**PRELIMINARY REPORT ON THE SEVENTH (2011) SEASON OF EXCAVATIONS BY ‘LA SAPIENZA’ UNIVERSITY OF ROME AT KHIRBAT AL-BATRĀWĪ, UPPER WĀDĪ AZ-ZARQĀ’**

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**Introduction**

A seventh season of archaeological excavation and restoration was carried out by the ‘La Sapienza’ University of Rome expedition to Jordan¹ at the Early Bronze (EB) Age site of Khirbat al-Batrāwī², located on the northern edge of the modern city of az-Zarqā’, in May-June 2011. The excavations were funded by ‘La Sapienza’ University of Rome³, the Italian Ministry of Foreign Affairs⁴ and the Italian Ministry of University and Scientific Research.⁵

Khirbat al-Batrāwī, a major fortified town of EB II-III date (Fig. 1), functioned as the central place of upper Wādī az-Zarqā’, being located at a strategic crossroads connecting the desert and steppe with the Jordan Valley (Nigro 2009, 2010, 2011, 2012). The site has presented a unique opportunity to study the earliest Jordanian civilisations. By means of systematic restoration, it is gradually becoming a tourist attraction, illustrating a rarely preserved historical period, viz. the 3rd millennium BC.

During the 2011 season, activities were focused on the restoration of the EB II-III main city wall on the northern slope of the *khirbat* (Area B North) and on the excavation and restoration of the EB IIIB public building erected within it (Area B South), known as Palace B.

**Aims of the Seventh (2011) Season**

The aims of the 2011 season of archaeological investigation and restoration at Khirbat al-Batrāwī were as follows:

1. Excavation of the EB IVB village, in Area B South;
2. Excavation in the EB IIIB Palace B, including (a) completion of destruction layer F.1054 in pillared hall L.1040, (b) destruction layers F.1124 in storeroom L.1120 and F.1128 in hall L.1110, and (c) corridor

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1. The ‘La Sapienza’ University of Rome team during the seventh (2011) season included: L. Nigro, director; M. Sala, field director; L. Caiafa; C. Fiaccavento; D. Ghigi; G. Merli; V. Pierini; V. Tumolo; P. Vitolo and S. Tricoli (restorer). The representative of the Department of Antiquities, who provided much useful assistance in the field, was Romil Gharib.
2. Lat. 32°05’ N, long. 36°04’ E (Nigro 2006: 233-235, fig. 1; Nigro ed. 2006: 16-22, maps 1-6, plan I).
3. The expedition wishes to express its thanks to all DoA personnel for their invaluable support, as well as to the academic authorities of ‘La Sapienza’ University of Rome; 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.L. Gregori; and the present Director, Prof. E. Lippolis, who have all supported the expedition.
4. The authors would also like to thank the Italian Embassy in Amman, in the persons of the Ambassador, HE Francesco Fransoni, Dr Stefano Stucci and Dr Natalia Sanginetti, for their co-operation, and the Italian Ministry of Foreign Affairs, Directorate General for the Promotion of the ‘Country System’ (DGSP), Office 6.
L.1050 (F.1126) lying between the eastern and western pavilions of Palace B;

(3) Restoration of the eastern pavilion (west wall) of Palace B (building B1), excavated between 2006 and 2009;

(4) Starting restoration of the western pavilion of Palace B, including pillared hall L.1040, excavated between 2009 and 2011;

(5) Further restoration of the Broad Room Temple in Area F (circular platform and west side).

Area B South: EB IIIB Palace B and the EB IVB rural Village

Excavations in Area B South, just south of the EB II-III main city wall and street L.1060 running within it, continued during in 2011, expanding the area to the west (square BmII7) and south (squares BmII8, BmII9 [northern half], BnII8 and BnII9 [northern half]). In the uppermost layers, another portion of the EB IVB (Batrāwī IVB; 2200-2000 BC) village was excavated, exposing dwellings and domestic installations. Underneath, exploration of the western pavilion of the EB IIIB (Batrāwī IIIB; 2500-2300 BC) Palace B continued, exposing its southern extension (middle terrace).

Stratigraphy of Area B South

The 2011 excavations in Area B South confirmed the stratigraphic sequence established during the 2009-2011 seasons (Nigro and Sala 2010: 244-246; Nigro 2012: 146-167). This consisted of the uppermost erosion layer (Phase 1), successive stages of the EB IVB village (Phase 2), the layers of the EB IIIB city investigated within the EB II - III main city wall (Phase 3) and, finally, the earliest levelling fill that lay directly over bedrock and preceded construction of the Batrāwī IIIB buildings (Phase 4).

Phase 1 is represented by topsoil, a hard stratum of dusty soil containing roots and scattered stones. It accumulated over the long period of the site’s abandonment following the end of the 3rd millennium BC.

Below the topsoil, Phase 2 groups all stratigraphic units related to the EB IVB occupation of the area (Activities 2a-2g; Nigro 2012: 147-157). In the squares investigated in 2011, only layers and structures associated with the construction, use and abandonment of the latest rural village were uncovered. These consisted of clusters of dwellings and open courtyards equipped with installations for storage and food preparation (Activities 2a-c), erected over a 30cm thick levelling fill of very friable, buff, sandy soil containing rubble and scattered small and medium stones (Activity 2d). In the northernmost square (Bml17), this latter fill concealed an earlier levelling fill (Activity 2g) associated with the initial campsite stage. However, in 2011 no structures belonging to this phase were brought to light, whether to the south or to the west.

The directly underlying strata belonged to Phase 3, which groups activities associated with the construction, use and destruction of the Bātrāwī IIIB buildings (Activities 3a-d). These date to EB IIIB, the final phase of the EB II-III city. Activity 3a represents the final abandonment and destruction of the ruins of the EB IIIB buildings and is represented by layers of friable greyish and yellowish - brown sandy soil, with gravel, small and medium stones, ashy lenses and smashed mud-bricks (F.1094, F.1095, F.1096, F.1121, F.1122). Activity 3b consists of thick layers of destruction (F.1054, F.1124, F.1128), consisting of relatively friable reddish - brown soil, mixed with scattered small and medium stones, collapsed yellowish mud-bricks and plaster fragments, ash, charcoal and carbonised seeds, with evident traces of the fierce fire which destroyed the EB IIIB city. Activity 3c represents the use and modification of the Bātrāwī IIIB buildings during EB IIIB. Activity 3d represents the construction of the EB IIIB buildings at the beginning of the Bātrāwī IIIB period.

A levelling fill consisting of a compact buff yellowish clayey soil and small stones (F.1156), laid between the bedrock and the floor of L.1040, represents the earliest activity detected in the area (Phase 4). This levelled the bedrock surface prior to the construction of Palace B and included EB II and IIIA ceramic material.

Domestic Quarter of the Batrawi IVB Period village (EB IVB)

In Area B South, further investigation of the EB IVB (2200-2000 BC) rural village that arose on the levelled remains of the EB II - III city in the last centuries of the 3rd millennium BC was carried out (Sala 2012). During the 2011 season, only the most recent occupational phase (2a-d)
was uncovered in this area. This suggests that the campsite (Nigro and Sala 2010: 244-247; Nigro 2012: 153-157, 193-201) was first erected over the ruins of the EB IIIB city in the centre of the area, in front of the blocked EB II city gate, and that the hamlet extended west and south only in its final stages, when it became a more coherent village. At least two units (L.1130, with circular platform B.1136, and L.1174, in BmII8 + BmII9) were uncovered, with a working area (L.1114 + L.1140) to the east (in BnII8 + BnII9) that hosted domestic installations for food preparation (platform B.1138, cist S.1113, mortar S.1111). Finds included an EB IV-type flint knife.

The Early Bronze IIIB Palatial Complex Inside the Main City Wall

Further exploration of the EB IIIB buildings in Area B South revealed that Building B1 (excavated during the 2006-2009 seasons [Nigro 2007: 353; Nigro 2008: 151-159, 2012: 178-182]) and Building B3 (Nigro and Sala 2010: 248) were actually part of the palatial complex known as Palace B (Fig. 2), which was erected inside the main city wall in EB IIIB. The ‘Palace of the Copper Axes’, so named after the discovery of a cache of four copper axes in pillared hall L.1040 (Nigro 2010), consisted of two main wings, each composed of at least two rows of large rectangular rooms delineated by stone walls 0.8-0.9m wide. These are respectively known as the eastern (B1) and western pavilions (B3), with a passageway (L.1050) between them that served as the entrance to the eastern wing of the palace (the main entrance of the western pavilion was apparently to the west). During the 2011 season, excavation was focused on the western pavilion, which was buried under a 1.2 m deep stratum of destruction consisting of layers of smashed pottery vessels and other valuable objects (Nigro 2010: 71-110). Some architectural repairs or reconstructions were identified within the Palace, especially of the east wall of the western pavilion (see below), all of which were carried out in EB IIIB.

Pillared Hall L.1040

Excavation of pillared hall L.1040 was completed in 2011, revealing some interesting architectural features in square BmII7 (Fig. 2).

A major doorway (L.1150), 0.9m wide, opened in the middle of the western wall (W.1133). It was emphasised by a step on the inner side consisting of two large yellowish mud-bricks (Fig. 3) which adopted the cubit of 0.52×0.26×0.13m. Four pillar bases were arranged on the main east-west axis, along the edge of the bedrock which formed the floor of the higher southern half of the hall. Here, a drain cut into the bedrock crossed the hall from its south-east to north-west corners, possibly collecting rainwater in an underground cistern; four circular cup marks were also cut into the bedrock. The westernmost base (B.1168) was a rectangular limestone slab associated with a built-up installation flanking the door; the second (B.1166) was a flat circular stone; the third (B.1108) – with a roughly rectangular shape – was encircled by...
small stones; while the fourth (B.1106) – set into a circle of limestone chippings – had a roughly circular shape.

In the south-west corner of the hall, another huge pithos was recovered (1040/18) next to a square slab (B.1186), with a flint blade and some animal bones nearby (at least 20 similar large containers were recovered from pillared hall L.1040 in 2010 and 2011 [Fig. 4]). Between the south-west corner of the hall and door L.1150, the burnt traces of a wooden bench or shelf ca. 0.4m wide and 1.4m long were visible. A second door (L.1160), again 0.9m wide, opened roughly in the middle of the southern wall (W.1101) of the pillared hall, leading to another major room (hall L.1110) located on an upper terrace to the south. It also had a step inside, consisting of a yellowish mud-brick similar to those of door L.1150. Just west of this step, a medium-sized jar was found with moulded decoration in the form of a snake applied to the shoulders (1054/4 [Fig. 5]). A third door (L.1158) opened in the south-east corner of the hall, leading south into a rectangular room (L.1120) oriented north-east - south-west. Another decorated vessel (1054/1) was found in front of this door, which was approached by means of a step in the protruding bedrock; this vessel was a medium-sized jar incised with metopae on the shoulders, separated by a herringbone motive in which a snake and a scorpion were respectively represented. Both animals are known from contemporary glyptics in Palestine; snakes are also attested to at the EB I sanctuary of Jabal al-Muṭawwaq in Wādī az-Zarqā‘ (Tresguerrez Velasco 2008, 2009: 78).

Finally, in the section between door L.1160 and the south-west corner of the pillared hall, beneath the foundations of wall W.1101 and in a layer with EB II pottery, a fragmentary Egyptianising palette (9.8x9.8cm) made of grey schist5 with an engraved line and some oblique strokes (KB.11.B.100) was discovered.

**Storeroom L.1120**

A rectangular room was accessed from door L.1158 in the south-east corner of pillared hall L.1040. This elongated room, L.1120 (in squares BnII8 + BnI9 + BmI9), was 2.1-2.4m wide and 6.5m long, with several unusual installations (Fig. 6). Two stone circles flanked the eastern face of the north-east - south-west western wall (W.1149) which separated L.1120 from the hall to its west (L.1110). Two jars (one a hole-mouth jar) were aligned between these two installations, while the upside-down neck of a pithos emerged in the collapse layer (a second complete upside-down neck was found to the south). The eastern wall of storeroom L.1120 (W.1157 + W.1159) was also the eastern wall of pavilion

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5. Mineralogical analyses of this object were conducted by Dr S. Mignardo (Dept of Earth Sciences, ‘La Sapienza’ University of Rome) and Prof. P.P. Lottici (Dept of Physics, Parma University).
B3; its northern section (W.1123) appeared to have been refurbished.

The southern part of storeroom L.1120 was at higher elevation compared to the rest of the space, being situated on an upper terrace of the bedrock. It was filled with a mixed layer of burnt plaster, collapsed bricks and charred wooden beams (of which samples were taken for analyses). This layer contained a series of pottery vessels, some of which, like a large squat vat (1124/9) and medium jar (1124/16), had presumably fallen from a shelf or balcony, the remains of which (wooden posts for a 0.35m wide structure) were detected along the western face of W.1159. Other jars, hole-mouth jars and red-burnished jugs (e.g. complete specimen 1124/36) were found on the emerging bedrock in this area. A notable find was a second basalt potter’s wheel (KB.11.B.110 [Fig. 7]) which, along with the specimen recovered in 2010, testifies to the presence of advanced tools (Roux and de Miroschedji 2009) within the palace.

Hall L.1110

South of pillared hall L.1040 and west of room L.1120 (in squares BnII8 + BmII8 + BmII9), there was another huge hall (L.1110), with a central, roughly circular stone base (W.1163) and another slab or base (W.1183) against the western face of the east wall (W.1149); these may originally have supported the charred roof beams found just south of this alignment (Fig. 8).

Like pillared hall L.1040, hall L.1110 also had two different floor levels in its northern and
southern halves, corresponding to a step in the bedrock, with the pillars supporting the roof beams standing on the edge of the step (W.1163 actually had a built-up foundation of firmly placed regular stones).

The whole room was buried under a layer of burnt material (F.1128), which included wooden beams, fallen stones, collapsed mud-bricks and plaster, and – of course – a great quantity of pottery vessels and objects lying smashed on the floor or, in some cases, extending up into the destruction layer (Fig. 9).

Against the western face of wall W.1149, a square feature (B.1189) consisting of a vertical slab and a mud-brick, and – to the south – a vertical cut in bedrock may have been a seat or niche. Next to this feature and leaning up against its base, there was a small jar (1128/69) containing a four-string necklace consisting of ca. 630 beads of carnelian, bone, sea shell, rock crystal, copper and amethyst (Fig. 10). The jar was part of a row of eight medium-sized jars, which included hole-mouth and flaring rim jars, arranged in two east-west rows roughly in the middle of the hall, corresponding with the distinct east-west step in the bedrock crossing the room. One of the other jars contained a bone ring and a sea shell necklace or pendant, while two others had small cups at their base. Further clusters of smashed jars and other vessels were uncovered west, north and north-west of the central pillar. All of these finds were buried in a soft layer of ash, charcoal, charred wooden beams and broken bricks, while in the western section a large yellowish mud-brick, like those used as door steps in pillared hall L.1040, was visible.

North of the central pillar base, a flint core and a varnished wooden sickle incorporating a series of Canaanite blades (Fig. 11) were retrieved from the floor, along with several animal bones, a wooden tray and a bowl with an inturned rim. A second sickle of the same type was found north of feature B.1189. Roughly 1m to the north-west, a copper axe (KB.11.B.120) was recovered from a small cavity in the floor, bringing the total number of such objects recovered from Palace B to five. This example was of the simple elongated type, with an expanded tang and carefully tempered fan blade (Fig. 12). Further to the north, in doorway L.1160, two jars were found in association with a small cylindrical cup / measure. Finally, an Egyptianising vessel (1128/76 [Fig. 13]) of the so-called ‘lotus vase’ type represents one of the most noteworthy finds from hall L.1110; it is a medium-sized example, of a type in use throughout the Early Bronze Age.

In the southern half of the room, on the bed-

11. Khirbat al-Batrāwī: destruction layer F.1128 inside hall L.II10 from the west, with in situ smashed vessels and objects; (foreground) sickle KB.II.B.99; (in frame) two sickles, KB.II.B.99 and KB.II.B.114.


rock step, there was another concentration of pottery vessels, including a red-burnished jug (1128/49) characterised by a highly polished body with net-burnishing on the shoulders (Fig. 14). The southern side wall (W.1201) of the hall had a stone-built bench within a niche (B.1188); this hosted a *pithos* that was probably used as container for liquid, perhaps water.

Hall L.II10 turned out to have been one of the main rooms of the western pavilion. It was also probably entered from the west. Its architecture was characterised by the central pillar and monumental seat in the middle of its east side. Finds from the hall demonstrate how objects, vessels and personal ornaments were gathered together in this wing of the palace during the last hours of its existence, before the dramatic conflagration which put an end to the history of the 3rd millennium BC city of Batrāwī.

**Restoration in Area B South**

During the seventh (2011) season, further restoration work was carried out in Areas B South and B North on Palace B and the EB II - III main city wall.

The stone walls of Palace B, usually preserved to a height of *ca.* 1m, were restored with ancient-style lime mortar, with this material being used on the upper parts of the walls. The structures of the eastern pavilion (B1), along with hall L.430 + L.1046, were completely protected, including its western wall W.439 + W.1049 and jamb / pillar W.1153. The structures
of pillared hall L.1040 of the western pavilion were also protected; this included restoration of the central pillar bases and the jambs of doors L.1150, L.1158 and L.1160.

With regard to the main city wall, an additional length of this structure was restored, especially on its outer face where a section had collapsed in antiquity.

A major commitment for the expedition has been the restoration of more than one hundred ceramic vessels which were found in Palace B in 2011. Similarly, the mending and restoration of pottery and other objects recovered during the 2010 season has continued. This followed conservation of the four copper axes and dagger recovered last season. These went on display at the Musei Capitolini in Rome between February and April 2011, and are now a permanent exhibit at the National Archaeological Museum in ‘Ammān. Finally, the fifth copper axe (KB.11.B.120) and the four-string necklace recovered from hall L.1110 were studied and documented by mineralogists before being carefully restored.

Conclusions

The seventh (2011) season of excavation and restoration at Khirbat al-Batrāwī (Fig. 15), as well as the prompt publication of preliminary reports on the findings of the fourth, fifth (Nigro 2012) and sixth seasons (Nigro 2010), have demonstrated that this Early Bronze Age city, especially its palace and temple, provide a vivid illustration of Jordanian culture and society in the 3rd millennium BC. Further work is needed to restore, archive and study the findings from Palace B, as well as to clarify their historical significance and connections with other civilisations of the ancient Near East. Further excavations will be needed to complete this work, the context of which has been preserved by the fierce destruction that occurred at around 2350-2300 BC (as indicated by the radiocarbon dates available so far, with due allowance for the intrinsic problems of calibration) and the massive city wall which subsequently helped to retain the destruction deposits in situ. Forthcoming studies and analyses of archaeological, zooarchaeological and palaeobotanical material from the site will generate fresh sets of data concerning the palace and its economy. These will stimulate new interpretative and explanatory models aimed at shedding further light on this early urban civilisation of Jordan.

The ‘La Sapienza’ University of Rome expedition has been able to rise to the challenges of these discoveries thanks to the kind and continuous co-operation of the Department of Antiquities of Jordan and the financial support
of the Italian Ministry of Foreign Affairs. Our deepest gratitude is expressed to both these institutions.

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