

PRELIMINARY REPORT ON THE SIXTH (2010) SEASON OF EXCAVATION BY “LA SAPIENZA” UNIVERSITY OF ROME AT KHIRBAT AL-BATRĀWĪ (UPPER WĀDĪ AZ-ZARQĀ’)

Lorenzo Nigro and Maura Sala

1. Introduction

The sixth (2010) season of archaeological excavation and restoration was carried out at the Early Bronze Age site of Khirbat al-Batrāwī¹, on the northern edge of the modern city of Zarqā’, by the “La Sapienza” University of Rome expedition to Jordan² in May-June 2010³. Financial support was provided by Rome “La Sapienza” University, the Italian Ministry of Foreign Affairs⁴ and the Italian Ministry of University and Scientific Research.

The site of Khirbat al-Batrāwī was a major fortified town of the EB II-III, acting as the central place of upper Wādī az-Zarqā’ at a strategic crossroads connecting the desert and steppe with the Jordan Valley (Nigro 2009, 2010b).

In 2010⁵, excavation and restoration activities were concentrated on the EB II-III main city-wall on the northern slope of the khirbat

in Area B North, and on the substantial public building within it in Area B South, namely Palace B (Fig. 1).

2. Aims of the Sixth (2010) Season

The main objectives of the sixth (2010) season of archaeological investigation and restoration at Khirbat al-Batrāwī were as follows:

- Excavation in the EB IIIB (2500-2300 BC) Palace B and overlying EB IVB (2200-2000 BC) rural village in Area B South;
- Restoration of House B2 in Area B South-East, along with annexed semi-circular plastered installation W.135, and to start restoration of the eastern pavilion of Palace B (Building B1 with oven T.413), excavated during the 2006-2009 seasons;
- Installation of information panels along the tourist path in Areas B and F (the EB II-III temple).

1. Lat. 32°05’ N, Long. 36°04’ E; JADIS site no 2516.011, p. 2.172 (Nigro 2006: 233-235, fig. 1; Nigro ed. 2006: 16-22, maps 1-6, plan I).

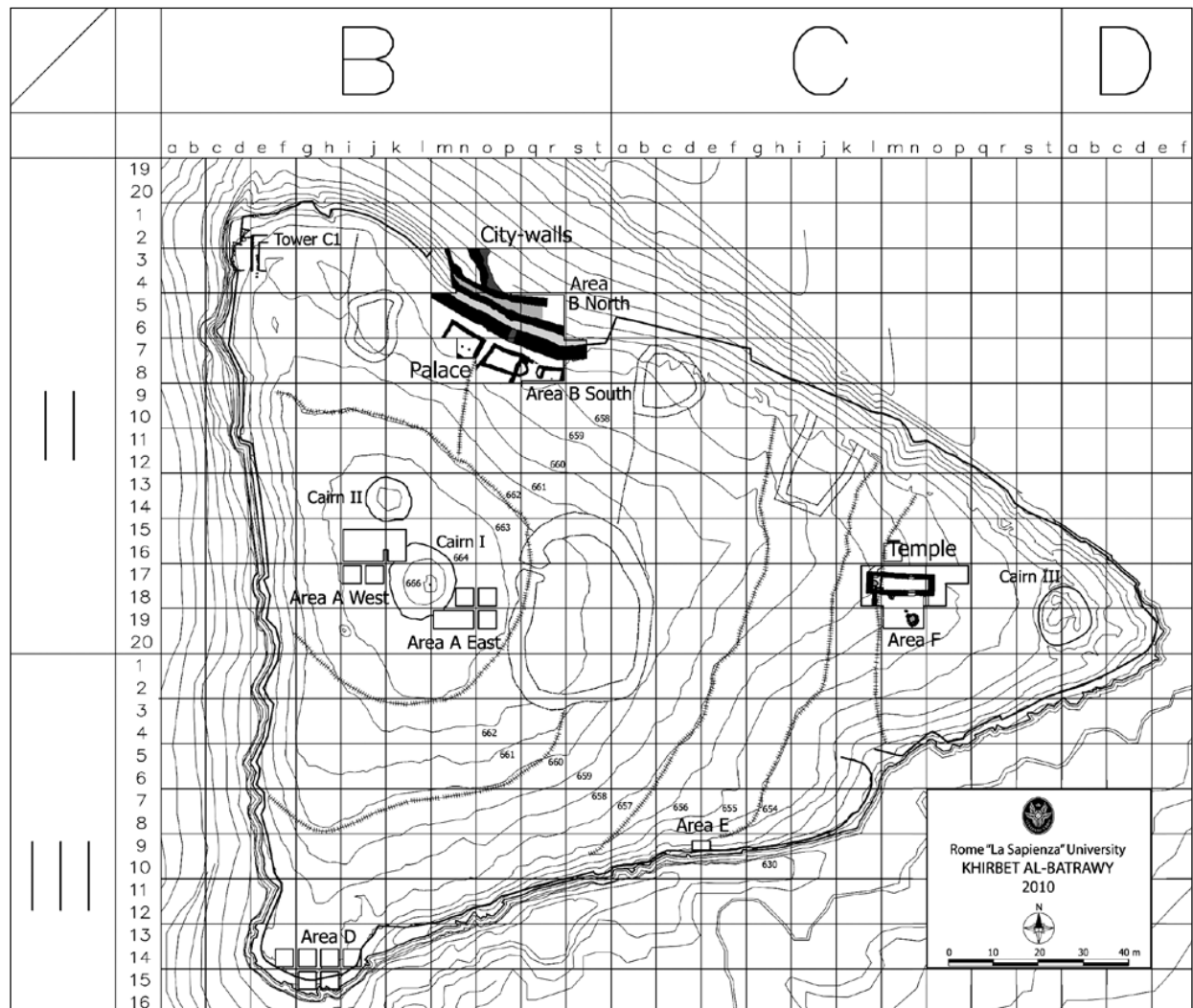
2. The Rome “La Sapienza” team during the sixth (2010) season included L. Nigro (director), M. Sala (field director), L. Caiafa, D. Ghigi, A. Massafra, G. Merli and V. Tumolo. The representative of the Department of Antiquities, whose support to the Expedition in the field was much appreciated, was Inspector Ahmed Shorma.

3. The Expedition wishes to express its gratitude to former Director General of the Department of Antiquities of Jordan, the late Dr Fawwaz al-Khraysheh, and to the present Director General, Prof. Ziad al-Saad, and to all the personnel of the DoA for their invaluable support, as well as to the academic authorities of Rome “La Sapienza” University, the Rector, Prof. Luigi Frati, the Dean of the Faculty of Humanistic Sciences, Prof. Roberto Nicolai, the former Director of the Department of Sciences of Antiquity, Prof. G. Bartoloni, and the present Director, Prof. G. Gregori, who provided enormous support to the Expedition.

4. The authors would also like to thank the Italian Embassy at Amman, in the persons of the Ambassador of

Italy, H.E. Francesco Fransoni, Dr Stefano Stucci and Dr Natalia Sanginiti, and the Italian Ministry of Foreign Affairs for their co-operation.

5. In previous seasons (2005-2009; Nigro 2006; 2007; 2009; 2010b; Nigro ed. 2006; 2008; Nigro and Sala 2009; 2010), the main chronological, topographical and architectural reference points of the site were established (Nigro 2006: 233-236; Nigro 2007: 346-347, tab. 1; Nigro ed. 2006: 9-36, fig. 1.2; 2008: 7-8; Nigro and Sala 2009: 373) and seven areas opened, i.e. on the Acropolis (Area A; Nigro 2006: 236-240; Nigro 2007: 347-349; Nigro ed. 2006: 63-102, plan II; 2008: 9-63); on the northern slope (Area B North and B South; Nigro 2006: 240-246; Nigro 2007: 349-354; Nigro ed. 2006: 153-196, plans III-IV; 2008: 65-240, plans I-II; Nigro and Sala 2009: 373-377); in the north-western and south-western corners (respectively Area C (Nigro ed. 2006: 25-27, figs 1.27-1.31) and Area D (Nigro 2007: 355-357; Nigro ed. 2006: 32-33, figs 1.38-1.41; 2008: 241-244)); on the southern side (Area E; Nigro 2007: 357-358; Nigro ed. 2008: 245-268); and on the easternmost terrace of the *khirbat* (Area F; Nigro 2007: 358-359; Nigro ed. 2006: 22, fig. 1.25; 2008: 269-316, plans III-IV; Nigro and Sala 2009: 377-383).



1. Topographic map of Khirbat al-Batrāwī, showing the areas and main monuments excavated during the 2005-2010 seasons.

3. Chronology and Stratigraphy of Area B

The sixth (2010) season of excavation in Area B South allowed us to refine the stratigraphic and constructional phases of the EB IVB village that was built over the collapsed remains of the EB IIIB city during the final centuries of the 3rd millennium BC (Batrawi period IVb; 2200-2000 BC). It also clarified the stratigraphy and layout of the public building known as Palace B (Buildings B1 and B3), which was erected inside the EB II-III main city-wall in Early Bronze IIIB (Batrawi period IIIB; 2500-2300 BC), at which time the defences in Area B North were strengthened and enlarged with the addition of a third line of fortifications (W.165). Palace B was destroyed by a fierce fire at around 2300 BC. This was the same violent conflagra-

tion, attested to by burnt layers of ash, charcoal and collapsed mud-brick, which destroyed the triple line of fortifications in Area B North and marked the demise of the 3rd millennium BC city (Nigro 2009: 670).

4. Area B South: EB IIIB (2500-2300 BC) Palace B and the EB IVB (2200-2000 BC) Rural village

Excavation in Area B South, just south of the EB II-III main city-wall and street (L.1060) running inside it, continued during the sixth (2010) season, expanding the area towards the west in squares BmII5 (southern half), BmII6, BmII7 and BnII7. The aim of the season was to continue exploration of the dwellings and installations of the EB IVB (Batrawi period IVb)

Chronology, stratigraphy and architecture of Khirbat al-Batrāwī.

Archaeological Period	Absolute Chronology	Site Period	Area B North		Area B South	
			Phase	Structures	Phase	Structures
EB I	3400-3000 BC	Batrāwī I	-	-	-	-
EB II	3000-2700 BC	Batrāwī II (fortified town)	Phase 5b-a	Main city-wall; city-gate L.160; street L.144b	-	-
EB IIIA	2700-2500 BC	Batrāwī IIIa (fortified town)	Phase 4b-a	Main city-wall; staircases W.181 and W.1067; blocking wall W.157; street L.144a / L.809a; outer wall W.155; outwork W.185	Phase 4	Street L.148 + L.458
EB IIIB	2500-2300 BC	Batrāwī IIIb (fortified town)	Phase 3c-b	Main city-wall; staircases W.181 and W.1067; outer wall W.155; scarp-wall W.165; bastion W.825; protruding wall W.177	Phase 3d-a	House B2; installation W.135; courtyard L.936; oven T.413; Building B1 (L.430 + L.1046); Building B3 (L.1040); passage L.1050; street L.133 + L.424 + L.1060
EB IVA	2300-2200 BC	Batrāwī IVa (abandonment)	Phase 3a	-	-	-
EB IVB	2200-2000 BC	Batrawi IVb (rural village)	Phase 2d-a	Embankment W.811; retaining wall W.815	Phase 2g-e	Campsite and domestic installations; child burials D.1020 and D.1026
					Phase 2d-a	Rural village: house L.910, L.354; yard L.1004; house L.480; L.1010, L.1080; lane L.1062; yard L.1058
Later Periods	2000 BC-1950 AD	Batrāwī V	-	-	-	-
Contemporary	1950 - 2010 AD	Batrāwī VI	Phase 1	-	Phase 1	-

rural village, and to uncover the western pavilion (Building B3) of what turned out to be an EB IIIB (Batrawi period IIIb) palatial complex known as Palace B.

4.1. Stratigraphy of Area B South

The 2010 excavations in Area B South substantially confirmed the stratigraphic sequence established in 2009 (Nigro and Sala 2010, § 5.1), extending from the modern erosion layer (Phase 1), through two different stages of the EB IVB village (Phase 2), and down to the strata beneath the EB IIIB buildings (Phase 3) which were erected inside the EB II-III main city-wall at the time of its final reconstruction (Nigro 2009: 668-669).

Phase 1 is represented by the topsoil, a hard, shallow layer which attests to the long period of abandonment at the site following the end of the 3rd millennium BC.

Under the topsoil, Phase 2 includes different episodes (Episodes 2a-2g), reflecting the two occupational phases of the Batrawi IVb village, both dating to EB IVB (Nigro 2007: 352-353; Nigro ed. 2008: 127-136). First, the later rural village, consisting of clusters of dwellings equipped with curvilinear storage and domestic installations (Episodes 2a-d); this represents the final permanent settlement on the khirbat. Second, the earliest occupational phase, consisting of a campsite with groups of huts (Episodes 2e-g); this marks the re-occupation of the site following a short period of abandonment in EB IVA (2300-2200 BC; Nigro ed. 2006: 37-40) and a return to a rural domestic economy by small groups of farmers after the destruction of the EB II-III city (Nigro 2009: 670-672).

The underlying Phase 3 strata illustrate a series of stages and episodes related to the construction, use and destruction of the Batrawi IIIb buildings, all dating to EB IIIB. Episode 3a represents the final abandonment of the ruins of the EB IIIB city. Episode 3b consists of thick layers of destruction, showing clear signs of the violent conflagration (burnt layers of ash, charcoal and collapsed mud-brick) which destroyed the entire EB IIIB fortified settlement at around 2300 BC. Episode 3c illustrates the use of and some rebuilding within the buildings during EB IIIB. Episode 3d represents the construction of these buildings at the beginning of Batrawi period IIIb.

4.2. Domestic Architecture of the Batrawi Period IVb (Early Bronze IVB) Village

Excavations in Area B South continued to investigate the EB IVB (2200-2000 BC) rural village, which was constructed on the ruins of the EB II-III city during the last centuries of the 3rd millennium BC. Two main EB IVB constructional phases were identified, showing the gradual transformation of the earlier campsite into a stable rural village.

The earliest phase (Episodes 2e-f) was reached in squares BmII5, BmII6 and BnII7, where it was represented by ephemeral stone structures and installations for temporary storage and food preparation, e.g. stone-lined circular bins, slab-paved platforms and stone benches.

The upper phase (Episodes 2a-d), investigated in squares BmII5, BmII6 and BmII7 (in square BnII7 this phase had already been excavated in 2009; Nigro and Sala 2010: § 5.2), illustrates the establishment of a more substantial village. This consisted of juxtaposed domestic compounds, each represented by a main rectangular house opening on to a courtyard with installations for food processing, (usually) curvilinear storage features, animal pens and other facilities for storage of grain and other agricultural products. Houses had an elongated rectangular plan, with various installations along their inner walls and in the corners, e.g. benches, paved and raised platforms, troughs, stone-lined bins etc. Auxiliary rooms were simply built on to the main one, always with an independent entrance. Two such compounds were investigated during the 2010 season.

The excavation of House L.1010, started in 2009 in squares BnII6 and BnII7, was completed. It was a large, elongated north-west-south-east oriented rectangular house, opening to the north and to the south on to lane L.1062, with two semi-circular stone-lined bins (S.1075, S.1077) on its western side.

To the west (in squares BmII5 and BmII6), a second rectangular domestic unit (L.1080) was built on to the western wall of House L.1010, which also opened on to lane L.1062. To its north, an adjacent square room (L.1070), butting directly up against the inner edge of the embankment created by the collapse of the EB II-III northern city-wall (Nigro 2007: 349, fig. 7; Nigro ed. 2008: 102-103, figs 3.54-3.55; Ni-

gro and Sala 2009: 374), probably represented an auxiliary storeroom with an independent entrance.

South of these houses, in square BmII7, there was an open courtyard paved with small pieces of limestone. The corner of another stone structure was partially exposed in the south-west corner of square BmII7. Both occupational phases yielded a broad assemblage of ceramics, all dating to the middle and final stages of Batrawi period IVb (EB IVb, 2200-2000 BC), as well as objects and tools including flint blades, stone pestles, basalt grinders, mortars, stoppers and spindle whorls. These reflect the subsistence strategies of household economies completely different to the complex, organized economy of the previous EB II-III city.

4.3. The Early Bronze IIIB Palatial Complex Inside the Main City-Wall

Continued exploration of EB IIIB (2500-2300 BC) buildings in Area B South revealed that Building B1 (excavated during the 2006-2009 seasons; Nigro 2007: 353, 2010a: 67, figs on Pp. 76-78; Nigro (ed.) 2008: 151-159; Nigro-Sala 2010: § 5.3) and Warehouse B3 (Nigro and Sala 2010: § 5.3) were actually part of the same palatial complex of Palace B (Fig. 2). This was constructed inside the main city-wall in Early Bronze IIIB and consisted of two main wings, each with at least two rows of large rectangular rooms (roughly 5 x 8 m), delineated by

stone walls 0.8-0.9 m in thickness. These rows of rooms, referred to as the eastern and western pavilions, were separated by a central passageway (L.1050) which served as the entrance to this wing of the palace. During the 2010 season, attention was focused on the western pavilion, which was covered by a 1.2 m deep layer of collapse which had buried layers of smashed pottery vessels and other more valuable items (Nigro 2010a: 71-110).

4.3.1. The Pillared Hall

The northernmost room of the western pavilion was a rectangular hall, 4.9 x 7.5 m, with a series of four pillars aligned on the main east-west axis. The pillar bases consisted either of limestone slabs set on circles of small stones, or the natural bedrock cut and worked to create a substantial base for a wooden post (Fig. 3). The second pillar was made of stones up to ca 1 m in size and was found collapsed towards the west (Fig. 4). The northern half of the room was paved with beaten clay/ earth, while in the southern half the floor was made of the emerging bedrock coated with lime plaster. The stone walls were preserved up to a height of 1.2 m, with an inner plastered surface consisting of a mixture of yellowish clay and lime. The main entrance to the hall (L.1080) was in the south-east corner and opened towards corridor L.1050, while a second door (L.1070)-apparently blocked during the final attack on the city-was in the opposite north-



2. General view from the west of the western pavilion (right) of the EB IIIB (2500-2300 BC) palace of Khirbat al-Batrāwī; (left) street L.1060 running parallel to the EB II-III main city-wall; (background) passageway L.1050 and the eastern pavilion.



3. General view from the south of the western pavilion of the EB III B (2500-2300 BC) palace of Khirbat al-Batrāwī; note the two bases for wooden posts (roof supports) aligned along the main east-west axis.



4. General view from the west of the western pavilion of the EB III B (2500-2300 BC) palace of Khirbat al-Batrāwī during excavation of destruction layer F.1054, with the remains of a collapsed stone pillar and *in situ* storage jars and pithoi.

western corner of the room (**Fig. 2**).

The ceiling of the hall fell in when the central pillars collapsed as a result of a fierce fire. However, as the ends of the roof beams spanning its width were partially embedded in the walls, ves-

sels and other items around the perimeter of the hall were protected and, in several cases, were found more or less *in situ*.

The whole hall, except for its south-western corner (which is still waiting to be excavated), was filled with a 1.2 m thick layer of destruction, which included broken and heavily burnt mud-brick and plaster fragments, ash and charred beams, along with a large number of ceramic vessels and other objects grouped mainly around the pillars and along the side walls. The nearby main city-wall protected Palace B from erosion on the northern slope of the hill, which explains why its contents managed to survive in a reasonably good state of preservation for more than four millennia.

4.3.2. The Pithoi

A series of pithoi was found along the perimeter walls of the hall (**Figs. 5 and 6**). These pithoi were all of the same type, apparently produced for palace storage with the same fabric and identical construction, i.e. two coil-built halves joined together, with an applied wheel-made neck (see below § 4.3.5). Though of varying height (0.9-1.2 m), each pithos had a regular capacity of 100-120 litres. Most contained winnowed barley (*Hordeum vulgare* L.; **Fig. 7**), although one (KB.10.B.1040/9) on the southern side of the hall contained red ochre. Seventeen



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



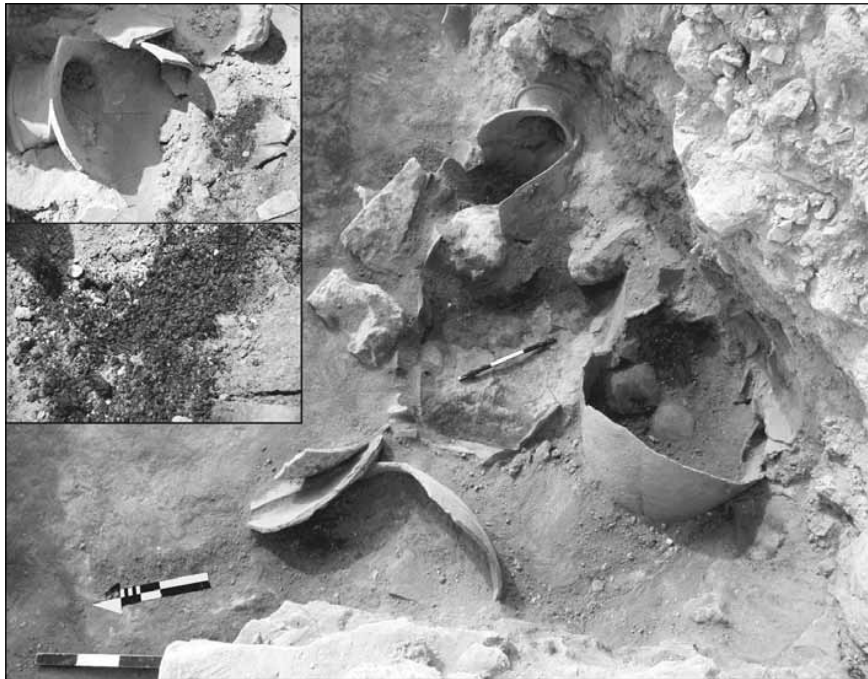
6. Khirbat al-Batrāwī: detail of pithos 1040/17 from the north-east, next to blocked door L.1070 in the north-west corner of the western pavilion of the EB IIIB palace.

pithoi have been uncovered so far, suggesting an overall storage capacity for the storeroom of around two tons of barley. Distortions and dark reddish burning were visible on the shoulders of the pithoi, no doubt as a result of the violent conflagration which marked the end of the palace.

4.3.3. The Table Vessels

Medium and small pottery vessels, as well as other precious items, were concentrated

around the pithoi and pillars (**Fig. 8**). Pottery included a variety of shapes, mainly jugs, juglets and small jars, but also amphoriskoi, vats and miniature vases (**Fig. 9**; see below § 4.3.5). A pattern-combed metallic jar, found north of the collapsed stone pillar, was of a type common in the EB III Batrawi ceramic assemblage and may have been linked to olive oil distribution within the palatial economy (Nigro 2009: 669-670, 2010b:440-441).



7. Khirbat al-Batrāwī: smashed storage jars and pithoi in the north-west corner of the western pavilion of the EB III B palace, with detail of the carbonized seeds inside them.



8. Khirbat al-Batrāwī: smashed pithos KB.10.B.1040/7 in front of door L.1080, with a water jug and beaker at its base.

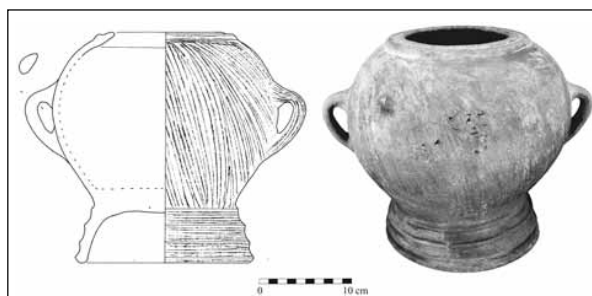
4.3.4. Finds Around the Second Pillar: the Ceremonial Vessel and Other Valuable Items

In the north-western central part of the hall, adjacent to the second pillar from the west, a number of interesting finds were discovered. First, a globular, double-handled, carefully red-burnished vessel (KB.11.B.1054/11; **Fig. 10**) was found; its unusual shape, with a ribbed hor-

izontal rim, vertical handles and high grooved pedestal, may have been imitating some aspects of Khirbat 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). It may have been a krater or large chalice, clearly imitating a metal (perhaps copper) prototype. It has been interpreted as a ceremonial vase, apparently conveying a sym-



9. Khirbat al-Batrāwī: smashed medium jars, vats and amphoriskoi in the north-west corner of the western pavilion of the EB IIIB palace.



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

bolic meaning associated with its palatial context.

Nearby, the remains of a bear paw (two right metatarsal fragments) have been interpreted as part of a bear skin, with the paws still attached, that was deposited among the goods in the palace. These remains of *Ursus arctos syriacus*, a sub-species of brown bear known mainly from northern Syria during the Bronze Age, but very rare at other contemporary sites in the region, would undoubtedly have been exotic at Batrāwī and are indicative of the symbolic or luxurious character of the palatial context. Many centuries later, a bear was represented among the tributes offered to the Pharaoh by the Syrians in paintings in the tomb of Rekhmire, vizier of Thutmose III (ca 1479-1425 BCE) and Amenhotep II (ca 1427-1401 BCE). Several cut marks caused by metal tools were detected on the paw fragments; this is interesting because stone tools were still used during this period for most day to

day domestic butchery activities.

Alongside the pottery vessels, worked bone represents another category of precious objects, which includes nails, pens and a kind of miniature knife or palette. Stone tools and implements were also recovered from the hall, including blades, pestles and two large tabular fan-scrapers (Fig. 11).

Among the charred remains recovered from the debris, a wooden cylinder represents a quite unique find, as it may be a seal, carefully prepared and ready to be decorated with incisions.

The Tournette

Another find from the western pavilion is interesting for its economic implications, namely a carefully worked basalt stone disk with a central conical hollow (KB.10.B.87). This would have been used as the upper disk of a potter's wheel, i.e. a tournette, of which the limestone base was



11. Khirbat al-Batrāwī: objects and luxury goods from the western pavilion of the EB IIIB palace, including four copper axes, a bone knife and several bone tools, pierced sea-shells, ochre, polishing pebbles, stone tools, flint blades and fan scrapers, and a basalt potter's wheel.

also recovered (KB.10.B.82; Nigro 2010a: 74, figs on Pp. 108-109; **Fig. 12**). The basalt disk has a diameter of 28 cm and thickness of 3.3 cm. In a recent study of the finds from Palace B1 at Khirbat Yarmouk (Tel Yarmouth) in Palestine, it was pointed out that such tournettes were associated with palatial economies (de Miroschedji and Roux 2009: 171) and that they were introduced for the production of pottery vessels such as big storage pithoi. This fits very well with the scenario envisaged for Palace B at Khirbat al-Batrāwī, where not only was the wheel included among the precious items gathered together in the pillared hall during the final attack to the city, but was also most likely used in the production of the necks of the many pithoi found in the palatial complex. As well as the two specimens found at Khirbat Yarmouk, a similar tournette was also found at Tell es-Sultan / Jericho in Square HII (phases xiii-xiv; Dorrell 1983: n. 2904, 559-560, fig. 231:2, pl. 21b) in the narrow units (? storerooms) immediately east of EB IIIB Palace G.

The Four Copper Axes

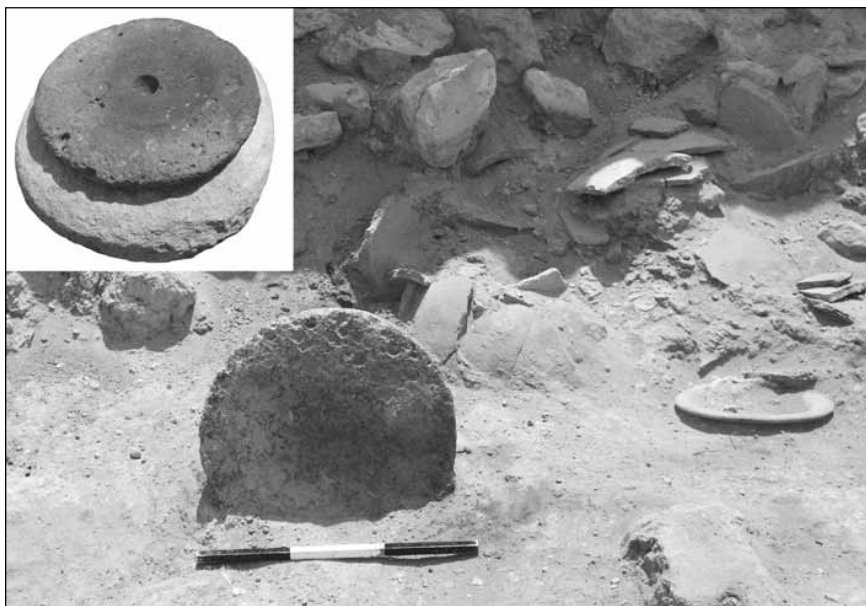
The most spectacular finds from the hall were concealed in a small cachette, dug into the bedrock floor immediately south-west of the pillar bases, where four copper axes were apparently laid in a bag or chest (Nigro 2010a: 69-70, 119-120, figs on pp. 106-107, 123-124; **Figs. 13 and 14**). The largest of the four is a copper flag

axe (KB.10.B.131) of 713 grams and a thickness of 1.1 cm, with a square hollow for binding the handle; it is the only one of the four with clear traces of use, namely two indentations at its upper and lower tips. The longest specimen (KB.10.B.130, 272.66 grams) belongs to a well-known type with an expanded tang for fastening the handle and a fan-shaped blade, carefully hammered and sharpened on one side. This type is also known from a series of moulds excavated by the University of San Diego expedition to Khirbat Hamrat Ifdān in Wādī Faynān (Levy 2007: fig. 7.3), where the copper ores used during EB III were identified, i.e. those contemporary with the floruit of the palace of Batrāwī.

A third copper axe (KB.10.B.132, 160.56 grams), though slightly smaller, is of the same type with a fan-shaped blade and expanded tang. The fact that no traces of use were detected on the blade suggests that this axe, like KB.10.B.130, was never used and conveyed a symbolic meaning instead.

The fourth specimen (KB.10.B.133, 210.36 grams) is also of the elongated type, though without the expanded tang, and has a particularly fine blade.

The discovery of four copper axes in a palatial context is particularly noteworthy for Early Bronze Jordan, since only a few copper weapons have previously been found (around 20 for EB II and EB III in Palestine and Transjordan combined; only 7 of these are EB III, of which five



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



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

came from an uncertain context at Tall al-Ḥisi: Bliss 1984: 39, figs 69, 73-77). The presence of these metal items is evidence of the important economic role played by the palace of Batrāwī during the third quarter of the 3rd millennium

BC.

Thanks to the generosity of the Department of Antiquities of Jordan, the four copper axes were brought to Italy for restoration and analyses by the Istituto Superiore per la Conservazi-



14. *Khirbat al-Batrāwī*: the four copper axes from the EB IIIB (2500-2300 BC) palace.

one e il Restauro (ISCR) in Rome (conservator Stefano Ferrari), where they were exhibited at Rome “La Sapienza” University and at the Musei Capitolini.

4.3.5. The Palatial Ceramic Assemblage

The EB IIIB palatial ceramic assemblage (Nigro 2010a: 67-110) is characterized by a significant leap in the direction of standardisation and centrally controlled production. Wheels were commonly used to make the upper part of medium and large storage containers (i.e. necks and rims of jars and pithoi), as well as to fashion and refine small vessels for daily use. All this occurred within the context of a general standardization in terms of shapes and fabrics. Relatively coarse, low-fired red, reddish-brown and brown wares were usually used for medium and small vessels intended for daily use, while large storage containers, such as the big pithoi, were all produced from a well-fired brownish-pink fabric (sometimes with a reduced grey core).

The closest parallels to the *Batrāwī* palatial ceramic assemblage come from the EB IIIB layers of northern Palestinian and Transjordanian sites, primarily *Khirbat az-Zayraqūn* (“späten Horizont”, or “Letztbenutzungsphase”; Genz 2002: 120) and *Khirbat Karak* (late Period D), but also *Beth Shan* (stratum XI / phase R7a). It also has parallels at central and southern Palestinian and Transjordanian sites such as ‘Ayy / at-Tall (phases VII-VIII), *Tell es-Sultan* (Sultan phase IIIc2), *Khirbat Yarmouk* (strata A6-A7

in Area A, BII-BI in Area B, CII-CI in Area C; de Miroschedji 2000: tab. 18.1), *Tell Beit Mirsim* (phase J; Dever and Richard 1977) and *Tall al-‘Umayri* (IP 19; Field D, phase 4; Harrison 2000; Herr 2000).

The plain-ware assemblage includes a few deep bowls (20-25 cm diameter) with flat bases, oblique walls and in-turned rounded rims (in one case with two small knobs / ledge handles applied below the rim), two medium vats with flat bases, in-turned rims and pushed-up ledge handles, and a third vat without handles.

Small jars (15-25 cm high), with short everted necks and elongated or squat ovoid bodies are relatively common in the palatial assemblage. At present, there are about 10 examples of medium sized ovoid jars (35-45 cm high), with flaring necks, everted rims and a couple of pushed-up ledge handles applied at the girth of the body; these are sometimes decorated with an incision at the base of the neck in order to hide the junction between the wheel-made neck and coil-built body.

A couple of big amphoriskoi or, more properly, double-handled jars was also found; comparable examples are known from *Khirbat az-Zayraqūn* (Genz 2002: 27, pls. 4:4-5, 54:3, 83:4), *Khirbat Karak* (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), *Tall al-‘Umayri* (Harrison 2000: fig. 19.3:7-8) and *Tall ad-Duwayr* (Tufnell 1958: pl. 59:168-169).

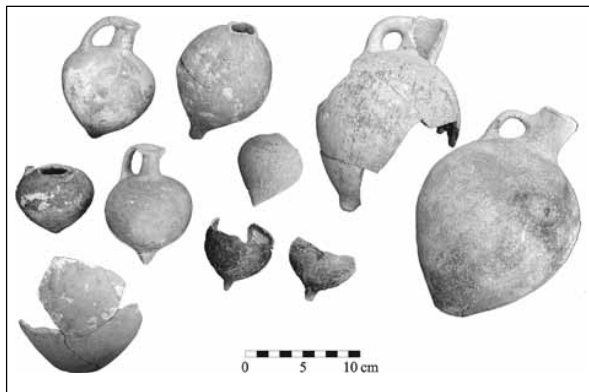
A wide range of jugs and juglets, possibly containers for olive oil, grape juice and / or other liquids, were also recovered. They have both piriform and globular bodies, flat or pointed bases, and wide or narrow mouths. A large water jug with two pushed-up ledge handles (KB.10.B.1054/26; c.f. EB IIIB examples from *Khirbat Yarmouk* (Ben-Tor 1975: pl. 31:4, figs. 8:4, 11:2; de Miroschedji 2000: fig. 18.9:10-11), *Tall ad-Duwayr* (Tufnell 1958: pls. 15:3, 69:285-286, 288), ‘Ayy / at-Tall (Marquet-Krause 1949: pl. 65:11.1565) and *Tell es-Sultan* (Sellin and Watzinger 1913: pl. 21:C.i; Kenyon 1960: fig. 47:3)) was found next to a beaker, which seems to be a forerunner of the later EB IV beakers. Pointed or spike-base juglets are diagnostic of the late EB III (as pointed out in Dever and Richard 1977: 7, 10; Mazar, Ziv-Esudri and Cohen-Weinberger 2000: 267) and were mainly

produced in red- or black-burnished ware.

Red-burnished and polished wares were the principal fine-wares of Batrawi period IIIb, and were of high quality. A variety of jugs and juglets, mostly red-slipped and burnished, are present in the palatial assemblage. Of these, seven small, pointed base red- and black-burnished jugs and juglets with globular bodies are a distinctive marker of the period (Fig. 15). These are typical of the final EB III assemblages from other stratified Palestinian sites, e.g. Beth Shan (Mazar, Ziv-Esudri and Cohen-Weinberger 2000: 267), Tall ad-Duwayr (Tufnell 1958: pls. 59:159, 164, 60:210-212, 61:247), Tell es-Sultan (Garstang 1932: pl. II:19-20; Kenyon 1960: figs 35:35-38, 37:48, 39:10-11, 52:52-55, 61:30, 68:19) and Tall al-'Umayri (Daviau 1991: fig. 6.41:26).

Two red-burnished and polished juglets (KB.10.B.1054/9 and KB.10.B.1054/34) deserve more careful examination, as they may belong to a ceremonial assemblage. The first (KB.10.B.1054/9) has a globular body with a flat, slightly concave base and cylindrical neck, with a carefully applied thick red slip and shiny vertical burnish. The second (KB.10.B.1054/34) has a vertical ovoid body with flat, slightly concave base and flaring neck, with a complicated pattern of burnishing that divides the vessel into zones (vertical on the lower half, net-pattern around the middle and horizontal on the neck).

An almost unique form was that of a globular, double-handled, red-burnished krater



15. *Khirbat al-Batrāwī*: red-burnished jugs and juglets, and black-burnished juglets from the EB IIIB (2500-2350 BC) palace.

(KB.11.B.1054/11), possibly inspired by Khirbat Kerak ware prototypes (see above 4.3.4).

Palatial storage vessels principally consist of pithoi, i.e. large containers for long-term storage made of two joined coil-built halves, with a distinctive wheel-made neck. These huge containers always have a narrow, flat base, elongated ovoid body and a flaring / cylindrical neck (c.f. contemporary contexts from the palace at Khirbat az-Zayraqon (e.g. Genz 2002: pls. 26, 33)). To hide the joins, rope-like decoration was applied to the middle of the body and at the base of the neck. The decoration at the base of the neck is often characterised by stick impressions⁶, while that applied to the middle of the body is usually represented by a plain raised band, as in specimens from EB IIIB layers at Khirbat Yarmouk (de Miroschedji 2000: fig. 18.6:10), Tall al-'Umayri (Harrison 1997: figs 5.20:1, 5.21-5.22; 2000: fig. 19.5) and Tall ad-Duwayr (Tufnell 1958: pl. 62:302). Several surface treatments are attested to, including a thick white coating and 'grain wash' decoration, now also known in a 'smeared wash' variant in white or red (also found at Khirbat az-Zayraqūn (Genz 2002: 32-35, pls. 28, 30, 33, 86, 97, 108:3, 153:D, 155:B-C) and Khirbat Karak (late Period C; Greenberg *et al.* 2006: figs 8.78:3-4, 8.80:4)).

Just a few hole-mouth jars with swollen, flattened or rounded rims were recovered, as these are usually the typical storage containers of EB II-III houses (Ilan 2001: tab. 18.6-18.7), rather than from palatial contexts.

An example of a pattern-combed, metallic transportation jar was found in the palace storeroom. It was produced in a highly fired, but rather coarse grained orange fabric, and has an ovoid body with flaring neck, everted rim and vertical handles, refined with alternating horizontal and vertical combing on the outside (according to a typology well-attested to at, for example, Khirbat az-Zayraqūn (Genz 2002: pls. 5:1-2, 25:1, 29:1-2, 4, 32:1, 3-4, 34:3, 56, 61:2, 70:5, 83:1, 3, 95, 108:4, 113:2, 131:1) and Khirbat Karak (Greenberg *et al.* 2006: figs. 8.69:5, 8.80:7)). This jar also has a potter's mark. It is of a type known from all over the Levant during

6. Comparable examples of this kind of rope decoration around the neck can be found at contemporary Khirbat az-Zayraqūn (Genz 2002: pls. 25:3, 26, 31:2, 36:1, 37, 84, 87, 98), Khirbat Karak (Greenberg *et al.* 2006: fig.

5.88:13), Tall al-'Umayri (Daviau 1991: fig. 6.40:20; Harrison 2000: fig. 19.5) and Tell es-Sultan (Kenyon and Holland 1983: fig. 157:7).

the mid-third millennium BC (Mazzoni 1987), that was mainly associated with the transportation and storage of olive oil.

Further study of this EB IIIB assemblage of more than 120 complete vessels recovered from the western pavilion of the palace will undoubtedly shed further light on the EB II-III pottery sequence of Khirbat al-Batrāwī, as well as defining Batrāwī as a key site for the study of northern Palestinian and Transjordanian Early Bronze Age pottery.

5. Restoration in Area B South

During the sixth (2010) season, restoration work was carried out in Area B South from east to west. The eastern, northern and western walls of House B2 were restored with mortar similar to the original (Fig. 16). The semi-circular silos (W.135) abutting the western side (W.921) of the house was also refurbished, as was oven T.413 abutting the eastern side of Building B1 (i.e. the eastern pavilion of Palace B). The latter was carefully restored, during the course of which the north-west corner, which was partly cut by a later pit, and the stone foundations (W.421) of a staircase set into the inner face of the eastern wall (W.389) were also reconstructed.



16. Khirbat al-Batrāwī: general view from the east of the EB IIIB (2500-2300 BC) quarter of houses and public buildings in Area B South after the restoration works carried out in 2010.

6. Conclusions

The sixth (2010) season of excavation and restoration at Khirbat al-Batrāwī focused mainly on the excavation of Building B3 in Area B South, i.e. the western pavilion of the palatial complex known as Palace B. This contained a rich assemblage of pottery vessels and objects, apparently gathered together during the final attack on the city at the end of Early Bronze IIIB (around 2300 BC). This extraordinary archaeological context yielded more than 100 complete ceramic vessels (including pithoi, storage jars, hole-mouth jars, vats, amphoriskoi, jugs and jugslets, miniature bowls and a near-unique double-handled, red-burnished ceremonial vase), a potter's wheel, several worked bones and a cachette of four copper axes. The latter represents an outstanding find of its type for EB III Jordan and Palestine. Since several pithoi and storage jars still contained seeds and other materials, chemical and physical analyses will undoubtedly provide valuable data for the interpretation and absolute dating of this building, which can now definitively be interpreted as a public structure within an Early Bronze Age city. Further investigations and studies are of course needed for the continued exploration of Palace B and a more complete evaluation of its finds. This will be pursued in forthcoming seasons, thanks to the kind co-operation and support of the Department of Antiquities of Jordan.

Bibliography

- 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.
- Bliss, F.J.
1894 *A Mound of Many Cities; or Tell el Hesi Excavated*. London: Palestine Exploration Fund.
- Daviau, P.M.M.
1991 Field D: The Lower Southern Terrace. Pp. 87-155 in L.G. Herr, L.T. Geraty, Ø.S. LaBianca and R.W. Younker (eds.), *Madaba Plains Project 2: The 1987 Season at Tell el-'Umeiri and Vicinity and Subsequent Studies*. Berrien Springs, MI: Andrews University Press.
- Dever, W.G. and Richard, S.
1977 A Reevaluation of Tell Beit Mirsim Stratum J. *BASOR* 226: 1-14.
- Dorrell, P.G.
1983 Appendix A. Stone Vessels, Tools, and Objects.

- Pp. 485-575 in K.M. Kenyon and T.A. Holland (eds.), *Excavations at Jericho. Volume Five. The Pottery Phases of the Tell and Other Finds*. London: The British School of Archaeology in Jerusalem.
- Garstang, J. *et al.*
1932 Jericho: City and Necropolis. *Liverpool Annals of Archaeology and Anthropology* 19: 3-22, 35-54.
- Genz, H.
2002 *Die frühbronzezeitliche Keramik von Khirbet ez-Zeraqon* (Abhandlungen des Deutschen Palästina-Vereins, Band 27, 2). Wiesbaden: Harrassowitz. Hesi
- 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.
- Harrison, T.P.
1997 Field D: The Lower Southern Terrace. Pp. 99-175 in L.G. Herr, L.T. Geraty, Ø.S. LaBianca, R.W. Younker and D.R. Clark (eds.), *Madaba Plains Project 3: The 1989 Season at Tell el-'Umeiri and Vicinity and Subsequent Studies*. Berrien Springs, MI: Andrews University Press.
2000 The Early Bronze III Ceramic Horizon for Highland Central Jordan. Pp. 347-364 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.
- Herr, L.G.
2000 Excavation and Cumulative Results at Tall al-'Umayri. Pp. 7-20 in D.R. Clark, L.T. Geraty, L.G. Herr, Ø.S. LaBianca, R.W. Younker and D.R. Clark (eds.), *Madaba Plains Project 4: The 1992 Season at Tell el-'Umayri and Subsequent Studies*. Berrien Springs, MI: Andrews University Press.
- 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.
JADIS JADIS, the Jordan Antiquities Database and Information System: a Summary of the Data. Amman.
- Kenyon, K.M.
1960 *Excavations at Jericho. Volume One. The Tombs excavated in 1952-1954*. London: The British School of Archaeology in Jerusalem.
- Levy, T.E.
2007 *Journey to the Copper Age. Archaeology in the Holy Land*. San Diego.
- Marquet-Krause, J.
1949 *Les fouilles de 'Ay (et-Tell), 1933-1935: entreprises par le Baron Edmond de Rothschild. Le réurrection d'une grande cité biblique* (Bibliothèque Archéologique et Historique 54). Paris: P. Geuthner.
- Mazar, A., Ziv-Esudri, A. and Cohen-Weinberger, A.
2000 The Early Bronze Age II-III at Tel Beth Shean: Preliminary Observations. Pp. 255-278 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.
- 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 (Proceedings of the First International Symposium on Palestine Antiquities)*, Vol. II. Aleppo: ALECSO.
- 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.
- 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.
2006 Preliminary Report of the First Season of Excavations by the University of Rome "La Sapienza" at Khirbat al-Batrāwī (Upper Wadi ez-Zarqa). *ADAJ* 50: 229-248.
2007 Preliminary Report of the Second Season of Excavations by the University of Rome "La Sapienza" at Khirbat al-Batrāwī (Upper Wadi az-Zarqa'). *ADAJ* 51: 345-360.
2009 Khirbet al-Batrāwī: a Case Study of 3rd millennium BC Early Urbanism in North-Central Jordan. *SHAJ* 10: 657-677.
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: «La Sapienza» Expedition to Palestine & Jordan.
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 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. (ed.)
- 2006 *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: «La Sapienza» Expedition to Palestine & Jordan.
- 2008 *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: «La Sapienza» Expedition to Palestine & Jordan.
- 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-Batrawi (Upper Wadi az-Zarqa’). *ADAJ* 53: 371-384.
- 2010 Preliminary Report of the Fifth Season (2009) of Excavations by the University of Rome “La Sapienza” at Khirbat al-Batrawi (Upper Wadi az-Zarqa’). *ADAJ* 54: 237-253.
- 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*. (The Wellcome-Marston Archaeological Research Expedition to the Near East, vol. IV). London: Oxford University Press.