

MÜNCHENER ABHANDLUNGEN ZUM ALTEN ORIENT

BAND 1

Münchener Abhandlungen zum Alten Orient

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Umschlagabbildungen: Spätbronzezeitliches Terrakottarelieff eines Lautenspielers aus Tall Bazi (Zeichnung: C. Wolff); Blick ins Euphrattal vom modernen Dorf Tall Banat aus (Foto: A. Otto); Keramikinventar aus Haus 29, Raum 34 der Weststadt von Tall Bazi (Foto: B. Einwag) © Bazi-Archiv

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Table of Contents

Preface	7
<i>CHAPTER 1 — ADELHEID OTTO</i>	
Introduction to the Chronology, History and Main Challenges of the Syrian Late Bronze Age	9
<i>CHAPTER 2 — GLENN M. SCHWARTZ</i>	
Late Bronze Chronology at Umm el-Marra: Problems and Possibilities	19
<i>CHAPTER 3 — ANNIE CAUBET</i>	
La céramique du complexe palatial d’Emar (fouilles françaises 1972-1976)	47
<i>CHAPTER 4 — FERHAN SAKAL</i>	
LBA Emar Revisited: The stratified LBA pottery from the Syrian-German excavations	61
<i>CHAPTER 5 — FELIX BLOCHER & PETER WERNER</i>	
Absolute Chronology of Late Bronze Age Tall Munbāqa/Ekalte	89
<i>CHAPTER 6 — THOMAS L. MCCLELLAN</i>	
Cracking the Chronological Code of Qitar	111
<i>CHAPTER 7 — BERTHOLD EINWAG & ADELHEID OTTO</i>	
The Late Bronze Age at Tall Bazi: The evidence of the pottery and the challenges of radiocarbon dating	149
<i>CHAPTER 8 — COSTANZA COPPINI</i>	
Tall Bazi: the Middle and Late Bronze age pottery from the Citadel’s Nordhang	177
<i>CHAPTER 9 — ANNE PORTER</i>	
The Tell Banat Settlement Complex during the Third and Second Millennia BCE	195
<i>CHAPTER 10 — ADELHEID OTTO</i>	
Summing up the Late Bronze Age of the Upper Syrian Euphrates Region	225

The Late Bronze Age at Tall Bazi: The evidence of the pottery and the challenges of radiocarbon dating

BERTHOLD EINWAG AND ADELHEID OTTO

Tall Bazi is a Bronze Age settlement on the eastern bank of the Euphrates approximately halfway between Carchemish and Emar. Excavations were conducted from 1993-2010 on behalf of the Deutsches Archäologisches Institut (1993-1999) and the Ludwig-Maximilians-Universität München / LMU Munich (2000-2009) with the support of the Deutsche Forschungsgemeinschaft (DFG).¹ The site (Fig. 1) consists of the 60m high Citadel, which was heavily fortified in the late third millennium BC (EINWAG 2008; OTTO 2006b) and continued to be used as a stronghold until the Late Bronze Age. A large templum in antis was the main building on top of the Citadel during the Middle and Late Bronze age. It remained in use, with some alterations, until its final destruction in the Late Bronze Age (OTTO/EINWAG 2007; EINWAG/OTTO 2012). Two cuneiform documents of the Mittani kings Saušatar and his successor Artatama confirm the exist-

ence of the temple in the time of these kings (SALLABERGER/EINWAG/OTTO 2006).

The lower town at the foot of the citadel can be divided into the “Nordstadt”, which was occupied from at least the Middle Bronze Age to the Late Bronze Age, and the “Weststadt”, which was a short-lived settlement extension which existed only in the last phase before the final destruction of the city. The Middle Bronze age pottery of some houses of the northern flank has been discussed by D. Szeląg (2012). The Weststadt (Western Lower Town) has been treated at length as to the settlement and its material culture including the pottery (OTTO 2006a; OTTO 2014b). The material from the one-period-settlement with maximally two phases is extremely uniform; the pottery constitutes therefore an ideal reference material for a relatively short period in the Late Bronze Age I. Since it resembles the material from the last phase of the Temple on top of the citadel, and the entire settlement exhibits signs of an enormous conflagration, it is highly probable that the Weststadt and the Citadel were destroyed at the same time. For the absolute dates see below.

The Periods of the Citadel

The finds on the upper plateau and the northern hillside of the citadel are of special importance for the chronology of the settlement of Tall Bazi. The earliest building phase on the Citadel, which consists of a 60 m high

1 Our thanks are due to the Directorate General of Syrian Antiquities in Damascus, especially to Sultan Muheisen, Tammam Fakouch, Bassam Jamous, Michel Maqdissi and Ahmed Taraqqi for their generous permission and support of the excavations. Special thanks are due to our representative Walid Abd-el Karim, who helped us constantly in every respect. Finally we are extremely grateful to our friends from the village Tall al-Banat, who welcomed us warmly, and who worked with us in excavation, restoration and every other task. Without the exceptional help of these people and without their brotherly support and friendship our excavations would never have been possible.

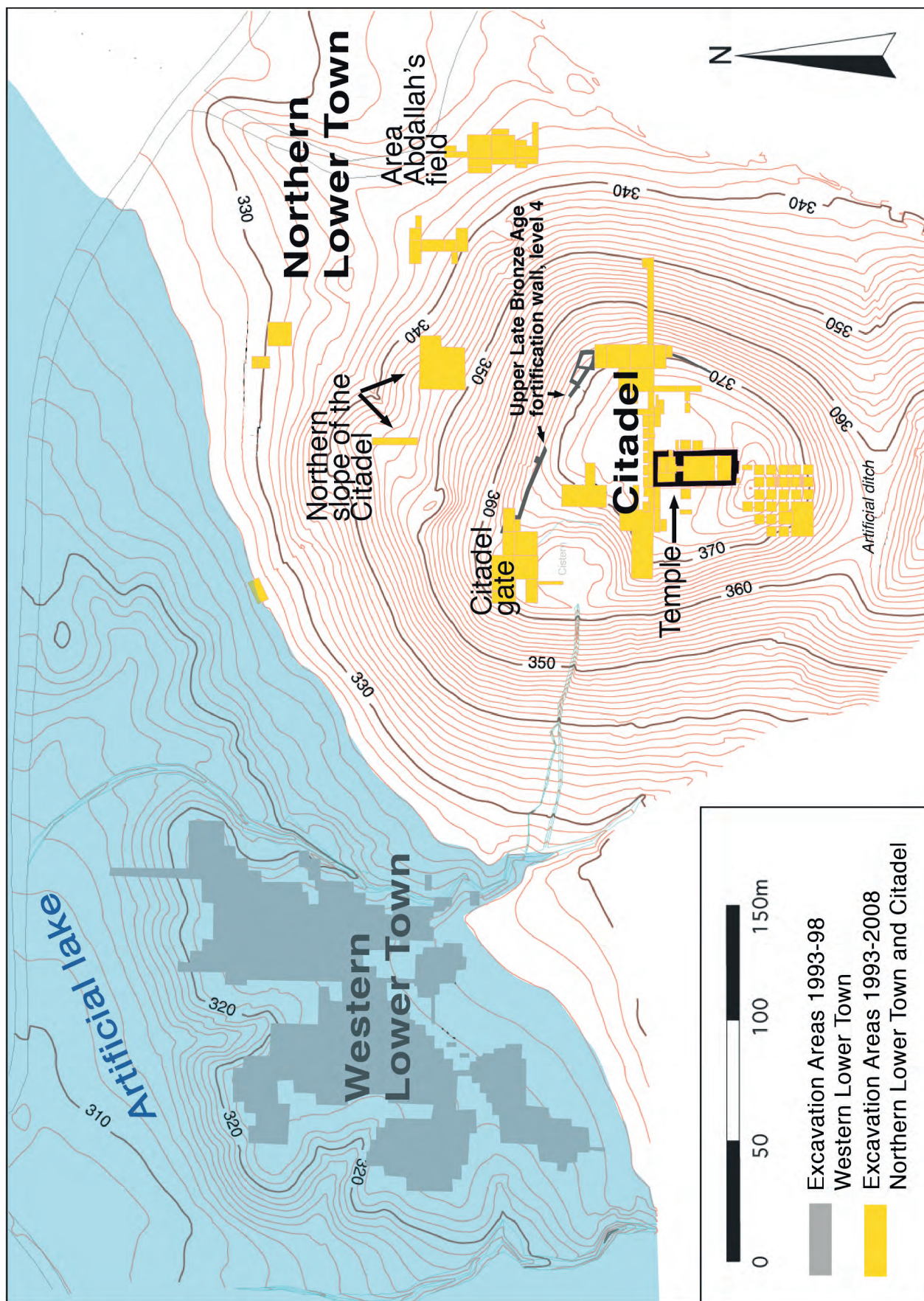


Fig. 1: Tall Bazi in the Late Bronze Age.

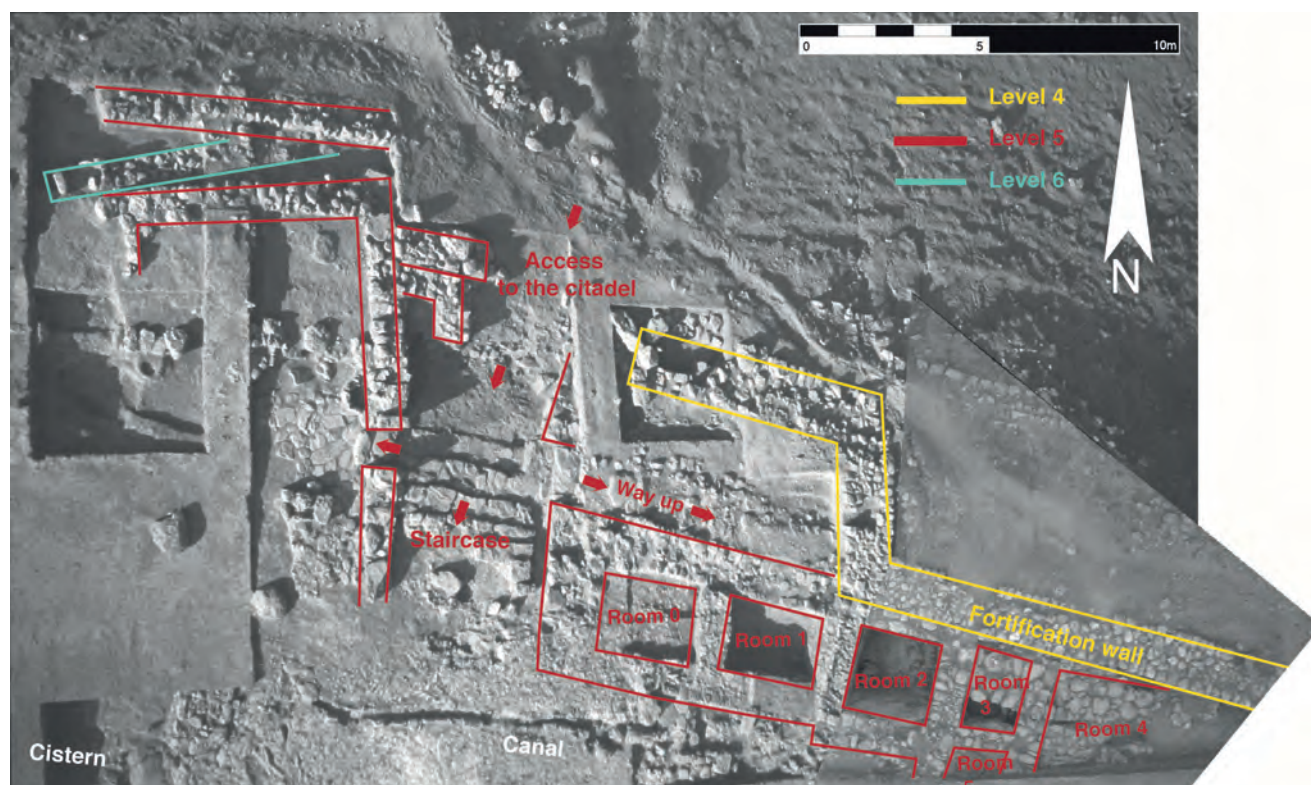


Fig. 2: The Area “Citadel Gate” on the northwestern edge of the citadel.

limestone hill, goes back to the Early Bronze Age III-IV. The Citadel continued to be used in the Middle and Late Bronze Age. The big temple in the centre of the citadel’s plateau persisted – undergoing some modifications – until the final destruction of the settlement (EINWAG/OTTO 2012).

Citadel Level	Date	Areas in use at Tall Bazi
1	Islamic	Citadel
2,3	Late Roman – Parthian	Citadel
4	LBA IB	Citadel, Nordstadt and Weststadt
5	LBA IA	Citadel and Nordstadt
6	MBA I/II	Citadel and Nordstadt
7	EB-MB transition	Citadel
8	EBA IVB / Akkadian	Citadel
9	EBA III-IVA	Bazi Citadel (+Tall Banat)

Table 1: The periodization of the levels at Tall Bazi

In the following we restrict ourselves to an exemplary presentation of stratified material from levels 4 and 5 in the Areas “Citadel Gate” and “Temple”. C. Coppini will treat the material from levels 5 and 6, which originate from the northern slope of the citadel (“Zitadelle Nordhang”) in a separate article in this volume. Note that Cit-

adel Level 5 corresponds to Citadel Northern Slope (Nordhang) Levels 2 and 3, and Citadel Level 6 corresponds to Citadel Northern Slope (Nordhang) Level 4.

The early Late Bronze Age I Pottery of Level 5 from the Area “Citadel Gate” (“Torbereich”)

The two main phases of LBA I can be especially well recognised at the area “Citadel Gate” (Figs. 1, 2). This is the north-western upper part of the citadel where the only path leading up to the citadel reached the plateau. There, excavations were conducted during the 2000 and 2001 campaigns.² Directly above the natural rock, several levels were unearthed, the two uppermost of which dating from the Late Bronze Age. The uppermost level 4 consists of the surrounding wall encircling the entire citadel and featuring projections, which probably were towers. At this place, the wall forms a rectangular protrusion, which constitutes the eastern side wall of the former gate (see Fig. 2). The western side wall is eroded. Directly behind the gate area there used to be a path paved with

2 For a detailed description see EINWAG/OTTO 2006: 113-123.

fist-size stones leading up towards the peak of the citadel with the dominant temple building on top.³ Since the scarce remains of level 4 were found near the surface, only few diagnostic finds have been preserved. Apart from some sherds, which are not presented here, these are above all one faience seal of Mittani Common Style, which has been poorly preserved because it was lying on the above-mentioned path directly beneath the actual surface (Fig. 3).⁴ Only parts of two men wearing long garments and caps and moving to the left can be recognised. The seal is shown here despite of its bad estate of preservation, because it contributes to the approximate date, even though the precise dating of Mittani Common Style seals remains difficult. The very similar seal R.S. 14.79 from Ugarit (SCHAEFFER-FORRER 1983: 112) unfortunately contributes little to the dating of the Bazi seal.

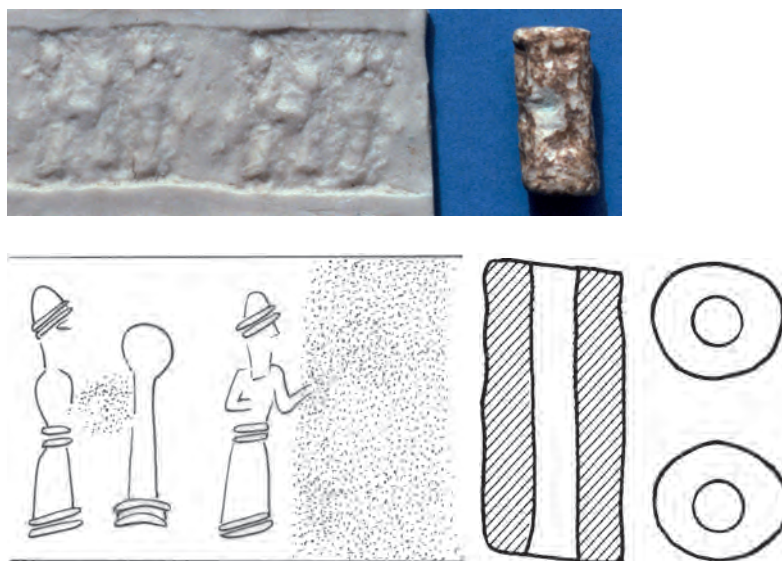


Fig. 3ab: The Mittani Common Style seal Bz 48/29:94 from Tall Bazi level 4 at the “Citadel Gate”; L.: 2.15 cm.

The way up and the surrounding wall of level 4 superimpose the older gate area of level 5. In this level the actual access consisted of a 4m broad staircase, seven stairs of which were still preserved. It was flanked by a casemate wall to its east and by a large room to its west. Room 1 of the casemate wall was a cellar without doors, carved out from the rock; it contained material

which must have been collapsed from the supposed room above (Fig. 4). The number of fine ceramics was quite high among the numerous fragmentary ceramic vessels. A part of it bore a dark grey, a red or a white slip, horizontally or vertically burnished. Comparable pottery was found in Tall Hadidi Area H XIII, Tall Hammam Turkman VIII and Tall Munbaqa.⁵

Fig. 4:	Description	Find Spot:	Dimensions:	Material:
1	Conical bowl with a stepped, tapered rim	48/29 room 1	H: [6.2]; diam: 16.6	medium coarse, slightly porous
2	Sharply carinated bowl with everted rim	48/29 room 1	H: [8.2]; diam: 14	coarse ware, porous, black and white inclusions
3	Ovoid, light yellow bottle with a small ring base. Surface carefully, almost vertically burnished	48/29 room 1	H: [21]; diam (base): 3.8	fine ware, pale brown
4	Ovoid bottle with a very narrow neck and round base, carefully burnished streaky surface	48/29 room 1	H: [15]; max. diam: 11.8	middle fine sandy, coloured inclusions
5	Small, globular little bottle with a narrow neck and extended thickened rim	48/29 room 1	H: [9.5]; diam: 4	fine sandy, slightly porous, black and grey inclusions
6	Bottle with cylindrical straight, horizontally grooved rim. Dark, intensely burnished surface	48/29 room 1	pres. H: 11; diam: 11	medium fine, dark-grey, white inclusions
7	Fragment of a bottle (?), inside deep traces of turning, outside red paint in the form of a grid (2.5YR 5/6) on light-red underground (7.5YR 7/4).	48/29 room 1	pres. H: 6.5	fine sandy, slightly porous, black and grey inclusions

3 A small part of this way up can be recognized on the aerial photo Fig. 2. Most of it was removed during excavations, since it superimposed the rooms of level 5.
 4 Cylinder seal Bz 48/29:94; whitish faience (core: 10YR 8/2, outside 10YR 8/4); L: 2.15 cm; diam: 0.95-1.05 cm; diam. perforation: 0.35 cm; surface very worn. For more information see EINWAG/OTTO 2006: 113 with footnotes 19 and 20.

* The measurements of fragmentary objects are indicated in [angular brackets].

5 DORNEMANN 1981: 42ss, figs. 12-16; SMIT 1988: 478, pl. 150, 58; DE FEYTER 1989: 237ss.

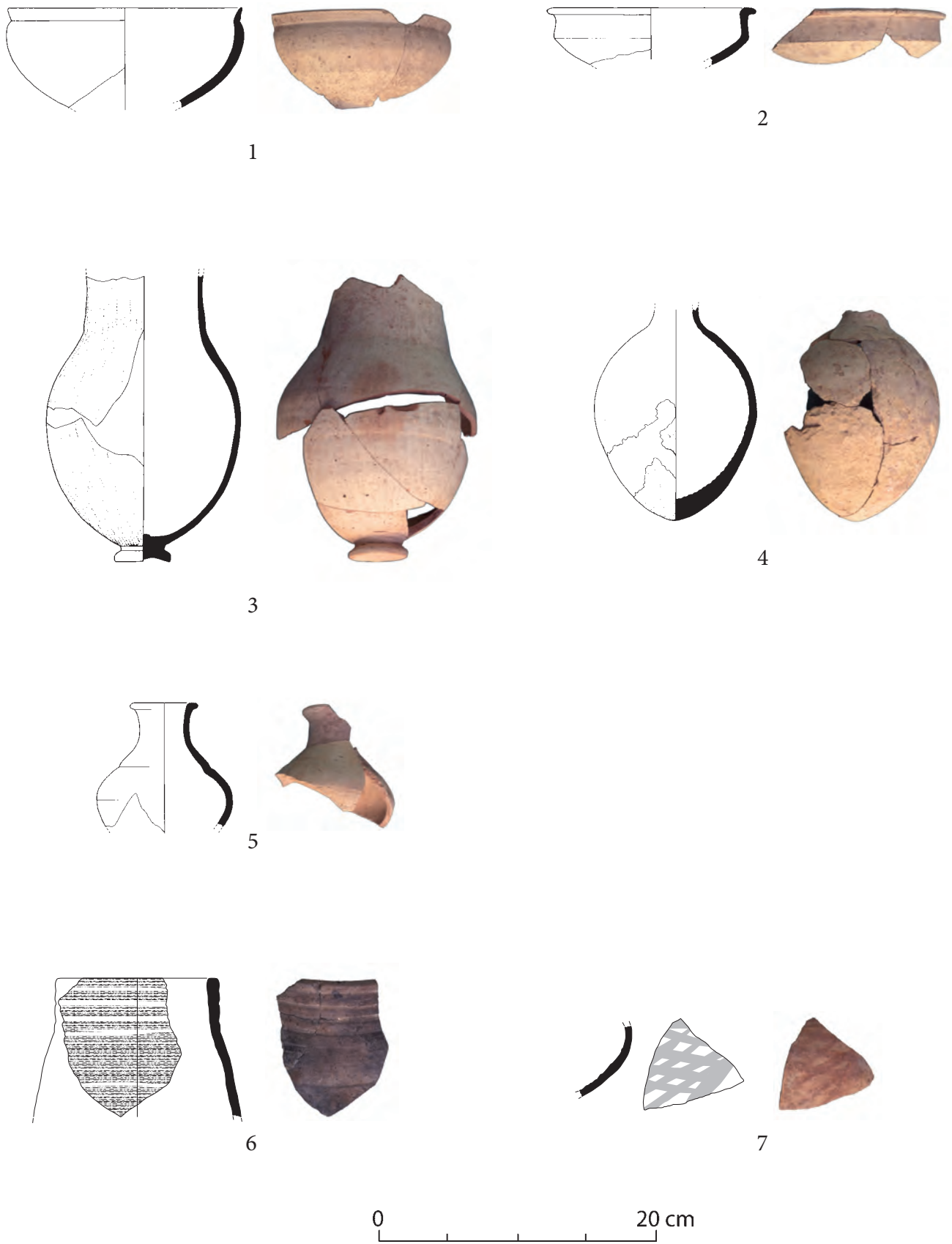


Fig. 4: Pottery from the area "Citadel Gate", Tall Bazi level 5, Room 1 — Catalogue see p. 152.



Fig. 5: Pottery from the area "Citadel Gate", Level 5, Room 2 — Catalogue see p. 157.

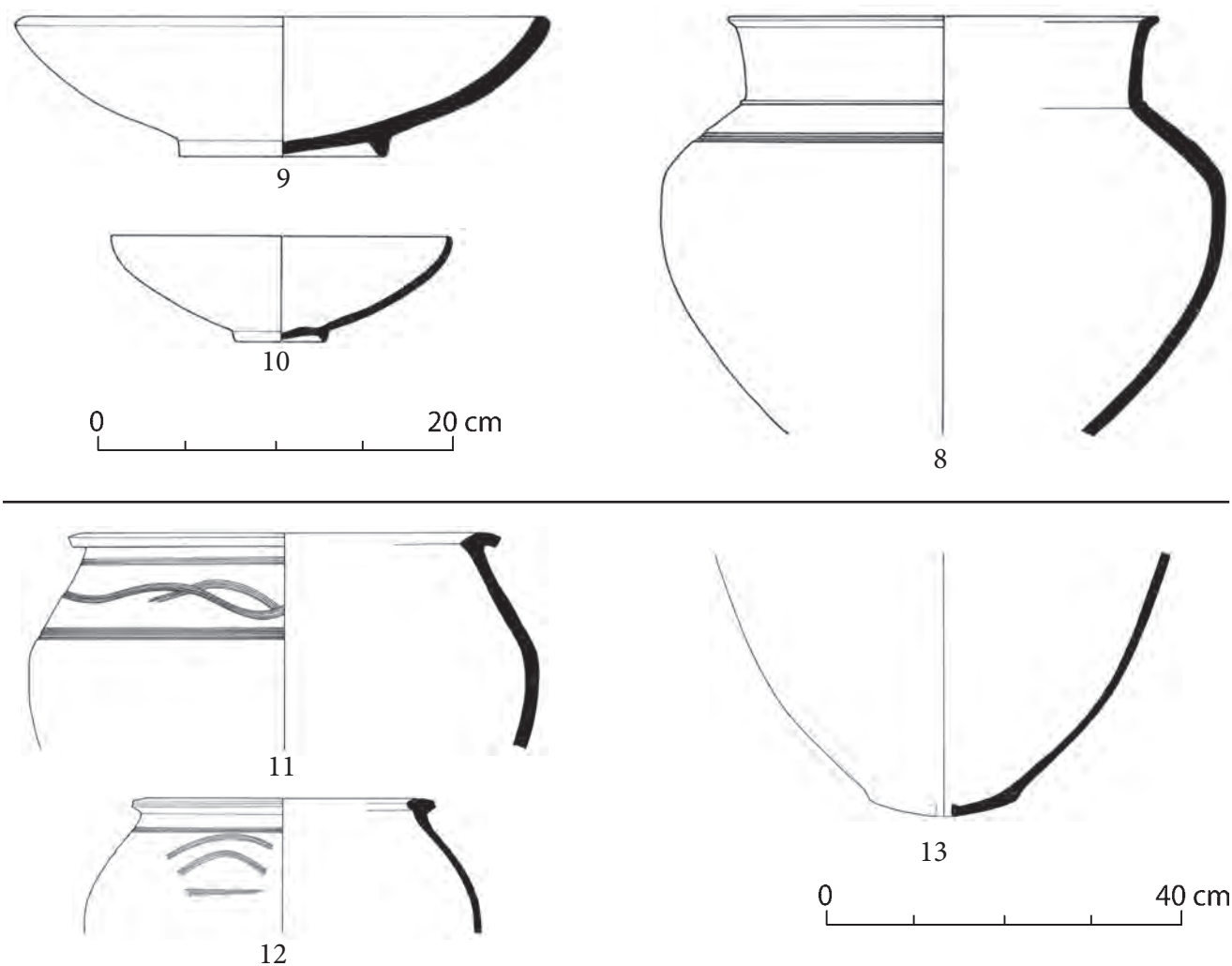


Fig. 5 (continued): Pottery from the area “Citadel Gate”, Level 5, Room 2

Fig. 5:	Description	Findspot:	Dimensions:	Material:
1	Goblet with flaring neck	48/29 room 2	H: 9; diam: 8.4	middle fine sandy, coloured inclusions
2	Medium-sized jar with flaring neck	48/29 room 2	pres. H: 10.4; diam: 23	middle fine sandy, coloured inclusions
3	Medium-sized jar with flaring neck and a handle	48/29 room 2	H: 23; diam: 18.4	fine sandy, slightly porous, black and grey inclusions
4	Small jar with flaring neck and handle	48/29 room 2	H: 16.7; diam: 13.5	fine sandy, slightly porous
5	Small jar with handle	48/29 room 2	pres. H: 13.3; diam: 13.2	coarse ware, sand-tempered, pale light grey
6	Upper part of a large bottle	48/29 room 2	pres. H: 8.5; diam: 15	coarse ware, slightly porous, black and grey inclusions
7	Globular jar with short neck	48/29 room 2	pres. H: 22.5; diam: 21	coarse ware, slightly porous, black and grey inclusions
8	Globular jar with flaring neck	48/29 room 2	pres. H: 24.5; diam: 24	reddish-light brown clay, black inclusions
9	Large bowl	48/29 room 2	H: 8; diam: 29	middle fine sandy, coloured inclusions
10	Medium-sized bowl	48/29 room 2	H: 6; diam: 19	coarse ware, slightly porous, black and grey inclusions
11	Large jar with wide opening and combed decoration of wavy lines between horizontal lines	48/29 room 2	pres. H: 21.5; diam: 44	coarse ware, sand-tempered, pale light grey
12	Large jar with combed decoration of wavy lines between horizontal lines	48/29 room 2	pres. H: 14; diam: 32	fine sandy, slightly porous
13	Lower part of a large vessel with perforated base	48/29 room 2	pres. H: 28.5; diam. hole: 1.8	coarse ware, sand-tempered, pale light grey

The associated animal bones were interpreted by A. von den Driesch (2006) as the remains of profane meals of people with an elevated standard of living. Other finds such as bronze filter tips of drinking tubes, gaming pieces, jewellery, bronze weapons and pins corroborate the same impression that this was an area where people of an elevated status had been gathering.

Several small, medium-sized and large pots, plates and goblets were found in the adjacent room 2 (Fig. 5).⁶ Typical shapes of the locally made pottery are the jars with tall flaring necks, some of them with one handle from the shoulder to the upper rim; shallow bowls with rounded rims, slightly pointing inwards; goblets with a wide opening, and ledge rims. These shapes are extremely rare in the following level 4 pottery and help to separate the two Late Bronze Age levels, which must be fairly close in time. Only the combed decoration of wavy lines between horizontal lines (Fig. 5.11-12) continues in level 4. In both levels 4 and 5 Mitanni Common Style cylinder seals were found, which have parallels in Alalakh Level VI.⁷ Level 5 was completely covered by level 4, which was probably destroyed around 1350 B.C. in the course of the overall destruction of the whole site (for the ¹⁴C dates see below p. 172, 173). Since the buildings of level 5 must have existed for a certain time, a date in the 15th century seems reasonable for level 5.

Levels 4 and 5 directly superimpose the remains of level 6 (see Fig. 2) and the Early Bronze Age levels 7-8, which consist of a.o. a covered channel, which was carved out of the natural rock and led to the large cistern (Fig. 2, lower left).

The pottery of the Western Lower Town ("Weststadt"), the Late Bronze age settlement enlargement of Tall Bazi, level 4

ADELHEID OTTO

The Western Lower Town ("Weststadt") is an one-level settlement enlargement with two building phases. In the first building phase the houses were erected on a natural river terrace, which had not been inhabited before. In the course of their existence, numerous houses saw various alterations of their original house plans through division, enlargement at the neighbour's expense, overbuilding of open spaces etc.; this is defined as the second phase. Since the houses existed continuously and the new floors were laid immediately above the old ones, no material has been left from the first phase, but abundant primary inventory of the second and final phase. However, it is evident that some older material continued to be in use. This becomes especially clear in some of the "poorer" households, where many ceramic jars were recycled and reused: broken rims or handles were smoothed, broken bottoms were reused as stands, and so on.⁸ Therefore I tried to rely only on frequently attested pottery types when I defined types 1-23 (see below). The layout, building-technique, immovable installations and movable objects were so standardized, that it was possible to reconstruct an ideal typical house with its ideal typical equipment. The individual variations of every single household and its deviations from the ideal type allowed to recognize the individual use of a house (OTTO 2014a: 44-52).

One single destruction level, a single site-wide event

In the Weststadt, 48 houses were excavated and about 22 more were traced superficially.⁹ 40 of the excavated houses exhibited traces of heavy burning: carbonized roof beams and other organic materials and completely decomposed, burnt vegetable material on the floor; collapsed, superficially burnt mud bricks in the fill of the houses. Even remains of the upper floor were present in

6 They have been published already in EINWAG/OTTO 2006: 116-120, but are treated here again for the sake of convenience.

7 The seal 46/30:23 from light green faience was found in the room east of the gate of level 5. It shows a caprid above a stylized guilloche, a human figure and a treelike object (EINWAG/OTTO 2006: 121-2, fig. 10). The seal is nearly identical with seal R.S. 27.060 from Ugarit (SCHAEFFER-FORRER 1983: 158), and comparable to two seals from Alalakh level VI (COLLON 1982: nos. 50, 91).

8 This is especially evident in house 43 of the Weststadt. The house was divided into a larger part with abundant pottery inventory, seals, weights and bronze tools, and a smaller part, where many damaged vessels were reused: OTTO/EINWAG 2001: 79-82.

9 This was partly done with the help of a magnetic survey by J. Faßbinder and H. Becker (in EINWAG/OTTO 2001: 87-88) and by documenting the washed-free remains after the Tishreen lake had risen.

some of the better preserved buildings. These 40 houses contained inventory that was fully functional at the time of burning, i.e. largely corresponding to the active inventory or Inventory I (SCHIFFER 1972; OTTO 2015: 65-67). Several houses showed signs of plundering before fire was set to them (OTTO 2006a: 18).

Eight houses did not show any traces of burning. However, they clearly differ from the other houses as to their remaining inventory: they were almost clean swept. Apart from single sherds left in corners or recesses and from a few objects which might be the remains of abandonment rituals¹⁰ the houses had obviously been emptied before they were abandoned. The emptying cannot have been done by the hypothetical enemy, for in that case heavy, bulky and relatively worthless objects such as saddle mills or large storage vessels and vats would have been left behind. Thus the situation suggests that some abandoned houses were standing in the functioning settlement, which were hence ignored by the looters and not set to fire either. This means that a single final catastrophe, caused by human enemies, was responsible for the end of the Weststadt. This final destruction was clearly a single site-wide event.

The Late Bronze Age Pottery of Level 4 from the “Weststadt”

The ceramics from the 48 excavated houses of the Weststadt is amazingly homogeneous. The final publication of the pottery is underway, but quantitative data are not yet available. The ceramic inventory of one single house, House 43, has been published room by room (EINWAG/OTTO 2001: 66-81). It is representative for the inventories of the other houses that essentially show the same types, but in different quantities. In 2006 and 2014 the main pottery types 1-23 were published, which had been derived from the analysis of the pottery of the 20 best preserved houses (OTTO 2006a: 86-101; OTTO 2014b). Therefore, in the following we will briefly summarise only the main pottery types and we will limit ourselves to the types that prevailed in most of the houses. We illustrate examples mainly from House 32 (for this house see OTTO 2006a: 204-207), with a few additional examples from Houses 18, 20, 23 and 43 (Figs. 6 and 7), in order to show complete pottery shapes and not fragmentary ones.

¹⁰ E.g. a large terracotta figurine of a humped bull was found broken on the floor in the otherwise completely emptied and abandoned House 37 (OTTO 2006a: 211).

Type 1: Small goblet or goblet with long cylindrical or flaring neck and globular body; mostly a flat, rarely a round or ring-base (Fig. 6. 1ab).

Type 2: Small bottle with narrow neck, globular, oval or carinated body and round or flat base; the surface is sometimes ring-burnished and rarely painted with horizontal, dark red stripes (Fig. 6. 2ab).

Type 3: Medium-sized jar with tall neck and ring-base; sometimes with painted banded decoration in dark red colour (Fig. 6. 3ab).¹¹ The painted decoration, which is extremely rare at Bazi and mainly occurs with this type, points to its function as a fine table ware. Residue analyses indicate that at least some of them contained wine and beer respectively. The latter is further corroborated by the situation in House 32, Room 44, where a bronze beer filter tip lay immediately beside the painted jar (Fig. 6. 3b), which certainly was used for drinking beer.

Type 4 and 11: Small or large jug with trefoil spout, ovoid or globular body with one handle and round base (Fig. 6. 4). Small or medium-sized stands were found close to them in several houses (Fig. 6. 23).

Type 7: Small bowl with simple, pinched rim and round base (Fig. 6. 7ab).

Type 8 and 10: Small and large plate (or shallow bowl) with fairly thick wall, bevelled or straight rim, rarely rounded rim (Fig. 6. 8, 10).

Type 9: Small sieve (bowl-like object with multiple perforations) (Fig. 6. 9)

Type 13: Medium bottle or jug (with handle), round base, cylindrical neck and round thickened rim (Fig. 6. 13).

Type 14: Pilgrim flask (Fig. 7. 14). The globular body is composed of two hemispherical wheel-made bowls, which were luted together. A hole was cut through the joined globular body, into which the cylindrical neck with a thickened rim was attached. A single handle was added to the shoulder. Detailed studies of similar pilgrim flasks of the Middle Bronze Age (GATES 1988: 71-73; EINWAG 1998: 103-107; EINWAG 2002) have shown that they might have been used as containers for the transportation of wine and probably originated in this area of the Upper Syrian Euphrates, which was one of the main cultivation areas of vine.¹² This was corroborated by residue analyses of some pilgrim flasks from Bazi, conducted by M. Zarnkow, which showed traces of tartaric acid.¹³

¹¹ Schwartz (this volume) calls this form „grain measure“ goblet.

¹² The Mari archives testify that the palace imported the best wine from the Carchemish region by boats; MICHEL 1996: 387-388.

¹³ OTTO 2006a: 96, 278-279.

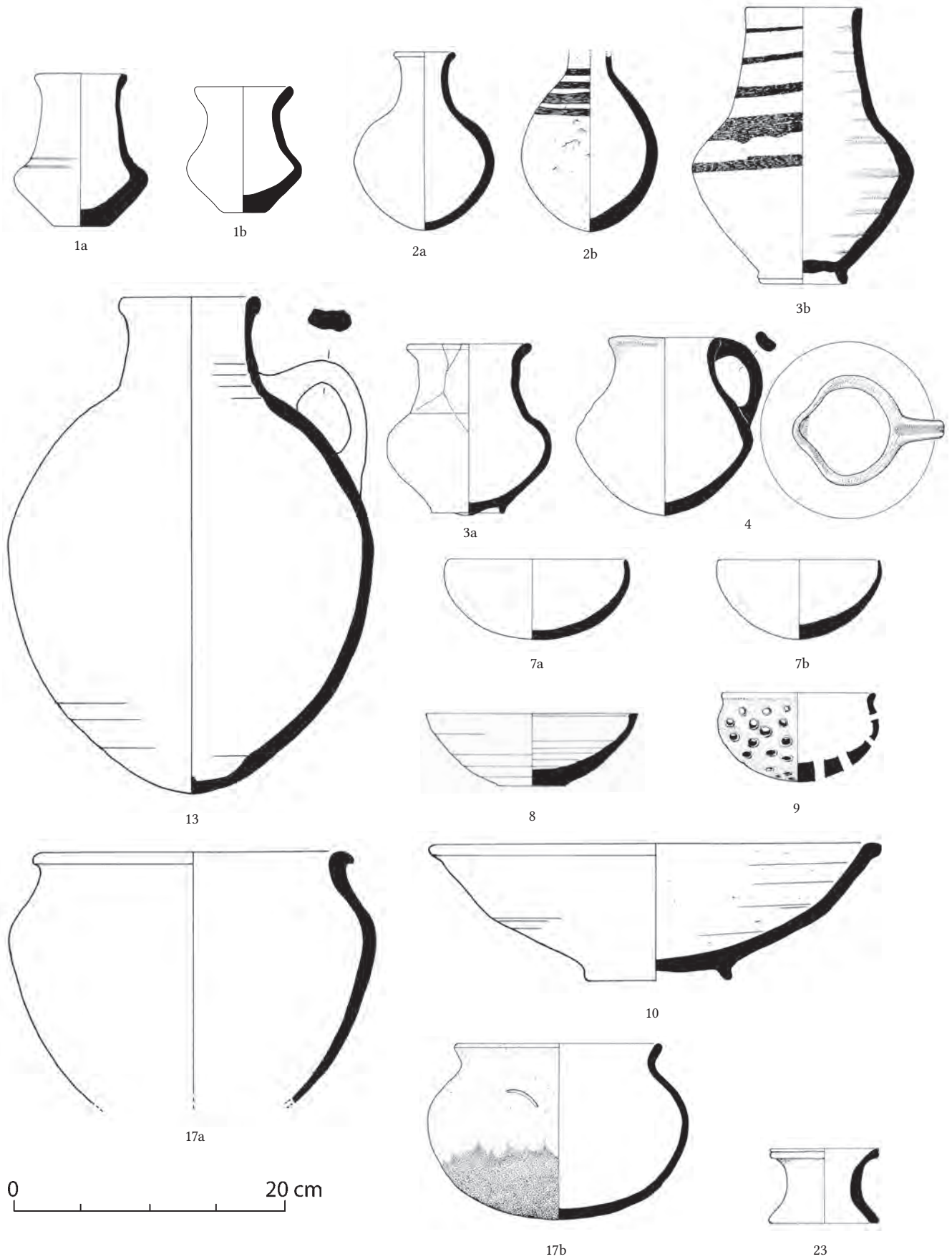


Fig. 6: Pottery of the Western Lower Town ("Weststadt"), Tall Bazi level 4 – Catalogue see p. 160.

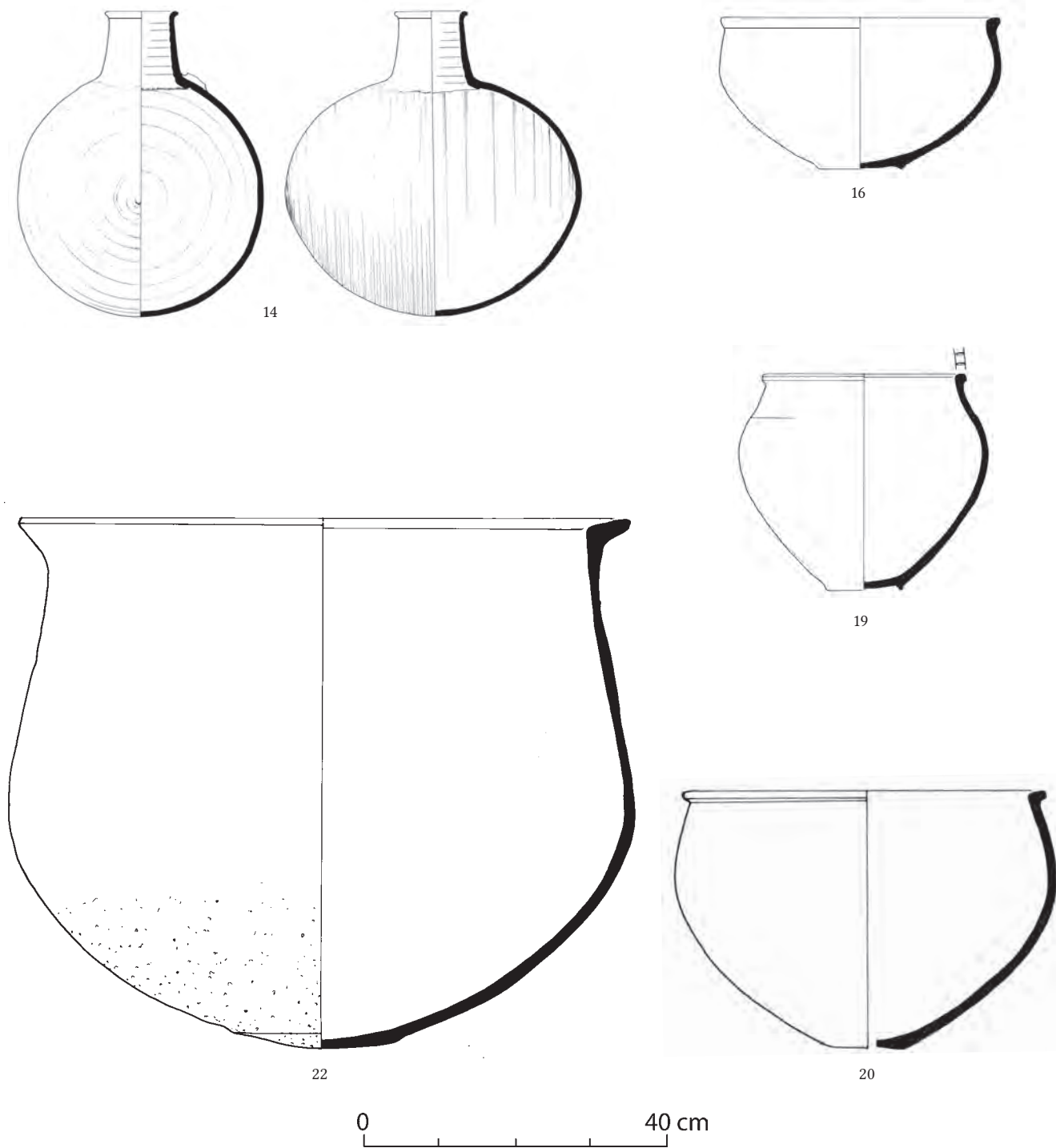


Fig. 7: Pottery of the Western Lower Town (“Weststadt”), Tall Bazi level 4 – Catalogue see p. 160.

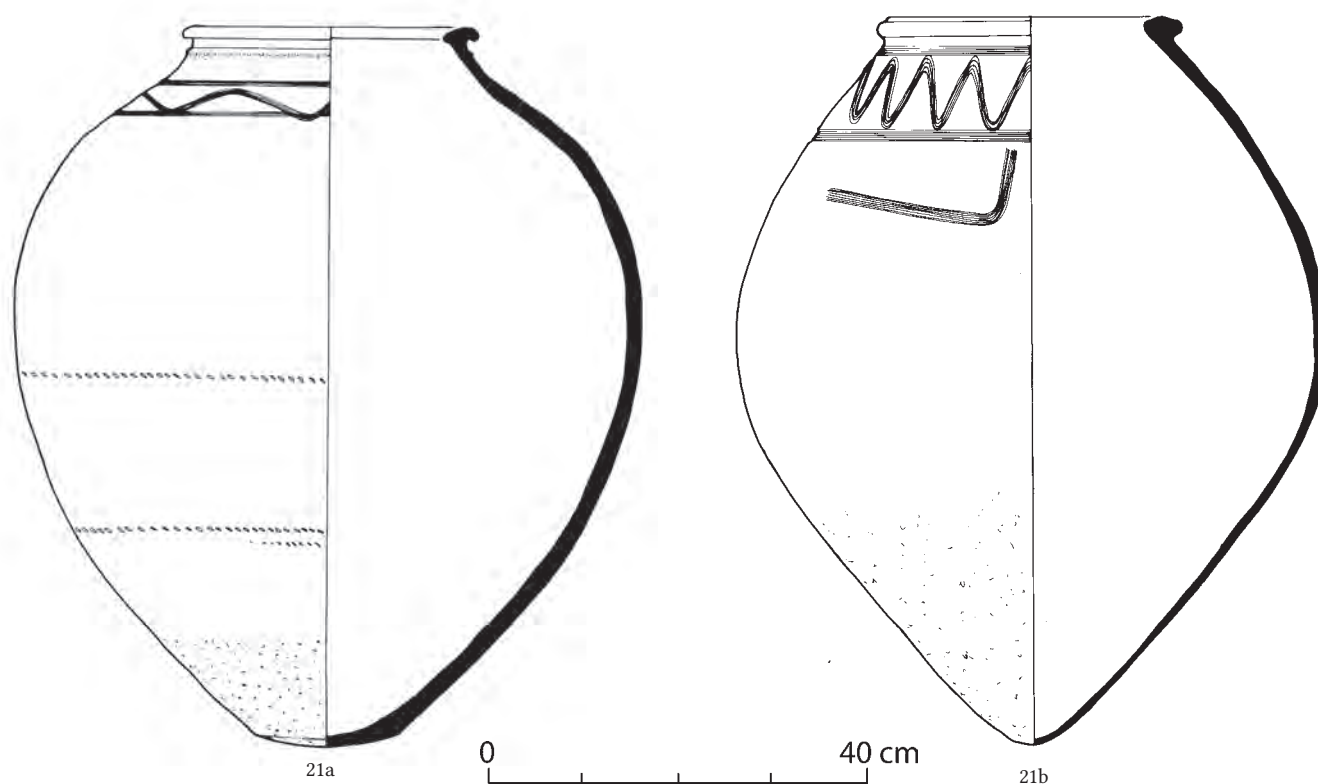


Fig. 7 (continued): Pottery of the Western Lower Town (“Weststadt”), Tall Bazi level 4 – Catalogue see below.

Fig. 6+7:	Description	Find Spot:	Dimensions:	Material:
1a	Small goblet or goblet	house 32, room 49	H: 11.6; diam: 6	coarse ware, slightly porous, black and grey inclusions
1b	Small goblet or goblet	house 32, room 44	H: 9.3; diam: 7	coarse ware, slightly porous, black and grey inclusions
2a	Small bottle	house 32, room 44	H: 11; diam: 5.2	fine sandy, slightly porous, black and grey inclusions
2b	Small bottle with painted decoration	house 32, room 44	H: 12.5; max. diam of body: 10	medium fine, pale brown, well fired
3a	Small pot with ring-base and thickened rim	house 32, room 49	H: 10.9; diam: 8.6	fine sandy, slightly porous
3b	Small pot with cylindrical neck and painted decoration	house 32, room 44	H: 20.2; diam: 8	fine sandy, slightly porous, black and grey inclusions
4	Small jug with trefoil spout	house 32, room 43	H: 13; diam: 7.6	fine sandy, slightly porous
7a	Small bowl	house 32, room 49	H: 5.7; diam: 13.2	coarse ware, slightly porous, black and grey inclusions
7b	Small bowl	house 32, room 43	H: 5.8; diam: 12	coarse ware, slightly porous, black and grey inclusions
8	Small plate	house 32, room 49	H: 6; diam: 14	medium coarse, slightly porous
9	Small sieve	house 32, room 43	H: 6.6; diam: 11	coarse ware, slightly porous, black and grey inclusions
10	Large plate	house 32, room 49	H: 10; diam: 28.6	fine sandy, slightly porous
13	Medium jug	house 32, room 49	H: 41.8; diam: 9.8	fine sandy, slightly porous, black and grey inclusions
14	Pilgrim Flask	house 32, room 44	H: 50; diam: 10	coarse ware, sand-tempered, pale light grey
16	Large deep bowl	house 32, room 50	H: 20; diam: 37	coarse ware, sand-tempered, pale light grey
17a	Cooking pot	house 32, room 49	H: [18,4]; Dm: 23; D: 1,0	Kitchen ware
17b	Cooking pot	house 18, room 16	H: 13; Dm: 14; D: 0,5	Kitchen ware
19	Medium-sized vat	house 32, room 50	H: 28.2; diam: 32.6	fine sandy, slightly porous, black and grey inclusions
20	Large vat with hole in base	house 32, room 44	H: 34; diam: 46	fine sandy, light grey clay white inclusions
21	Large storage jar	house 32, room 49	H: 66; diam: 24	coarse ware, sand-tempered, pale light grey
22	Large beer vat	house 20-N, room 16	H: 70; diam: 80	coarse ware, sand-tempered, pale light grey
23	Small stand	house 23-S, room 11	H: 5.2; diam: 8	coarse ware, sand-tempered

Type 16 and 19: Large deep bowl or medium-sized to large vat; wide opening, which is slightly narrower than the maximum diameter of the body, and ring base. Some examples show one or two vertical handles; a spout is rarely attested (Fig. 7. 16, 19).

Type 17: Cooking pot; open jar with thickened rim, simply rounded or hooked, and round bottom (Fig. 6. 17ab).

Type 20: Large vat with perforation in the base, wide opening and ledge rim (Fig. 7. 20).¹⁴

Type 21: Large jar with ovoid body and relatively narrow opening with thickened rim; sagging base (“Wackelboden”), sometimes with a central perforation. The shoulder is in most cases comb-decorated, with a wavy line set between two horizontal bands. This type is the only one that is frequently bearing potmarks on the rim and/or on the shoulder (SACHS 2012). Since several examples still contained carbonized grain, we considered them as storage jars (Fig. 7. 21ab).

Type 22: Large vat with flat ledge rim, cylindrical body with wide opening, sagging base (Fig. 7. 22¹⁵). The purpose of these largest vessels in every house was derived from residue analyses and experimental archaeology. This vat, one of which was present in nearly every house, served for brewing (OTTO 2006a: 86-93; ZARNKOW ET AL. 2006; ZARNKOW/OTTO/EINWAG 2011).

Type 23: Small or large stand, cylindrical or biconical, with or without triangular or round, window-like openings (Fig. 6. 23)¹⁶.

The Temple on the Citadel in Levels 5 and 4

BERTHOLD EINWAG

A large temple, 37.6m long and 15.8m wide, occupies the top of the citadel (Fig. 8a). Its 2-3m thick walls consisted of a 2.5m-high socle from large ashlar stones, on top of which the mudbrick wall was placed. In its first phase (Citadel Level 6), the Temple used to be a templum in antis, with a large main room B and a smaller open area between the protruding wall stubs. In the succeeding phase this open area was transformed into room A, an altar was added, the doors changed and the lion ortho-

states, which had flanked the main entrance gate to room B, were transferred to the entrance of room A (EINWAG/OTTO 2012). In the last phase (Citadel Level 4), only room A served for cultic purposes, while room B had been abandoned (OTTO 2013: 372-4). Consequently, only room A suffered the destruction by human enemies, who visibly plundered the temple thoroughly and deliberately smashed the remaining objects into as little pieces as possible.

This level 4 exhibits one of the rare inventories of a LBA temple, which certainly was deprived of its valuable pieces, but the ceramics of which – considered as worthless – were left behind, if unfortunately in a strongly fragmented state (Fig 8b).

The Late Bronze Age Pottery from the Temple, Room A, Level 4

Numerous ceramic vessels were found on the temple floor, some of which still containing animal bones or the carbonized remains of edibles. Since the pottery was deliberately smashed into sometimes quite small fragments, it took considerable time to restore it. The final publication of the Temple is in preparation; we give here an overview over the main types and shapes which were attested in Room A (Figs. 9-13).

The LBA pottery from the last use phase of the Temple (level 4) is very similar to the one of the Weststadt in many respects; therefore we maintain the type numbers which were created for the Weststadt pottery. Most of the main types occurring in the residential quarters of the Weststadt (see above; Figs. 6-7) were also present in the Temple. However, some differences are noticeable, as well in quality and in quantity. There is a greater variety of smaller forms. Especially small goblets occur in greater numbers, and vary a lot in form (Fig. 9. 1,1-1,6 gives only a selection of the goblets): some of them have a tall, vertical neck and globular or truncated body, some have a squat body and flaring neck; they can have a flat, sagging, or ring base; the lips are everted or straight, slightly pointed and sometimes thickened; some surfaces are burnished and some are plain, and also the colour and clay vary. Some goblets have miniature form, while others correspond to the size which is also attested in the houses.

There was also a fine painted Nuzi beaker, fragments of which were restored (Fig. 9. 1,7). It measured still 10 cm in height. The upper half was painted dark brown, on which six horizontal decorative bands were painted in whitish colour: Below two rows of hanging bows there were two rows of mirrored spiral bands, divided by a

14 For this type see SOLLEE 2012.

15 The illustrated beer vat comes from House 20-North. The beer vat of House 32 had been transferred to the upper store; its rim was found collapsed with the material from the upper room (OTTO 2006a: 205).

16 Since they do not occur in every household, the illustrated object comes from house 23-South, room 11.

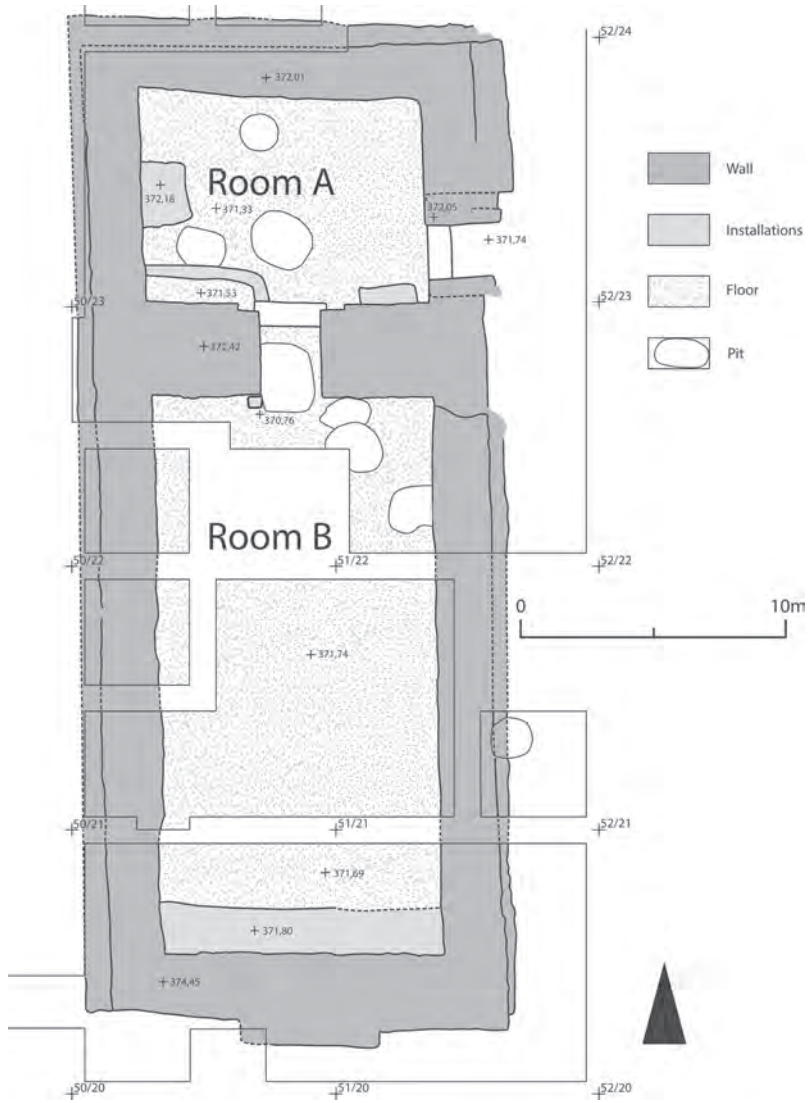
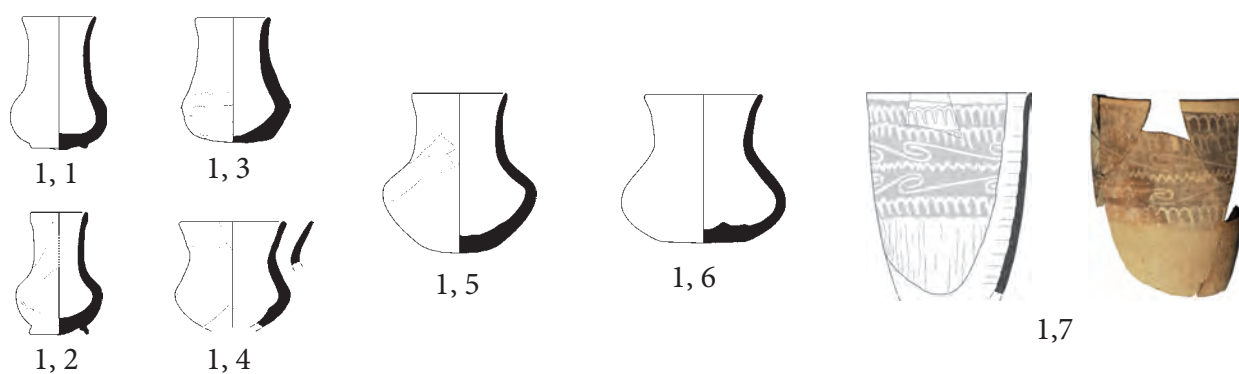


Fig. 8a: The Temple on the Citadel, Tall Bazi levels 5 and 4.

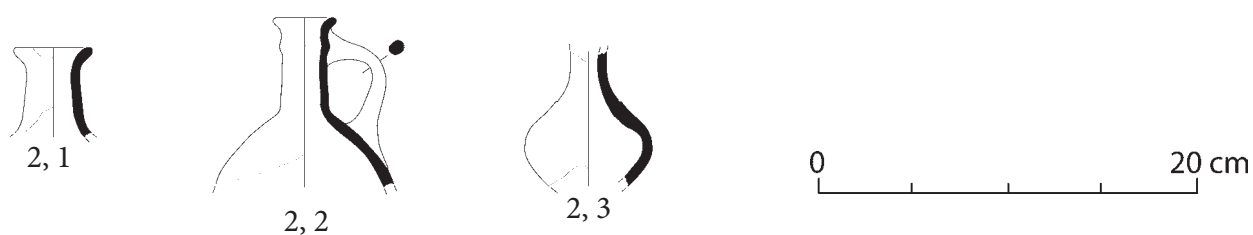


Fig. 8b: Pottery mixed with animal bones on the floor of level 4, Room A.

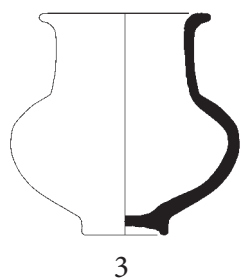
1. Small goblet



2. Small bottle with narrow neck

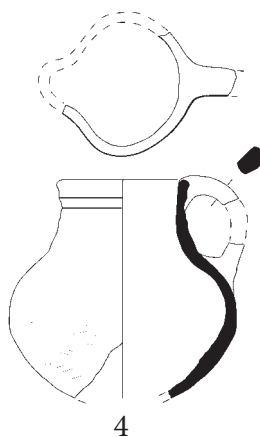


3. Small ring-based pot



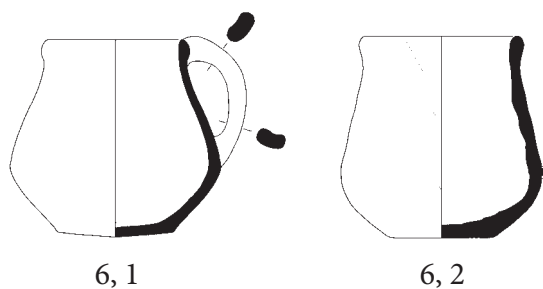
3

4. Small jug with refoil spout



4

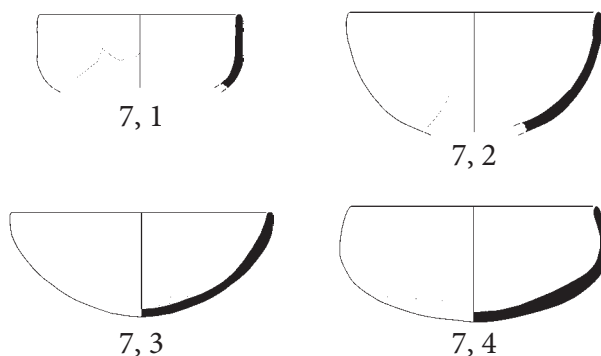
6. Small jug



6, 1

6, 2

7. Small bowl



7, 1

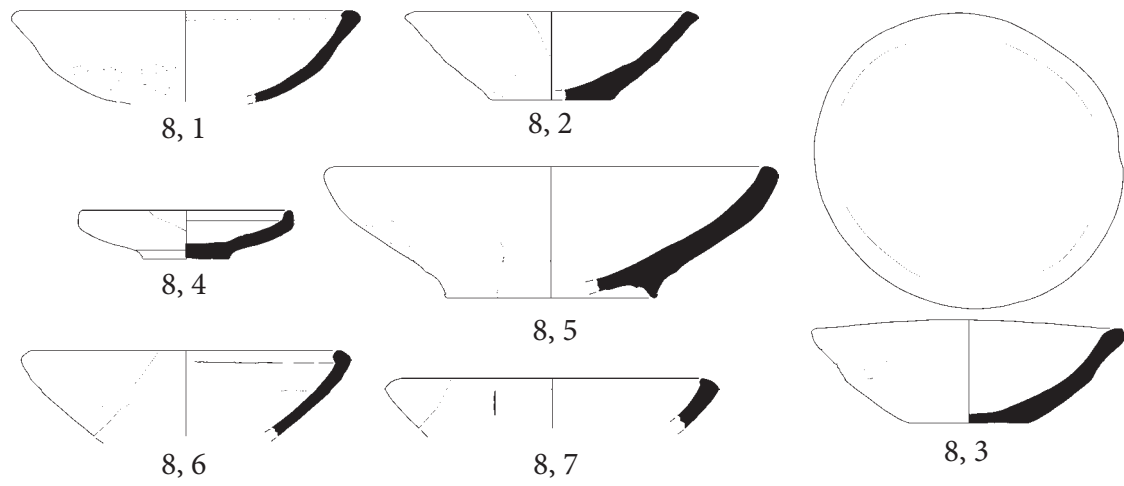
7, 2

7, 3

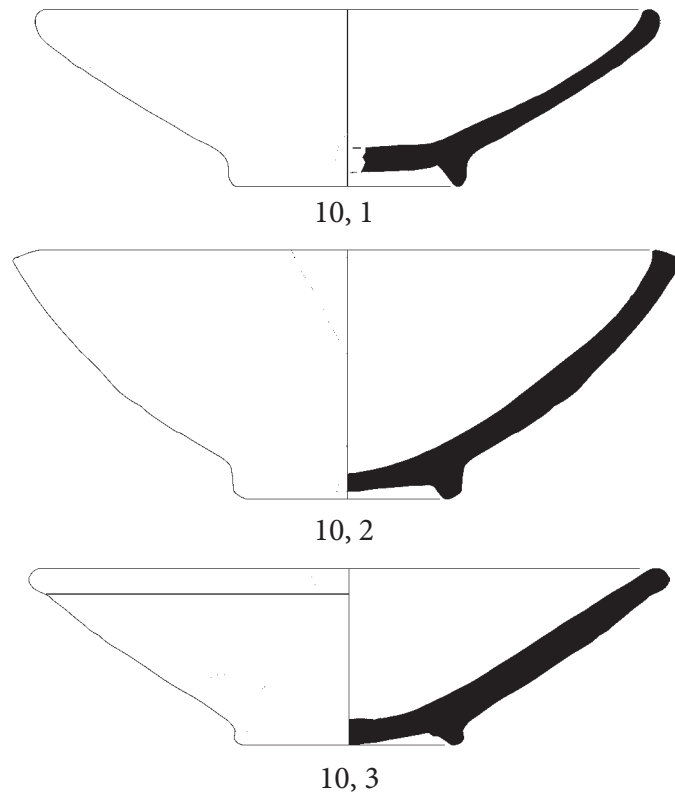
7, 4

Fig. 9: The pottery of the Temple, Room A, level 4 — Catalogue see p. 168-169.

8. Small plate



10. Large plate



12. Medium bottle

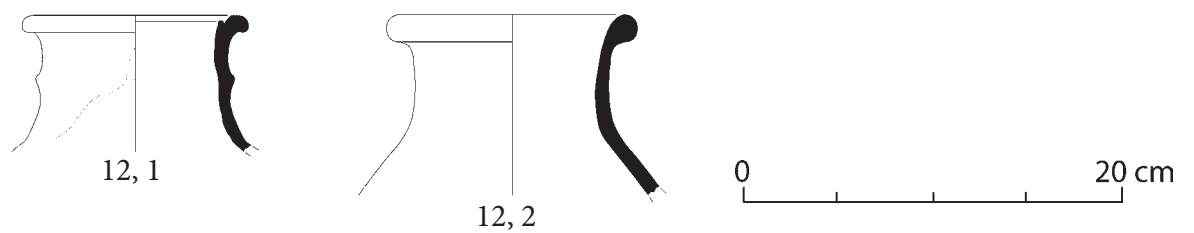
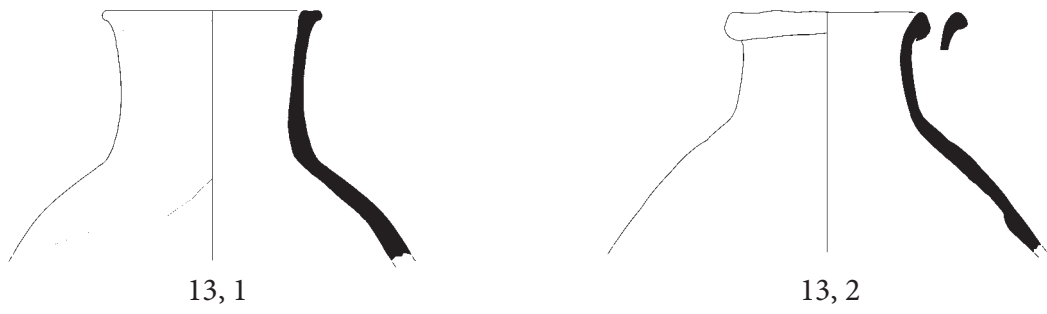


Fig. 10: The pottery of the Temple, Room A, level 4 – Catalogue see p. 168-169.

13. Medium jug



16. Medium-sized jar with/without handles

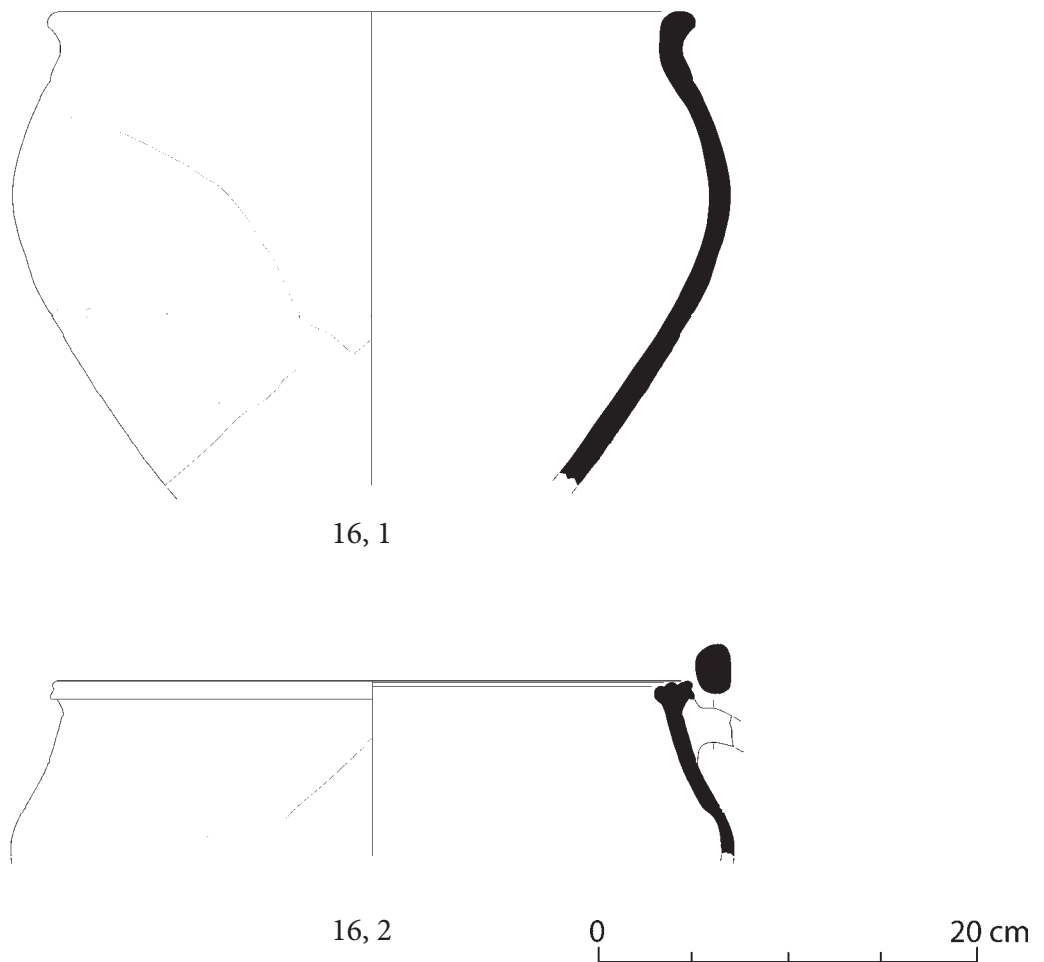
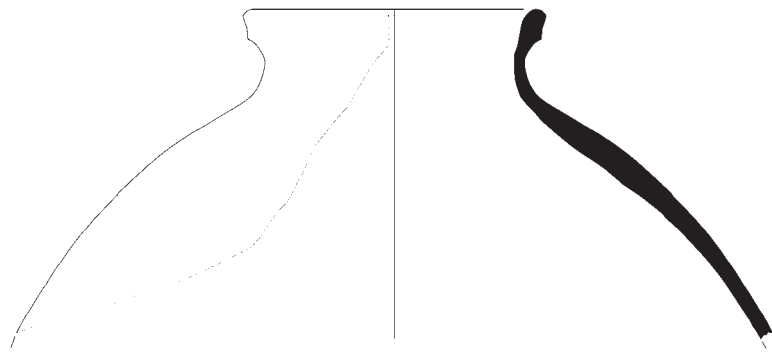
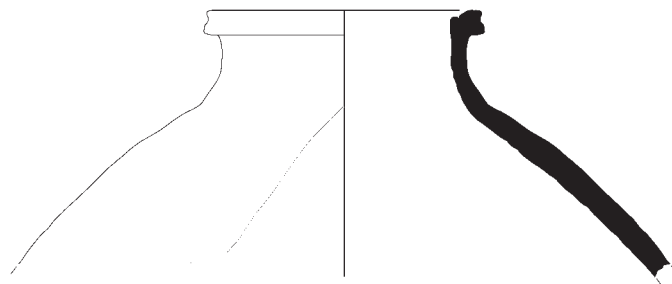


Fig. 11: The pottery of the Temple, Room A, level 4 — Catalogue see p. 168-169.

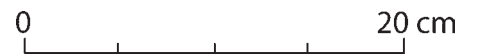
18. Large bottle



18, 1



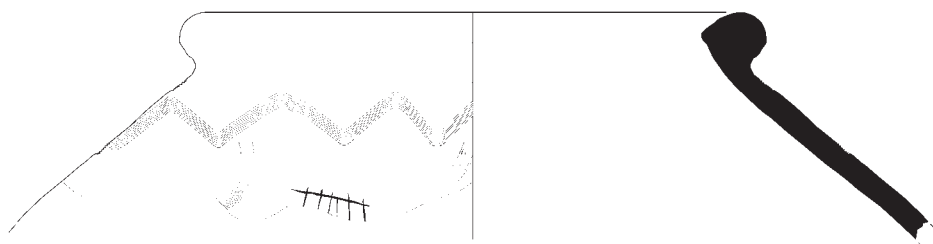
18, 2



21. Large storage jar



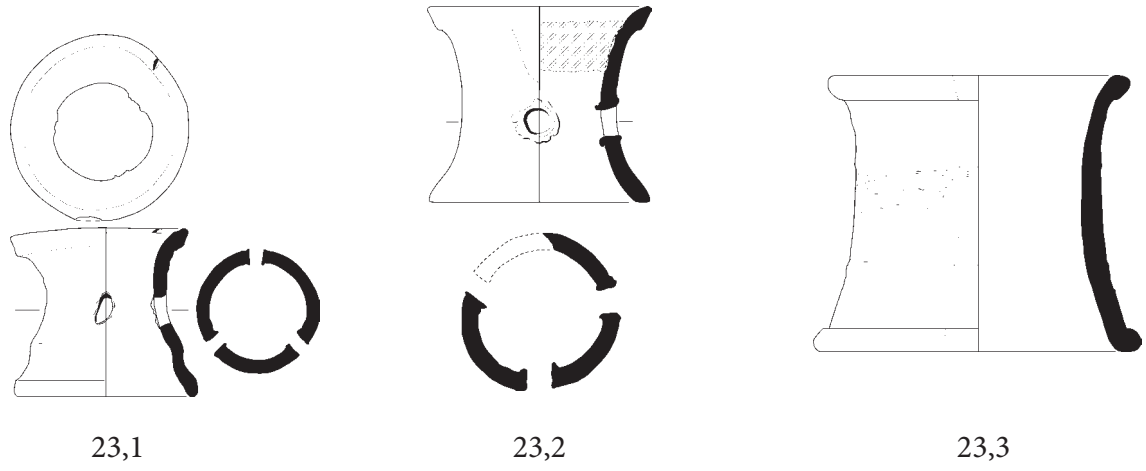
21, 1



21, 2

Fig. 12: The pottery of the Temple, Room A, level 4 – Catalogue see p. 168-169.

23. Stand



0 20 cm

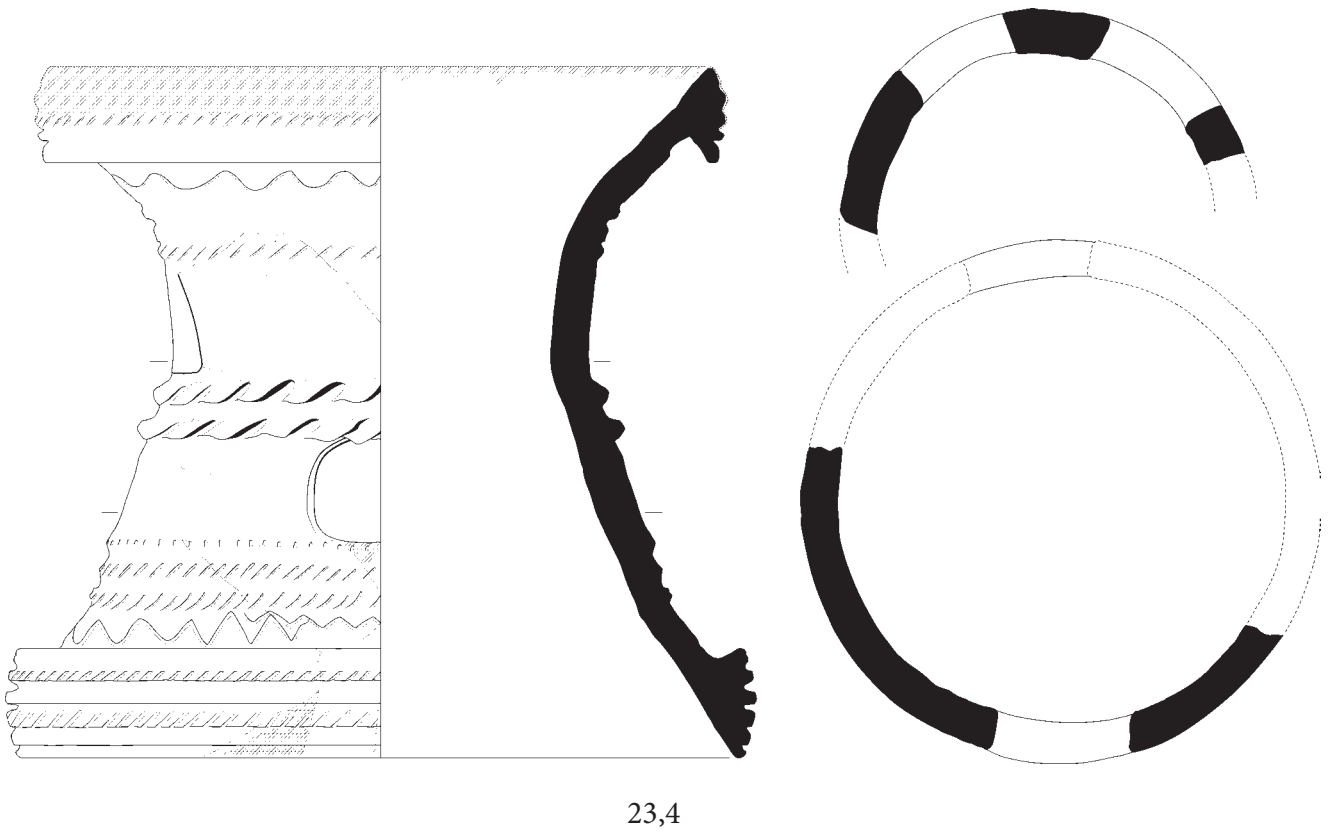


Fig. 13: The pottery of the Temple, Room A, level 4 — Catalogue see p. 170.

Fig. 9-13	Object	Description	Findspot	Dimensions	Material
1,1	Small goblet	Small goblet with cylindrical neck and slightly everted, pointed rim. Small applied ring base that is too low, so that the goblet does not stay firmly. Outer surface horizontally burnished	Temple, room A, destruction level, floor	H: 6.8; diam: 3.8	middle fine sandy, coloured inclusions
1,2	Small goblet	Small goblet with ring base, globular body and long cylindrical neck, slightly everted, thickened rim	Temple, room A, destruction level, floor	H: 5.1; diam: 2.8	fine sandy, black inclusions
1,3	Small goblet	Small goblet with flat base, slightly curved neck, slightly pointed and everted rim	Temple, room A, destruction level, floor	H: 6.6; diam: 3.7	fine sandy, slightly porous, black and grey inclusions
1,4	Small goblet	Small goblet with wide opening, flaring neck and pointed or rounded rim	Temple, room A, destruction level, floor	H: [5.8]; diam: 5.4	fine sandy, slightly porous
1,5	Goblet	Goblet with cylindrical, carinated neck and slightly flared, pointed rim, sagging base	Temple, room A, destruction level, floor	H: 8.5; diam: 4.8	fine sandy, black inclusions
1,6	Goblet	Goblet with squat body, flaring neck, simple rounded rim and flat base	Temple, room A, destruction level, floor	H: 7.8; diam: 6	coarse ware, slightly porous, black and grey inclusions
1,7	Painted beaker	Nuzi beaker with light brown (originally white?) painting in horizontal bands on dark surface	Temple, room A, destruction level, floor	H: [10,0]; diam: 8	Fine ware
2,1	Small bottle with narrow neck	Cylindrical neck, flaring rounded rim	Temple, room A, destruction level, floor	H: [4.1]; diam: 3.6	coarse ware, porous, black and white inclusions
2,2	Small bottle with narrow neck	Globular body (fragm.), cylindrical neck with slightly thickened rim, one handle from rim to shoulder	Temple, room A, destruction level, floor	H: [8.8]; diam: 2.8	coarse ware, porous, black and white inclusions
2,3	Small bottle with narrow neck	Very narrow cylindrical neck, rim not preserved. Small groove at the beginning of the globular body	Temple, room A, destruction level, floor	H: [7.1]; Dm (neck): [2]	coarse ware, porous, black and white inclusions
3	Small jar with vertical neck	Small pot with globular body, ring base and wide, vertical neck. Rim slightly thickened and almost horizontally everted	Temple, room A, destruction level, floor	H: 11.6; diam: 8	medium coarse, slightly porous
4	Small jug with trefoil spout	Small jug with trefoil spout, globular body and cylindrical neck. Thickened, slightly profiled rim. Broad handle from rim to shoulder	Temple, room A, destruction level, floor	H: [10.7]; diam: 6.4	fine sandy, slightly porous, black and grey inclusions
6,1	Small jug	Small jug with flat base. Rounded, thickened rim. Broad handle from the to shoulder	Temple, room A, destruction level, floor	H: 10.3; diam: 6.5	fine sandy, slightly porous
6,2	Small jug	Small jug with rather thick, carelessly made wall, flat base. Thickened, rounded rim	Temple, room A, destruction level, floor	H: 10.6; diam: 8	coarse ware, slightly porous, black and grey inclusions
7,1	Small bowl (fragm.)	Small bowl with vertical walls and rounded rim, base not preserved	Temple, room A, destruction level, floor (area I)	H: [3,4]; diam: 10,5	middle fine sandy, coloured inclusions
7,2	Small bowl (fragm.)	Hemispherical small bowl with pointed rim. Base not preserved	Temple, room A, destruction level, floor	H: [7.8]; diam: 13	middle fine sandy, coloured inclusions
7,3	Small bowl	Hemispherical small bowl with round base and pointed rim	Temple, room A, destruction level, floor	H: 5.9; diam: 14	medium coarse, slightly porous
7,4	Small bowl	Small bowl with round base and inwards bent walls, heavily overfired	Temple, room A, destruction level, floor	H: 6.2; diam: 14	fine sandy, orange-brown clay with coloured inclusions
8,1	Small plate	Small plate with thickened, interior bead rim. Base not preserved	Temple, room A, destruction level, floor	H: [7.1]; diam: 18	reddish-light brown clay, black inclusions
8,2	Small plate	Small bowl with beveled straight sides, beveled rim and flat base	Temple, room A, destruction level, floor	H: 5.0; diam: 14	coarse ware, slightly porous, black and grey inclusions

Fig. 9-12 – Catalogue: The pottery of the Temple, Room A, level 4.

Fig. 9-13	Object	Description	Findspot	Dimensions	Material
8,3	Small bowl	Small bowl with beveled wall and exterior bead rim. The vessel is distorted and slightly oval	Temple, room A, destruction level, floor	H: 4.8 – 5.5; diam: 15.5	medium coarse, slightly porous
8,4	Small plate	Very small, flat plate with short vertical rim and carinated flat base	Temple, room A, destruction level, floor	H: 2.6; diam: 11	medium coarse, slightly porous
8,5	Medium bowl	Medium bowl with simple rounded rim and ring base	Temple, room A, destruction level, floor	H: 6.9; diam: 23	fine sandy, light grey clay white inclusions
8,6	Small bowl (fragm.)	Small bowl with thin walls and inverted, carinated rim	Temple, room A, destruction level, floor	H: [5.5]; diam: 16	fine sandy, slightly porous
8,7	Small bowl (fragm.)	Shallow bowl with thickened, bevelled rim	Temple, room A, destruction level, floor	H: [2.6]; diam: 16	medium coarse, slightly porous
10,1	Large plate	Large plate with ring base; simple rounded rim slightly inwards turned	Temple, room A, destruction level, floor	H: 9.3; diam: 32	fine sandy, slightly porous
10,2	Large plate	Large plate with thick walls, ring base and beveled rim	Temple, room A, destruction level, floor	H: 13; diam: 32	fine sandy, light grey clay white inclusions
10,3	Large plate	Large plate with thick walls, ring base and rounded, exterior bead rim	Temple, room A, destruction level, floor	H: 9.25; diam: 33	fine sandy, orange-brown clay with coloured inclusions
12,1	Bottle (fragm.)	Fragment of a bottle (or jug?) with cylindrical neck and ledge rim, carination inside (for lid)	Temple, room A, destruction level, floor	H: [7.5]; diam: 11	coarse ware, sand-tempered
12,2	Bottle (fragm.)	Fragment of a bottle with cylindrical neck and round, thickened, everted rim	Temple, room A, destruction level, floor	H: [9.4]; diam: 13	medium coarse, red-brown, white and black inclusions
13,1	Medium-sized jug / bottle (fragm.)	Upper part of a medium-sized bottle with high cylindrical neck and flat ledge rim	Temple, room A, destruction level, floor	H: [13.3]; diam: 11.5	medium coarse, slightly porous
13,2	Medium-sized jug / bottle (fragm.)	Upper part of a medium-sized bottle with cylindrical neck and rounded thickened, everted rim	Temple, room A, destruction level, floor	H: [12.7]; diam: 10	medium coarse, slightly porous
16,1	Medium-sized jar (fragm.)	Medium-sized jar with wide opening and everted rounded rim. Base not preserved	Temple, room A, destruction level, floor	H: [25]; diam: 32	fine sandy, slightly porous
16,2	Medium-sized jar with handle (fragm.)	Medium-sized jar with handle; carinated shoulder and ledge rim with double grooves on the upper side, a single groove on the outside and an interior bulge	Temple, room A, destruction level, floor	H: [14.8]; diam: 32	fine sandy, light grey clay white inclusions
18,1	Large bottle (fragm.)	Large bottle with short neck and collared rim	Temple, room A, destruction level, floor	H: [17]; diam: 15	fine sandy, light grey clay white inclusions
18,2	Large bottle (fragm.)	Large bottle with carinated cylindrical neck. Collared rim, profiled also inside (for lid)	Temple, room A, destruction level, floor	H: [13.5]; diam: 14	fine sandy, orange-brown clay with coloured inclusions
21,1	Large storage jar with decoration	Large storage jar with short neck; combed decoration (two horizontal bands with a zig-zag band in between) on its shoulder. Strongly thickened ledge rim with a bulge projecting inside the jar	Temple, room A, destruction level, floor	H: [40]; diam: 30	coarse ware, sand-tempered, pale light grey
21,2	Large storage jar with decoration and potmark	Large storage jar with strongly thickened, rounded rim; a bulge projecting inside the jar. Combed decoration lines emanate from the rim, done with an eight-rayed, 1.1 cm broad comb: two horizontal bands with a zig-zag band in between. A combed line extends vertically below this horizontal band. Close to it there is a potmark (done after firing), consisting of one long line, which is cut by 6 short, vertical strokes	Temple, room A, destruction level, floor	H: [12]; diam: 29	coarse ware, sand-tempered, pale light grey

Fig. 9-12 – Catalogue: The pottery of the Temple, Room A, level 4.

Fig. 9-13	Object	Description	Findspot	Dimensions	Material
23,1	Small fenestrated pot stand	Pot stand with 3 oval perforations in the middle of the body	Temple, room A, destruction level, floor	H: 8.8; diam 9.7	fine sandy, light grey clay, white inclusions
23,2	Medium fenestrated pot stand	Pot stand with 3 round perforations in the middle of the body	Temple, room A, destruction level, floor	H: 10.2; diam: 11	fine sandy, light grey clay, white inclusions
23,3	Medium pot stand	Pot stand without perforations	Temple, room A, destruction level, floor	H: 14.5; diam: 14.5	medium coarse, slightly porous
23,4	Large decorated, fenestrated pot stand	Highly decorated pot stand with profiled rim and horizontal bands of grooved, incised and plastic applications; oval perforations	Temple, room A, destruction level, floor	H: 37; diam: 35	medium coarse, slightly porous

Fig. 13 — Catalogue: The pottery of the Temple, Room A, level 4.

zigzag line, and at the bottom another row of hanging bow. The remaining surface of the beaker was vertically burnished. The clay is unique in Bazi, and this is the only piece of Nuzi pottery which has so far been found at Bazi. It had certainly been imported, since it stands out in every respect from the locally produced pottery.

Small globular bottles with narrow neck are attested with and without a handle (Fig. 9. 2,1-2,3). Other small closed forms such as ring-based pots, jugs with trefoil spout and coarse jugs with thickened rim, with or without handle, are also attested, although not frequently (Fig. 9. 3-6).

Open forms such as small bowls with round base (Fig. 9. 7,1-7,4), small plates with flat base, usually thicker than the bowls and sometimes bevelled at the outside (Fig. 10. 8,1-8,7) and large plates or bowls with simple rounded or bevelled rims and ring base (Fig. 10. 10,1-10,3) are quite frequent. They were apparently used as offering plates for various goods such as cereals and other food donations. Some of them still contained edibles such as barley, sesame, grapes, meat and others.

Medium-sized and large vessels such as medium-sized vats (Fig. 11. 16,1-16,2) and large jars (Fig. 12. 18,1-18,2) are less frequently attested than in the houses. Likewise large storage jars with combed decoration (Fig. 12. 21,1-21,2) are rare. This indicates that no large quantities of edibles were stored or kept in the temple, but that food was brought here by different people, not all of them were locals.

Completely absent is the large beer vat (type 22 in the Weststadt). It indicates that the production of beer is unlikely to have taken place in the temple. However, the residue analysis of several pottery vessels, especially of the small goblets or beakers (Type 1), proved in many cases positive for oxalate, indicating that they contained

beer.¹⁷ Apparently beer was offered or consumed inside the temple, but was brewed elsewhere, presumably in the individual houses (OTTO 2012b).

Pot stands are more frequently attested in the Temple than in the houses (Fig. 13). They range from small to large; the sides are plain (Fig. 13. 23,3), can be pierced by round or triangular openings (Fig. 13. 23, 1-2), or are highly decorated with profiled rims and horizontal bands of grooved, incised and plastic applications (Fig. 13. 23,4).

In total, the Temple pottery is much less homogenous than the pottery from the Bazi houses. In the Temple, contemporary pots are found mixed with antique pieces; typical forms which were used for offering small to medium amounts of liquid or solid food, including miniature vessels, and appealing stands are more frequent; also, there is an exceptionally high degree of variation within one type. Taken all this together, it seems that a considerable number of people from various places were bringing offerings to the Temple and over quite a long time.

The radiocarbon dates from Tall Bazi

BERTHOLD EINWAG AND ADELHEID OTTO

Several ¹⁴C samples from various areas at Tall Bazi were sent for analysis to different laboratories (Table 2; Table 7). The first five samples came from burnt assemblages

17 The residue analysis was undertaken by Dr. Martin Zarnkow, TU München, Forschungszentrum Weihenstephan, to whom our sincere thanks are due.

in four contemporary Weststadt houses (Table 3). They were analyzed in 2002 in the DAI laboratory in Berlin (R_Date Bln), published (GÖRSDORF 2006) and taken as relevant for dating the Weststadt to the end of the Late Bronze age (OTTO 2006a: 20-21). What puzzled us immediately, was the fact that the carbonized barley grains, which were kept in storage jars in House 20 and House 46 and can by no means have been older than one year at the moment of the destruction, dated older than the remains of wooden beams from the houses. Gradually we began to doubt this dating, and the intriguing dates were discussed (OTTO 2014b: 93-95).

The radiocarbon dates from Tall Bazi reveal a problem with this in general useful and important method of dating. Because of the apparent discrepancy of the just mentioned ^{14}C dates with the absolute dates of other sites, more samples from Tall Bazi were sent for analysis to four more laboratories in Kiel (Germany), Georgia (USA), Groningen (The Netherlands), and Vienna (Austria). The results are not consistent, and raise questions as to the reliability of radiocarbon analyses in general. There may be convincing explanations for the puzzling differences between the individual radiocarbon analyses, but nevertheless the reliability of the results has to be treated with caution (see summary).

Results of the Radiocarbon Analyses in five different laboratories

Lab 1: The results of the Berlin laboratory analyses of the Weststadt have been published and discussed elsewhere (GÖRSDORF 2006; OTTO 2014b). In 2007, Dr. Görzdorf on behalf of the DAI conducted more analyzes; the measurements were done by Dr. Anderson of the Leibniz-Labor in Kiel. Among others, one sample of wood from the burnt destruction level of House 1, Room 12 in the excavation area “Abdallah’s field” (Lower Town Area AF House 1) was analysed (see Table 2, “Lower Town AF-wood”). The house was situated in the Northern Lower Town halfway between the Weststadt and the Banat houses (EINWAG/OTTO 2006: 123-125). The layout and material of the excavated Houses 1 and 2 are identical to those of the Weststadt houses, ended also in conflagration and should be contemporary. The radiocarbon date ranges between the late 15th and the 14th century BC.

Lab 2: Three samples of carbonized grain from the heavily burnt material on floor level of the Temple, Room A, were analyzed in 2008 by Prof. Dr. P. M. Grootes, Leibniz-Labor für Altersbestimmung und Isotopenforschung, Christian-Albrechts-Universität Kiel (Table 2; 4; R_Date KIA). The translation into the „Calibrated age” was made

with „CALIB rev 5.01” (IntCal04, REIMER ET AL., Radiocarbon 46: 1029-1058). All three samples cluster closely around $3115/3120/3125 \pm 35$ BP, which gives a highly probable date for the destruction level between 1453-1313 BC. There are two peaks, one around 1410 BC and the other around 1325 BC.

Lab 3: Three samples of carbonized grain and one sample of carbonized beans from the destruction level of the Temple, Room A, were analyzed in 2012 by the Centrum voor Isotopenonderzoek at Rijksuniversiteit Groningen (Table 2, R_Date GrAnr). The results of the four AMS analyses ranged between 3475 and 3340 BP, which gives dates between the 19th and 16th century cal BC with peaks between 1800 and 1600 BC. These dates seem far too high, and cannot be explained.¹⁸ The material, its findspot and context, are similar to the material which was analyzed in Vienna, Georgia and Kiel. The deviation of the Groningen dates from all the other results is so marked that it seems obvious that the analyses from Groningen should not be taken into consideration.

Table 4 shows all the analyses of barley from the same destruction level in the Temple and two samples from the destruction level in the Weststadt.

Lab 4: We decided to have samples from the same context analyzed at another laboratory. One sample of carbonized barley and one sample of carbonized beans, both from the destruction level of the Temple, Room A, were sent in 2013 to the Center of Applied Isotope Studies at the University of Georgia, Dr. A. Cherkinsky (Table 2; 4, R_Date UGAMS). The results of the ^{14}C Radiocarbon analyses and Stable Isotope Ratio $d^{13}\text{C}$ are 3220 BP ($d^{13}\text{C}$ -22.6) and 3110 BP ($d^{13}\text{C}$ -21.8). This gives dates between the 16th and 13th century BC (95,4 % probability).

Lab 5: Lastly, ten ^{14}C samples from the Temple on top of the Citadel were analyzed in a laboratory in Vienna in 2016, together with five samples from Munbaqa (see BLOCHER/WERNER, this volume). Wherever short-lived material was available, this was preferred. Samples 9 and 15 are carbonized grain from the burnt horizon of the final level of Room A (Table 2; 4, R_Date EuphratSBZ). The other samples are wood mainly from Room B (Table 2; 5). Their date can only be taken as a terminus post quem for the associated level.¹⁹

¹⁸ We discussed the results with Prof. J. van der Plicht. He assured, that the measurements and the pretreatment were made properly, and confirmed that contamination was highly unlikely.

¹⁹ We thank Katleen Deckers for analyzing the material and selecting the samples. Her notes on the material are added in the footnotes.

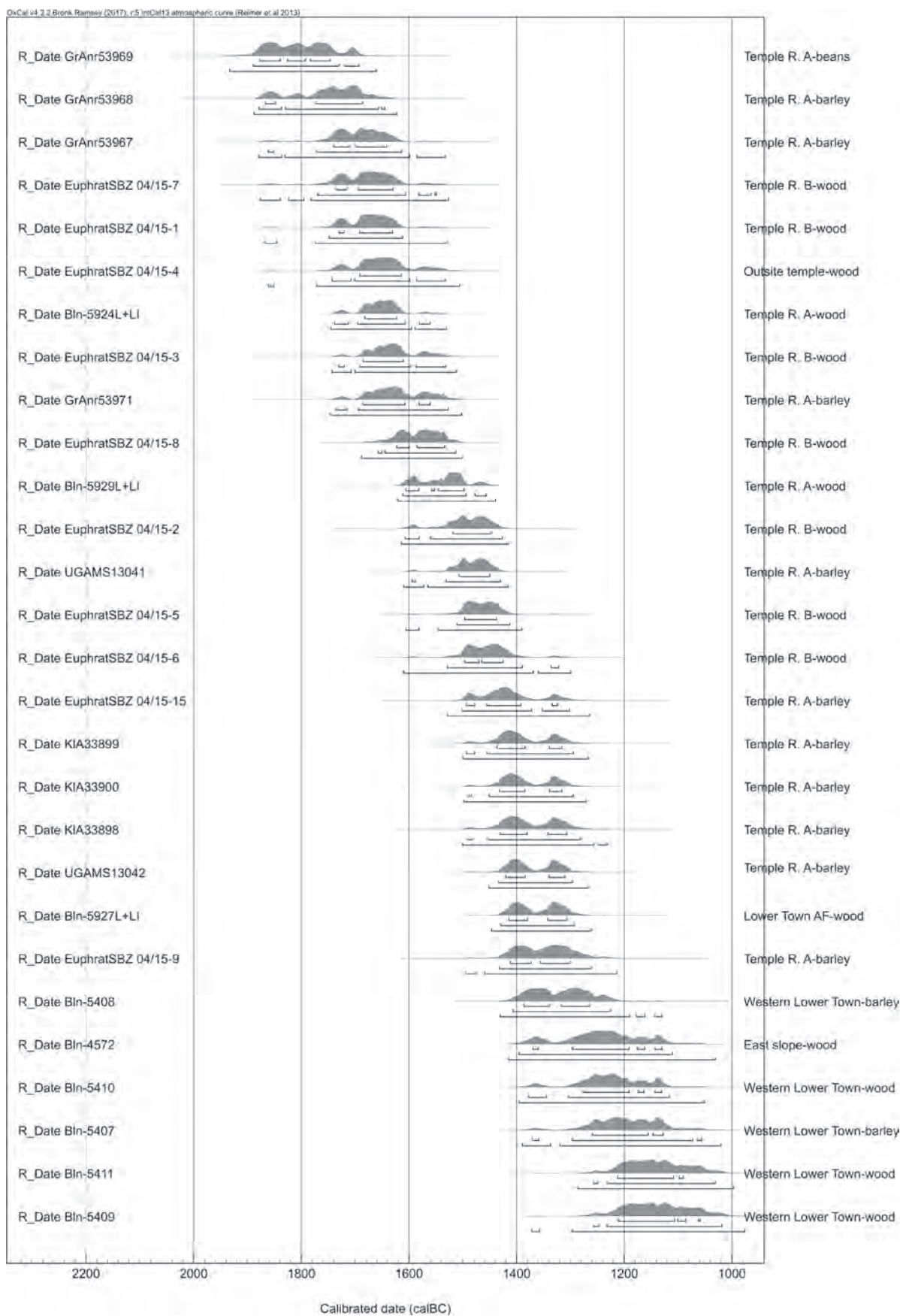


Table 2: 14C samples from Tall Bazi; all material from Late Bronze age contexts.

The Late Bronze Age at Tall Bazi: The evidence of the pottery and the challenges of radiocarbon dating

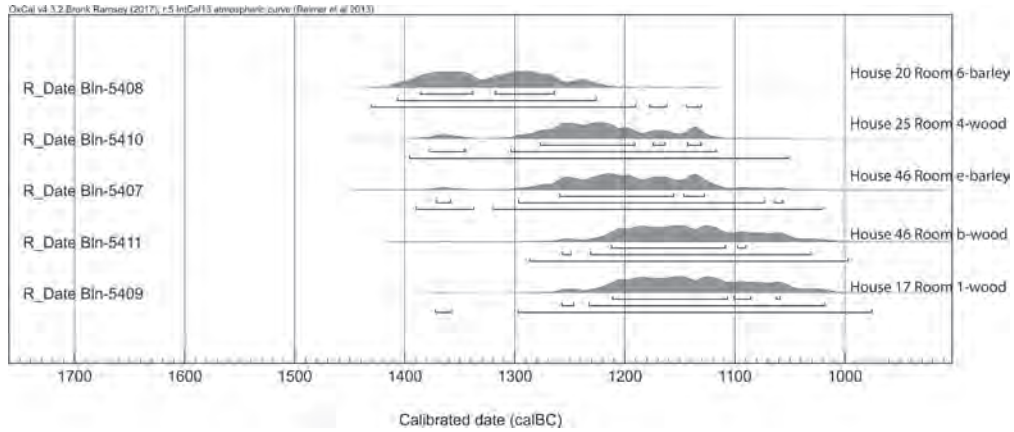


Table 3: The earliest analyses of carbonized material from the Weststadt houses.

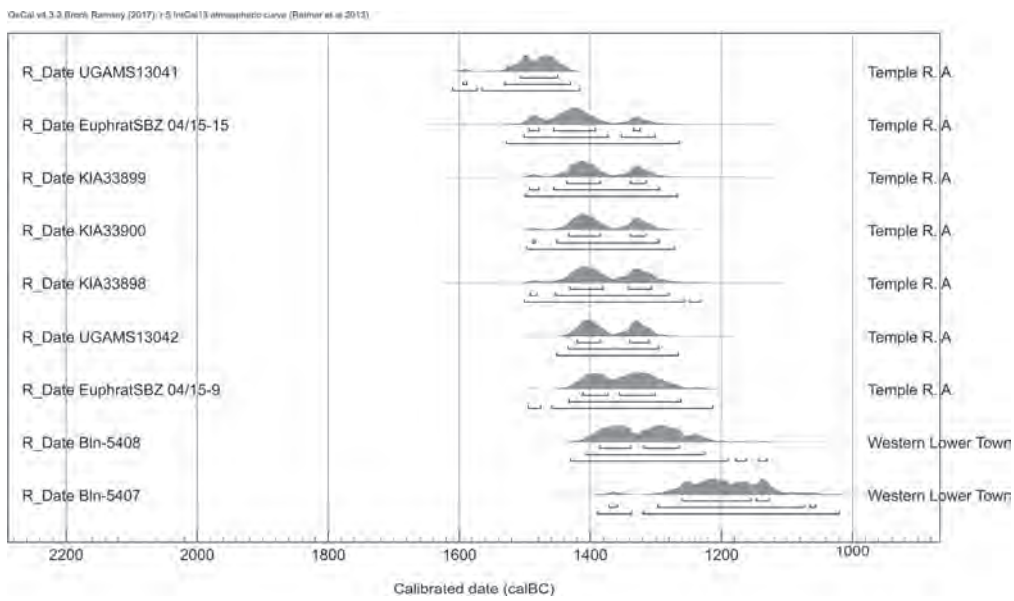


Table 4: 14C samples from carbonized grain; all from the destruction level of the Temple, Room A and the Weststadt (Bazi level 4).

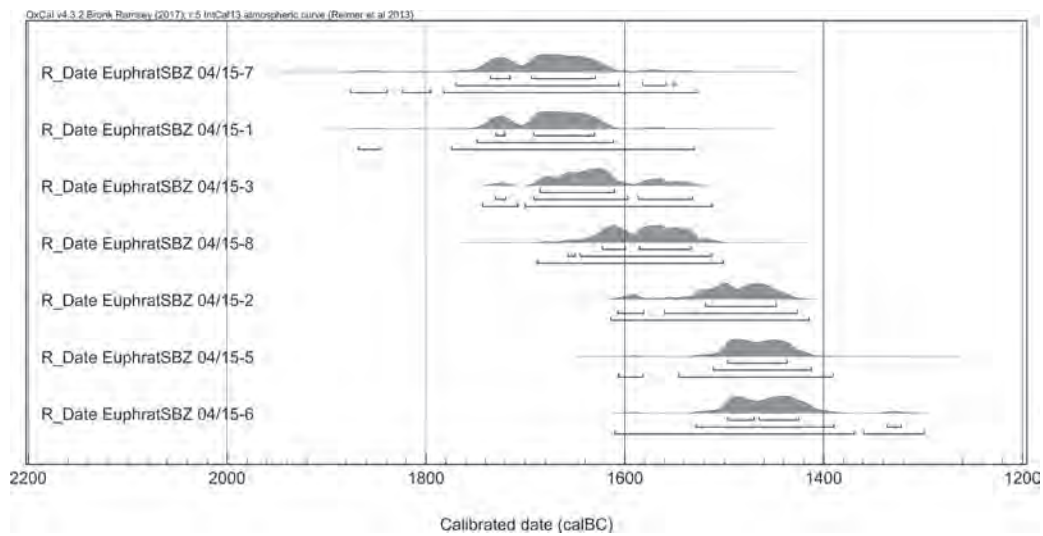


Table 5: 14C samples from the various levels of the Temple, Room B.

Findspot of samples	Sample nos.	Material	Date calBC (95 % probability)
Temple, destruction horizon, last phase of Room A	9 ²⁰ , 15 (Vienna), 33898-900 (Kiel), 13041-2 (Georgia)	Grain (barley) and beans	1430-1263; 1417-1229; 1457-1299; 1453-1313; 1458-1313; 1532-1431; 1435-1297.
Temple, last phase of Room B	1 ²¹ (Vienna)	Populus/Salix	1745-1613
Temple, second phase of Room B	3 ²² (Vienna)	Pinus halepensis	1729-1532
Temple, end of first phase of Room B	2 ²³ , 5 ²⁴ , 6 ²⁵ , 7 ²⁶ , 8 ²⁷ (Vienna)	Ulmus; Tamarix; Populus/Salix; Populus/Salix; Tamarix	1606-1424; 1509-1414; 1527-1323; 1768-1559; 1657-1513
West of Temple, level earlier than Temple	4 ²⁸ (Vienna)	Populus/Salix	1742-1533

Table 6: List of 14C samples from the Temple area, ordered chronologically

The samples cover most of the Temple's use phases (Table 6). Sample 4 comes from the level outside the Temple, into which the building was dug. Samples 2, 5, 6, 7 and 8 derive from the end of the first use phase of the Temple, Room B, thus covering the whole period of the erection and first use until the first abandonment of Room B. Sample 3 is from the second phase of the Temple, Room B; sample 1 is from the last phase of Room B. Samples 9 and 15 come from the final destruction level of the Temple, which was attested in Room A only, since Room B was no longer in use. The other analyses of the barley from the Temple, Room A are fairly consistent and give two peaks, one around 1410 BC and the other around 1325 BC (Table 4). One Weststadt sample and the sample from the Northern Lower Town fall into the same range.

One sample (Table 2: Lower Town AF-wood) came from the burnt destruction level of House 1, Room 12 in the excavation area "Abdallah's field", which is the Northern Lower Town halfway between the Weststadt and the Banat houses (EINWAG/OTTO 2006, 123-125). The layout and material of the excavated Houses 1 and 2 are identical to those of the Weststadt houses. The radiocarbon dates shows a similar range.

In sum, all the radiocarbon dates together favour a date around 1325 BC for the overall destruction of Tall Bazi.

20 50/23:432. This carbonized grain sample 9 dates similar to sample 14 from Munbaqa (a piece of wood from the younger house level II-Mbq-3), which was analyzed at the same laboratory. This may be a hint that the destruction at Bazi and the end of Munbaqa II-Mbq-3 took place roughly at the same time.

21 50/22:87 Populus/Salix. Note by Deckers: „No bark, no clear curvature to be identified and no annual ring seen, so probably only 1 year present.“ Temple, Room B, north-west corner, 4th floor, below fallen roof, H: 372,05 m. Date max: 1745-1613. Peaks at 1730-1721 and 1692-1630.

22 51/20:341. Pinus halepensis. Note by Deckers: „Outer part selected of a larger fragment with larger curvature and several years; ca. 1 year in the dating sample.“ Temple, Room B, south-east corner. In burnt material of the fireplace, Lot 5120194. Date max: 1729-1532.

23 51/20: 351. Ulmus. Note by Deckers: „1 fragment Ulmus - no specifics seen, small fragment, probably only from within one year, rays relatively parallel which would imply it is more from the outside from a larger trunk.“ Temple, Room B, south-east corner. On hard mud floor of early use phase. Date max: 1606-1424.

24 51/20:361. Tamarix. Note by Deckers: „One Tamarix fragment from which I selected the outer annual ring – none of the samples had

bark ore were clear small twigs.“ Temple, Room B, below second floor.

25 Populus/Salix. Note by Deckers: „ This fragment had a very weak curvature, is thus more from the outside of a larger beam and probably only one year on it (no clear annual ring seen).

26 51/21:317. Populus/Salix. Note by Deckers: „The ring curvature was weakly curved and only 1 annual ring is sampled - no certain small twigs seen.“ Temple Room B, mudbrick installation, from 1st temple building phase. Date max. 1768-1559.

27 50/21:49. Tamarix. Note by Deckers: “The fragment had quite parallel rays which indicates it comes more from the outside of a larger branch/beam. I selected the outer year (there were ca. 3 years present).” Temple Room B, westside. On hard mud floor, 1st temple phase. Max. 1657-1513.

28 49/22:197. Populus/Salix. Note by Deckers: “Very large vessels; no annual ring was seen so that the whole fragment probably belonged to 1 year. Looking at the angle of the rays this piece derives from the outside of a larger beam since the rays were almost parallel.” Outside the Temple, from MBA level. Date max: 1742-1533. 1700-1600 (2 Sigma).

Name of Sample	Age BP
Lab 1	
Bln-4572	3002 ± 43
Bln-5407	2977 ± 35
Bln-5408	3054 ± 33
Bln-5409	2937 ± 37
Bln-5410	2993 ± 33
Bln-5411	2939 ± 33
Bln-5924L+LI	3357 ± 25
Bln-5927L+LI	3102 ± 25
Bln-5929L+LI	3255 ± 25
Lab 2	
KIA33898	3115 ± 35
KIA33899	3126 ± 32
KIA33900	3122 ± 30
Lab 3	
GrAnr53967	3395 ± 35
GrAnr53968	3435 ± 35
GrAnr53969	3475 ± 35
GrAnr53971	3340 ± 35
Lab 4	
UGAMS13041	3220 ± 25
UGAMS13042	3110 ± 25
Lab 5	
EuphratSBZ 04/15-1	3378 ± 31
EuphratSBZ 04/15-2	3224 ± 31
EuphratSBZ 04/15-3	3343 ± 28
EuphratSBZ 04/15-4	3359 ± 36
EuphratSBZ 04/15-5	3193 ± 29
EuphratSBZ 04/15-6	3179 ± 38
EuphratSBZ 04/15-7	3382 ± 37
EuphratSBZ 04/15-8	3310 ± 26
EuphratSBZ 04/15-9	3091 ± 36
EuphratSBZ 04/15-15	3147 ± 38

Table 7: 14C samples from Tall Bazi

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