jordan Valley: New Evidence from the Early Iron Age

Introduction

The site of Tall Abū al-Kharaz, “the Mound of the Father of the Beads” is a 12ha mound which is located in the Central Jordan Valley, north of the perennial Wādī al-Yābis/ar-Rayyān (FIG. 1). The site has an excellent strategic position overlooking and making it possible to control large areas of the Central Jordan Valley from its summit, including Mount Tabor, Nazareth, Beth Shean, Tel Rehov, major parts of the eastern West Bank, and, in Transjordan from Pella to the north down to the area north of Tall as-Sa‘īdiyyah to the south.

To date (Spring 2014) 16 seasons of excavation by the Swedish Jordan Expedition directed by the co-author Peter M. Fischer from the University of Gothenburg have been carried out since 1989, mainly on the upper part of the tell (FIG. 2). Remains have been exposed from the period between *ca.* 3200 and 600 BC (EB IB - IA II) (Fischer 2006, 2008, 2013). There is an occupational lacuna from the end of the Early Bronze Age until the Middle Bronze Age II (Fischer 2013: 516) and another possible lacuna from the latter part of the Late Bronze Age II until the beginning of the Iron Age (TABLE. 1). Tall Abū al-Kharaz was occupied during the Iron Age in seven settlement periods

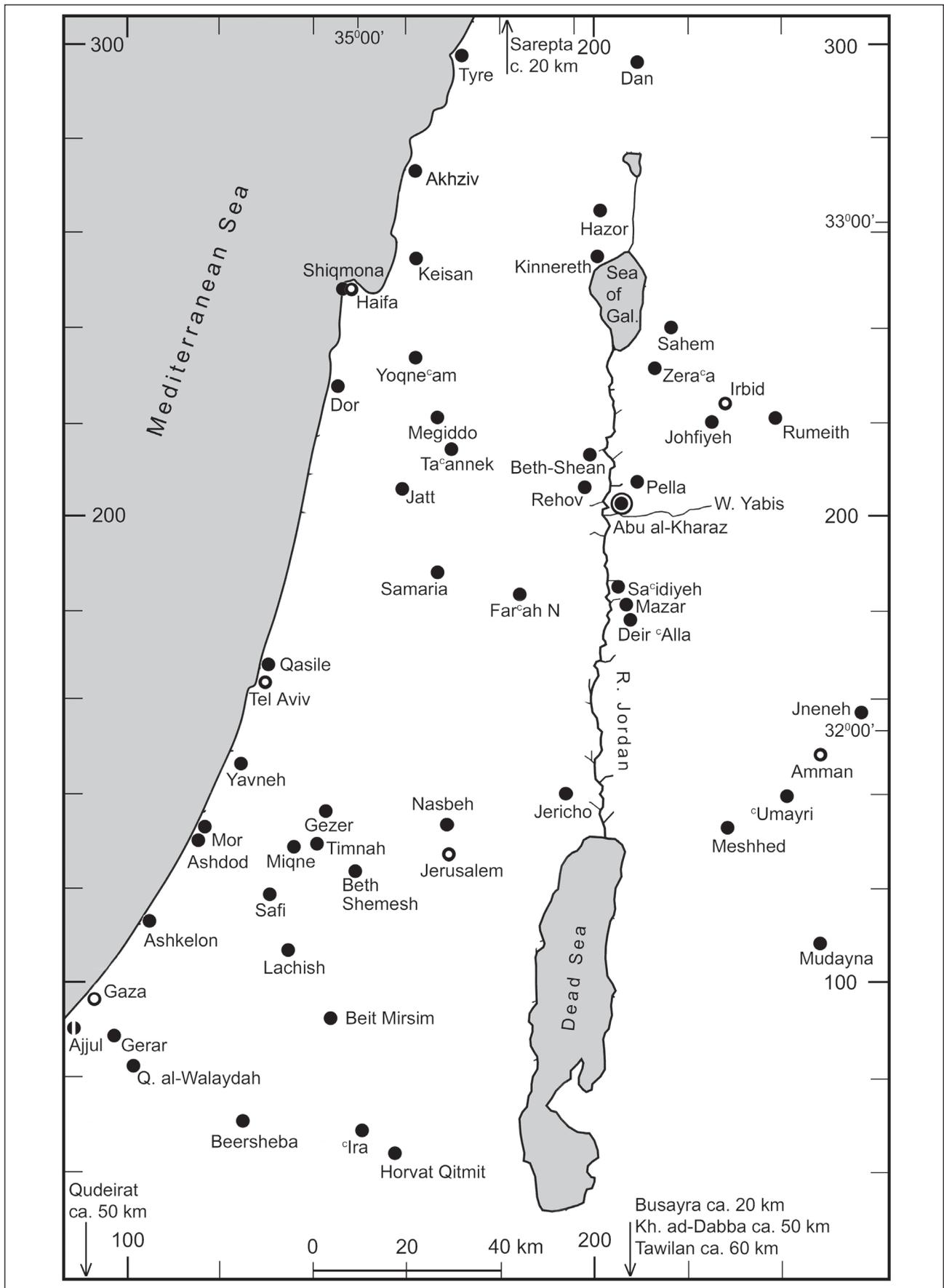
(Phases IX - XV). There is also evidence of post-Iron Age settlements, especially from Roman, Byzantine, Islamic and Mamluk periods.

The description and discussion of the early Iron Age Phases IX and X in Area 9, which were exposed between 2009 and 2013, are the main topic of this paper. These are mainly represented by a two-storey compound more than 60m long, located on the southern edge of the upper part of the tell.

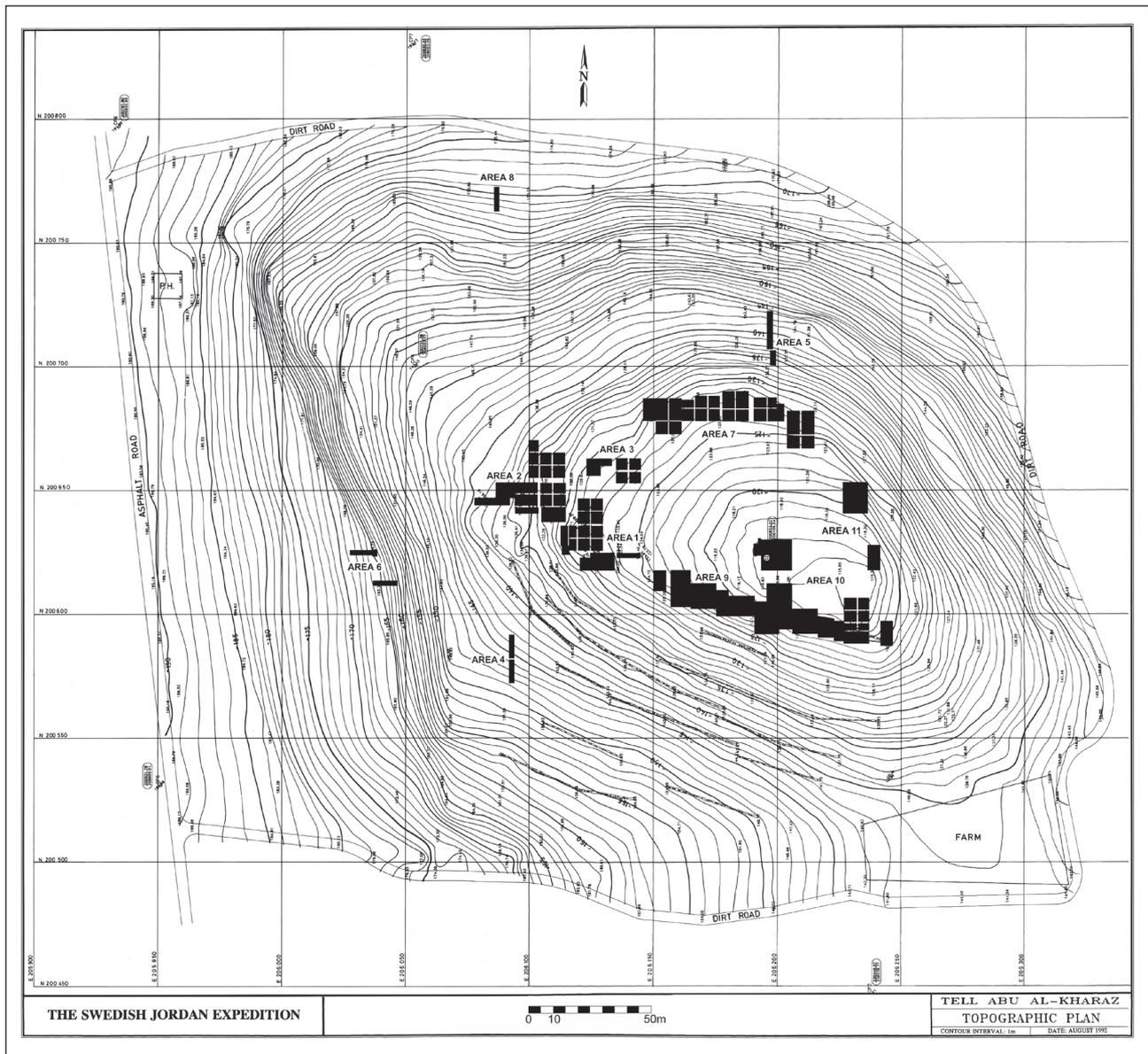
Architectural Layout of the Early Iron Age Remains

The Iron Age settlement of Tall Abū al-Kharaz was protected by a city wall of which large portions in the northern, western, eastern and southern parts of the tell were uncovered. Whilst more substantial domestic buildings, viz. five “four-room houses” from the Iron Age IIB (Phase XIV), were exposed in the northern and eastern part of the settlement, structures from the Iron Age I (Phases IX and X) are mainly present in the southern part of the *tall*. The structures from Phase IX (see FIG. 3), which were either reused or newly built, consist of three portions: 1) A two-storey compound 46m long and 8-10m wide which was built against the city wall; 2) an annex west

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1. The position of Tall Abū al-Kharaz and other selected Iron Age sites in the Southern Levant.



2. Contour map of Tall Abū al-Kharaz with excavation areas (state autumn 2013).

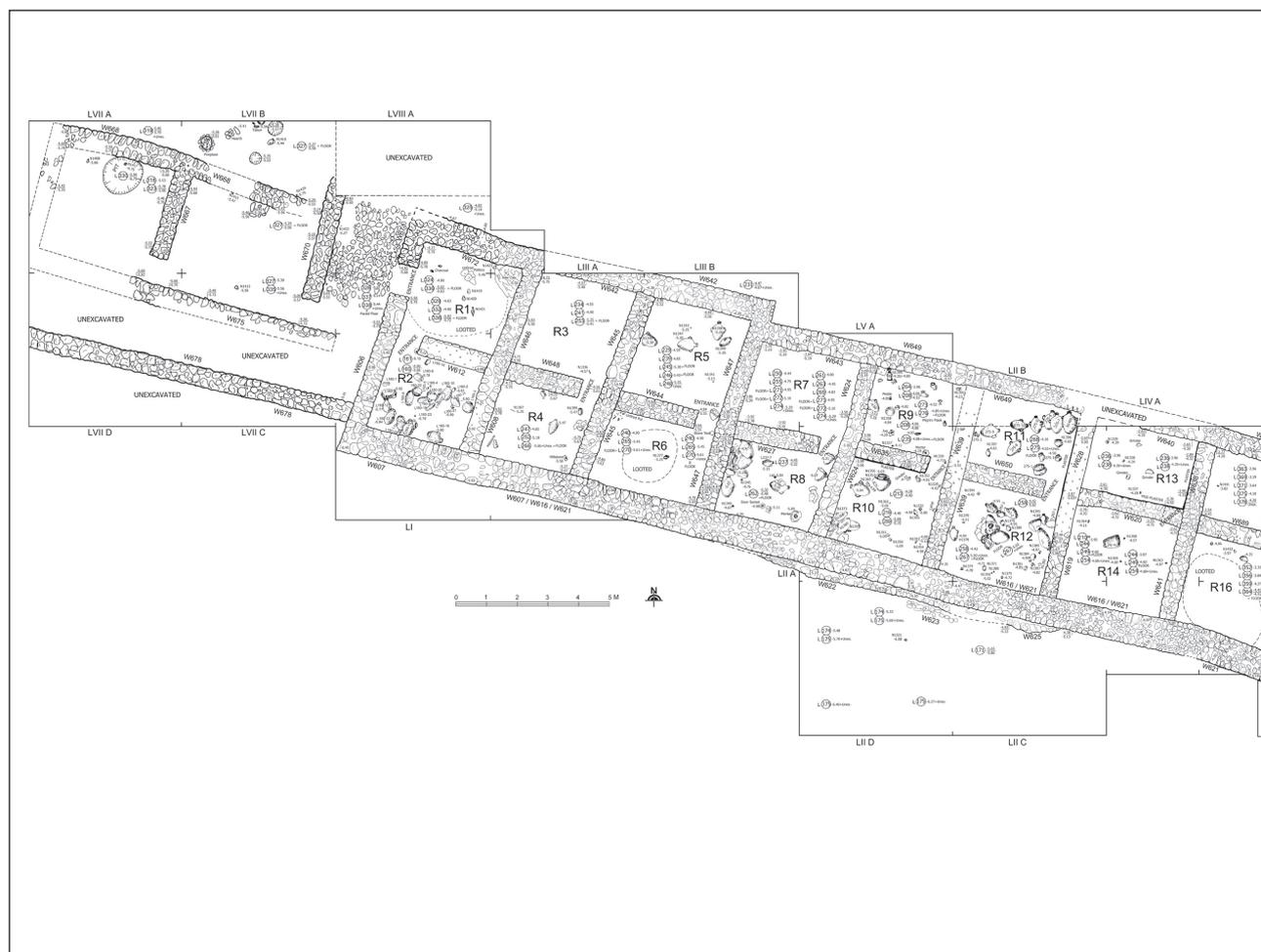
of it, approximately 15m × 10m in size (both in Area 9 East); and 3) a large defence glacis to the east (in Area 10).

The western annex, which is only partly excavated, has at least three walled spaces: Two are of rectangular shape, approximately 3.5m × 3.5/4.5m, and separated from the city wall to the south by a “passage” 1.5m wide. The easternmost space of the annex is approximately 2m wide and at least 5m long and paved with pottery sherds. From here, the “main building” can be accessed via a doorway approximately 1m wide.

The 46m two-storey compound was

extremely well preserved, as it was covered by a layer of debris of fallen mudbricks, wooden baulks, roof tiles, stones and straw, up to 1.2m thick, which functioned as a protecting blanket throughout the millennia. The debris showed traces of intense fire, such as secondary fired mudbricks and ceramics, and carbonized wooden baulks. Some walls of the building had been blackened by the conflagration. The stamped clay floors were covered by a fine ash layer and many finds were covered with soot.

This building consists of 21 rooms, arranged in pairs – except for the easternmost three rooms, which are solitary – to form a cell-plan

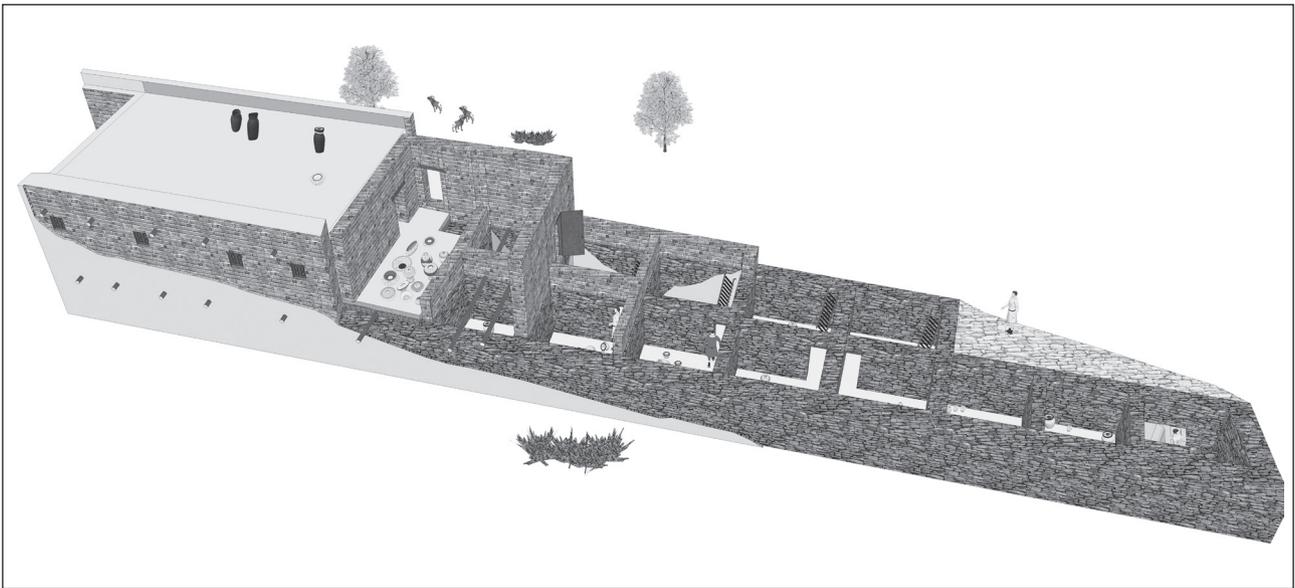


3. The early Iron Age (Phase IX) compound and the defence glacis.

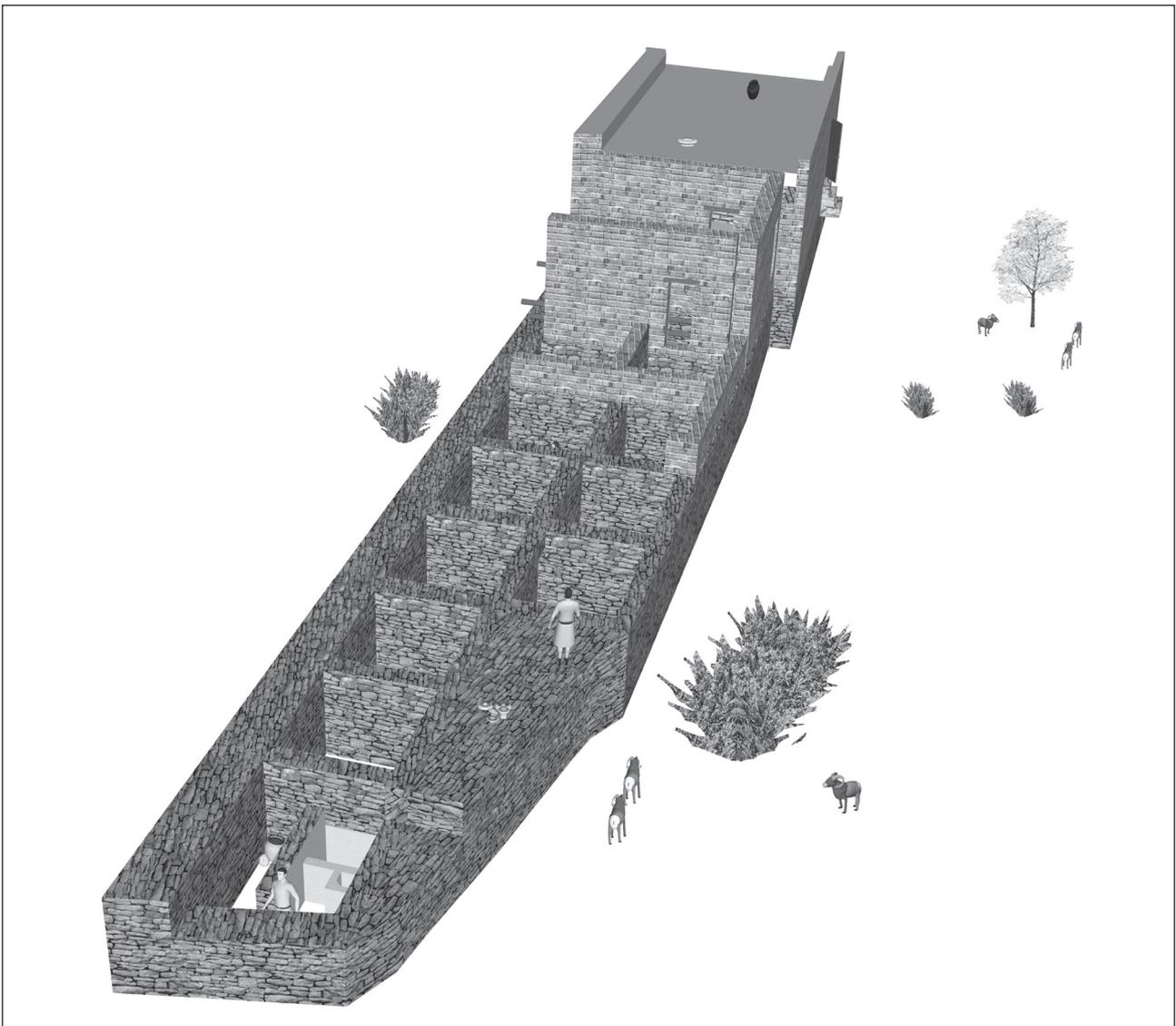
Table 1. Latest Late Bronze Age Phase VIII and Iron Age Phases IX-XV according to radiocarbon dates (see Fischer 2013: 516, table 83).

Phases	Duration BC	Periods ²	Comments
VIII	1350-?	LB IC-II	Scanty remains
Lacuna		LB II	
IX	Around 1100-1050	IA I(A)/B	Flourishing multicultural society, centralized planning
X	1050-930	IA IB/(IIA)	Only regional cultural connections
XI	930-850	IA IIA	Only regional cultural connections
XII	850-800	IA IIA/B	Contacts with Cyprus and Phoenicia
XIII	800-770	IA IIB	Contacts with Cyprus, Phoenicia and the Neo-Assyrian cultural sphere
XIV	770-732	IA IIB/(C)	Prosperous society, contacts with Cyprus, Phoenicia and the Neo-Assyrian cultural sphere, destruction/conflagration by Assyrian invaders likely
XV	732-	IA IIC	Little preserved (on today's surface), impoverished small settlement

2. Periodization according to Fischer 2014: 563, table 37.1



4. Reconstruction of the early Iron Age compound, Phase IX, view from the south (by M. al-AI-Bataineh).



5. Reconstruction of the early Iron Age compound, Phase IX, view from the northeast (by M. al-AI-Bataineh).

perpendicular walls in between, which form a kind of casemate. The spaces between the walls were filled with mud and stones forming a 5m wide, steep glacis. This glacis is built on a substantial mudbrick wall, which probably corresponds to the first city wall of Tall Abū al-Kharaz, dating from the Early Bronze Age IB, *ca.* 3100 BC (see also Fischer 2008: 345; Fischer and Bürge forthcoming).

Organic Remains and Dating

Several kilograms of short-lived organic remains were retrieved from the Early Iron Age compound, most of them inside vessels or spread on the floor. These included wheat and barley seeds, barley flour, chickpeas, millet, twigs, olive stones and dried remains of olive oil. Fifteen samples from Area 9 East, Phase IX, and two samples from the following phase, Phase X (also from Area 9 East), were used for radiocarbon dating. On the basis of these dates it can be concluded that the destruction of the Phase IX settlement must have taken place between 1193 BC and 1049 BC with 2σ (95.4%) probability or between 1128 BC and 1055 BC with 1σ (68.2%) probability (more detailed in Wild and Fischer 2013; Fischer and Bürge 2013). The destruction of Phase IX is therefore not later than 1050 BC. Assuming the use of the compound for some decades a date

for its production around 1100 BC is feasible.

Function and Reconstruction of the Compound

While the western annex and the defence system in the eastern part of the tell contained only a few finds from the Early Iron Age, due to erosion and later occupation and building activities, the “main building” was left alone. It yielded more than 200 intact, complete or reconstructable ceramic vessels, in addition to numerous small finds of stone, metal, bone, and clay. Several clay installations were uncovered, such as two complete ovens (*tananir*; see one in FIG. 6), additional fragments of ovens and two smaller complete and partly preserved heaters. Room 21A (FIG. 7), the northern part of the easternmost room, contained a structure made of two mud-clad clay containers with volumes of approximately 1000 litres and 260 litres (see a similar structure in Dor, Area G, Phase G/9, Late IA1a; see Sharon and Gilboa 2013: 407, figs. 10 and 11). Barley and wheat seeds were found in both containers, which indicate that these were used for the storage of grain.

The corpus of ceramic vessels from the two-storey compound include in principle all standard vessel types, including bowls, chalices, goblets, kraters, juglets, jugs, pilgrim flasks, jars/storage jars, pyxides, lamps,



6. Tannur with preserved handle from the Phase IX compound.



7. Rooms 21A (with silos) and 21B.

cooking vessels, a baking tray or frying pan, and an ‘incense stand’. Vessels whose main function was storage, *i.e.* jars and storage jars, are represented by 22.9 % of the total amount of pottery. The second largest group of vessels is cooking vessels at 19.9 %. Chalices, goblets, juglets, pilgrim flasks and pyxides together represent 15.4 % of the total amount, jugs and a strainer jug 13.4 %, kraters 11.9 % and bowls 10.9 %. The remaining 9.5 % either belong to more than one functional group or do not belong to any of the functional groups and comprise lamps, miniature bowls and juglets, and the ‘incense stand’.

The preliminary percentage frequencies of functional groups of vessels within the total amount of vessels from Phase IX and the evidence of a grain silo in Room 21A indicate that storage was one function of the building. However, the large amount of cooking vessels, kraters, jugs, etc., hints also at activities related to food preparation and consumption. Several

spindle whorls and loom weights point to textile production, and a depot of fine raw clay in the north-westernmost room indicates that pottery production took place in the compound.

Parallels - Architecture

This cell-plan structure of Phase IX has no exact parallels in the Early Iron Age southern Levant. A remotely similar structure comes from Kinneret, Stratum V (Münger et al. 2011). The compound from Kinneret is dated to the later part of the Iron Age IB according to the excavators (*ibid.*: 75-77), *i.e.* the later part of the 11th century (Pakkala et al. 2004: 19) or the first half of the 10th century (Münger 2005: 400). This compound also has a kind of cell-plan layout, but the ground plan is trapezoid and not as regular as the building from Tall Abū al-Kharaz. Another difference is that the former is not built against the city wall because there is a space of at least 5m between the compound and the city wall (see Münger et al. 2011: 75,

fig. 9). The date of the Kinneret compound is in any case somewhat later than that of Tall Abū al-Kharaz, Phase IX (see below).

The regular layout with the standardized rooms and doorways of the Early Iron Age two-storey compound of Tall Abū al-Kharaz is evidence of a centralized planning of at least this part of the town, which implies an organized and rather complex society. Our compound is very different from other house types of the Early Iron Age southern Levant, where there are diverse types of houses, such as “four-room houses” (e.g. Tall al-‘Umayrī, late 13th/early 12th centuries, see Clark 2003; Herr 2009; Beersheba Stratum VII, late 11th/early 10th centuries, see Herzog 1984: 51, 79, fig. 34; both examples are also built against or incorporated in the city wall) or other houses with courtyards, where the spaces have varying sizes.

One reason for this special layout might be the topography of the *tall*: The compound is built mainly on earlier city walls (see above) but also directly on the bedrock, which rises like a step north of the compound. Consequently, there was no space to build the compound wider than 8 m. In the eastern parts there was no space to continue the northern row of rooms because of the superficial bedrock. Therefore the easternmost three rooms are solitary rooms in line with the southern row of rooms. However, a totally new architectural layout with no forerunners in previous periods may also hint at the arrival of new settlers at Tall Abū al-Kharaz in the beginning of the Iron Age who brought their building traditions with them. Another interpretation is that the Phase IX compound is an *in situ* invention.

Parallels - Finds

The spectrum of ceramic shapes and non-ceramic objects is vast. The majority of finds follow Canaanite traditions, but there are also some objects that show foreign influences.

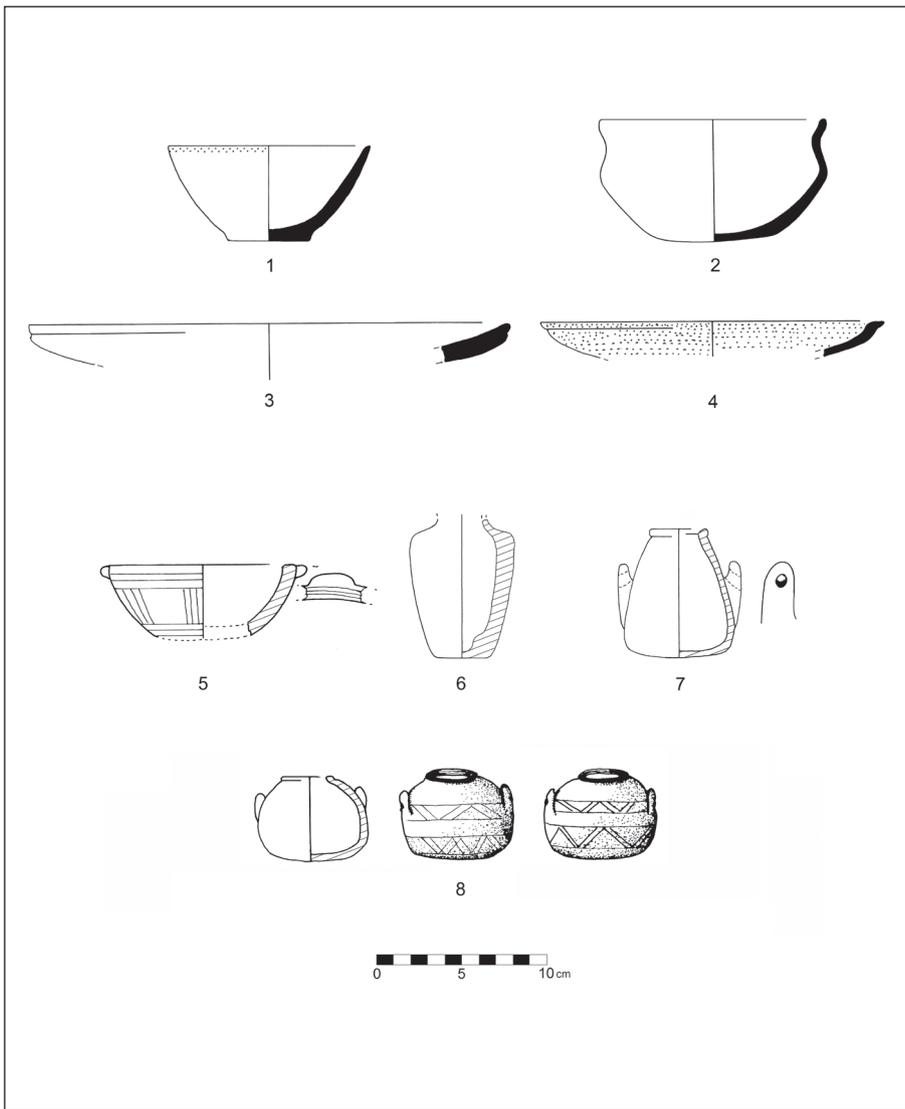
Finds with Egyptian Influences

There are several bowls with rounded and straight walls (see FIG. 8:1-4), which resemble Egyptian-type bowls from Beth-Shean (see types in Martin 2009: 435, fig. 6.1, BL70a, c) from the 12th century (from Strata S5-S3; see Mazar 2009: 13, table 1.2): One of our bowls (FIG. 8:1) is painted with a red band on the rim, a feature which typically occurs on Egyptian or Egyptian-style bowls (see Martin 2009: 441). However, the fabric of the Egyptian-type bowls from Tall Abū al-Kharaz is not different from locally made bowls, which is congruous with the so-called Egyptian or “Egyptian-style” pottery from Beth-Shean: these, too, were locally produced, imitating Egyptian counterparts (Martin 2009: 438).

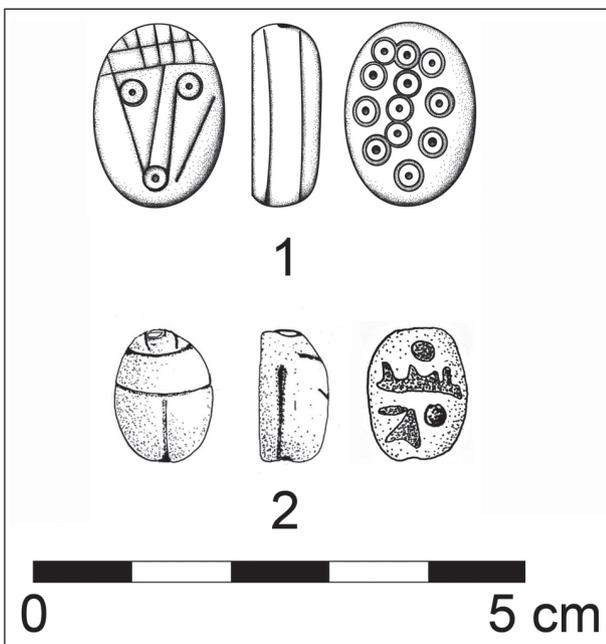
There are several alabaster vessels in the Phase IX compound³. One is a hemispherical bowl with a bar handle and incised metope pattern and grooves on the rim (see FIG. 8:5). A plate of gypsum with a similar bar handle and incised decoration is from Tall as-Sa‘īdyah (see Sparks 2007: 119, fig. 44:1; dated to the 12th century). Another parallel, but made of clay, comes from Megiddo Stratum VIB (see Finkelstein et al. 2000: 253, fig. 11.6:5). Another alabaster vessel is a small-shouldered jar (FIG. 8:6), which has no ceramic counterparts at Tall Abū al-Kharaz. The shape appears in the Middle Bronze Age as an Egyptian import (see Sparks 2007: 47, fig. 13:2 and cat. 401-416) and was imitated in southern Levantine gypsum workshops (Sparks 2007: 108-109). Two more alabaster vessels are pyxides (FIG 8:7-8), of which one has an incised zigzag decoration. The pyxis shape is not uncommon during the Early Iron Age in the southern Levant (see below). In summary, it is likely that none of the vessels were imported from Egypt, but that they come rather from other parts of the southern Levant. Sparks (2007: 158, fig. 58) pointed out that there is a gypsum deposit in the Jordan

3. The term alabaster is used here as umbrella term for gypsum-alabaster (calcium sulphate) and calcite-alabaster (calcium car-

bonate), since material analyses have not yet been carried out (see also the discussion in Sparks 2007: 159-160).



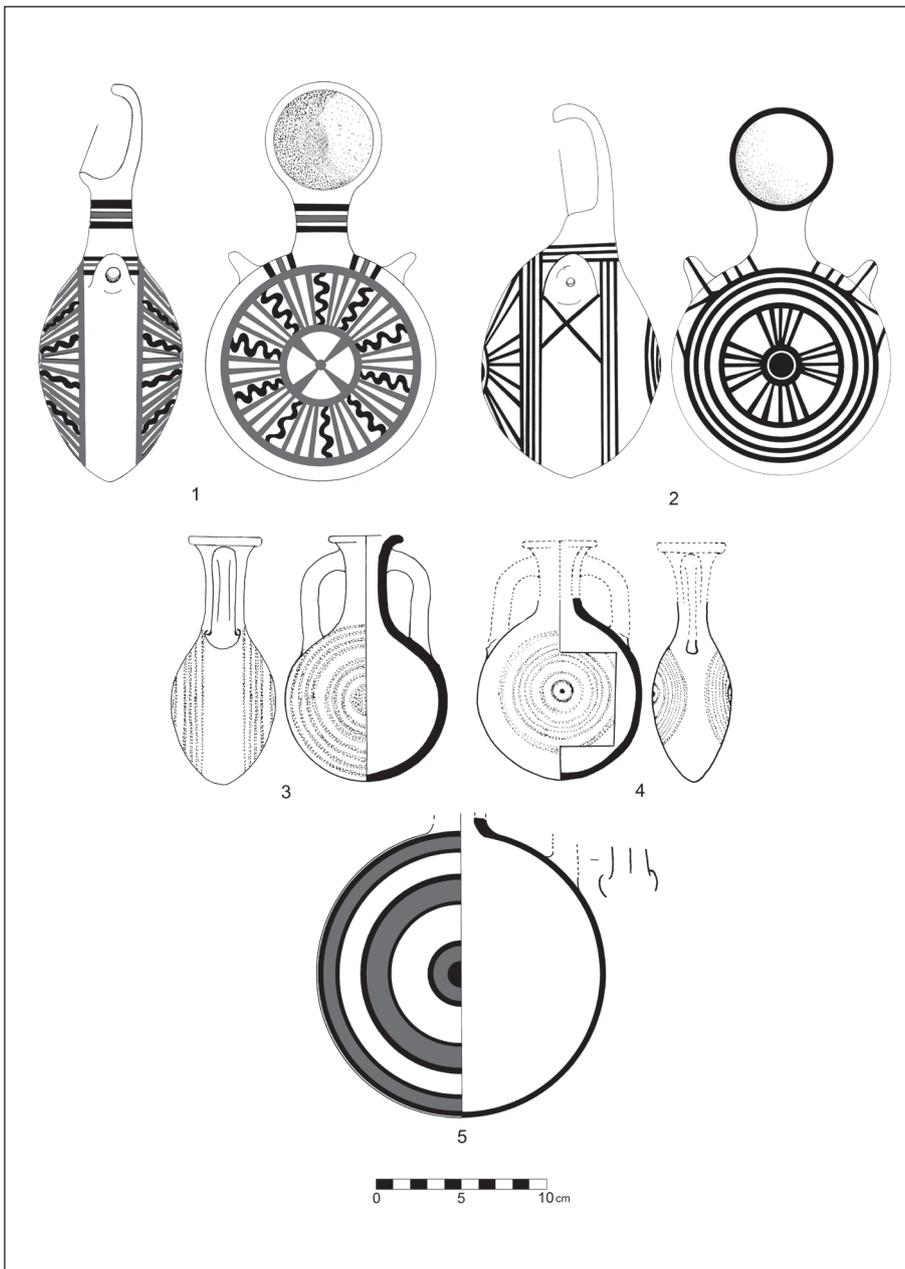
8. Finds of pottery and alabaster with Egyptian influences from Phase IX.



9. Scarab and scaraboid from Phase IX.

Valley, 18km north of Beth-Shean, which was used during the Late Bronze and the Iron Ages, another one is in Wādī az-Zarqā’.

A scarab of faience is incised with the probable throne name of Thutmosis III (FIG. 9:1). The scarab belongs to a group of mass-produced scarabs from the Iron Age IB onwards, which originate from Tanis in the Nile delta (see Keel et al. 1990: 205; Münger 2005: 395, 400). A scaraboid of steatite (FIG. 9:2) depicts the stylized head of a horse on the upper side and twelve drilled circles on the lower side. Our scaraboid is unique and has no close parallels. One very worn scarab from Tall al-Fār‘ah South (dated to the 19th-20th Dynasty; see Keel 2010: 422-423, no. 947) has some common features: The upper part of the object is almost identical



10. Pilgrim flasks and globular jug with Aegean and Phoenician influences from Phase IX.

to ours with linear straight lines (for the horses’ mane?), two drilled circles with a dot in the middle (the eyes?) and five circles with dots on the base. The scaraboid from Tall Abū al-Kharaz is most likely “locally” produced.

Although a presence of Egyptian-influenced objects in the Phase IX compound of Tall Abū al-Kharaz is obvious, all of these objects were most likely produced in the southern Levant.

Phoenician influences

A globular jug with a double handle and bichrome decoration (FIG. 10:5) is certainly

an import. It has a decoration of concentric red bands enclosed by black lines and a neck ridge. The upper part of the neck and the rim are not preserved. The thin fabric is very fine and the surface burnished. There is, for instance, a parallel from Tyre, Stratum XIII-1 (Bikai 1978: pl. XXXIII:25, dated to after 1070/50 BC; revised to 1100-1050 BC, see Schreiber 2003: 208; NúñezCalvo 2008: 83, fig. 33.).

At least two of our pilgrim flasks (FIG. 10:3-4) have counterparts in Phoenicia (see *e.g.* Bikai 1978: pl. 37:3 but undecorated; also NúñezCalvo 2008: 83, fig. 33), and occur frequently in Early

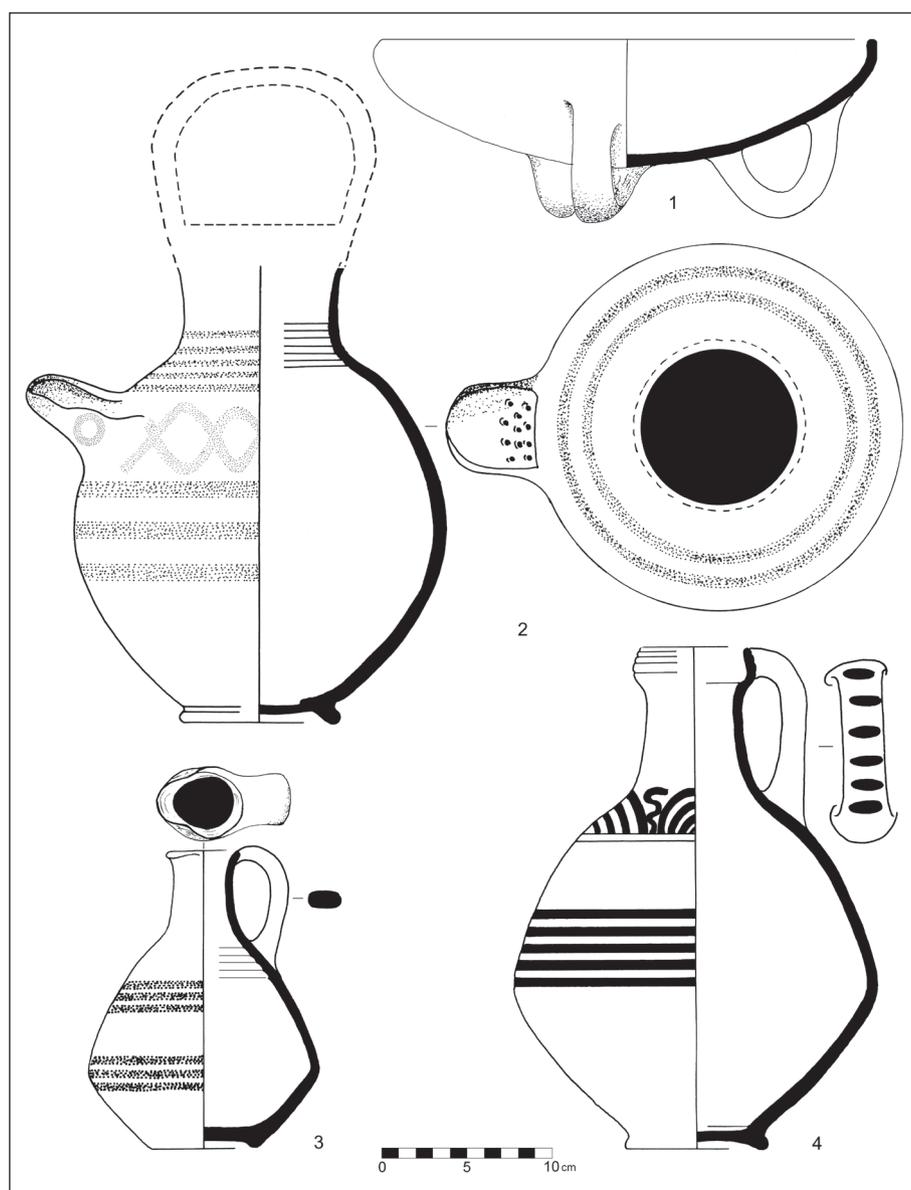
Iron Age strata of the southern Levant (see *e.g.* Tel Dor and Tel Keisan; Gilboa *et al.* 2008: 128, fig. 5:1-3, dated to the late 11th/early 10th century; see *ibid.*: 133-134.; or Tel Mor, see Barako 2007: 121, fig. 3.29:4, Stratum III, later part of IA IB). We suggest that these small pilgrim flasks are imports from Phoenicia.

Philistines/Sea Peoples and Connections to Cyprus and the Aegean
Fine Tableware

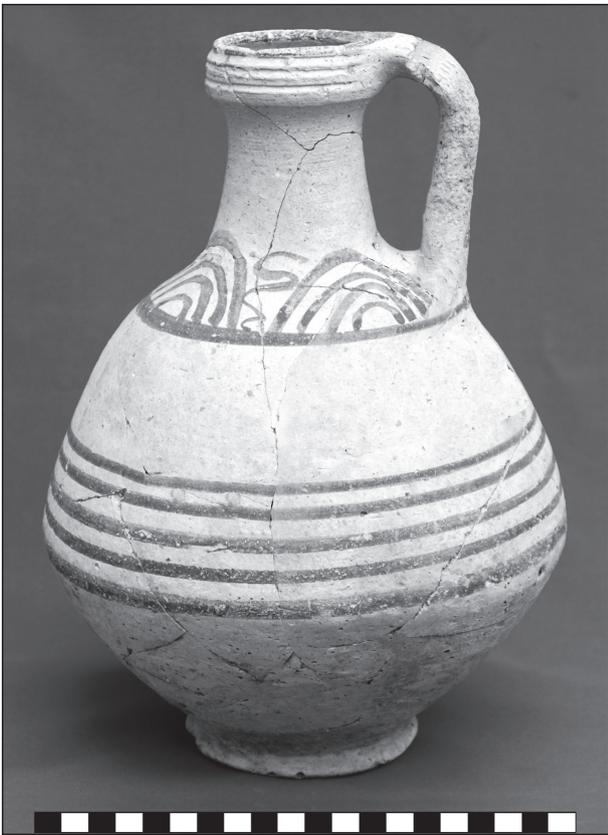
There are several vessels that have parallels in the Eastern Mediterranean in terms of shape, surface treatment and decoration. One is a white slipped bowl standing on three loops (FIG. 11:1).

Loops as vessel supports already occur in the Middle Bronze Age (*e.g.* at Dan in “MB IIB”; Biran 1994: 100, fig. 67:6.) and reappear again in the Early Iron Age, *e.g.* at Tel Qasile (Mazar 1985: 221, fig. 40:2.), Megiddo (Finkelstein *et al.* 2000: 253, fig. 11.6.11) and with ‘Philistine-style’ decoration with zigzag lines and ladder motifs at Tall Dayr ‘Allā (Franken 1969: 190-191, 245, fig. 52:4; pl. XIV). The white slip is a common trait in Philistine pottery.

Another example is a jug with thick white slip and red painted horizontal bands, concentric arcs and wavy lines on the shoulder, belly and handle (FIGS. 11:4 and 12). The decoration is related to vessels from the end of the Late



11. Bowl and jugs with Aegean/Philistine influences from Phase IX.



12. Jug with white slip and Aegean-type decoration from Phase IX.

Helladic and Late Cypriot Bronze Age from the Aegean sphere (e.g. on a Submycenaean Lekythos, FS124; Mountjoy 1986: 198, fig. 263), Cyprus (e.g. a stirrup jar from Hala Sultan Tekke; Fischer 2012: 94, fig. 3:1.) and Philistia (see, for example, compilation in Dothan 1982: 118-143). A similar jug with a thin white slip and simple band decoration on the belly (FIG. 11:3) should also be mentioned.

A strainer-spouted jug with a basket handle⁴ (FIG. 11:2) is a mixture of local Canaanite shapes and influences from the Eastern Mediterranean, such as the basket handle and the strainer spout. These characteristics occur, for example, at Ashdod (Dothan and Porath 1993: 175, fig. 15:10 from Stratum XIIIb, dated to the early 12th century; Ben-Shlomo 2005: 102-103, fig. 3.25 from Stratum XII, dated to the 12th century), Tel Qasile (Mazar 1985: 95-96, 211, fig. 35:1, from Stratum X, dated to the second

half of the 11th century), Megiddo (Loud 1948, pl. 82:1, 2, 4, Strata VIIIB-VI, dated to the 12th century) and the Aegean during LH IIIB-IIIC and Cyprus during LCIIIA-IIIC (FS 159: cf. Mountjoy 1986: 203; see Killebrew 2000: 240).

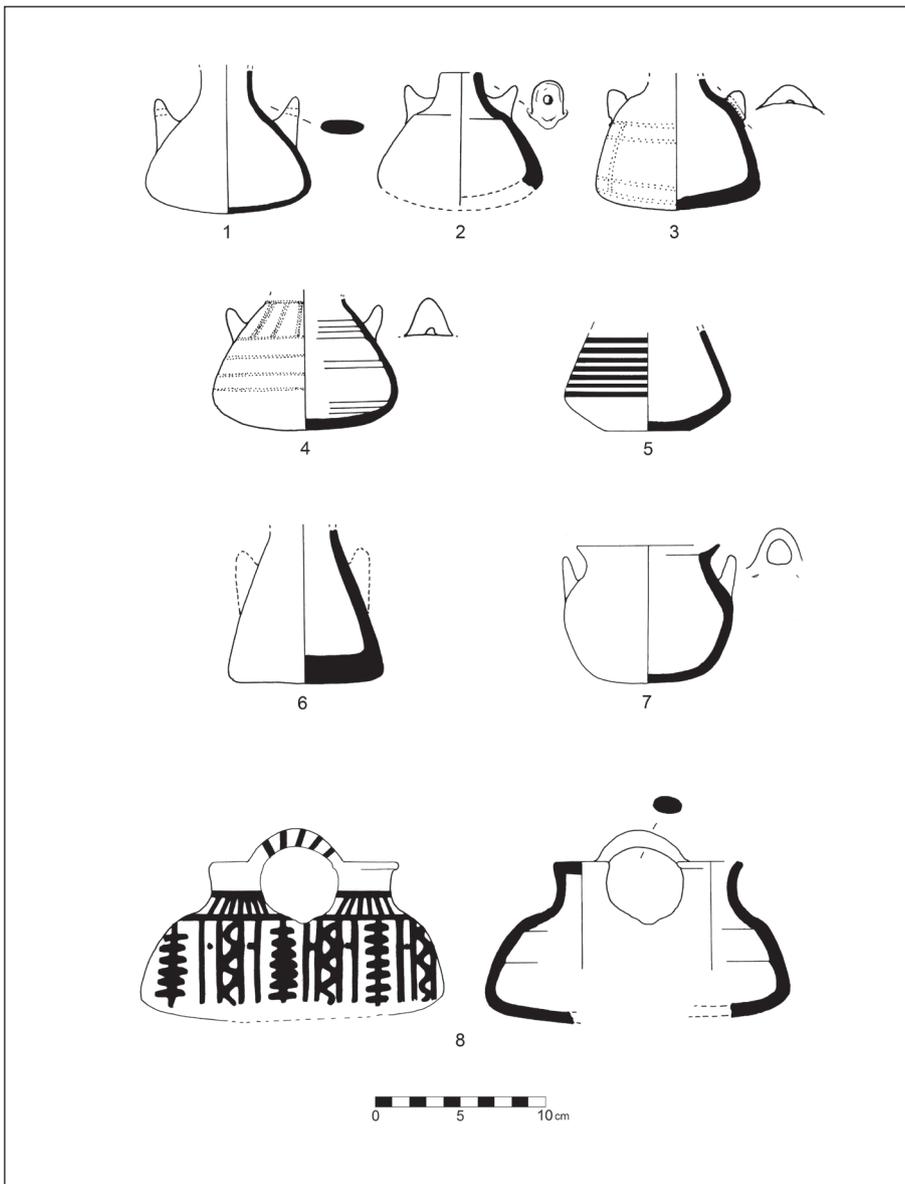
Pyxides represent a class of vessels of Aegean origin which are common finds, already locally imitated in Transjordan in the Late Bronze Age. It is, however, noticeable, that there are eight pyxides in the Early Iron Age compound of Tall Abū al-Kharaz (FIG 13), which is quite a high number. One of these pyxides is in fact a double-pyxis with one false spout (cf. the Aegean-type stirrup jar) and a basket handle connecting the two vessels at their rims (FIGS. 13:8 and 14). It is decorated with a metope pattern of stylized vertical zigzag and wavy lines enclosed by vertical lines. The vessel type is related to the ‘rounded alabastron’ in the Aegean repertoire (FS 86). Composite vases were common in the Mycenaean sphere of culture, e.g. in Perati (dated to Late Helladic IIIC Middle, i.e. around 1100 BC; see Mountjoy 1986: 170, fig. 217).

There are also two pilgrim flasks with cup mouths: one is bichrome-painted with framed wavy lines, concentric circles, parallel bands and a ‘Maltese cross’ in the centre (FIG. 10:1). The other is monochrome-painted with several concentric circles, parallel and crossing bands and a centrally placed wheel-spoke pattern (FIG. 10:2). The ‘Maltese cross’ on the bichrome vessel is frequently used on vessels in the Philistine and neighbouring regions (see e.g. Ben-Shlomo 2010: 160-161, fig. 3.90:7). A very close parallel comes from Megiddo Stratum VIB (see Loud 1948: pl. 74:16). The monochrome pilgrim flask has a parallel in Yoqne’am Stratum XVII (second half of the 11th century BC; Zarzecki-Peleg 2005: 71, fig. I.24:2).

Cooking Pots

Two-thirds of the cooking pots from Tall Abū

4. The handle is not preserved but it can be deduced that it was a basket handle, as there are no other remains of handles on the shoulder or neck.



13. Pyxides from Phase IX.

al-Kharaz, Phase IX, are of the local wide-open shape with a triangular rim (FIG. 15:1), typical of the Early Iron Age and developed from Late Bronze Age cooking pot types. The other third has a closed, jug-like shape, two handles and a rounded base (FIG. 15:2-5). The latter cooking pot type has its roots in the 12th century Aegean, and spread from there to Cyprus and Philistia (Yasur-Landau 2010: 126-130). The cooking jugs in the Aegean, Cyprus and Philistia have however disk bases (see types in Yasur-Landau 2010: 128-129, 232), while our cooking jugs with rounded bases can be regarded as an amalgamation of foreign and local traits, *i.e.* the closed shape and the rounded base respectively.

Such hybrid types appear towards the end of the Iron Age I and become more frequent during the Iron Age II in the southern Levant (*cf.* Ben-Shlomo et al. 2008: 229-232). The sudden appearance of a new type of cooking vessel indicates a change of cooking habits and may point to immigration. It is not likely that these cooking pots were imported.

A part of the Early Iron Age pottery from Tall Abū al-Kharaz shows considerable influences from the Aegean, Cypriot and Philistine spheres of culture. However, there are no direct imports from the Aegean or Cyprus but rather combinations of different – local and foreign – traits and it is very likely that all these vessels



14. Double-pyxis from Phase IX.

were produced locally or at least in the southern Levant.

Other Objects

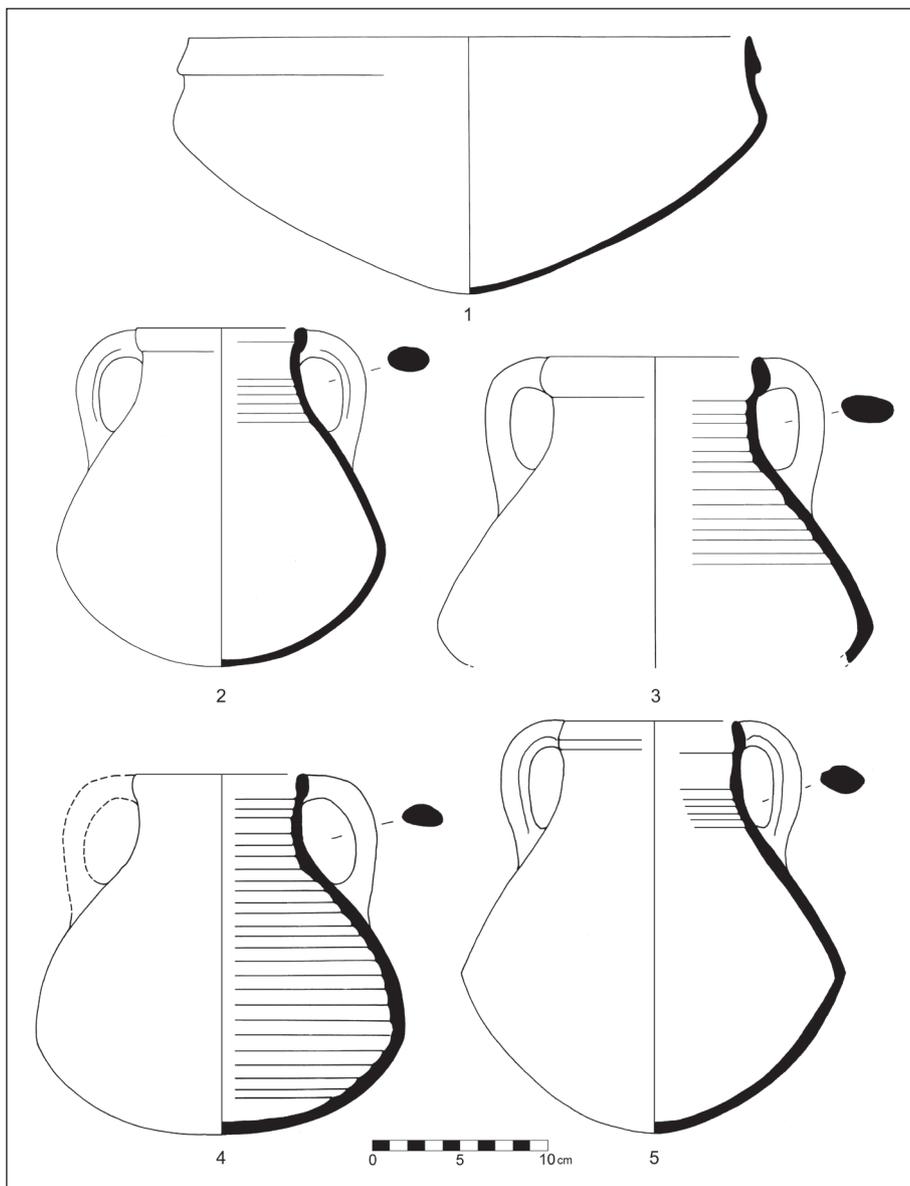
While the loom weights in the Iron Age are doughnut-shaped of unfired clay, this type does not appear in the Early Iron Age, Phase IX, at Tall Abū al-Kharaz. In contrast, all loom weights from this phase are cylindrical or spool-shaped and made of unfired clay (FIG. 16). An exception is a cylindrical loom weight of stone with incisions around the central part in order to fasten the thread (FIG. 16:4). Cylindrical and spool-shaped loom weights of unfired clay were also used in Late Helladic IIIC Tiryns and other contemporary sites on the Greek mainland (Rahmstorf 2003). They appear eventually in Cyprus, *e.g.* at Kition (Karageorghis and Demas 1985: pl. 201) and Maa-Paleokastro (Karageorghis and Demas 1988: pl. 189.) during the Late Cypriot IIIA period (roughly 12th century) and Philistia (*e.g.* Ashkelon: see Stager 1991: 36-37; Ashdod: see Dothan and Porath 1993: 64, 193, figs. 24:3-5,

pl. 39:4; Tall aṣ-Ṣafi / Gath: see Cassuto 2012, 469-470 and Tel Miqne/Ekron: see Shamir 2007: 44, fig. 1). Similarly, the appearance of new cooking pot shapes, new shapes in loom weights all indicate a break with old traditions and changes in weaving processes.

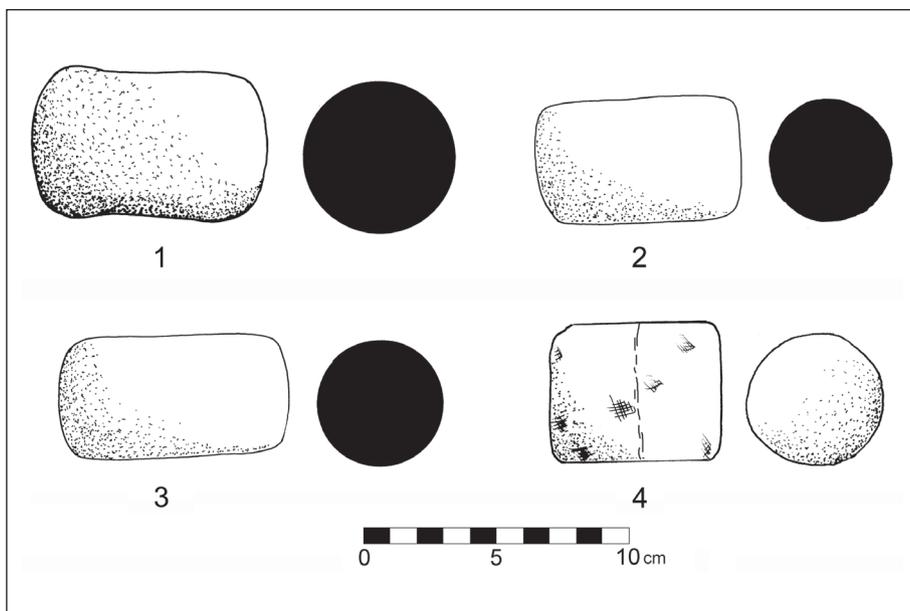
Amongst the few metal finds from Phase IX (mainly spear heads and two toggle pins) is also a part of a bronze wheel which originally had eight spokes (FIG. 17). Wheels such as these have been found at Tel Qasile, Stratum XII (dated to the mid 12th century; Mazar 1986: 13-14, Fig. 6:4) and Tel Miqne/Ekron (Dothan 2002: 4-8). Similar wheels from Cyprus are parts of four-wheeled stands (see *e.g.* Catling 1964: 207-208, pl. 35a-d; discussion and further references in Fischer and Bürge 2013). It is not unlikely that the tradition of making miniature wheels originates from Cyprus. However, the function of these stands remains unclear and it is doubtful if all the retrieved wheels or fragments of wheels can be reconstructed as parts of four-wheel stands.

Conclusions

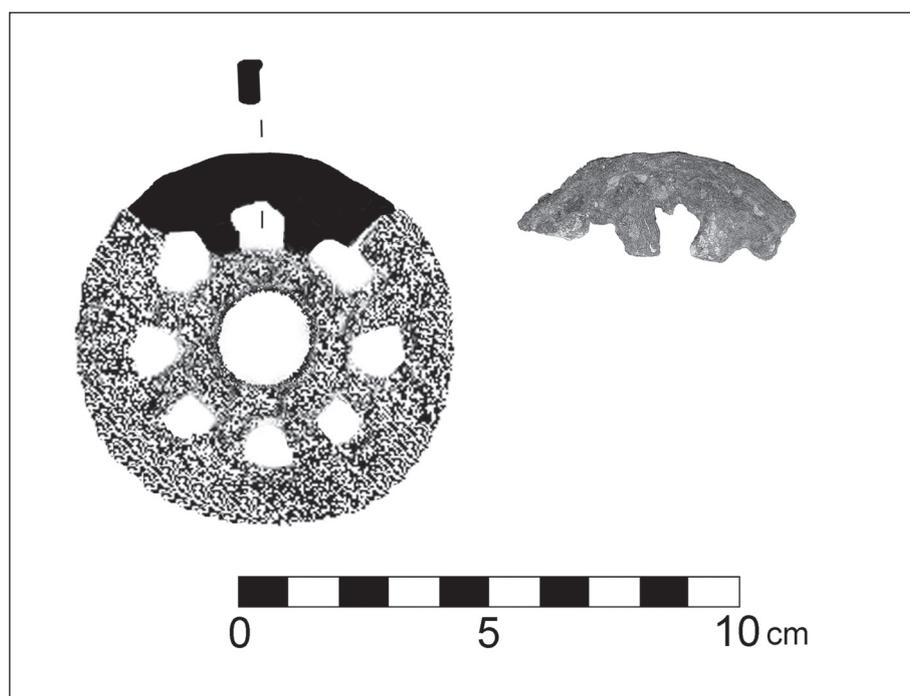
While the occurrence of foreign-influenced fine tableware and other ‘precious’ objects from Egypt, Phoenicia, the Aegean, Cyprus and Philistia may well be explained by trade, in contrast, the new cooking pot and loom weight shapes point rather to the arrival of new ethnic groups. It seems that a group of people with different cooking habits and a modified weaving technique were living at Tall Abū al-Kharaz in symbiosis with the local population. This hypothesis is supported by several find contexts: objects that break with local tradition are, for instance, the closed-shaped cooking jugs and the cylindrical loom weights. These are distributed randomly in the compound and appear side by side with local pottery, *e.g.* with the standard open-shaped cooking pots, in the same rooms. A possible explanation is that (female?) small numbers of the Sea Peoples reached Tall Abū al-Kharaz perhaps



15. Open and closed cooking pot shapes from Phase IX.



16. Cylindrical/spool-shaped loom weights of clay (1-3) and stone (4) from Phase IX.



17. Bronze wheel from Phase IX.

via intermarriage with the local population. Influences from the Eastern Mediterranean became less intense in the following settlement of Phase X and virtually disappear in Phase XI which can be explained by processes of acculturation and, eventually, total assimilation.

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