

Khirbat al-Batrāwī 2010-2013: The City Defenses and the Palace of Copper Axes

Introduction

Exploration at Khirbat al-Batrāwī, a previously unknown site dating to the third millennium BC, was undertaken over nine seasons between 2005-2013 by the University of Rome «La Sapienza» Expedition to Jordan. Support for the project was through the Italian Ministry of Foreign Affairs, and all fieldwork was under the aegis of the Department of Antiquities of the Hashemite Kingdom of Jordan. The present paper focuses on the discoveries of the last four seasons of fieldwork (2010-2013)¹. From the northern defenses and the 'Palace of the Copper Axes'.

Batrāwī: An Early City of the Third Millennium BC

Batrāwī is situated in the Zarqā' River Valley, the easternmost river of the Levant, in a strategic position from the point of view of the ancient road-network, the availability cultivable land, and water control. The city arose at the end of the east-west routeway that crosses the Syro-Arabic desert to Mesopotamia in the east, the Gulf of Aqaba in the far south, and beyond to

the Sinai and the Arabian Peninsula. The route facilitated access to salt, copper, bitumen and sulfur, as well as to precious or semi-precious stones, spices and other exotic stuffs. Moreover, the development of long-distance trade through the Sinai Peninsula also assured an inland connection with Egypt², which played an important role in the urbanization of the region at the beginning of the 3rd millennium BC.

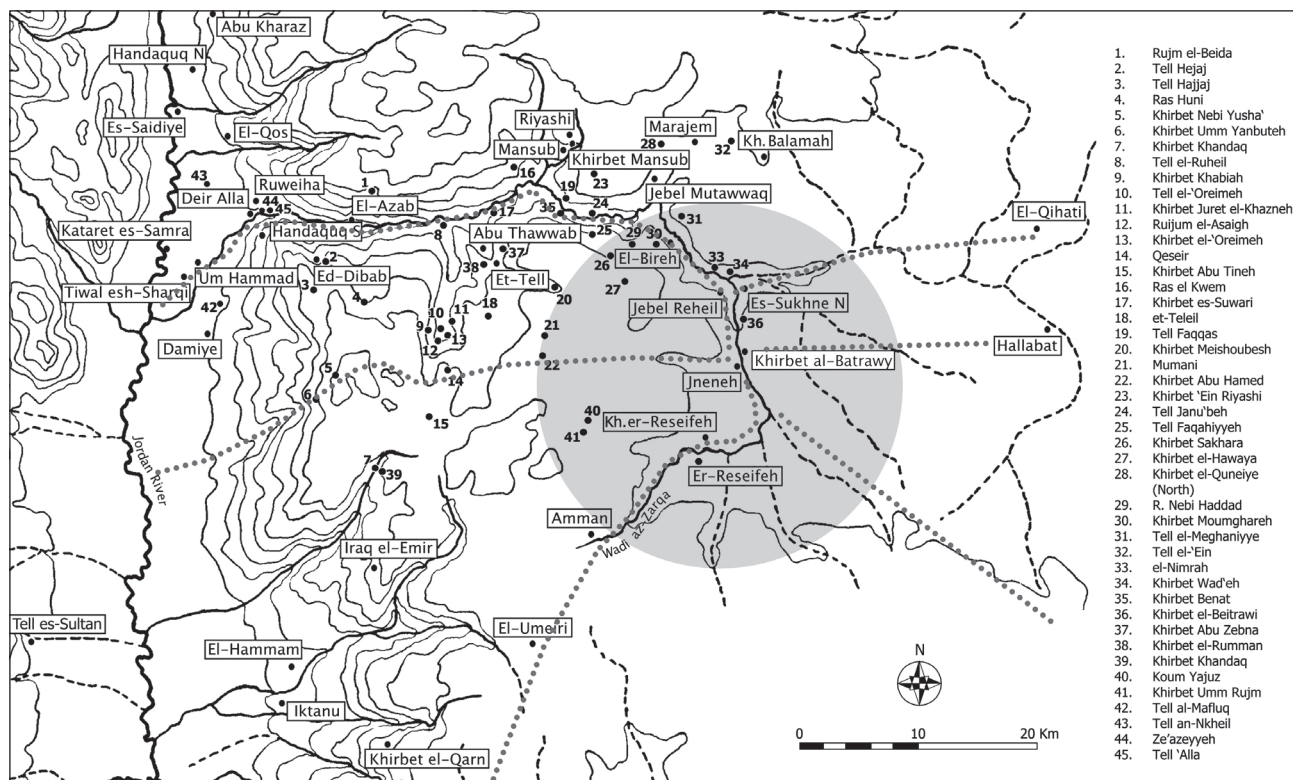
Dominating the river

Batrāwī dominated a bend in the Zarqā' River, where a series of small, unfortified settlements constituted the productive basis of its territorial organization. The fertility of the upper Zarqā' Valley allowed for intensive cultivation along the river banks and the western hills where olive trees, lentils and chickpeas, ensured a flourishing agricultural base³. Furthermore, the city controlled the ford through the river leading to a shortcut connecting the Zarqā' and Jordan valleys (FIG. 1).

The city emerged in Early Bronze Age II due to a phenomenon known as synecism⁴ where the inhabitants of the local rural villages aggregate

1. Along with four volumes of preliminary reports (Nigro ed. 2006, 2008, 2010, 2011), one exclusively devoted to the "Palace of the copper axes" (Nigro 2010a), several articles and specific studies were dedicated to the study of stratigraphy, architecture and finds from the Early Bronze Age II-III city and the EB IV village (Nigro 2006a, 2006b, 2012a, 2012b, 2012c, 2013a, 2013b; Nigro and Sala 2009, 2010, 2011).

2. Newly discovered harbours in the Red Sea (Tallet 2012), dating back from the IV Dynasty, suggests that also a south route existed crossing the Sinai Peninsula and reaching the copper and turquoise ores of the 'Arabah (Timnah).
3. Falconer 1994; Harrison and Savage 2003; Douglas 2006.
4. Nigro 2011, 2013b.



1. Upper Wādī az-Zarqā' and the Jordan Valley with EB II-III sites and the area of the Batrāwī county highlighted. Dotted lines show main tracks leading from the Desert down to the Jordan, and the ford through the Zarqā' river at Batrāwī.

at a strategic point forming a city. Foundation acts of the city were the erection of the city-walls, a solid structure based upon a massive foundation made of limestone boulders, set into the bedrock on edges of the hill, and the erection of a 'broad room' temple; a monumental building dominating the landscape⁵.

At the centre of the city (FIG. 2), on the northern slope of the *tall*, there was a palace; a multi-functional building connected with power, self-representation, economic development, administration and territorial control. The excavation of the palace, and the northern city defenses, were the main goal of the expedition in the last four seasons (2010-2013). This included restoration work, and the collection and recording of finds, which in the case of the palace included items buried beneath a thick layer of debris attributed to a dramatic destruction at the end of Early Bronze IIIB (2300 BC) and which brought an end to the city.

The Early Bronze II-III Fortifications

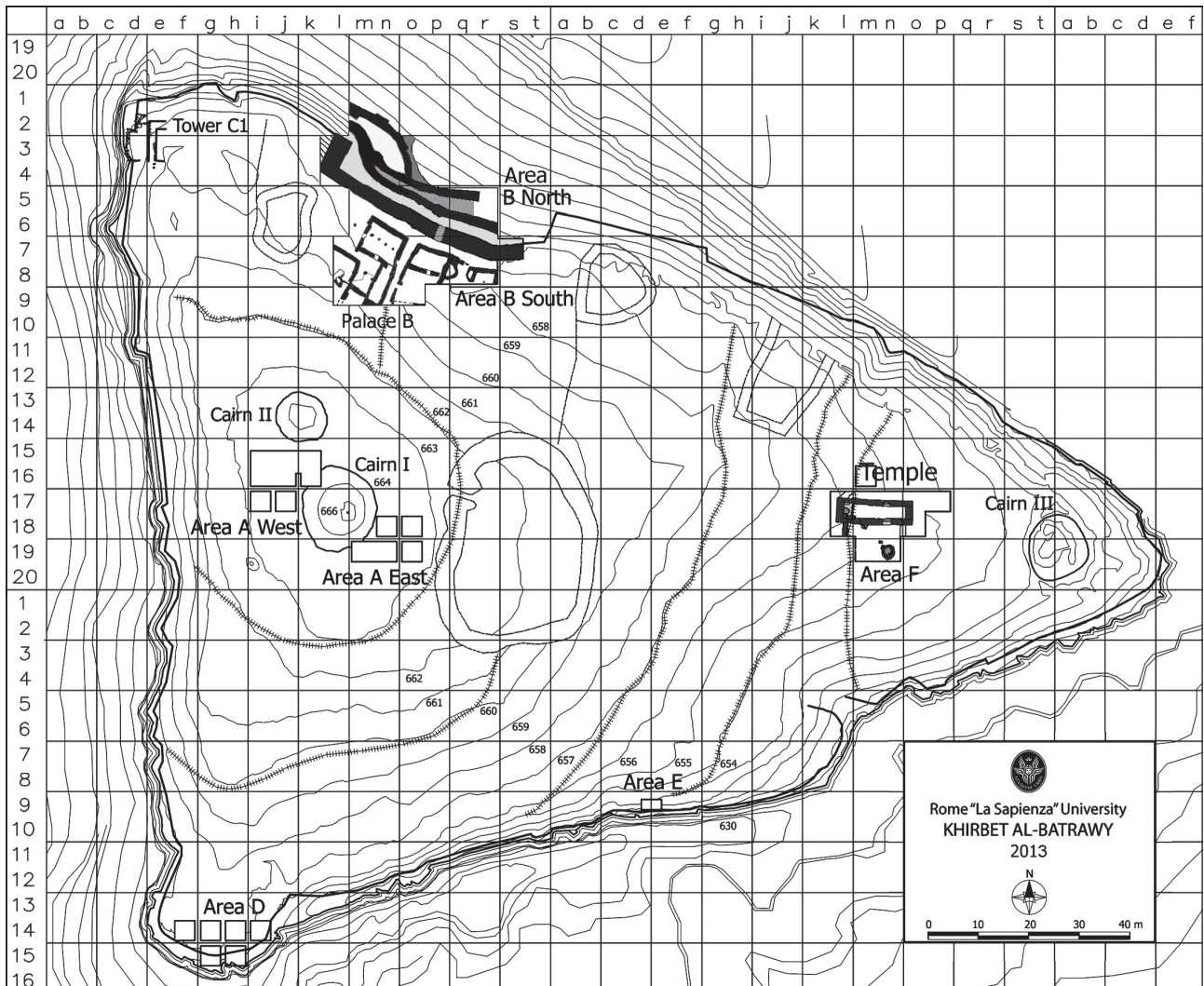
The massive and complex fortifications of Batrāwī reflect the main architectural transformations of the ancient city in the Early Bronze Age II-III and the social impact of such a public enterprise. The excavations of a crucial stretch of the defensive perimeter, at the middle of the northern side of the hill (FIG. 3), the most easily approached and, for this reason, the one where the main city gate was located (a second gate was to the south-east, but accessible only for pedestrians), provided a thorough insight into the history of the city⁶.

The EB II City Gate, the EB II-III Main Inner City Wall, the Outer Wall and the Scarp Wall

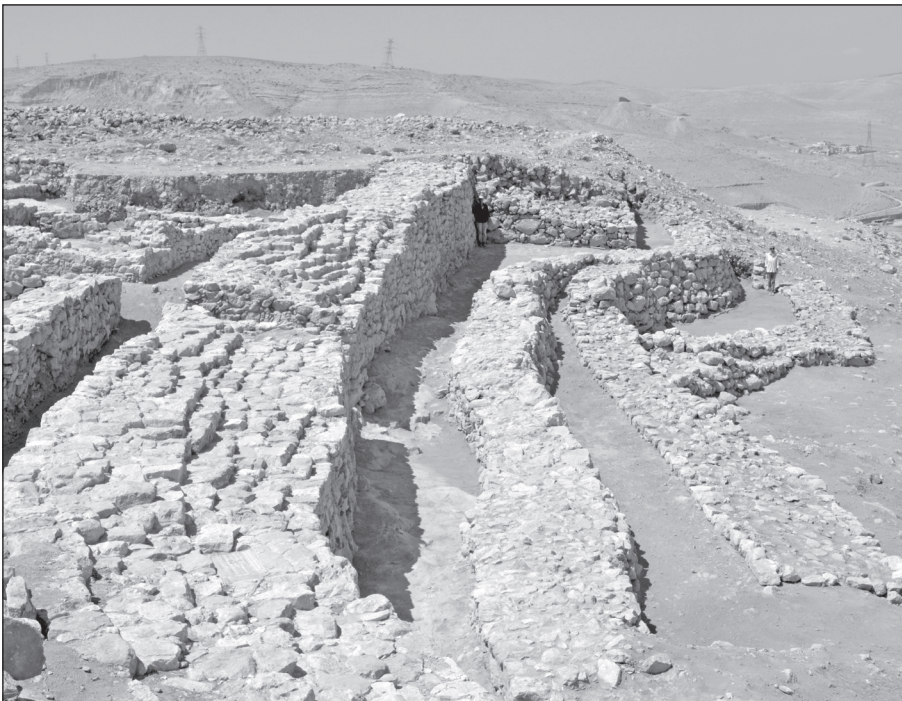
The main city wall was erected in the EB II and encircled the entire mound encompassing an area of 3 ha. It consisted of a mudbrick superstructure resting upon a solid foundation of monolithic stone blocks and boulders. The main

5. On the Batrāwī Broad Room Temple: Nigro ed. 2008; Nigro 2013b, 192 with bibliography.

6. The stratigraphy of Area B North produced important clues for reconstructing the archaeological periodization of the city (Nigro ed. 2008: 66-76; Sala 2012).



2. Sketch map of EB II-III Khirbat al-Batrāwī with major monuments highlighted.



3. View from the east of the northern defence in Area B North at Khirbat al-Batrāwī with the triple line fortification and in the background the huge Rectangular Bastion T.830 abutting from the Main Inner Wall.

city gate opened through this line of fortification and comprised a 1.6 m wide passageway⁷.

Following an earthquake, which resulted in a crack the gate and the collapse of the capstone⁸, the city wall was reinstated and the defense system was reinforced in the EB IIIA with the addition of an external batter wall⁹ made of large limestone boulders and comprising a round tower standing at the centre of the pass leading to the hill of Batrāwī. The external batter wall supported a passageway running alongside the city wall, and it was successively reinforced by the addition of a scarp wall¹⁰, a third line of fortification, which obliterated the round tower in the EB IIIB¹¹.

The Rectangular Bastion (T.830)

The discovery of a massive rectangular tower was a major result of the eighth and ninth seasons (2012-2013). It possibly protected the main entrance to the EB III city, located west of the EB II gate. The structure (T.830) abutted the main inner wall. It had eastern (W.835) and northern (W.837) walls 1.65 m (3 cubits) thick, made of large limestone boulders (FIG. 4). The tower foundations were supported by an outer wall (W.155), which to the west was preserved to its original height of 2.7 m. Both the tower

(T.830) and the outer wall (W.155) were buried under a destruction layer with abundant ashes and remains of carbonized beams (FIG. 5).

The outer wall (W.155) was reinforced in its eastern section by a scarp wall (W.165), which ran parallel to the city wall and ended against the outer wall (W.155) in a circular bastion (W.185), as the former sharply turned northwards following the protruding offset of the rectangular tower.

The Exterior Wall and the Rhomboidal Court

A fourth line of fortification was investigated in 2012 and 2013: a transversal wall (W.177), which from the scarp wall (W.165) stretched towards the north and connected with a perpendicular wall (W.827). This feature ran parallel to the outer wall (W.155), thus renovating the triple line of walls to the west where the outer wall (W.155) distinctly shifted from its original alignment. The perpendicular wall (W.827) was reinforced at the junction with the transversal wall (W.177) by a buttress (W.826) with another offset (W.841) on its northern face, some meters to the west. It had a thickness of 1.65 m, and, in square BIII2, it also had an inner offset (W.842) facing the outer wall (W.155). The perpendicular wall



4. The western stretch of triple line EB II-III fortifications on the northern slope of Khirbet al-Batrāwī with protruding Rectangular Bastion T.830; from the east.

7. Nigro ed. 2008: 83-89.

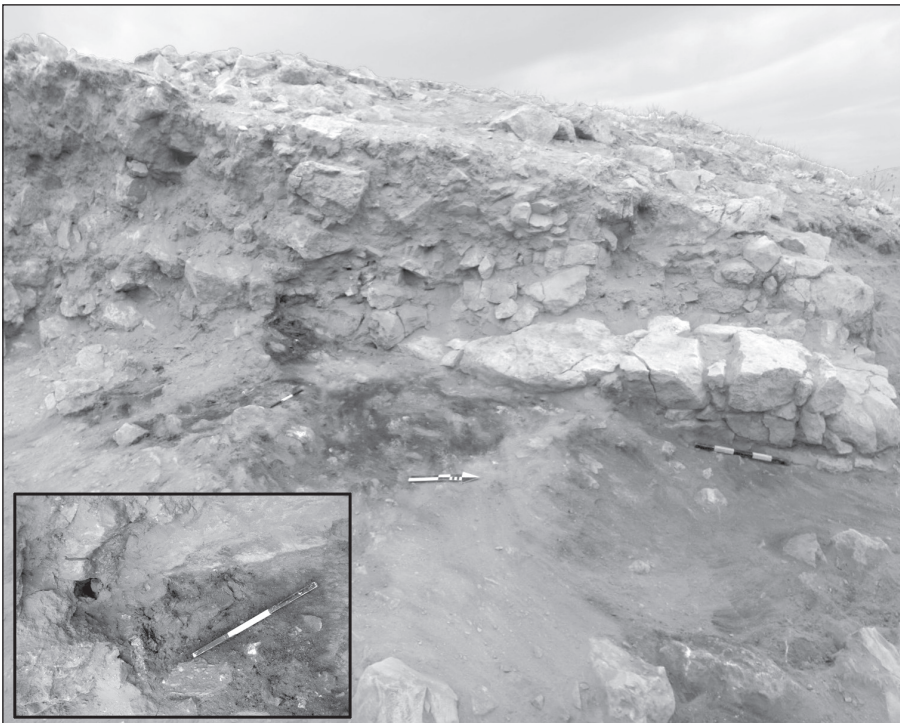
8. Gallo 2014: 150.

9. Nigro ed. 2008: 89-99; Nigro 2009: 667, 2010c: 438-439, 2013b: 197; Nigro and Sala 2009: 375.

10. Nigro 2009, 668-669, 2010c: 440; Nigro ed. 2008: 100-101; Ni-

gro and Sala 2009: 374-375.

11. A possible comparison for the Curvilinear Outwork are the round towers inserted in the EB III city-wall at Khirbat Kerak (Fortification C; Greenberg and Paz 2005: 94-96, fig. 1-2, 5-6; Greenberg *et al.* 2006: 249-267).



5. Detail of a carbonized beams and ashy lenses of the collapse layer at the foot of the western side wall of Rectangular Bastion T.830; from the east.

(W.827) was called the exterior wall, since it was the most external defensive structure of the city, and was situated on the lower terrace of the whole defensive system (FIG. 6). The exterior wall (W.827) delimited a rhomboidal court (L.814) and between it, the transversal wall (W.177) and the outer wall (W.155) were found filled with a thick layer of ashes yielding EB III pottery. This might be interpreted as guard's house.

Area B South: The Palace of the Copper Axes (Palace B)

Palace B (the 'palace of the copper axes') was erected over an area of more than 2000 sq. m upon a series of terraces on the northern slope of the 'acropolis' just inside the main gate¹². To date only the latest phase of utilization (Early Bronze IIIB, 2500-2300 BC) has been explored.

The lowest and northernmost portion of the palace complex was subdivided into two almost symmetrical wings by a central passage (L.1050) (FIG. 7). The two pavilions had independent circulation and different functions.

The Eastern Pavilion

The eastern pavilion (FIG. 8), measured approximately 150 sq. m and on the basis of the current excavated area, included a rectangular court (L.1046) measuring 8 m × 5.5 m, accessible through a pillared passage (L.1144) opening onto the central corridor, and a rectangular hall (L.430), with a staircase (W.421) on the short eastern side (W.389), supported by a freestanding pillar (W.465), leading to the upper storey. The hall (L.430) communicated with the courtyard (L.1046) through a door (L.1066) opening in the middle of the long southern side (W.391). Hall L.430 measured 3.3 m × 6.2 m and its ceilings consisted of wooden beams and fronds (found burnt and carbonized in the collapse layer)¹³.

Although almost completely empty, as it had been cleaned out (perhaps plundered during the final attack to the city), the eastern pavilion provided some small but meaningful finds, such as a copper arrow head and a carnelian bead, and in courtyard L.1046, a fragmentary basalt potter's wheel¹⁴. Attached to the eastern side of

12. Actually, it seems possible that a huge temple was erected on the tell south-west summit (Area A) in the Early Bronze III.

13. Nigro 2007: 352-353, fig. 14, 2013b: 199, fig.14; Nigro ed. 2008: 148-162.

14. KB.12.B.140: Fiaccavento 2013: 78, fig. 6.



6. Rhomboidal court L.814, External Wall W.827 (on the right); curving Outer Wall W.155 (centre right); Scarp-Wall W.165 and Bastion W.825 (left), transversal wall W.177 (in the foreground) obliterating the Curvilinear Outwork W.185.



7. Khirbat al-Batrāwī: general view of Palace B from the west. In the foreground the Western Pavilion.



8. Khirbat al-Batrāwī: general view of Palace B from the east. In the foreground the Eastern Pavilion.

the hall (L.430) a large oven was paved with reemployed basalt grinders and querns (T.413), which might have supplied bread to the palatial institution.

The Western Pavilion

The western pavilion had a more articulated plan extending over more than 250 sq. m. It was approached through a forecourt (L.1100) with a porch (L.1292) and in the northwest quadrant of the building was apparently directly connected by a street L.1060 and an open yard to the city-gate (not yet excavated). Two façades of the palace blocked its eastern (W.1133) and southern sides (W.1245), while two doors opened in the middle (L.1050) and southern corner (L.1272) of the eastern façade, each opening onto to a hall. The first opened onto the pillared hall (L.1040), while the second opened onto hall (L.1110).

The Pillared Hall (L.1040): Architecture

The pillared hall (L.1040) was a large rectangular room (7.4 – 7.8 m × 5.1 – 5.5 m)

mirroring the hall (L.430) of the eastern pavilion in its general layout¹⁵. The door was located in the middle its western short side. It was subdivided into two by a central row of four pillars (FIG. 9). The hall was encircled by massive stone walls (W.1033) 1 m wide, reaching the height of 1.5 m to 1.9 m, upon which a mudbrick and wooden superstructure stood.

The southern half of the hall had a raised floor (up to 0.5 m) and an irregular step aligned north-west to south-east. The main entrance (L.1050) was emphasized by a raised threshold preceded on the outside by a step in the natural bedrock, and inside by two yellowish mudbricks 0.52 m (1 cubit) long. Also at the middle of the southern long side of the hall (W.1101), there was a 0.9 m wide door (L.1160), with a step marked by a couple of regular 1 cubit × ½-cubit mudbricks (FIG. 10). A third door (L.1161) was located in the southeastern corner, opening towards central corridor (L.1150). The door (L.1161) was found intentionally blocked, possibly during the final attack to the city, when a number of valuable items were collected and



9. Khirbat al-Batrāwī: Pillared Hall L.1040 with surviving bases of the central row of pillars in the foreground, and Hall L.1110 in the background; from north-east.

15. Nigro 2013b, 200-203, with previous bibliography.



10. Door L.1160 connecting Pillared Hall L.1040 with Hall L.1110, preceded by a step made of yellowish bricks, from the north.

placed inside the hall (L.1040). Finally, a fourth 1 m wide passage (L.1158) opened in the same corner through the southern wall, giving access to an elongated storeroom (L.1120) on the eastern side of the western pavilion (this also was preceded by a step, made with a limestone block). A fifth, blocked, passage (L.1070; 0.7 m wide) was identified in the northwest corner, apparently leading to an underground cave.

The central row of pillars was diagonally arranged, from the northern lintel of door (L.1161) to the northern lintel of door (L.1050). The eastern-most pillar base (B.1106) was a flat, almost hexagonal stone (0.42 m × 0.44 m), set into the clay-like floor and fixed by means

of a series of small stones and limestone chips. The second base (B.1108) was almost round (diam. 0.42 m), and it too was supported by a stone and some wedges fixed into the floor. On its southern side, the footing was in connection with the emerging bedrock, and a short distance away there was a cavity in the rock hosting the cache with four copper axes, originally wrapped in a rag (see below for the axes description). The third base (B.1166) was an elongated block (0.55 m) set into the bedrock across a drain C.1162. Finally, the fourth base (B.1168) was a semicircular slab 0.62 m long, set upon a stones support, made to fill in the elevation gap due to the cavity of bedrock in the northwest corner of the room.

The southern half of the hall (L.1040) was paved with a thin layer (0.05 m to 0.1 m thick) of yellowish-brown clayey marl regularizing the emerging bedrock, while in the northern half this layer was laid over an intentional filling of compacted brown ashy soil. Drain C.1162, excavated in the bedrock, ran from the east lintel door L.1160, down to the underground installation in the northwestern corner of the hall, passing through pillar base B.1166. A second drain (C.1124) was intended to avoid water flow in the southwestern quadrant of the hall, where a regular flat bedrock platform was used for productive activities.

Finds from the Pillared Hall L.1040

The pillared hall (L.1040) suffered a violent fire, which brought the sudden collapse of its ceilings that had been supported by wooden beams. The collapse layer filled the room up to a thickness of more than two metres, burying ceramic vases and other precious items carefully accumulated inside it. The main walls of hall L.1040 were lined with at least 20 pithoi (up to 1.2 m high and holding 70 to 120 litres) containing carefully sieved barley¹⁶, fruits and liquids, and in one case, red ochre.

16. Food accumulation has been long recognized as the main (if not exclusive) function of the Palestinian and Transjordanian Early Bronze Age palatial buildings (lastly, Genz 2010).

The pithoi were characterized by a wheelmade neck (striking given that all other pottery was handmade). In between the pithoi a number of other ceramic vessels had been accumulated. They all belonged to the palace services (such as food preparation, consumption, disposal, as well as for other symbolic actions: see Sala in this volume), including luxury red-burnished jugs, juglets and *amphoriskoi* (often in sets of twos), bowls and vats, a water jug with a beaker aside, small jars, and a pattern-combed metallic jar for olive oil (FIG. 11).

A ceremonial crater (KB.10.B.1054/11) of an unusual shape exhibited a high grooved trumpet-shaped pedestal, a hole-mouth globular body and a couple of vertical handles. It possibly had a symbolic use like a big cup or a chalice in the palatial ideological *milieu*¹⁷. It was not the only vase of this kind retrieved in the hall. Next

to the southern wall, two jars were retrieved, which were adorned by a peculiar applied and incised decoration: one (KB.11.B.1054/4, FIG. 12) had a sinuous punctuated snake on the shoulder, while the other (KB.11.B.1054/1, FIG. 13) had a register subdivided into *metopae* separated by a herringbone motif with a snake and a scorpion on the opposite sides of the vase (both animals are known from contemporary glyptic in Palestine and Egypt)¹⁸. A group of miniature vessels (FIG. 14), including cups and small jars, some with incised net decoration, are also typical of this palatial context¹⁹ and might be related to a fragmentary Egyptian palette (KB.11.B.100)²⁰, also found in hall L.1040, and which may have been a woman's make-up palette.

The most remarkable find in hall L.1040 was a cache four copper axes (FIG. 15) discovered



11. Pattern-combed metallic jar used as olive oil contained (KB.10.B.1054/21) retrieved in Pillared Hall L.1040.

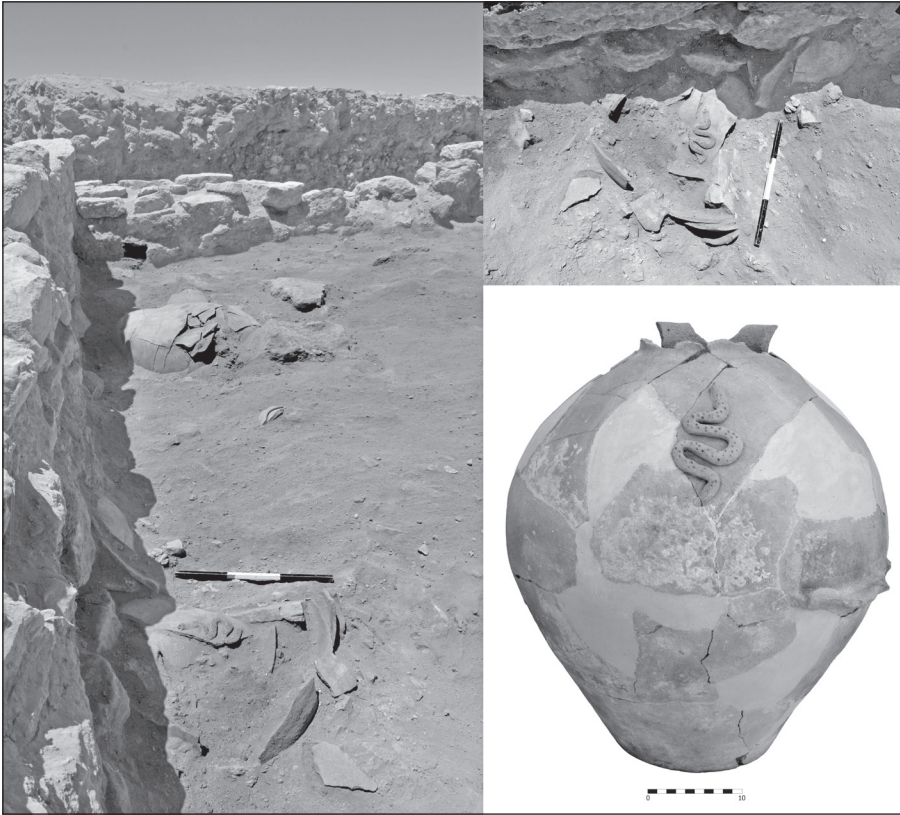
17. Nigro 2010: 73, 2013b: 201.

18. Applied snakes are also attested to in the EB I sanctuary of Jabal al-Muṭawwaq in Wādī az-Zarqā' (Fernández-Tresguerrez Velasco 2008: 30-32).

19. For a preliminary presentation of the finds from pillared Hall

L.1040 see Nigro 2010a: 71-110, 2010b.

20. It is a rectangular-shaped thin slice of grey fine schist, with an engraved line and some oblique strokes at the broken edge. The shape is that of many other slate palettes, but the incised motive (or figure), is quite unusual.



12. Decorated jar KB.11.B.1054/4 with a sinuous punctuated snake applied on the shoulder.



13. Jar KB.11.B.1054/1 with an applied and incised decoration on the shoulder showing a snake and a scorpion in two opposite metopae separated by a herringbone motive.



14. Small jar KB.11.1054/10 and miniature cup KB.10.1054/51 showing the same net decoration on the shoulders.



15. Copper axes found in the chachette in Pillared Hall L.1040 (from top down: KB.10.B.131; K B . 1 0 . B . 1 3 0 ; K B . 1 0 . B . 1 3 3 ; KB.10.B.132).

beside the base of the second pillar (B.1108). They belong to two types²¹: one with an elongated tang and expanded fan-shaped blade (KB.10.130, 132,133), and the other flag-shaped with a square hollow tang to fix the handle (KB.10.131). While the latter, heavier example (713 gr) had evident use marks on the blade, the other three (weighting between 160

and 270 grams) were apparently unused.. The tip of one copper dagger was found in the corner of the same hall. A fifth axe (KB.11.B.120)²², of the simple elongated type, was found in the nearby hall L.1110, not far from the door connecting it with hall L.1040. The presence of these copper axes and the fact that they were cached, testify to the concentration of valuable

21. Nigro 2010a: 73-74, 2010b: 568-570, 2013b: 203, fig. 20.

22. Nigro 2012b.

objects in the palace just before its dramatic destruction. Indeed, near to the axe cache the paw of a bear (*Ursus arctos syriacus*) was also found, possibly having belonged to a bear-skin, an exotic garment or furbishing connected with a ruling elite?

Finally, in hall L.1040 a potter's wheel made of a finely cut basalt disk was retrieved²³. As with other objects found in the palace, it highlights the wealth of technological innovation desired by the central institution.

Storeroom L.1120

From the south-eastern corner of the hall (L.1040), through the door (L.1158), was an elongated room (L.1120) measuring 2.3 m-2.6 m × 6.3 m, with a wooden loft in its northern part (FIG. 16). In this room were found several jars (crushed and upside down lying upon the smashed vessels directly on the floor), as well as a pointed red-burnished jug (KB.12.1124/36, FIG. 17). Along both sides of the storeroom circular installations (B.1181;

B.1182) connected with food processing were found associated with hole-mouth jars. A series of pottery disks (probably used as jar stoppers or tokens in a simplified tallying system), some quite large and two pierced, were also found (FIG. 18). However, the most noticeable find is a third basalt potter's wheel, found in the south-western quadrant of the room²⁴.

Hall L.1110

Hall L.1110 was located on the central terrace, around 0.5 m to 0.7 m higher than the pillared hall (L.1040). The room was accessible from the latter hall, or, independently from the corridor L.1272, directly from the forecourt L.1110 (FIG. 19). It was rectangular (6.3 m to 6.5 m on the north-south axis × 3.6 m to 3.7 m on the east-west axis) and was subdivided into two sectors with different floor elevations south and north, with a step roughly in the middle of the room, where a single major pillar supporting the ceiling stood (W.1163, the pillar base was a large flat stone [0.59 m × 0.64 m]).



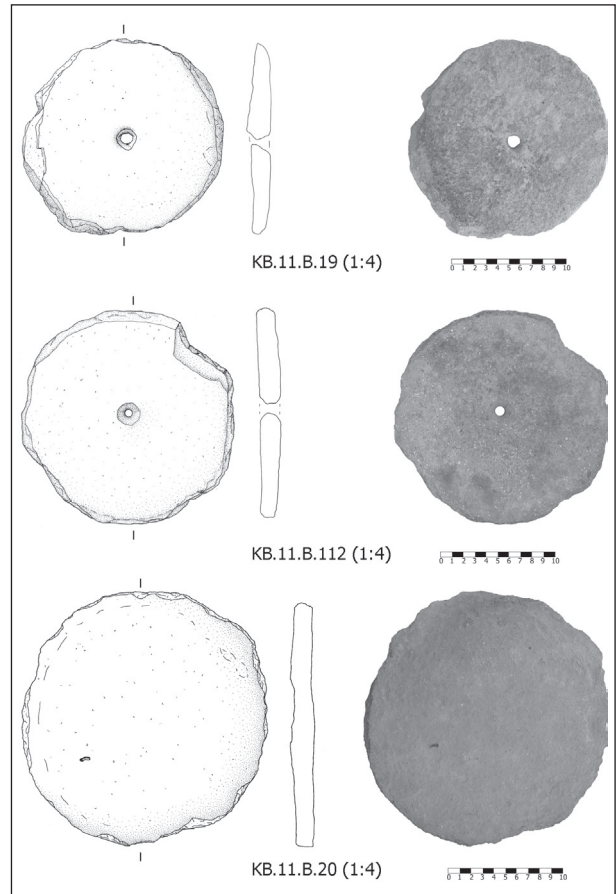
16. The northern half of Storeroom L.1120 with smashed jars and, on the right, basalt stone potter's wheel KB.11.B.110.

23. KB.10.B.87: Nigro 2010b: 567-568; Fiaccavento 2013: 77, fig. 2.

24. KB.11.B.110: Fiaccavento 2013: 78, fig. 4.



17. Highly burnished jug KB.11.B.1124/36 from Store-room L.1120.



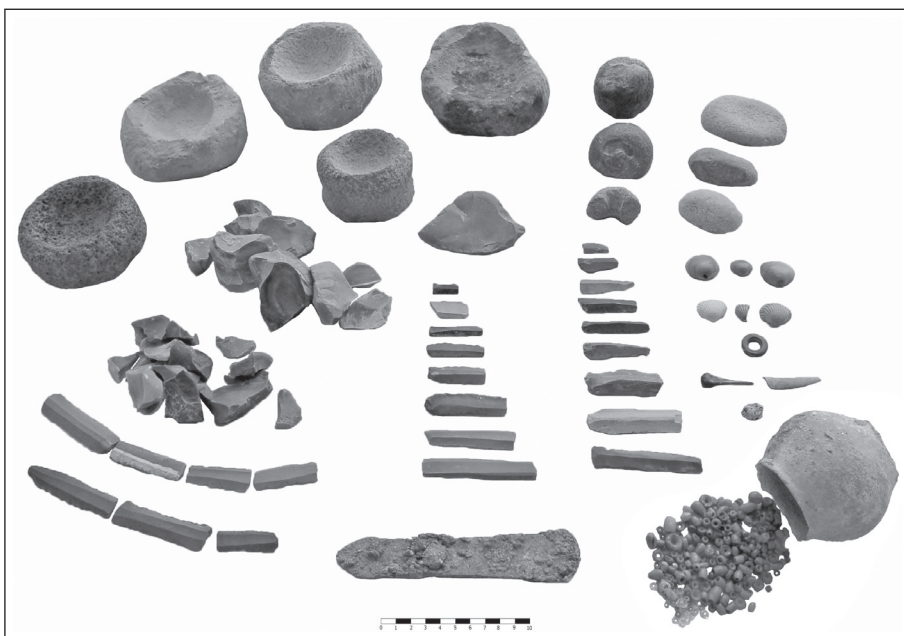
18. Pottery disks used as hole mouth jars stoppers (two pierced) found in Store-room L.1120.

Placed against the eastern face of the western wall (W.1249), facing the central pillar, was a bench (B.1253) made of two rectangular limestone blocks, one with a small cup-mark. To the north of the step, in the lower part of the hall, were found a flint core, two wooden sickles incorporating a series of Canaanite blades, several bone tools, a wooden tray and a round basalt mortar (FIG. 20). Nearby, the fifth copper axe retrieved from the palace was concealed in a bedrock fissure (FIG. 21). Several complete vessels were collected in this hall too, among which were a couple of medium sized jars accompanied by a cup in door L.1160, and a flaring vessel (KB.11.B.1128/76) of the type known as a 'Lotus Vase'. The latter has an Egyptian shape and were common at other major sites in the region in the Early Bronze Age²⁵.

25. Nigro 2014; Sala in this volume.



19. Collapse layers in Hall L.1110 showing a sickle made with Canaanite blades and several fragments of vessels aligned by the step at the middle of the room.



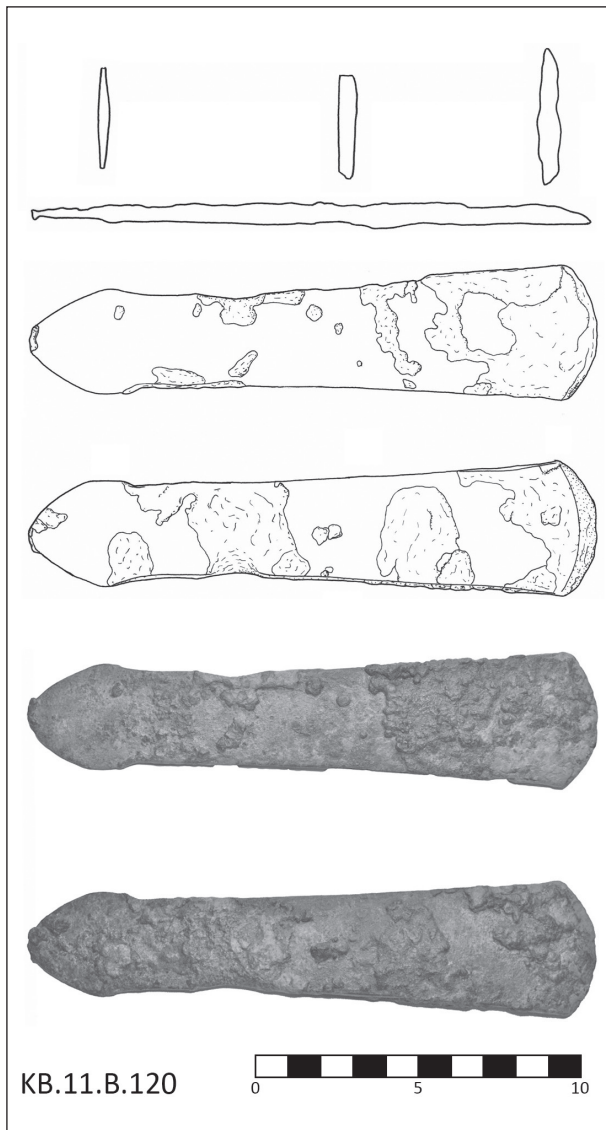
20. Copper axe KB.11.B.120, stone tools (mortars), flint blades, sea-shells, beads and bone tools from Hall L.1110.

Just under the central step crossing the hall east to west were a series of small jars and other vessels arrayed in two rows. One of the jars contained a bracelet made from a bone ring and four sea shells. Against the east wall (W.1149), an installation (B.1189) made of a vertical and a horizontal slab was erected, partly exploiting the central step in the bedrock, interpreted as a cist or a seat (FIG. 22). A concentration of objects was found near the seat, including a small jar containing more than 600 beads made of a variety of precious materials: carnelian,

animal bone, copper, frit, sea-shell, olivine, hyaline quartz (transparent rock-crystal) and smoky quartz (smoky rock crystal), all of which belonged to a single four-string necklace (FIG. 23)²⁶.

The southern side of the room was constructed by cutting the bedrock vertically for a height of around 1.2 m, and erecting upon it the southern wall (W.1201). A niche was cut in the southeastern corner of the hall in order to create a bench (B.1188) on which a storage jar sat (FIG. 24). West of the niche

26. The necklace was reconstructed thanks to two bone spacers retrieved with the incrustation of the four strings melted together due to the copper beads (Nigro 2012).



21. Copper axe KB.11.B.120 from Hall L.1110.

a round depression faced with flat upright stones (B.1251), was dug into the bedrock to host a hole-mouth jar; another jar was placed in the south-west corner of the room, as well as other vessels distributed in the central area of the room. Several bone tools were found in this part of the hall (L.1110) including a spindle whorl and several awls and shuttles.

In the bedrock floor, a drain was excavated connected with a round installation, where another big storage jar was set (B:1251). Upon the step in the southern half of the hall there was a noticeable concentration of ceramic vessels, among which was a noteworthy red-slip highly

polished jug (KB.11.1128/49) characterized by net pattern stick burnishing on the shoulder.

Room L.1250

West of the hall (L.1110) there was another large room or courtyard (L.1250): no entrances were identified between it and the rest of the pavilion. The flooring of this room used the regularized bedrock, which was cut through by a series of six round holes (pulping holes and cup-marks; FIG. 25). It was connected by a ramp (L.1240) with the upper terrace of the palace, where another group of rooms stood (L.1230). Here a large vat (KB.12.B.1238/2) was uncovered, consisting of the lower half of a pithos with a natural rim and attached ledge handles (FIG. 26).

The Historical Significance of the Batrāwī II-III (EB II-III) City

Nine seasons of fieldwork between 2005 and 2013 have brought to light an impressive array of material remains from Khirbat al-Batrāwī all of which require consideration within a framework of Early Bronze Age Jordanian “urbanism”²⁷. A number of features of Batrāwī suggest the site had reached a level of urbanism that other centres in the region had not yet reached. These include: monumental architecture (with basic spatial/functional distinctions within the city); massive defensive works (which also give evidence for labour organization and social complexity, technological innovation (pottery standardization including the introduction of the wheel in the palatial assemblage); centralization of goods (carefully sieved seeds of barley testifying to a centrally controlled agricultural production; red ochre lumps); trade in luxury and symbolic goods (personal ornaments: precious stones and sea-shells from long distance); economic and symbolic functions attributed to copper items (the axes cache); material evidence of Egyptian influence (connection?); the use of donkeys as pack

27. Harrison and Savage 2003; Savage *et al.* 2007.



22. View of Hall L.1110 with seat B.1189 visible on the background; on the left copper axe KB.11.B.120.



23. Necklace KB.11.B.101 from Hall L.1110 as reconstructed after restoration and study.

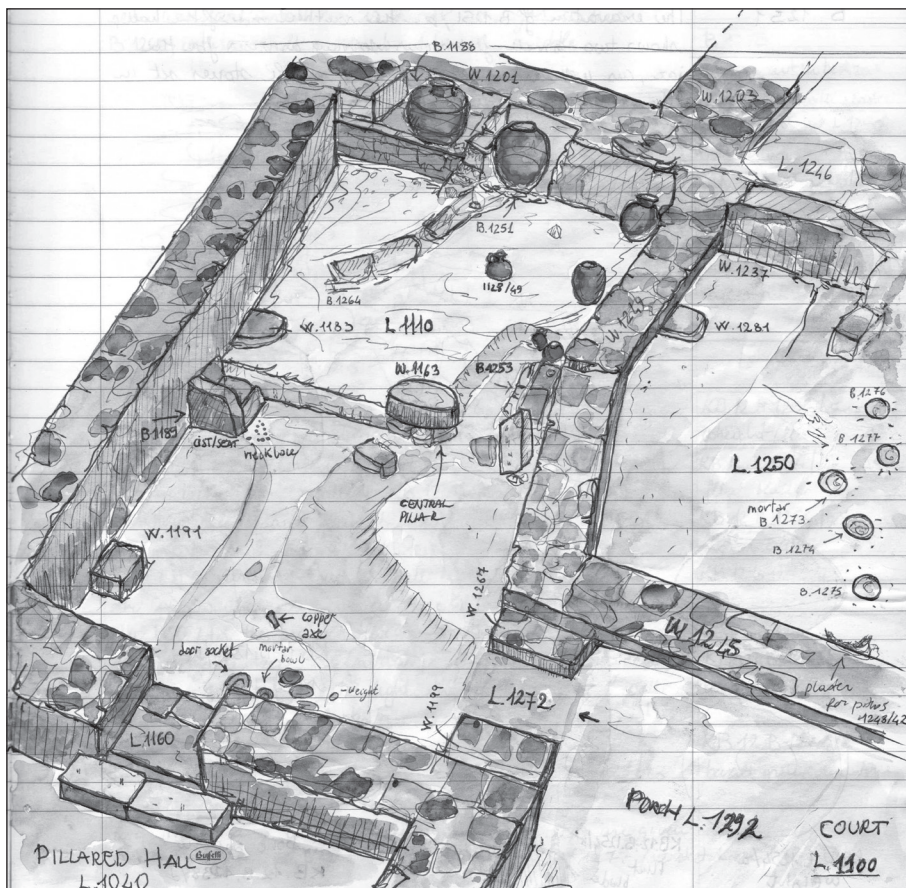
animals in long-distance trade (as illustrated by faunal remains: around 50% of samples are donkeys)²⁸ and social differentiation through differential access to water and trade routes.

Access to means of production (water, cultivable land, and animals), and the accumulation and redistribution of goods, as illustrated by the archeological record, hint at a precise hierarchy in social organization, with the palace ruling over the city, as well as controlling trade routes and landscape exploitation. Also labour organization for the erection of fortifications and public buildings, and of course for primary agricultural production, indicates a principal authority displaying its economic and technical capabilities.

A series of surveys carried out by the Expedition in the upper Wādī az-Zarqā' demonstrated that settlement patterns in the surrounding area were directly related to the rise of the city²⁹, and that the city was apparently in direct connection with contemporary villages – if not in a dominion relationship – during its floruit. The exact nature of this relationship

28. Alhaique 2008.

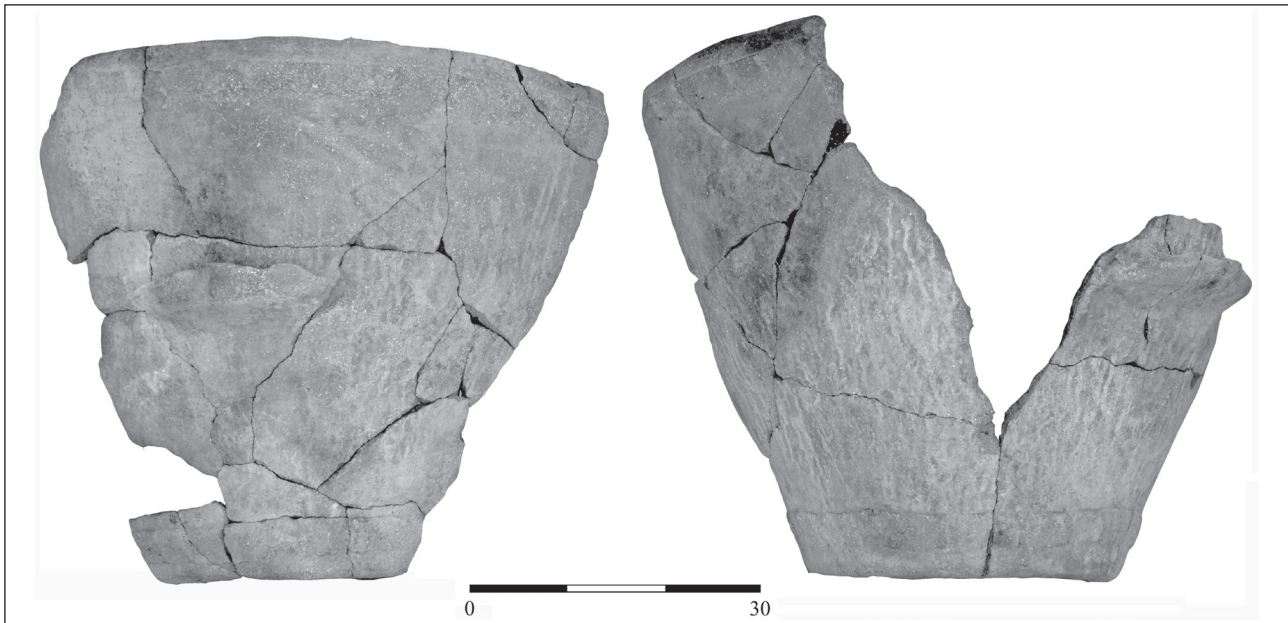
29. Sala 2008.



24. Sketch water colour drawing from Field Diary (june 4th 2012) by the Author showing Hall L.1110 with some main features, including the two big jars in the southern wall or the room.



25. Khirbat al-Batrāwī, Palace B: general view of L.1250 from the north-west.



26. Vat KB.12.B.1238/2 from Room L.1250.

may be only inferred in the absence of written records. For example, pattern-combed jars retrieved from closely located sites also appear in the palace, and might be interpreted as evidence of centralization and control of agriculture production.

Around 2300 BC the city underwent some sort of catastrophe and never recovered. A century later, the mound of Batrāwī was chosen by a new small rural community of the EB IVB.. This was the last occupation of Batrāwī until the 3rd millennium AD.

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