# TALL ABŪ AL-KHARAZ: THE SWEDISH JORDAN EXPEDITION 2010, THIRTEENTH SEASON PRELIMINARY EXCAVATION REPORT

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### Introduction

The thirteenth season of excavation at Tall Abū al-Kharaz was carried out with the kind support of the Department of Antiquities and its new director Dr Ziad al-Saad between 20 September and 20 October 2010. This year's field work was a direct continuation of a research project which started in 2008 and continued in 2009 (see Fischer et al. 2009, 2010), which is mainly devoted to the Iron Age occupation of the site (see earlier publications on the Early, Middle and Late Bronze Ages in Fischer 2006, 2008; Fischer ed. 2006). The excavations were continued in order to explore the earliest Iron Age occupation of Tall Abū al-Kharaz and to study new material for a refined stratigraphy to be published in the next volume, namely, that on the Iron Age (Fischer forthcoming). Excavations concentrated on Area 9, where very well-preserved, undisturbed contexts dating to the Iron Age I period were discovered in 2009 (for map see Fischer 2010: Fig. 1, Trench LI). The recovery of good radiocarbon samples from sealed floor contexts had, as usual, high priority.

The 2010 team consisted of 35 individuals, including P. M. Fischer (director), R. Feldbacher (assistant field director), H. Ta'ani (foreman, trench supervisor), M. al-Bataineh (surveyor, draughtsperson). Trench supervisors were J. Azzopardi, D. Blattner, T. Bürge, L. Franz, A. Gustafsson, N. Monschein, M. Pehrson and P. Täuber. Assistant trench supervisors were I. Fischer, L. Längström, R. Lundh, S. Lundh, J. Martinell, S. Martinell, L. Nyström and M. Werngren. The Department of Antiquities representative was Mohammed al-Shalabi. The expedition was further strengthened by the new inspector of Pella, Nasser Khasawneh. Additional support was provided by Samir Esbeihat (cook), Deeb Jawahreh (pottery washing) and Musa Mohammed Ahmad (transport). Ten local workers from Pella, al-Mashāri' and al-Yābis were engaged in the excavations.

The Royal Court, represented by T.R.H. Prince Raad bin Zaid and Princess Majda Raad, and the Swedish Embassy headed by H.E. C. Sparre again showed interest in our work and provided valuable support. The Department of Archaeology and Anthropology of Yarmouk University in Irbid, headed by Dean Professor Z. Kafafi, supported the expedition in many ways and also organised a public lecture at Yarmouk University, where the results from Tall Abū al-Kharaz were presented and discussed in a wider forum. Amongst our visitors were those from the Department of Antiquities, American Center of Oriental Research, the German Protestant Institute and Yarmouk University.

# Results from the 2010 Excavations in Area 9: Trenches LII-LV (Fig. 1)

# Background

At the end of the 2009 season of field work it was intended to clean and consolidate the Early Bronze Age to Abbasid city walls in Area 9. We were able to expose and clean some 30 m of defensive systems of all periods in Area 9, east of the trenches which were excavated in 1994 and 1995. Walls visible on the surface were recorded by total station in order to present them digitally in three-dimensions; some were also consolidated. During cleaning, a near-square structure, 4.4 m x 4.2 m in size (outer dimensions), built on top of the MB / LB city wall and projecting southwards was exposed (see Fischer 2010). Two strata of Iron Age occupation were



1. Location of Trenches LI-LV in Area 9.

discovered, *viz*. Strata 1B and 1C<sup>1</sup>, of which the oldest, Stratum 1C, yielded twenty three complete earthenware vessels and many other finds of metal, stone and organic material in an excellent, primary context. Six radiocarbon dates from the floor of Stratum 1C are all between roughly 1200 - 1000 BC. This encouraged us to extend the excavations to the east; a total of 28 m represented by Trenches LI - LV was opened during these two seasons. The area of excavation slopes 1.18 m in 28 m from east to west.

Unfortunately three deep looters' pits, approx. 3 m wide, had been dug into the area. Other areas also suffered from extensive looting. As the *tall* is privately owned and not the property of the Department of Antiquities, no guard has

been placed on the site to date.

#### Stratum 1A

The architectural remains of this phase, most of them visible on surface or just below a thin layer of colluvial soil, were badly preserved. Only the northern part of this compound provided some interpretable structures (Walls 629, 615 and 617). The western structure is fairly well-preserved and approx. 11 m (east - west) x 5 m (north - south) in size. A 4 m wide (?) gate separates it from the eastern structure, of which only one wall (W618) and a stone pavement were exposed. The function of these two buildings is difficult to assess. Nevertheless, the large size of the western structure and its proximity to

<sup>1.</sup> The preliminary stratigraphy is from the top down, i.e. Stratum 1A, 1B etc., regardless of area. This means that

Stratum 1B in Area 7, for example, need not necessarily correspond with Stratum 1B in any of the other areas.

the summit of the *tall* makes it likely that it had an administrative function. The 4 m wide opening between the two buildings is suggestive of a portion of the city gate.

The majority of sherds are from the second part of the Iron Age, but a few intrusive sherds dating to the late Roman / Byzantine and Abbasid periods were also found. There are no other finds of significance except for a typical Iron Age loom weight of unfired clay.

# Strata 1B1 and 1B2 (Fig. 2)

The exposed compound is at least 22 m wide (east - west) and 8 m long (north - south), and



2. Phase 1B (Iron Age I/IIA): selected pottery.

contains nine walled spaces. These are bordered to the south by the array of city walls from earlier periods which were re-used as foundations for new structures. The uppermost of these re-used and modified walls is W616. Two sub-phases can be distinguished in the eastern portion. Whereas the structures of the western part remained unchanged throughout the period represented by Stratum 1B, the structures of the eastern part indicate two sub-phases, the more recent Stratum 1B1 and earlier Stratum 1B2.

In the west is the largest walled space, 6 m x 5m large. It is most likely a courtyard which was partly stone-paved. There are three stone-lined installations along the southern wall (W632) which are associated with food preparation. In the north is a displaced limestone door socket. On the floor is a substantial layer of burned debris and ash. Finds from the floor level and fill above it include a black juglet (N1323), a plain juglet (N1333), two ceramic spindle whorls of recycled pottery sherds (N1325, N1331) and an arrow head of bronze (N1335). To the north-east of the eastern wall bordering the courtyard were three additional finds: a recycled spindle whorl (N1326), part of a basalt bowl and a partially preserved bronze handle of a sword or large dagger (N1328).

The next eight spaces were likewise covered with debris and ash but are smaller, being in the region of 2 - 3 m x 2 m. Two central spaces are partially stone-paved, the southern one of which is disturbed by a sewer (L196). The sewer dates to the Abbasid period and functioned as a drain for rainwater from higher up the *tall*, leading it out of the city through the array of city walls from earlier periods. Large pieces of a black jar with the typical white Abbasid decoration were found imbedded into the sewer. The central rooms contained numerous pieces of leather-hard, unfired, mainly larger vessels, which is indicative of local pottery production. The northern of the next pair of rooms to the east contained quite a large, roughly circular installation which is most likely a pottery kiln. Opposite the kiln is a clay bench and south of it a small fire place built of mud-bricks. Amongst the finds are a fishing hook (N1322), a basalt millstone (N1324), a limestone mortar (N1385),

a cylindrical clay lid (N1342), a carnelian bead (N1344), a tool or pendent of terracotta (N1393) and a decorated jar with a pattern encircling the entire shoulder (N1400; Fig. 2:1). The pattern on the shoulder of the decorated jar gives the impression that the potter was trying to imitate script. According to K. Jaros (pers. comm. 29 October 2010), the most frequently appearing 'sign' resembles a *waw*; others look like *kaph*, samech and taw. However, the pattern cannot be read and it may be the case that an illiterate potter tried to imitate letters, because it is difficult to see it as mere decoration. This example is completely different to other similar vessels, on which the decoration is much more accurately executed. Cooking pots typically have triangular rim sections (Fig. 2: 5, 6) and storage jars show often neck ridges (Fig. 2: 4).

The earlier sub-phase is apparent in the four eastern rooms, where in one of the northern rooms two  $t\bar{a}b\bar{u}ns$  preceded the kiln. There are also clay installations and a millstone, all of which point to food preparation. Finds from these eight spaces are relatively scarce, which suggests either that the people resettling in the later part of Iron Age 'cleaned' the area or that the area was looted after the conflagration and probable attack. It is obvious from the thick layer of debris and the ash that Stratum 1B suffered from a severe catastrophe.

According to the pottery and radiocarbon dates, this stratum belongs to the end of Iron Age I or possibly the beginning of Iron Age II.

## *Stratum 1C* (**Fig. 3**)

During the second half of the excavation season, we reached the stratum corresponding with the partially exposed building from the 2009 excavations which was so rewarding in terms of its state of preservation and numerous finds (see above and Fischer 2010; Locus 160). Regrettably, three of the looters' pits had reached Stratum 1C and seriously disturbed its contexts. One pit was in the northern room of the most westerly pair (Room 1), the second in the southern room of the third pair (Room 6) and the third east of the seventh pair, i.e. outside the openedup area to the south<sup>2</sup>.

After removing debris with a total depth of

<sup>2.</sup> The rooms are here numbered 1 to 14; Room 1 is north



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almost 1 m and up to 0.5 m of burned roofing materials, we were able to expose a compound extending approx. 28 m east - west and 8 m north - south (2009 and 2010 seasons). The compound consists of seven pairs of rooms (R1 - 14 in Fig. 3) which gives a strong impression of centrally supervised town planning. The 14 rooms are fairly standardized, ranging from 2.5 m x 3 m to 3 m x 3 m in size. The walls of the compound are typically 0.6 - 0.7 m thick, except for the city wall which is approx. 1 m thick and against which the compound is built to the south. All seven pairs of rooms are connected to each other through standardized entrances which are 0.6 m wide. These entrances are always to the east, except for the most westerly pair of rooms which had the entrance to the west. Some entrances have a threshold of clay, because the northern row of rooms is somewhat higher up the tall than the southern row. All rooms were plastered on the inside with a layer of fine clay.

The floor contexts of the 12 undisturbed rooms were amongst the most rewarding of all those excavated over the past 20 years. Room 1 was looted and Room 2 is the space which was excavated in 2009 and which was crowded with finds. Rooms 3 and 7 were unexpectedly devoid of finds of special interest in comparison with the contents of the other rooms. Room 4 contained a cooking pot (N1399) and bronze pin (N1367), and Room 5 four complete storage jars. Room 6 was partially looted: only a broken basalt bowl (N1377) and numerous pieces of unfired vessels remained. Room 8, which was clearly a storage and working facility, was again full of finds: storage jars, typical early Iron Age cooking pots with triangular rims (see Fig. 4: 3), jugs - one still sealed with a lid and containing flint blades (N1397 in Fig. 5: 2), mortars, two spindle whorls (N1340, N1376), a basalt pestle (N1345) and a juglet (N1386). The next two rooms, Rooms 9 and 10, were also packed







5. Phase 1C (Iron Age I): selected pottery.

with finds which included some imports: one is a large jug from Room 9 (Fig. 9:1). This is a 'pilgrim-flask' of excellent craftsmanship, with bichrome decoration on a burnished red background, most likely an import from the Phoenician cultural sphere. This room also contained an upright stand / incense burner (N1390; Fig. 7: 1, 2) with a lid in the shape of a chalice, all in situ (see appendix by T. Bürge). Other finds are an unusually shaped cooking pot (N1358), a pilgrim flask, pyxis (N1392) and stone tools including a mortar and pestle. The southern Room 10 was entered through an aperture in the south-east of Room 9. This room was also packed with finds. In the south-west corner of the room, storage jars were leaning against the walls (N1359, N1360, N1361, N1366). Other finds from Room 10 are kraters (e.g. N1356), pilgrim flasks (e.g. N1350), a double-pyxis (N1365; **Fig. 6: 4**), a pyxis (N1351; **Fig. 6: 3**), various juglets (e.g. N1355), lamps - one of which is four-spouted (N1352; **Fig. 4: 2**), and a variety of stone tools. There are at least two vessels which were definitely imported: first, from the south-west corner, is a large, shallow, white-slipped and burnished bowl standing on three loop handles (N1372; **Fig. 4: 1**) and, second, a large, monochrome, decorated jug with a thick white, burnished slip (N1352; **Fig. 5: 4**). The latter in particular has a strong resemblance to Philistine jugs.

The next pair of connected rooms, Rooms 11



6. Phase 1C (Iron Age I): selected pottery and other finds.

and 12, likewise contained a multitude of objects, some imported. The northern Room 11 contained seven storage jars (e.g. N1400), four cooking pots, a chalice and two large 'goblets' (e.g. N1397; **Fig. 5: 1**). Room 12 to the south contained, *inter alia*, nine storage jars, jugs, juglets and a lamp (N1371). There are also two elaborate pilgrim flasks in Room 12 (L267-3; **Fig. 6: 1**, N1381; **Fig. 6: 2**). Other finds include a steatite scaraboid with a stylised representation of a horse's head instead of the more common representation of a beetle's pronotum

and wings, and drilled circular decorations on the base (N1388; **Fig. 6: 6**). There was also a paste scarab with the possible throne name of Tuthmosis III (N1389; **Fig. 6: 7**)<sup>3</sup>. One of the small vessels is of calcite in the shape of a pyxis (N1382). Room 13, the northern of the next pair of rooms, is remarkably well-preserved; its well-constructed walls still stand to a height of more than 2 m. Rooms 13 and 14 did not contain the same quantity of finds as the rooms to the west. Nevertheless, a number of stone tools and a complete *tannūr* in Room 14 deserve mention.

<sup>3.</sup> A. Ahrens, German Archaeological Institute, Damascus wrote on 26 October 2010: "... a rather mediocre version of "Men - Kheper – Re" (= Tuthmose III throne name)... However, this is not clear beyond doubt, and

one of the signs could also read "user / woser"... Since the hieroglyphs are locally executed, a definite reading is always difficult...".



7. Phase 1C (Iron Age I): stand and chalice-lid from Room 9.

The *tannūr* lay on its side with heavy roofing material on top.

Four radiocarbon samples were recovered from the corresponding Stratum 1C during the 2009 excavations (Locus 160, the southern of the most westerly pairs of rooms, i.e. Room 2). One of the dates is a Middle Bronze Age outlier, but the remaining three all range from 1200 to 1000 BC ( $2\sigma$ ), or roughly 1130 to 1000 BC ( $1\sigma$ ). The pottery and other finds confirm the radiocarbon dates, i.e. Iron Age I, most likely the latter part of that period.

### **Future Objectives**

Protection and guarding of the site has been

approved by the Department of Antiquities, which will facilitate continuation of the project. Consolidation of the well-preserved architectural remains is a priority and has already been initiated. Extension of the areas opened in 2009 and 2010 to the north, i.e. to the centre of the city, is an objective for forthcoming seasons, so as to further investigate these remarkable remains of the early Iron Age.

# Appendix 1: A Note on an Early Iron Age Stand from the Excavations at Tall abū al-Kharaz, 2010 (T. Bürge)

#### Material and Context

During the 2010 season at Tall Abū al-Kharaz, a stand (N1390/1; Fig. 7: 2) was discovered in an early Iron Age compound. It was found in situ in the north-west corner of Room 9 in Trench LVA (see Fig. 1). The dimensions of Room 9 are 3 m x 2.5 m, the thickness of the walls being 0.6 m (western wall W624), 0.6 m (southern wall W635), 0.65 m (northern wall W649) and 0.6 m (eastern wall W639). Their preserved heights are 1.35 m (W649; total height 2.25 m, upper portion re-used in Phase 1B), 2.10 m (W624), around 2 m (W639 - not completely exposed) and 1.10 m (W635). Room 9 is connected to Room 10 to the south through a 0.55 m wide gap between the eastern end of W635 and wall W639.

The stand consists of two pieces, the stand itself and its lid, a chalice. The stand is 47 cm high; its basal diameter is 24 cm, narrowing to 12 cm at the top. It is double-fenestrated and of cylindrical shape, flaring slightly out towards the double-carinated base. It has two vertical handles slightly above and between two rectangular windows with rounded corners, each 6 cm wide and 8 cm high. The everted and rounded rim is worn and only a small part of it is preserved. The stand is wheel made, hard fired, its fabric yellowish - brown, coarse with mainly grey inclusions; the slip is light reddish - yellow. It has no decoration, but dark grey patches are visible from top to bottom - probably the remains of an oily substance which had flowed down the object. A chalice was placed on top, in the opening of the stand (N1390/2; Fig. 7: 1). Apparently it was secondarily used as a lid, as its base was cut in order to fit into the top open-



8. Phase 1C (Iron Age I): selected pottery from Room 9.

ing. The preserved height of the chalice is 15 cm and the diameter of the rim is 17 cm. The fabric is about the same as the stand. There are darker spots on the interior of the bowl - possibly also remains of oil.

The stand was found next to a rectangular mud-brick platform (surface approx. 24 cm x 32 cm; height around 15 cm) in the north-west corner of Room 9. A complete chalice (L273-4; **Fig. 8: 1**) was discovered just south-east of the stand. Other finds in the same room were a number of complete or near-complete vessels, *viz.* a cooking pot (N1358; **Fig. 9: 7**), three jars (L208-4, L208-5 and L273-3; **Figs. 9: 4, 5, 6**), a

small krater (L273-2; **Fig. 8: 2**), a jug (L273-1; **Fig. 8: 6**), a pyxis (N1392; **Fig. 9: 3**), parts of a pilgrim flask (L264-1; **Fig. 9: 2**), three kraters (L264-2, L208-1 and L208-2; **Figs. 8: 3, 4, 5**) and a number of stone tools, amongst them two pestles and one mortar (N1330/1-3). Of special interest is a high-quality, bichrome-decorated, globular jug of Phoenician provenance (L208-6; **Fig. 9: 1**, see main report).

#### Selected References

Stands of cylindrical shape are found all over the ancient Near East, dating roughly from the third millennium BC onwards. They are espe-



9. Phase 1C (Iron Age I): selected pottery from Room 9.

cially frequent in the Levant between the Middle Bronze Age and 10th century BC (Mazar 1980: 93) and fall into two types. The body of the first type is finished as a bowl, resembling an elaboration of a chalice. It is rare in comparison to the second type, a cylindrical stand open top and bottom like the item under discussion here (Mazar 1980: 94). In contrast to our stand, many show decorations such as paintings or applied human or animal figures. The number of openings varies, as does their shape: rectangular, oval, triangular and small circular windows are known from the same period. Vertical handles were very common in Palestine between the Middle Bronze Age and 11th century BC (Mazar 1980: 94 ff.).

Another stand (N114) from Tall Abū al-Kharaz comes from Area 2. It was discovered in the Phase VII temple, which dates to the Late Bronze Age IC (Fischer 2006: 141, fig. 154; 151, figs. 163, 1-2; chronology table 70, 374). Together with a fenestrated stand from Pella with crudely painted human figures and a variety of animals and plants, which was found in an offering pit in a Late Bronze Age II temple (Bourke 2004: 16-18, fig. 12), this is the geographically closest parallel.

Examples from the Iron Age I can be found at Hazor (Yadin *et al.* pl. 204, 2), *viz.* a stand decorated with rope ornament, and from Iron Age IC at Tell Qasile (Mazar 1980: 87-89, figs. 23, 25-27, pl. 32, 1-2, pl. 33, 1; all painted examples). Most similar to our stand are two examples from Megiddo VIA. One has plastic decoration in the form of small balls below the ridge (Arie 2006: figs. 13.41 and 13.62.11), while the second - so far the closest parallel to our stand (Finkelstein *et al.* 2000: 267, fig. 11.17, 7; Loud 1948: fig. 80, 9) – is an undecorated tubular example with two (comparatively small) rectangular windows and the remains of two vertical handles.

#### Suggested Function

Stands of this type are often referred to as 'incense burners' or 'incense stands', in the belief that frankincense or other aromatics were burned at the bottom of the stand (cf. Andrae 1938: 111; Schaeffer 1949: 260-261, fig. 11, 1; Devries 1976: passim; Nielsen 1986: 42-46) and / or in the bowl that covered the stand. However, the absence of traces of burning - see also our stand - makes their function as incense burners unlikely (Lapp 1969: 44; Fowler 1984: 185). Several seals show stands of cylindrical shape being used in worship rituals (e.g. Bikai 1978: 77-79, who notes that these were probably made of metal). Their use as holders for sacred plants in fertility rituals has been suggested by Rowe (1940: 52-54), as has their use for the presentation of food and drink offerings (with Egyptian analogies, cf. Nagel 1938: 176-181; depicted on seals and reliefs, e.g. Keel 1996: 158, fig. 242; food offering cf. Mazar 1980: 96; libation funnel, e.g. Schaeffer 1936: 110).

The association of such stands with cultic activities can also be questioned. Fowler (1984: 184) regards at least some of them as braziers for heating in winter, and also suggests other secular uses such as heating water, keeping food or drink warm and using incense as a perfume to counteract unpleasant odours (Fowler 1985: passim). Possibly the smoke from burning substances served to keep away flies and mosquitoes. The missing evidence of combustion still remains a problem.

#### Discussion

One should avoid assigning an exclusively cultic context to Room 9 solely on the strength of the presence of such a stand. The aforementioned possible remains of oil on the stand and chalice make it very likely that it was used for liquids – whether in a secular way, as suggested by Fowler (1984: 184 and 1985: passim) and noted above, or in a cultic context as a libation vessel. The latter interpretation is supported by the presence of the adjacent raised platform and chalice (L273-4). Three stands from Tell Qasile - all from a temple building - were found leaning against a similar platform (stands nos. 3446, 3255 and 3604, found in Shrine 300, Mazar 1980: 27) supporting a sacrifice bowl. Thus, a private domestic sanctuary in Room 9 is at least conceivable (see also Mazar 1980: 94).

Obviously the effort put into the manufacture of our undecorated stand with its re-used lid is relatively low compared to other, more elaborate objects of the same period. The context in which one of the stands from Megiddo (Arie 2006: fig. 13.62.11; for context see Arie 2006: 234, fig. 13.46) was found, *viz.* a storage area, is interesting. According to Arie (2006: 247), cultic activities may have been performed with it in favour of the stored goods or it may simply have been stored there in between rituals – a suggestion that could be applicable to the stand from Tall Abū al-Kharaz.

# **Appendix 2: Interpretation of an Early Iron Age Room Uncovered in 2010** (A. Gustafsson and J. Azzopardi)

#### Material and Context

The roughly square Room 8 in Trench LIIIB is 3 m x 2.4 m in size, the widths of the walls being 0.6 m (northern wall W627), 0.5 m (eastern wall W624), 0.85 m (southern city wall W621) and 0.6 m (western wall W647). The walls are

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preserved to heights of up to 1.4 m. All of these walls had remnants of pinkish-brown mud plaster attached to their surface. In the north-east corner in W627 there is an entrance, 0.5 m wide, leading to Room 7 to the North.

To the south of the entrance, leaning against W624, are two storage jars which were broken when the roof collapsed. In the western part of Room 8 were six badly damaged storage jars leaning against Wall 647, likewise broken by the collapse of the roof. A complete juglet (N1386) containing carbonized chickpeas was located below the storage jars. Another complete vessel, an obviously unused cooking pot (L237-5), was leaning vertically against W627. A decorated jug (L237-7) was lying alongside W627. It is decorated with brownish - red bands on the neck and lower part of the body, bordering the double zigzag lines which cover the body itself. An incomplete rim of a cooking pot (L237-8) was found next to the entrance, along W627. Other, almost complete finds discovered nearer the centre of the room were two lids of unfired clay, two jars (L237-1, L237-6), a krater (L237-2), a carinated bowl (L237-3) and a jug with decorations (L237-4). Approximately 25 additional broken storage vessels were scattered around the room as a whole.

Two mortars were found alongside W621. One of them, found upside down in the southeast corner, was broken at the base; it was larger (37 cm wide) than the other (18 cm wide) which was found in the centre of the southern half of the room. Between these two mortars were four basalt pestles; a fifth basalt pestle (N1345) was found in the western part of the room. Alongside W621 was a spindle whorl (N1340); a second spindle whorl (N1376) was located in the northwestern corner. At least three fired mud-bricks were close to W624. Additional finds included a couple of polished bones and a river clam shell. A large amount of roof debris and ash covered all finds.

#### Discussion

Room 8 can be interpreted in several ways. It contained a considerable number of storage jars leaning against the walls. These and the juglet containing chickpeas suggest a storage area for food and liquids. The pestles and mortars found close to the city wall indicate food processing.

The necessity of a light source is obvious, yet a lamp was not found. The fact that they were found against the city wall hints at the possibility of a small hole or slit to allow light to enter the room. Spindle whorls and polished bones, possibly used to wind thread, indicate – at the very least - production or mending of textiles, or a storage area for these items. All these findings point to a storage room which also was used for certain activities and which was accessed from the floor above by a ladder. The slits or holes in the city wall, not large enough for large projectiles or humans to pass through, would have been the only source of natural light. The presence of a floor above, at street level, would also explain the scattered textile production tools, which fell down when it collapsed.

Ash was found everywhere in this space. The fact that so many vessels and items were left behind indicates a hasty retreat from a building on fire, as well as no return to the debris to recover surviving food and artefacts.

### Conclusion

The results described above are suggestive of the basement of a domestic structure. The main function of this space would have been storage of liquids and food. It seems also to have been used as a workshop for textile production or at least the mending of clothes, and for food processing. Some of the vessels and tools most likely fell down from the floor above. Of particular importance is the fact that the former inhabitants never returned to their home after the conflagration, which does not seem to have been caused by an earthquake on the evidence of the substantial preserved heights of the walls.

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