

Urban Origins in the Upper Wādī az-Zarqā', Jordan: The City of Khirbat al-Batrāwī in the third Millennium BC

1. Khirbat al-Batrāwī: Case Study Illustrating the Birth of a City in EBA Transjordan¹

Unexplored until 2004, Khirbat al-Batrāwī is a third millennium BC fortified town and a valuable case-study of early urbanism in Transjordan (Nigro 2009a), which sheds light on the wider phenomenon of urbanisation in southern Levant (FIG. 1)². Recently, a number of scholars have claimed that "neither city nor states" existed in Jordan and that, during the Early Bronze Age, the region may have been characterised by heterarchical rather than hierarchical societies (Philip 2001: 166-168, 2003; Chesson and Philip 2003; Savage, Falconer and Harrison 2007). This debate has remained at a theoretical level, while finds and investigations

in the field continue to accumulate new data³. The discovery of Batrāwī allows a new evaluation of the nature of the relationship between landscape and human settlement, which gave birth to what we would refer to as early urbanism in Jordan (Nigro 2009a: 660-662, 2010b).

2. Geomorphological Setting

In the case of Batrāwī, its location in respect to ancient routes crossing the desert seems significant. Here, Early Bronze Age settlements and small outposts have been identified during a series of surveys⁴ and hint at the existence of an alternative path to urbanisation which should be investigated further⁵. From this perspective, Khirbat al-Batrāwī

¹ I would like to take this opportunity to thank former Director Generals, the late Dr Fawwaz al-Khraysheh and Dr Ziad al-Saad, and all personnel of the Department of Antiquities of Jordan for the valuable help given to the Khirbat al-Batrāwī excavation and restoration project, especially Departmental representatives, Romil Ghrayib and Ahmed Shorma, and colleagues from the Queen Rania Institute of Tourism and Cultural Heritage at the Hashemite University of Zarqā'. The author would like to thank the Italian Embassy at 'Ammān, specifically Ambassador HE Francesco Frasoni and Dr Stefano Stucci, for their co-operation, and the Italian Ministry of Foreign Affairs - DGPCC, Office V. Sincere thanks are extended to the academic authorities of Rome "La Sapienza" University, including the Rector, Prof. Luigi Frati, the Dean of the Faculty of Humanistic Sciences, Prof. Roberto Nicolai, and the Director of the Department of Sciences of Antiquity, Prof. Gianluigi Gregori, who have strongly supported the project's activities.

² During the second half of 4th millennium (Esse 1989: 82-85; Nigro 2005: 1-6, 109-110, 197-202, 2007b: 36-38) and first half of the third millennium BC, the southern Levant saw several attempts to establish complex societies concentrated spatially and institutionally in what may be termed 'cities', viz. a well-defined place which gathered all the communal functions of a well-structured social group under the control of emerging political elites capable of implementing large-scale building operations, centralised storage systems and centralised administrations, and exert-

ing control over land, labour and agricultural products.

³ Major Jordanian sites for this period include Khirbat az-Zayraqūn, Tall al-Ḥuṣūn / Pella, Tall as-Sa'idiyyah, Tall al-'Umayrī, Khirbat Iskandar, al-Lajjūn, Bāb adh-Dhrā' and Numayra, but just a few of these have been thoroughly investigated. New data have recently been published from excavations at Tall Abū al-Kharaz (Fischer 2008), Tall al-Ḥammām (Collins *et al.* 2009) and Khirbat al-Batrāwī itself (Nigro 2010a, 2010b; Nigro and Sala 2009; Nigro *ed.* 2006, 2008).

⁴ A series of surveys carried out in the 1990s along Wādī Rājil and Wādī al-'Ājib in the western Black Desert following the discovery of the EB I site of Jāwā yielded a preliminary map of Chalcolithic and EBA sites in the area between al-Mafraq district and Jāwā itself (Betts *et al.* 1995, 1996), as well as further to the north in southern Syria (Braemer 1993). These EBA Jordanian sites on the western margins of the Syro-Arabian Desert are, from west to east, Tell el-Qihati, Qaṣr al-Ḥallābāt, Rukays, Salatin, Qaryāt al-Khishā' al-Sletin, Umm al-Quṭṭayn and Hawshiyān, which have recently been re-examined by a survey carried out by Rome "La Sapienza" Expedition (Sala 2006).

⁵ Recent archaeological research in al-Mafraq governorate in northern Jordan (Bartl, al-Khraysheh and Eichmann 2001), in the Hauran and Jebel Druz regions, and in southern Syria at Khirbat al-Umbashi (Braemer, Échallier and Taraqqi 2004), Qarassa (Braemer *et al.* in press) and Labwe (al-Maqdissi and Braemer 2006), have led to a thorough →



1. General view of the Early Bronze Age site of Khirbat al-Batrāwī from the north, with the restored EB II - III main city-wall and EB II city-gate.

might represent the western end of an east - west route crossing the desert, where several Early Bronze sites were connected along the course of Wādī aḍ-Ḍulayl. The site also controlled a ford across Wādī az-Zarqā' and thus a straightforward route descending east to west into the Jordan Valley (Nigro 2009a: 660-662, 2010b: 434). This is reflected in the diversity of Batrāwī's economy, which combined intensive agriculture (e.g. barley, horticulture) along the river banks, olive and grape cultivation on the hills west of the river, and pastoralism practiced by semi-nomadic communities living between the desert and the steppe.

3. Wādī az-Zarqā' in Early Bronze Age I: From Rural Villages to the Birth of a City

Upper Wādī az-Zarqā', from its sources in 'Ammān down to its junction with Wādī aḍ-Ḍulayl, formed

a linear geo-ecological niche favourable for human occupation. This attracted new groups of semi-nomads who gradually settled in encampments, hamlets and villages (Kafafi 2008). In the second half of the fourth millennium BC, rural villages emerged along the banks of the Zarqa river from its sources down to the point at which it turns to the west. These villages were concentrated around the hill-top site of Jabal al-Muṭawwaq (Fernández-Tresguerraz Velasco 2008), which had a central sanctuary and an associated large dolmen field (one of the largest EB I religious sites in Jordan). Although these villages and their economies flourished during this period, by the end of the fourth millennium BC they were mostly abandoned or transformed.

Comparison of EB I and EB II settlement patterns is enlightening. In the upper Wādī az-Zarqā', one site, Khirbat al-Batrāwī, emerged as a major

← co .. reevaluation of human engagement with, and responses to, so-called 'marginal' environments during Chalcolithic and EBA, especially with regard to the semi-nomadic

component of ancient societies (Braemer and Sapin 2001; LaBianca and Witzel 2007; Barge and Moulin 2008).

fortified centre. The size of Batrāwī (*ca.* 4ha) suggests that migrants were attracted to the emerging fortified centre. This may be explained by looking at the middle Wādī az-Zarqā', where EB I villages around Jabal Muṭawwaq were abandoned without any EB II centre taking their place (Nigro 2010a: 20-21, 2010b: 432-433).

4. Territorial Control

Some newly occupied EB II and III sites within the Batrāwī district were in fact rural villages, such as Tell el-Bireh, Tall as-Sukhni North and Khirbat ar-Ruṣayfah (Nigro ed. 2006: 4-8; Sala 2008a: 363-370), which attracted people gradually shifting from a semi-nomadic to a sedentary life-style. This shows how groups previously external to village life may have become integrated within an urban socio-economic productive network.

5. A Hill Dominating the Upper Wādī az-Zarqā' Valley

The EB II - III town of Batrāwī was established on a hill-top dominating the upper reaches of the Zarqā' river. The site occupied a favourable defensive location (FIG. 2); territorial and / or symbolic influence may also have been derived from its dominant position (Nigro 2009a: 662; Nigro ed. 2006: 16-37).

6. Emphasising Urban Status: The City-Wall and Associated Fortifications During the Early Bronze Age

The main fortification of the site, emphasising its urban credentials, was a massive, solid stone and mud-brick wall erected in EB II, from which bastions and towers projected at irregular intervals. This wall underwent at least two major reconstructions in EB IIIA (*ca.* 2700 BC) and EB IIIB (*ca.* 2500 BC), during which an outer wall and a further scarp-wall were added.

The initial, EB II city-wall was made of huge limestone blocks and boulders (some exceeding 1.5m in length), carefully set into the bedrock and with a battered base for strength and stability. It was built in separate stretches 6 - 8m in length, a technique already known from Early Bronze Age

fortified sites in Palestine and Jordan, which afforded a degree of protection from the effects of earthquakes (Nigro 2009a: 663-664; Nigro ed. 2006: 175-177, 2008: 77-82).

7. EB II City-Wall and Main City-Gate in Area B

The main gate in the EB II city-wall was on the north side of site, in the only location with easy access for pedestrians and possibly donkey / onager caravans. It was approached via a street which flanked the wall (Nigro 2007a: 349-352, 2009a: 663-664; Nigro ed. 2008: 83-88). In spite of the monumental nature of the 3.2 m wide city-wall, the gate was a simple opening 1.6m wide, roofed with a single lintel on the outer side and wooden beams in the passageway. The outer jambs of the gate were reinforced with big blocks, while a step marked the entrance. There is no evidence for towers immediately adjacent to this early gate, in contrast to contemporary cities such as Tell el-Fara'ah North (de Vaux 1962: 221-234, fig. 1, pls XIX-XXI) and Tell 'Arad (gate in Area N; Amiran and Ilan 1996: 20-22), notwithstanding the fact that this area was heavily disturbed by later rebuilding work.

A pierced block was situated a few metres east of the gate, in the lower course of the city-wall, and was probably used for tethering donkeys (FIG. 3). The faunal assemblage from Batrāwī (Alhaique 2008) contained a significant proportion of donkey bones, interpreted as the remains of transport animals.

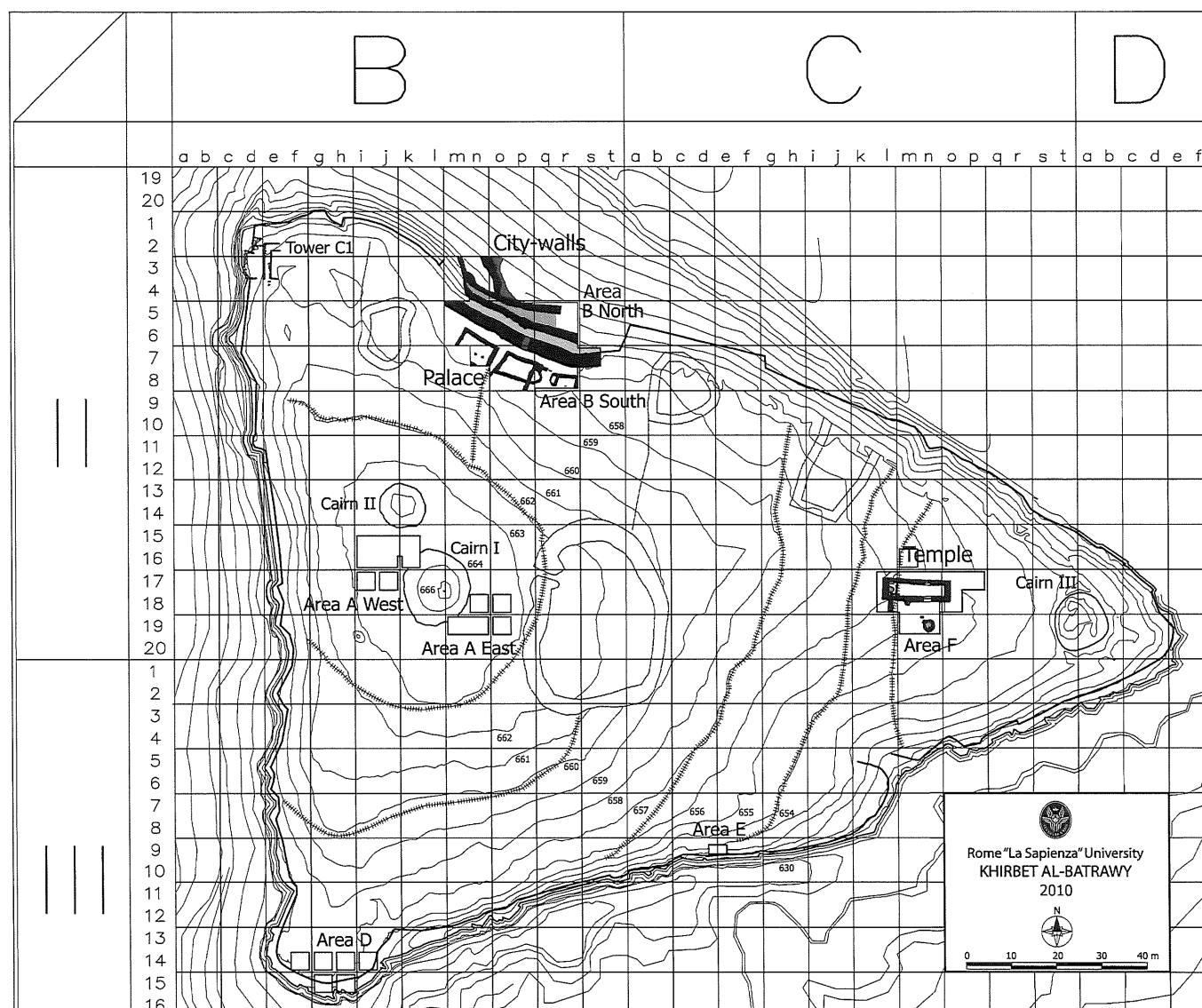
8. EB IIIA Reconstruction of the City-Wall

The gate and the city itself were badly damaged by a major earthquake at the end of EB II (Nigro 2009a: 666-667, 2010b: 437). Cracks on both jambs caused the collapse of the gate lintel (Nigro ed. 2008: 87, fig. 3.37). After this dramatic event, a general reconstruction of the city's defences took place, marking the transition to Early Bronze Age IIIA (2700 - 2500 BC) during which the town flourished. The main city-wall was fully rebuilt by repairing the stone foundations up to a height of more than 2m⁶; the collapsed EB II gate was blocked at the same time (Nigro 2007a: 349-350, fig. 8; Nigro ed. 2008: 89-90, figs. 3.38, 3.40)⁷. An outer wall

⁶ On the inner side of the main wall two staircases, set into the structure, were identified. The two symmetrical flights of steps (or supports for wooden posts) allow the height of the original wall to be calculated at *ca.* 7m (FIG. 4).

⁷ Excavation of the wall blocking the EB II gate and exami-

nation of the stratigraphy accumulated against it have provided a clear sequence of ceramic material illustrating the main phases of the city's occupation (Nigro ed. 2008: 73-76, fig. 3.17a-b).



2. Topographical plan of Khirbat al-Batrāwī, with the areas and main monuments excavated during the 2005 - 2010 seasons.

(W.155) of large limestone boulders was added to the main, inner wall, with a passage / street retained between the two defensive lines (Nigro 2007a: 349-351, 2010b:438-439; Nigro ed. 2008: 92-99). Additionally, a curvilinear outwork (W.185, possibly a circular tower) was added to the defences immediately in front of the blocked gate (FIG. 5), similar to those known from EB IIIA Khirbet Kerak (Greenberg and Paz 2005: figs. 84, 94-96).

9. EB IIIA Destruction: Urbanism, Centralisation of Commodities and War

The EB IIIA city also suffered a dramatic destruction, evidenced by layers of ash and collapsed architectural fragments (e.g. mud-bricks, stones, plaster frag-

ments), after which it was rebuilt for a second time at the beginning of EB IIIB (*ca.* 2500 BC). These layers yielded a number of diagnostic artefacts, including several fragments of so-called 'Khirbet Kerak Ware', copper objects, balance-weights for precious metals (e.g. silver) or drugs, all of which attest to the fact that Batrāwī was a flourishing community at the time of the EB IIIA destruction.

This destruction, like that which occurred at the end of the EB IIIB period, is evidence of the weakness of southern Levantine Early Bronze Age 'urban culture'. A certain degree of political turbulence was provoked by centralisation of commodities, especially in centres like Batrāwī which was located on the boundary between different



3. Khirbat al-Batrāwī: pierced block for tethering animals, set in the lower course of the outer face of the EB II (3000 - 2700 BC) main city-wall; view from east.



4. Khirbat al-Batrāwī: the two facing staircases (W.181 and W.1067) on the inner side of the EB II - III main city-wall.

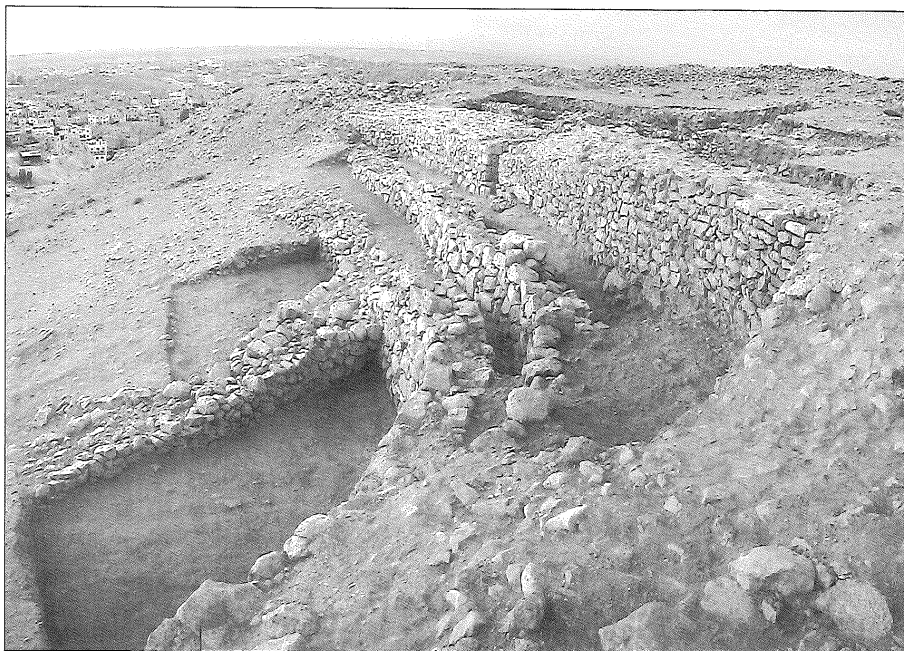
(sometimes antagonist) social groups / landscapes / modes of subsistence. The continuous improvement and enlargement of the defensive systems, coupled with the presence of impressive destruction layers, suggests that urbanism may have been associated in some way with war, whether as a quick, direct means of obtaining territorial control or to seize goods stored within the walls of the city (Nigro 2009a: 667-668, 2009b; 2010b: 439).

10. EB IIIB Reconstruction: Multiple Fortifications and Public Building B1

At the beginning of EB IIIB, the fortifications were rebuilt and strengthened with the addition of a further scarp-wall (W.165) to the outer wall, which brought the overall width of the defensive works in Area B to *ca.* 15m (FIG. 6; Nigro and Sala 2009: 374-375; Nigro ed. 2008: 100-101). Here the scarp-wall, which obliterated the curvilinear outwork,



5. EB IIIA (2700 - 2500 BC) curvilinear outwork W.185 from the north.



6. Khirbat al-Batrāwī: EB IIIB (2500 - 2300 BC) triple line of fortifications from the west: (left) EB IIIB scarp-wall W.165 with protruding wall W.177; (centre) EB IIIA - B outer wall W.155, gradually turning northwards; (right) EB II - III main city-wall.

ended against the face of the outer wall with a round bastion, while a transverse wall protruding from the line of fortification protected the area to west, where the EB III gate was presumably located (FIG. 7). A new street was paved by levelling the collapse layer between the main wall and outer wall. The upper section of the main wall was also reconstructed.

11. The Broad-Room Temple on the Eastern Terrace

Why did an EB II - III city emerge at Batrāwī? Possibly because of its naturally defensive location, but discoveries on the easternmost terrace of the site suggest another possible explanation. Here, in Area F, a major building was uncovered which extended



7. Khirbat al-Batrāwī: EB IIIB (2500 - 2300 BC) protruding wall W.177 and scarp-wall W.165 from the north-west, ending against the outer face of EB IIIA - B outer wall W.155 with semi-circular bastion W.825.

east - west over an area of *ca.* 400m², including a forecourt and some noteworthy installations (Nigro 2009a: 665-666; Nigro and Sala 2009: 381-383; Nigro ed. 2008: 276-293). At the time of its initial construction concurrent with that of the EB II city, this building consisted of a broad-room (L.500) with a row of pillars supporting the roof and a niche facing the entrance. In the forecourt there was a round platform, *ca.* 0.5m high and 2.5m diameter, erected around a bedrock outcrop. The centre of the platform had a slab with a small, circular hollow in the middle, similar to those visible on the steps of Round Altar 4017 at Tell el-Mutesellim / Megiddo in Palestine (Finkelstein and Ussishkin 2000: 71, fig. 3.50).

After the destruction at the end of EB II, the façade of the temple wall was reconstructed and the *cella* re-oriented with a raised platform at its western end. A semi-circular niche was opened in the west wall, with two small pillars or betyls in front of it (FIG. 8).

The overall plan of the building, the layout and placement of cult installations, and especially the circular platform in the forecourt allow it to be interpreted as a broad-room temple. The building is very similar to the renowned EB II - III sanctuary at Bāb adh-Dhrā', which saw the same internal adjustment of the cult focus between EB II and III (Rast and Schaub 2003: 157-166, 321-335,



8. Khirbat al-Batrāwī: general view from the west of restored EB II - III (3000 - 2300 BC) broad-room temple in Area F.

figs. 8.2, 10.57). This type of religious building is deeply rooted in a religious architectural tradition well known in the southern Levant during the Early Bronze Age (and which dates back to the Late Chalcolithic period, e.g. the rectangular temples at Tulaylāt al-Ghassūl and En Gedi); it may have been inspired by the monumental temple at et-Tell / 'Ai in Palestine (Sala 2008b).

12. EB IIIB Buildings in Area B South

In Area B South, a domestic quarter with houses and buildings dating back to EB IIIB has been excavated. To the east, the northern half of a rectangular domestic unit (house B2) was exposed, with a circular pillar-base in the middle and an entrance on the west side (FIG. 9).

This house was different in terms of dimensions and architectural features to the adjacent building, a large structure previously designated building B1 (Nigro ed. 2008: 151-161). This had a couple of large rooms (*ca.* 8 x 5m; L.430 + L.1046) delineated by a 0.8 - 0.9m wide northern wall (FIG. 10); one of these rooms had a staircase leading to an upper storey. West of building B1, a passage (L.1050) was exposed which connected it with another large structure, designated building B3, of which only the northern and western side-walls were uncovered in 2009. By the end of the 2010 season, both building B1 and building B3 had been shown to be part of a unique structure: a broad public building extending

on to the acropolis to the north, with passageway L.1050 interpreted as its northern entrance. Buildings B1 and B3 were then reinterpreted as the eastern and western pavilions of a palace (FIG. 11). This interpretation is based on finds and observations from pavilion B3. By 2009, two huge *pithoi* had already been found *in situ* along the northern wall of the room. Excavation demonstrated that the entire room was filled with a 1.2 m thick destruction layer (F.1054), which included broken and heavily burnt bricks, plaster fragments, collapsed stones, charcoal and ash, which had buried layers of smashed pottery vessels and other items (FIG. 12; Nigro 2010a: 67-110).

Pavilion B3 was a rectangular room (L.1040; 7.5 x 5m) with a row of wooden pillars aligned along the central east - west axis; these were supported by flat stones or bedrock worked to create a substantial base (FIG. 13). A door in the south-east corner (L.1080) of the room opened towards the central passageway (L.1050), while a second entrance in the north-west corner (L.1070) was found to have been blocked by a wall. This 'pillared hall' was evidently used as a store-room, as at least twenty big jars and *pithoi* were aligned in two rows along the main walls of the room (FIGS. 14 and 15). 17 *pithoi* with flaring / cylindrical necks seemed to have contained liquid (*ca.* 120 litres each). Approximately four contained carefully winnowed carbonised barley seeds (*Hordeum vul-*



9. Khirbat al-Batrāwī: general view from the east of domestic and public buildings in Area B South, which were erected within the EB II - III main city-wall during EB IIIB (2500 - 2300 BC); (foreground) house B2.



10. Khirbat al-Batrāwī: eastern pavilion (building B1) and northern entrance (L.1050) to the EB IIIB (2500 - 2300 BC) palace from the south-west.

gare L.), while one (KB.10.B.1040/9) was full of a pigment identified as red ochre.

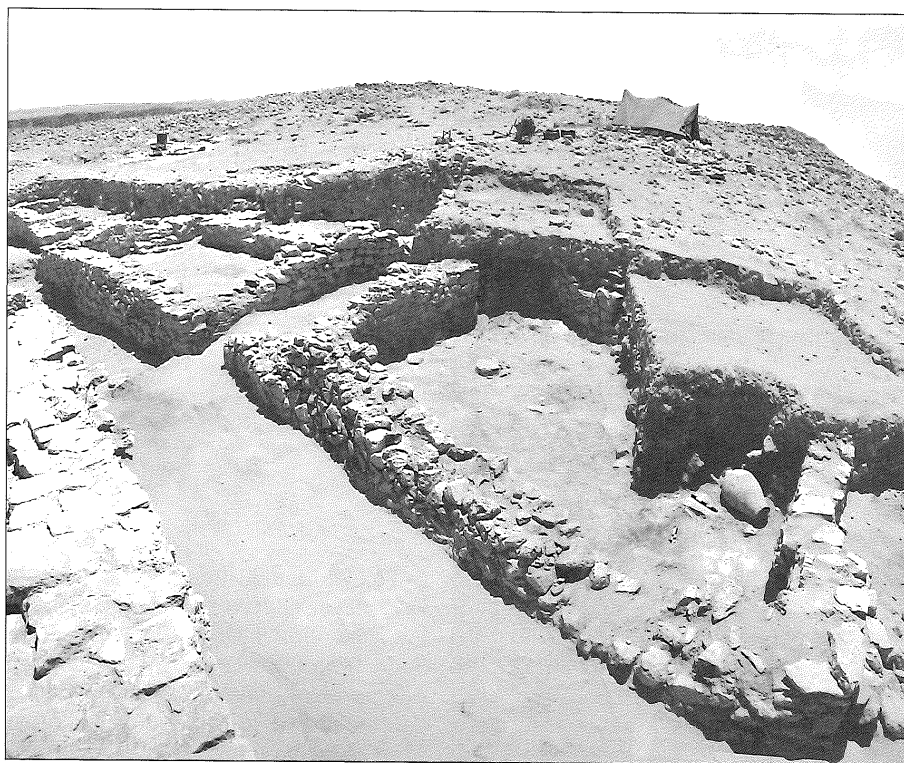
Several types of large container were discovered, usually made of two joined halves with a distinctive flaring / cylindrical neck, refined on the



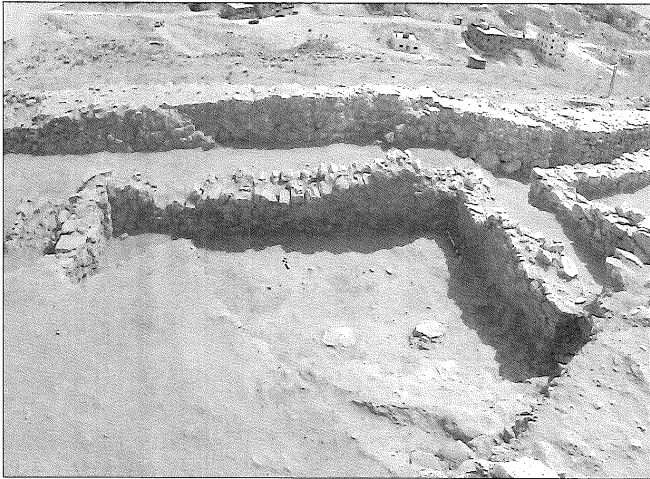
12. Khirbat al-Batrāwī: destruction layer (F.1054) inside the western pavilion of the EB IIIB palace from the south-west during excavation, with the remains of a collapsed stone pillar and *in situ* storage jars and *pithoi*.

wheel. Several surface treatments are attested to, e.g. a thick, white coating and a smeared, washed decoration usually known as “grain wash” (Genz 2000, 2002: 32-35).

In one instance, barley was found stored in a hole-mouth jar (KB.10.B.1054/86), as is usually the case in EB II - III houses (Ilan 2001: tab. 18.6-18.7) but not in this palatial context. Olive oil, grape juice and ointments may have been contained



11. Khirbat al-Batrāwī: general view of the western pavilion of the EB IIIB (2500 - 2300 BC) palace from the north-west, with *pithos* 1040/17 still *in situ*; (background) northern entrance (L.1050) to the palace and eastern pavilion.



13. Khirbat al-Batrāwī: general view of the western pavilion of the EB III B palace from the south; note two bases for wooden posts supporting the roof.

in a series of juglets. Olive oil was transported and stored in metallic pattern-combed jars (Mazzoni 1987), such as the example with two loop-handles discovered in the middle of the room (c.f. Khirbet ez-Zeraqon [Genz 2002: pls 5:1-2, 25:1, 29:4, 32:1,4, 34:3, 56, 61:2, 70:5, 83:1,3, 95, 108:4, 113:2, 131:1] and Khirbet Kerak [Greenberg *et al.* 2006: figs. 5.82:4, 5.88:9, 7.49:3, 8.80:7, 8.91:14]). This jar also had a potter's mark. Fragments of metallic pattern-combed jars were also collected during a 2007 survey carried out with the help of DoA representative Romil Gharib. These metallic sherds hint at the presence of a number of farms in the hilly countryside around Batrāwī towards the west, e.g. Massarah (presumably also a burial site during the third millennium BC, as hinted at by a fine limestone mace-head; Sala 2008a: 373-374).



14. Khirbat al-Batrāwī: destruction layer (F.1054) inside the western pavilion of the EB III B palace from the west during excavation, with *in situ* storage jars and *pithoi*, smashed vessels and an emerging stone base for a wooden post.



15. Khirbat al-Batrāwī: smashed storage *pithoi* in the north-eastern corner of the western pavilion of the EB IIIB palace from the south-west; (right) northern jamb of door L.1080.

Returning to the palace storeroom, more than 100 medium- and small-sized vessels were piled up around the big jars and *pithoi*. An interesting feature was the presence of several jugs and juglets, mostly red-slipped and burnished. A large water-jug (KB.10.B.1054/26, which has parallels with EB IIIB examples from Khirbet Yarmouk [Ben-Tor 1975: pl. 31:4, figs. 8:4, 11:2; de Miroschedji 2000: fig. 18.9:10-11], Tell ed-Duweir [Tufnell 1958: pls 15:3, 69:285-286, 288], 'Ai / et-Tell [Marquet-Krause 1949: pl. 65:11.1565] and Tell es-Sultan [Sellin and Watzinger 1913: pl. 21:C.i; Kenyon 1960: fig. 47:3]) recalls types hitherto known from tomb assemblages, while other juglets are closer to various types of table-ware.

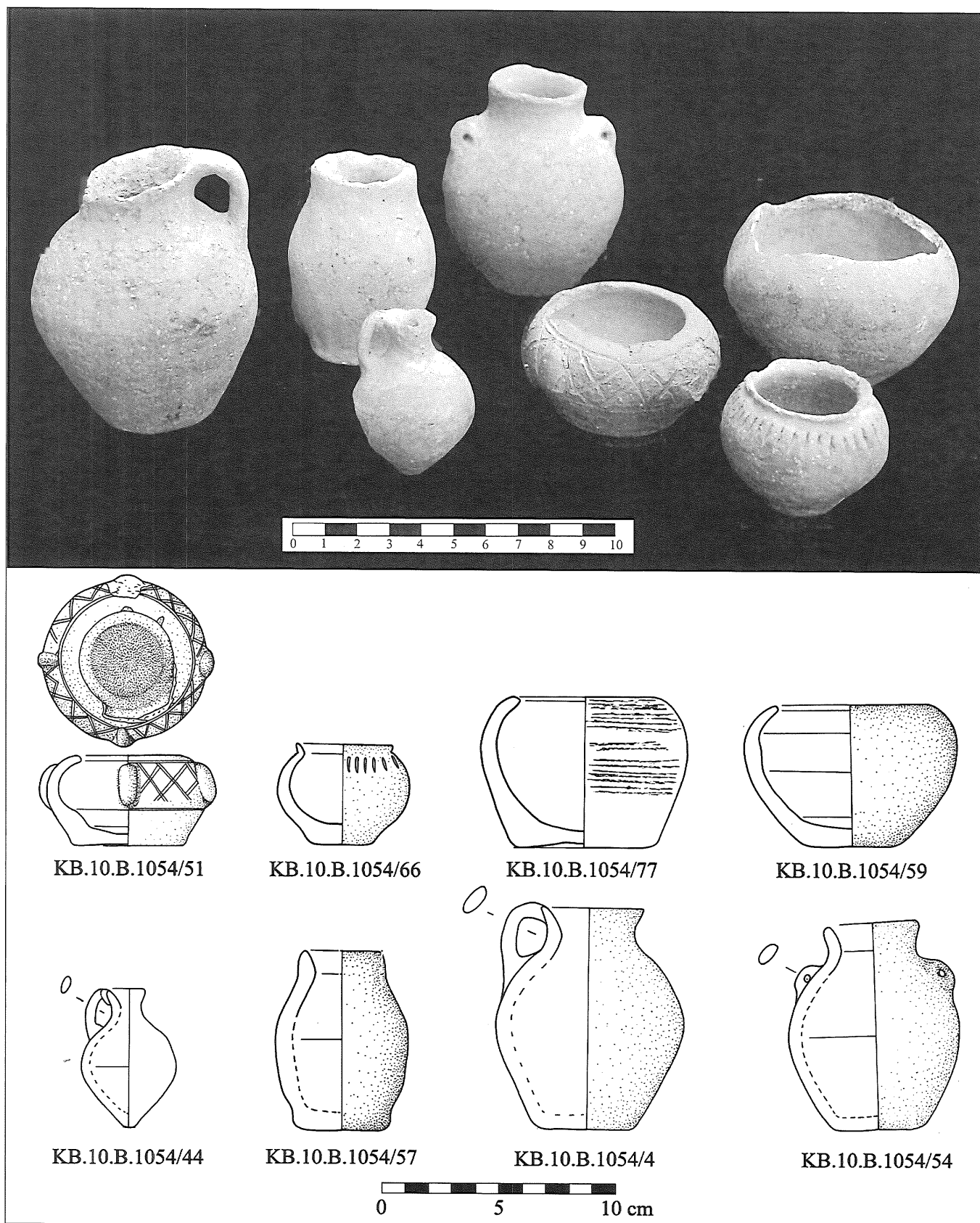
Two red-burnished and polished juglets (KB.10.B.1054/9 and KB.10.B.1054/34) warrant more careful examination, as they apparently occupy a prominent position in the assemblage as potential ceremonial vessels. The first (KB.10.B.1054/9) has a globular body with a flat, slightly concave base and cylindrical neck, and a carefully applied thick, red slip and shiny vertical burnish. The second

(KB.10.B.1054/34) has a vertical ovoid body with a flat, slightly concave base and flaring neck, and a complicated pattern of burnish dividing the vessel into zones (vertical burnish on the lower half, net-pattern mid-body and horizontal burnish on the neck).

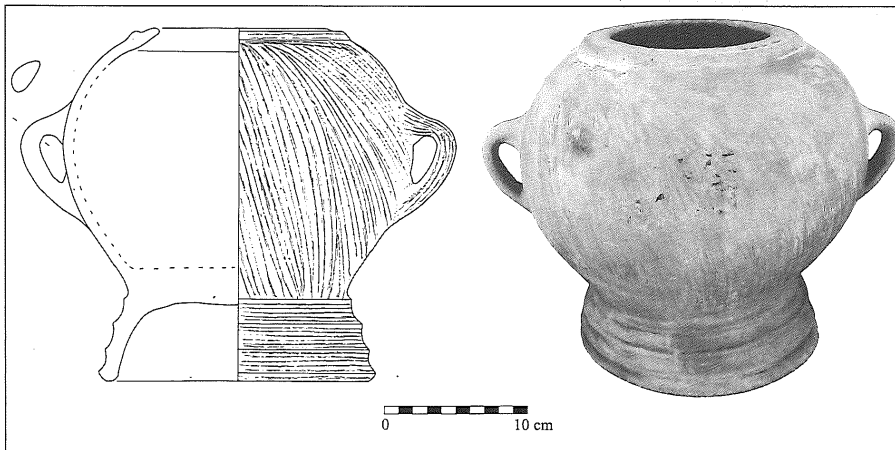
A different group consisted of seven small, pointed-based, black and red burnished jugs and juglets, which belong to a class of small vessels usually associated with burials and used as perfume containers.

Grouped on the floor of the room in between the big jars, a group of eight miniature vessels (FIG. 16) was also discovered. This included a small incised bowl which imitates stone prototypes known from Syria and Mesopotamia, which were commonly used as make-up palettes.

A quite extraordinary find in the middle of the room was a special double-handled, red-burnished vessel with a high, grooved pedestal (KB.10.B.1054/11; FIG. 17), possibly imitating some features of Khirbet Kerak Ware (Greenberg *et al.* 2006: figs 3.13, 3.27:9, 3.46:5, 5.90:14, 5.91:22, 6.31:16, 6.34:11), which has been interpreted as a ceremonial vase. The intrinsic symbolic value of



16. Khirbat al-Batrāwī: miniature vessels from the western pavilion of the EB IIIB palace.



17. Khirbat al-Batrāwī: double-handled, red-burnished ceremonial vessel KB.10.B.1054/11.

this type of hole-mouth krater is suggested by its shape and surface treatment, which clearly imitates a metal (copper) prototype.

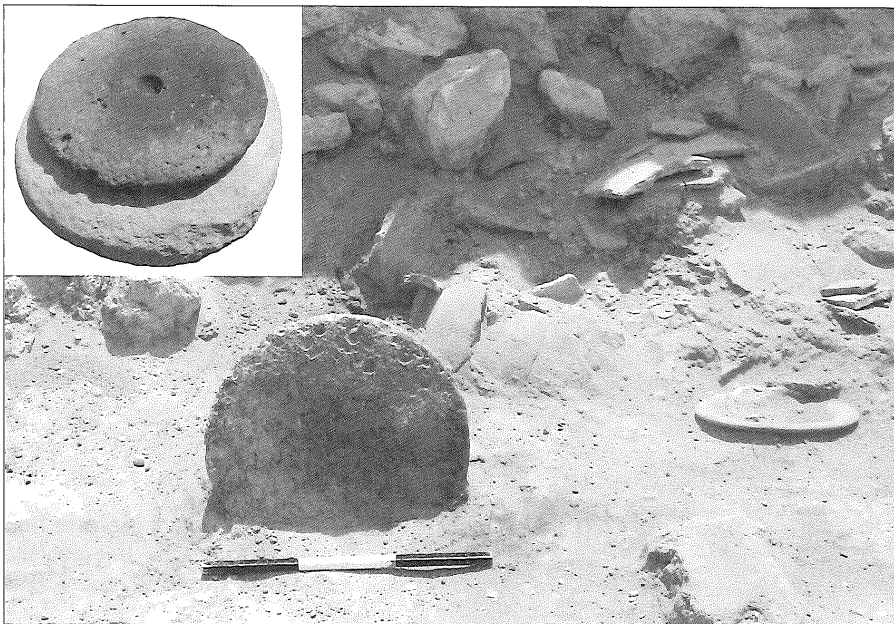
In the same area of the room, a couple of vats were also found, along with - slightly to the east - a couple of big *amphoriskoi* or, more properly, double-handled jars with parallels at Khirbet ez-Zeraqon (Genz 2002: 27, pls 4:4-5, 54:3) and Khirbet Kerak (Greenberg *et al.* 2006: figs 5.81:7, 5.88:1, 5.91:12, 8.69:3, 8.77:3, 8.89:9, 8.100:8). These seem to be forerunners of the 'pilgrim-flask'. Both pairs of vessels hint at the existence of a palace service associated with the ceremonial vessel, which was stored in the pillared pavilion.

Along with ceramic vessels, other finds were also recovered: a set of worked bones (including a

miniature knife - perhaps associated with the miniature vessels - and several pins), some large stone scrapers, polishing pebbles, pierced sea-shells and the tip of a copper spear-head, the latter perhaps a ceremonial weapon.

13. Potter's Wheel

One major find was a carefully worked basalt potter's wheel (FIG. 18; Nigro 2010a: 74, 108-109), a sound witness of level of technological achievement at Batrāwī. This hints at the palace being the institution which prompted ceramic standardisation (also suggested by contemporary finds from the EB IIIB palace at Khirbet Yarmouk [de Miroshedji and Roux 2009]). The only vessels in the ceramic assemblage from pavilion B3 which show



18. Khirbat al-Batrāwī: basalt potter's wheel recovered from the western pavilion of the EB IIIB palace; (left corner) detail of the potter's wheel and finely worked limestone base underneath.

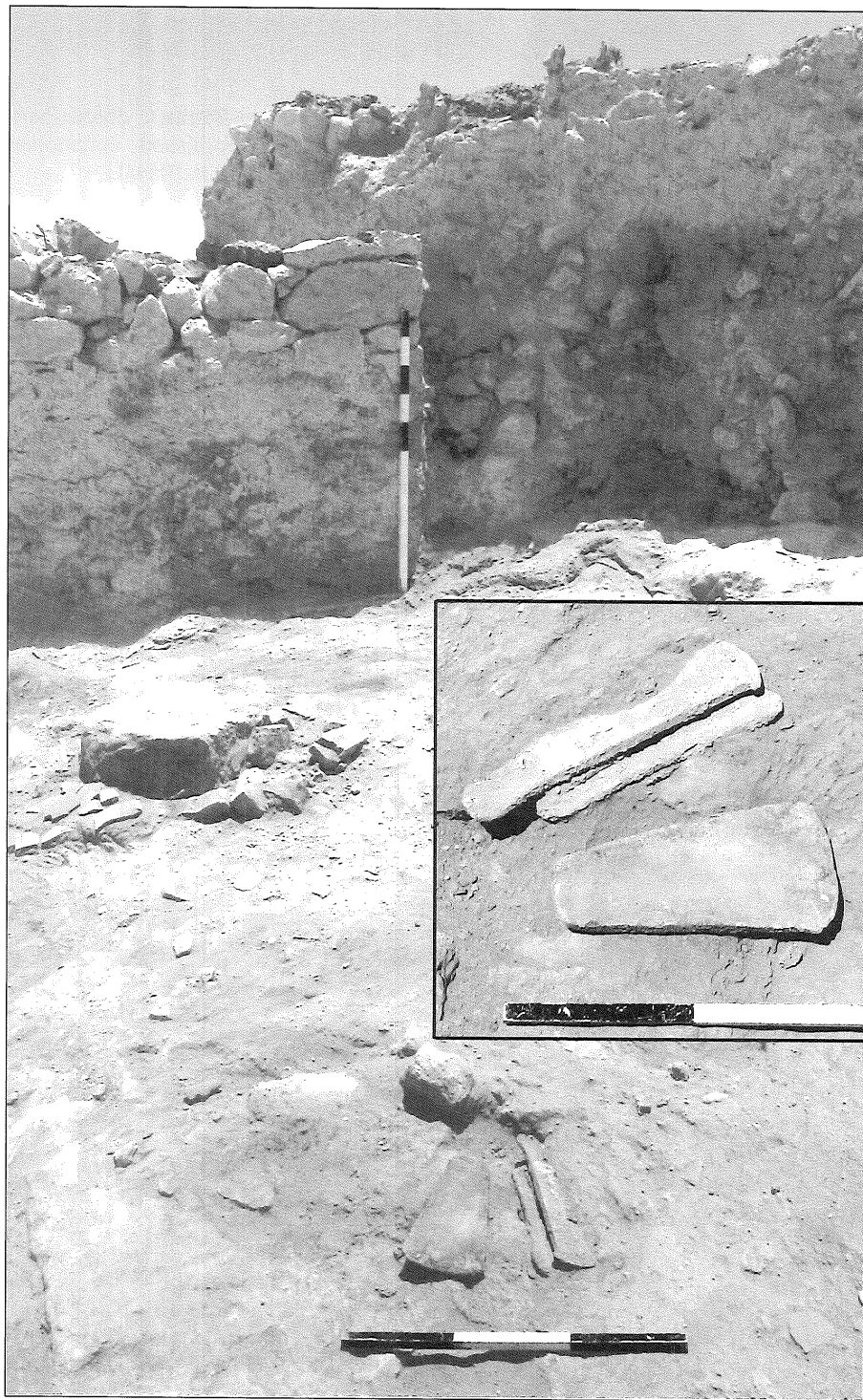
LORENZO NIGRO

use of a wheel are the big *pithoi*, the necks of which were refined on the *tournette*. These huge containers were specifically made for storing liquids and grain within the public building.

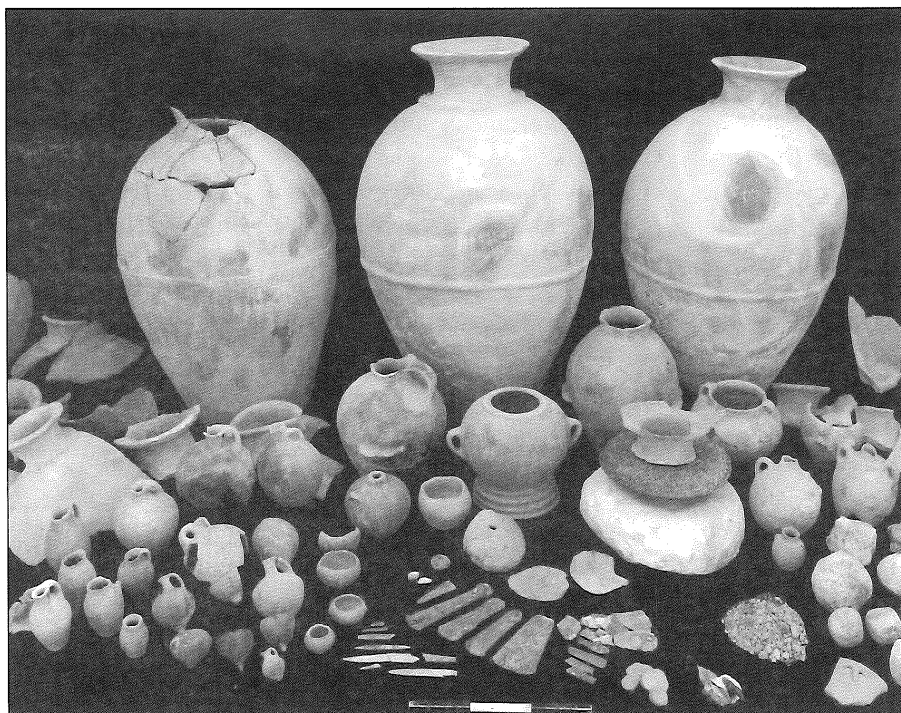
14. Four Copper Axes

Not far from the spot where the double-handled

vessel was found, a cache of four copper axes (FIG. 19) was found in a small hole in the bedrock floor at the base of the second pillar in the middle of the room; it is possible that these axes were cached in a small bag or basket (Nigro 2010a: 73-74, 106-107). The axes are different sub-types of the most common axe-type known from the Chalcolithic



19. Khirbat al-Batrāwī: cache of four copper axes in the floor of the western pavilion of the EB IIIB palace.



20. Khirbat al-Batrāwī: assemblage of *pithoi*, red-burnished jugs, black-burnished pointed juglets, jars and ceremonial vessels, as well as other noteworthy objects; the latter include four copper axes, a bone knife, several worked bones and a carefully worked basalt potter's wheel, all stored in the western pavilion of the EB IIIB palace.

and Early Bronze Age in the southern Levant (Miron 1992: 3-29). The largest specimen is a wide flag-axe with a squared hole for fixing the shaft. It shows traces of use on the upper and lower corners of the blade. The second and the third axes are of a well known EB III type with a fan blade. The fourth is a simple example with a regular, elongated body.

The Batrāwī axes recall the historical discovery of six EB III axe-types, including a crescent-shaped example, by Fredric John Bliss at Tell el-Hesi (Bliss 1894: 39, figs. 69, 73-77).

15. The Palace of Batrāwī and its Significance

Finds from pavilion B3 at Batrāwī give a vivid but very preliminary insight into the life of this ancient city during the third quarter of the third millennium BC. Many items recovered from the pillared room have yet to be restored. Indeed, the excavation of the whole building needs to be completed in order to generate a general interpretive sketch of all finds (FIG. 20). However, even at this stage, the site clearly illustrates the achievements of an early urban community with its public building and palace, the latter intended as a place where agricultural products, valuable goods and symbolic and utilitarian tools were collected, and where several public functions were carried out (the EB IIIB Palace B at Khirbet Yarmouk in Palestine may be a possible comparison [de Miroschedji 2003]). This

places Jordan firmly within the sphere of early urbanism, not as a neglected periphery but perhaps as an alternative trajectory towards urban civilization that still remains to be thoroughly explored.

Further research will allow the historical picture of early Jordanian urbanism, as illustrated by Khirbat al-Batrāwī, to be described more precisely. Regrettably, however, this extraordinary process was brought to a sudden end by a fierce conflagration at the end of EB IIIB, at *ca.* 2300 BC.

16. Site Rehabilitation

The rehabilitation of the site as a tourist attraction is one of the goals of the project. Architectural remains have been fully restored and, this year, explanatory panels in English and Arabic have been set up. An Italian tourist group visited Batrāwī in 2010. The project has already published three reports on the six (2005 - 2010) season of excavation and restoration. I would like to conclude by remembering the late Father Michele Piccirillo, an extraordinary Italian - Jordanian archaeologist to whom we dedicate our discoveries.

Bibliography

- Alhaique, F. 2008. Appendix A: Faunal remains. Pp. 327-358 in L. Nigro (ed.), *Khirbet al-Batrāwī II. The EB II city-gate, the EB II-III fortifications, the EB II-III temple. Preliminary report of the second (2006)*

- and third (2007) seasons of excavations (Rome «La Sapienza» Studies on the Archaeology of Palestine & Transjordan, 6). Rome: Roma: Università degli Studi di Roma «La Sapienza».
- Amiran, R., and Ilan, O. 1996. *Early Arad. The Chalcolithic and Early Bronze IB Settlements and the Early Bronze II City: Architecture and Town Planning. II. Sixth to Eighteenth Seasons of Excavations, 1971-1978, 1980-1984*. Jerusalem: The Israel Museum and the Israel Exploration Society.
- Al-Maqdissi, M. and Braemer, F. 2006. Labwe (Syrie): une ville du Bronze ancien du Levant du Sud. *Paléorient* 32/1: 113-124.
- Barge, O. and Moulin, B. 2008. The development of the Syrian steppe during the Early Bronze Age. Pp. 19-28 in H. Kühne (ed.), *Proceedings of the Fourth International Congress on the Archaeology of the Ancient Near East*, Berlin 2004. Berlin: Harrassowitz.
- Bartl, K., al-Khraysheh, F. and Eichmann, R. 2001. Palaeoenvironmental and archaeological studies in the Khanasiri region/northern Jordan. Preliminary results of the archaeological survey 1999. *ADAJ* 45: 119-134.
- Ben-Tor, A. 1975. *Two Burial Caves of the Proto-Urban Period at Azor, 1971. The First Season of Excavations at Tel Yarmuth, 1970* (Qedem 1). Jerusalem: The Hebrew University.
- Betts, A. et al. 1995. Archaeological survey of the Wadi al-‘Ajib, Mafrq district. *ADAJ* 39: 149-168.
- 1996. Studies of Bronze Age occupation in the Wadi al- al-‘Ajib, southern Hauran. *Levant* 28: 27-39.
- Bliss, F.J. 1894. *A Mound of Many Cities; or Tell el Hesb Excavated*. London: Palestine Exploration Fund.
- Braemer, F. 1993. Prospections archéologiques dans le Hawran (Syrie). III. *Syria* 70: 117-170.
- Braemer, F. et al. in press. Etude préliminaire du site de Qarassa (Mohafazat de Suweida). *Annales Archéologiques Arabes Syriennes*.
- Braemer, F. and Sapin, J. 2001. Modes d’occupation de la steppe dans le Levant sud-est au Bronze ancien: les structures liées au pastoralisme. Pp. 69-88 in B. Geyer (ed.), *In Conquête de la steppe et appropriation des terres sur les marges arides du Croissant fertile* (Travaux de la Maison de l’Orient 36). Lyon: Maison de l’Orient.
- Braemer, F., Échallier, J-Cl. and Taraqqi, A. (eds.). 2004. *Khirbet al Umbashi. Villages et campements de pasteurs dans le “désert noir” (Syrie) à l’âge du Bronze. Travaux de la mission conjointe franco-syrienne 1991-1996* (Bibliothèque Archéologique et Historique - T. 171). Beyrouth: Institut Français d’Archéologie du Proche-Orient.
- Chesson, M.S. and Philip, G. 2003. Tales of the City? “Urbanism” in the Early Bronze Age Levant from Mediterranean and Levantine Perspectives. *JMA* 16: 3-16.
- Collins, S. et al. 2009. Tall al-Hammam: Preliminary Report on Four Seasons of Excavation (2006-2009). *ADAJ* 53: 385-414.
- Esse, D.L. 1989. Secondary State Formation and Collapse in Early Bronze Age Palestine. Pp. 81-95 in P. de Miroschedji (ed.), *L’urbanisation de la Palestine à l’âge du Bronze ancien Bilan et perspectives des recherches actuelles. Actes du Colloque d’Emmaüs (20-24 octobre 1986)* (BAR IS 527). Oxford: B.A.R.
- Fernández-Tresguerrez Velasco, J.A. 2008. The “Temple of the Serpents”. A Sanctuary in the Early Bronze Age 1 in the village of Jabal Mutawwaq (Jordan). *ADAJ* 52: 23-34.
- Finkelstein, I., and Ussishkin, D. 2000. Area J. Pp. 25-74 in I. Finkelstein, D. Ussishkin, and B. Halpern (eds.), *Megiddo III. The 1992-1996 Seasons* (Tel Aviv Monograph Series 18. Tel Aviv). Tel Aviv: Tel Aviv University, Sonia and Marco Nadler Institute of Archaeology.
- Fisher, P.M. 2008. *Tell Abu al-Kharaz in the Jordan Valley. Volume I: The Early Bronze Age* (Österreichische Akademie der Wissenschaften, Denkschriften der Gesamtakademie, Band XLVIII). Wien: Verlag der Österreichische Akademie der Wissenschaften.
- Genz, H. 2000. Grain wash Decoration in Early Bronze Age III? The Evidence from Khirbet ez-Zeraqon. Pp. 279-286 in G. Philip and D. Baird (eds.), *Ceramic and Change in the Early Bronze Age of the Southern Levant* (Levantine Archaeology 2). Sheffield: Sheffield Academic Press.
- 2002. *Die frühbronzezeitliche Keramik von Khirbet ez-Zeraqon* (Abhandlungen des Deutschen Palästina-Vereins, Band 27,2). Wiesbaden: Harrassowitz.
- Greenberg, R. and Paz, Y. 2005. The Early Bronze Age fortifications at Tel Beth Yerah. *Levant* 37: 81-103.
- Greenberg, R., Eisenberg, E., Paz, S. and Paz, Y. 2006. *Bet Yerah: The Early Bronze Age Mound I: Excavations Reports 1933-1986* (Israel Antiquities Authority Reports 29). Jerusalem: Israel Antiquities Authority.
- Ilan, O. 2001. Household Archaeology at Arad and at Ai in the Early Bronze Age II. Pp. 317-354 in S.R. Wolff (ed.), *Studies in the Archaeology of Israel and Neighboring Lands in Memory of Douglas L. Esse* (Studies in Ancient Oriental Civilizations 59). Chicago: The University of Chicago Press.

- Kafafi, Z. 2008. Early Bronze Age I settlers and transhumance in the Wadi az-Zarqa Basin: Stations on the way from the Jordan Valley to the Badia region. *Adumatu* 18: 27-40.
- Kenyon, K.M. 1960. *Excavations at Jericho. Volume One. The Tombs excavated in 1952-1954*. London: The British School of Archaeology in Jerusalem.
- LaBianca, O.S. and Witzel, K.R. 2007. Nomads, empires and civilizations: Great and little traditions and the historical landscape of the southern Levant. Pp. 63-74 in B.A. Saidel and E.J. Van der Steen (eds.), *On the Fringe of Society: Archaeological and Ethnoarchaeological Perspectives on Pastoral and Agricultural Societies* (BAR IS 1657). Oxford: B.A.R.
- Marquet-Krause, J. 1949. *Les fouilles de 'Ay (et-Tell), 1933-1935: entreprises par le Baron Edmond de Rothschild. Le résurrection d'une grande cité biblique* (Bibliothèque Archéologique et Historique 54). Paris: P. Geuthner.
- Mazzoni, S. 1987. The Diffusion of the Palestinian Combed Jars. Pp. 145-158 in S. Shaath (ed.), *Studies in the History and Archaeology of Palestine* Vol. II (*Proceedings of the First International Symposium on Palestine Antiquities*). Aleppo: ALECSO.
- Miron, E. 1992. *Axes and Adzes from Canaan* (Prähistorische Bronzefunde Abteilung IX, Band 19). Stuttgart: Franz Steiner-Verlag.
- de Miroschedji, P. 2000. An Early Bronze Age III Pottery Sequence for Southern Israel. Pp. 315-345 in G. Philip and D. Baird (eds.), *Ceramic and Change in the Early Bronze Age of the Southern Levant* (Levantine Archaeology 2). Sheffield: Sheffield Academic Press.
- 2003. The Late EB III Palace B1 at Tel Yarmouth: A Descriptive Summary. *Eretz Israel* 27: 153-170.
- de Miroschedji, P. and Roux, V. 2009. Revisiting the History of the Potter's Wheel in the Southern Levant. *Levant* 41: 155-173.
- Nigro, L. 2005. *Tell es-Sultan/Gerico alle soglie della prima urbanizzazione: il villaggio e la necropoli del Bronzo Antico I (3300-3000 a.C.)* (Rome «La Sapienza» Studies on the Archaeology of Palestine & Transjordan, 1). Rome: «La Sapienza» Expedition to Palestine & Jordan.
- 2007a. Preliminary Report of the Second Season of Excavations by the University of Rome «La Sapienza» at Khirbat al-Batrāwī (Upper Wādī az-Zarqā). *ADAJ* 51: 345-360.
- 2007b. Aside the spring: Byblos and Jericho from village to town in the second half of the 4th millennium BC. Pp. 1-45 in L. Nigro (ed.), *Byblos and Jericho in the Early Bronze I: social dynamics and cultural interactions. Proceedings of the International Workshop held in Rome on March 7th 2006 by Rome «La Sapienza» University* (Rome «La Sapienza» Studies on the Archaeology of Palestine & Transjordan, 4). Rome: «La Sapienza» Expedition to Palestine & Jordan.
- 2009a. Khirbet al-Batrāwī: a Case Study of 3rd millennium BC Early Urbanism in North-Central Jordan. Pp. 657-677 in F. al-Khaysheh (ed.), *SHAJ X*. Amman: Department of Antiquities, Hashemite Kingdom of Jordan.
- 2009b. When the walls tumble down. Jericho: Rise and collapse of an Early Bronze Age Palestinian city. Pp. 91-110 in R. Peroni and A. Cardarelli (eds.), *Le ragioni del cambiamento. Reason for Changes. 'Nascita', 'declino' e 'crollo' delle società tra fine del IV e inizio del I millennio a.C.* (Scienze dell'Antichità 15). Rome: Università degli Studi di Roma «La Sapienza».
- 2010a. *In the Palace of the Copper Axes/Nel Palazzo delle Asce di Rame. Khirbet al-Batrāwī: the discovery of a forgotten city of the III millennium BC in Jordan*, Khirbet al-Batrāwī: la scoperta di una città dimenticata del III millennio a.C. in Giordania (Rome «La Sapienza» Studies on the Archaeology of Palestine & Transjordan, Colour Monographs I). Rome: Roma: Università degli Studi di Roma «La Sapienza».
- 2010b. Between the Desert and the Jordan: Early Urbanization in the Upper Wadi az-Zarqa - the EB II-III fortified town of Khirbet al-Batrāwī. Pp. 431-458, Vol. 2 in P. Matthiae et al. (eds.), *6 ICAANE: Proceedings of the 6th International Congress of the Archaeology of the Ancient Near East. 5 May – 10 May 2008, «Sapienza», Università di Roma*. Wiesbaden: Harrassowitz.
- Nigro, L. and Sala, M. 2009. Preliminary Report of the Fourth Season (2008) of Excavations by the University of Rome «La Sapienza» at Khirbat al-Batrāwī (Upper Wādī az-Zarqā). *ADAJ* 53: 371-384.
- Nigro, L. (ed.). 2006. *Khirbet al-Batrāwī. An Early Bronze Age Fortified Town in North-Central Jordan. Preliminary Report of the First Season of Excavations (2005)* (Rome «La Sapienza» Studies on the Archaeology of Palestine & Transjordan, 3). Rome: Roma: Università degli Studi di Roma «La Sapienza».
- 2008. *Khirbet al-Batrāwī II. The EB II city-gate, the EB II-III fortifications, the EB II-III temple. Preliminary report of the second (2006) and third (2007)*

LORENZO NIGRO

- seasons of excavations*, (Rome «La Sapienza» Studies on the Archaeology of Palestine & Transjordan, 6). Rome: Roma: Università degli Studi di Roma «La Sapienza».
- Philip, G. 2001. The Early Bronze I-III Ages. Pp. 163-232 in B. MacDonald, A. Russel and P. Bienkowski (eds.), *The Archaeology of Jordan*. Sheffield: Sheffield Academic Press.
- 2003. The Early Bronze Age of the Southern Levant: A Landscape Approach. *JMA* 16.1: 103-132.
- Philip, G. and Baird, D. (eds.). 2000. *Ceramic and Change in the Early Bronze Age of the Southern Levant*, (Levantine Archaeology 2). Sheffield: Sheffield Academic Press.
- Rast, W.E. and Schaub, R.Th. 2003. *Bâb edh-Dhrâ': Excavations at the Town Site (1975-1981). Part 1: Text, Part 2: Plates and Appendices*, (Reports of the Expedition to the Dead Sea Plain, Jordan, Volume II). Winona Lake, In.: Eisenbrauns.
- Sala, M. 2006. Appendix A: Across the Desert and the Steppe. Ancient Tracks from the Eastern Edges of the az-Zarqa and al-Mafraq Districts to the Western Fringes of the Black Desert of Jordan. Pp. 233-250 in L. Nigro (ed.), *Khirbet al-Batrawy. An Early Bronze Age Fortified Town in North-Central Jordan. Preliminary Report of the First Season of Excavations (2005)*, (Rome «La Sapienza» Studies on the Archaeology of Palestine & Transjordan, 3). Rome: Roma: Università degli Studi di Roma «La Sapienza».
- 2008a. Appendix B. Along the river: 2007 Survey of Upper and Middle Wadi az-Zarqa. Pp. 359-397 in L. Nigro (ed.), *Khirbet al-Batrawy II. The EB II city-gate, the EB II-III fortifications, the EB II-III temple. Preliminary report of the second (2006) and third (2007) seasons of excavations*, (Rome «La Sapienza» Studies on the Archaeology of Palestine & Transjordan, 6). Rome: Roma: Università degli Studi di Roma «La Sapienza».
- 2008b. *L'architettura sacra della Palestina nell'età del Bronzo Antico I-III*, (Contributi e Materiali di Archeologia Orientale XIII). Rome: Università di Roma «La Sapienza».
- Savage, S.H., Falconer, S.E. and Harrison, T.P. 2007. The Early Bronze Age city states of southern Levant. Neither cities nor states. Pp. 285-297 in Th.E. Levy, P.M.M. Daviau, R.W. Younker and M. Shaer (eds.), *Crossing Jordan. North American Contributions to the Archaeology of Jordan*. London and Oakville: Equinox Publishing Ltd.
- Sellin, E., and Watzinger, C. 1913. *Jericho. Die Ergebnisse der Ausgrabungen*, (Wissenschaftliche Veröffentlichung der Deutschen Orient-Gesellschaft 22). Leipzig: J.C. Hinrichs'sche Buchhandlung.
- Tufnell, O. 1958. *Lachish IV. The Bronze Age* vol. IV, (The Wellcome-Marston Archaeological Research Expedition to the Near East). London: Oxford University Press.
- de Vaux, R. 1962. Les fouilles de Tell el-Far'ah. Rapport préliminaire sur les 7e, 8e, 9e campagnes, 1958-1960 (suite). *Revue Biblique* 69: 212-253.