# PRELIMINARY REPORT OF THE SECOND SEASON OF EXCAVATIONS BY THE UNIVERSITY OF ROME "LA SAPIENZA" AT KHIRBAT AL-BATRĀWĪ (UPPER WĀDĪ AZ-ZARQĀ')

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#### Introduction

Rome "La Sapienza" University Expedition to Jordan<sup>1</sup> carried out its research activities in the Wādī az-Zarqā' basin in year 2006 with systematic excavations and restorations conducted under the auspices of the Department of Antiquities of Jordan at the Early Bronze Age site of Khirbat al-Batrāwi,<sup>2</sup> in the north-western periphery of the city of Zarqā', the Hashemite Kingdom of Jordan.<sup>3</sup> The excavation's wages were supported by Rome "La Sapienza" University, the Italian Ministry of Foreign Affairs, and the Italian Ministry of University and Scientific Research,<sup>4</sup> with the cooperation of the Queen Rania's Institute of Tourism and Heritage of the Hashemite University of Zarqa.<sup>5</sup> The second season of excavations and restorations took place in May-June 2006.

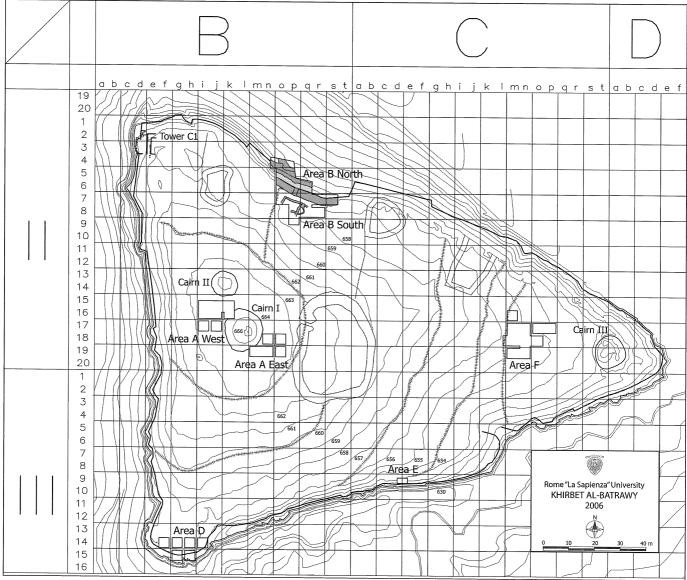
The site of Khirbat al-Batrāwī was identified in 2004 as a fortified town of the Early Bronze Age, almost completely untouched, on top of a cliff dominating the Upper Wādī az-Zarqā', and was chosen as the key site of the research thanks to its prominent location overlooking the valley and to the presence of a massive fortification system all around the site, pointing to the central role in Upper Wādī az-Zarqā' during the early Jordanian urbanization in the 3rd millennium BC.6

During the second season (**Fig. 1**),<sup>7</sup> excavations were extended to three more Areas (D, E, F) respectively located at the south-western corner of the hill (Area D),<sup>8</sup> inside the main citywall at the middle of the southern side of the site (Area E), and on the easternmost Terrace V (Area F).<sup>9</sup> In the meanwhile, the exploration of

- 1. Rome "La Sapienza" team during the second season included: L. Nigro, Director; M. Sala, Supervisor of Areas A, E, F; A. Polcaro, Supervisor of Area B North; G. Marinelli and Pierfrancesco Vecchio, Supervisors of Area B South; M. D'Andrea, A. Di Michele, E. Gallo, D. Montanari, G. Pagliari, I. Salimbeni, V. Tumolo, P. Vitolo. The representative of the Department of Antiquities, who gave helpful collaboration on the field to the Expedition, was Inspector Romel Ghrayib.
- the Expedition, was Inspector Romel Ghrayib.

  2. Lat. 32°05' N, Long. 36°04' E; *JADIS* site n. 2516.011, p. 2.172 (Nigro 2006a: 233-235, fig. 1; Nigro ed. 2006: 16-22, maps 1-6, plan I).
- 3. The Expedition wishes to express his deepest thank to Dr. Fawwaz al-Khraysheh, General Director of Department of Antiquities of Jordan, for his invaluable support, as well as to the Academic Authorities of Rome "La Sapienza" University, the Vice-Rector, Prof. Paolo Matthiae, the Dean of the Faculty of Humanistic Sciences, Prof. Roberto Antonelli, the Director of the Department of Historical, Archaeological and Anthropological Sciences of Antiquity, Prof. Clementina Panella, who strongly sustained the Expedition.
- 4. The Author would also like to thank the Italian Embassy in Amman, in the persons of H.E. Gianfranco Giorgolo, Ambassador of Italy, Dr. Marco Canaparo and Dr.

- Emanuele Manzitti for their cooperation, and the Italian Ministry of Foreign Affairs General Directorate for Cultural Promotion and Cooperation, Office V.
- 5. Students and scholars of the Queen Rania's Institute of Tourism and Heritage of the Hashemite University participated in the dig under the direction of Dr. Khaled Douglas, and thanks to the support of the Dean of the Faculty, Dr. Ahmad Al-Malabeh. The Queen's Rania Institute of Tourism and Cultural Heritage team also included Dr. Bilal R. Khrisat and architect Fawaz Ishakat.
- 6. Nigro 2006a: 229-230; Nigro ed. 2006: iii-vii.
- 7. In the first season (Nigro 2006a; 2006b; Nigro ed. 2006), the main chronological, topographical and architectural pinpoints of the site were fixed (Nigro 2006a: 233-236; Nigro ed. 2006: 9-36, fig. 1.2), and two areas were opened respectively on the Acropolis (Area A; Nigro 2006a: 236-240; Nigro ed. 2006: 63-102, plan II) and on the northern slope (Area B; Nigro 2006a: 240-246; Nigro ed. 2006: 153-196, plans III-IV), setting a preliminary periodization and the stratigraphic sequence of the site (Nigro 2006a: 231-233; Nigro ed. 2006: 37-40, tab. 1.1).
- 8. Nigro ed. 2006: 32-33, figs. 1.39-1.42.
- 9. Nigro ed. 2006: 22, fig. 1.25.



1. Topographical plan of Khirbat al-Batrāwī with areas excavated in seasons 2005 and 2006.

Areas A and B was continued, by enlarging respectively Area A West (four more squares), and especially in Area B, which was subdivided into two sectors inside and outside the main citywall, and where ten new squares were opened. Systematic restorations were also started at the main city-wall in Area B (**Fig. 2**).<sup>10</sup>

#### Aims of the Second Season

The first season of excavations at Khirbat al-Batrāwī confirmed that the site was a major fortified city of the region during the Early Bronze II-III (2900-2300BC), then reoccupied by a rural village in the last two centuries of the 3rd millennium BC (Early Bronze IVB, 2200-2000BC). This city rose on the fringes of the

desert at the entrance of the Wādī az-Zarqā', a main way of communication towards the Jordan Valley for the caravan routes which crossing the desert, proceeded from Mesopotamia, Syria and the Arabian Peninsula. Archaeological investigations at Khirbat al-Batrāwī, as well as at some other coeval sites in Jordan, allowing for a deepening of the study on the origins, development and crisis of the early urban civilisation in the Southern Levant, especially in the so-called marginal and peripheral areas. For the sake of this research, the second season of excavations was oriented to specify the ways and times of the foundation, growth and final abandonment of the town. Field activities were focused on:

- Prosecution of the exploration of the EB IVB

<sup>10.</sup> Nigro 2006d; 2006e.



2. General view of Areas B North and B South at the end of the 2006 season, from west: in the foreground, the restored stretch of the main EB II-III city-wall (W.103ca.); in the bottom right, the EB III outer wall (W.155) and scarp-wall (W.165); in the bottom left, Building B1 with Installation T.413 erected inside the main city-wall in the Early Bronze IIIB (2500-2300BC).

village on the summit of the Acropolis (Area A West) and in Areas B South, D and F;

- investigation of EB III structures of in Area A West:
- excavation and restoration of the imposing fortification system of the Early Bronze II-III (Area B North), and of contemporary buildings inside the city-wall (Area B South);
- investigation of the major defensive tower and related fortifications at the south-western spur of the site (Area D);
- soundings just inside the southern city-wall, aiming at establishing the preliminary chronology of this stretch of fortifications (Area E);

- excavation of a portion of the eastern terrace (Terrace V), where a preliminary survey indicated the presence of a building of noticeable dimensions (Area F).

### Stratigraphy and Updated Periodization of the Site

The second season of excavations allowed us to check and refine the general stratigraphy of the site proposed after the first season, by comparing data from different areas, within a wider range of material culture stratified sequences. A major achievement was the confirmation that the fortified town was founded during the Early Bronze II,<sup>11</sup> and finally destroyed at the end of Early Bronze IIIB, while the hill itself was definitely abandoned at the end of Early Bronze IVB, around 2000BC. Relative periodization was, then, fixed as in the following **Table 1**. As regards absolute dating, a series of carbonized seeds from reliable and indicative destruction layers was sent to laboratories for C14 analyses; until these samples are processed, a conventional dating has been adopted.

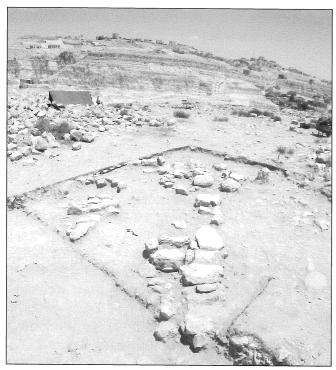
### Area A West: the Early Bronze IV village and Early Bronze III structures on the Acropolis

Excavations on the summit of the Acropolis were enlarged in Area A West (Nigro 2006a: 236-240; Nigro ed. 2006: 89-100), north-west of Cairn I, where a further portion of Batrawy IVb village was unearthed (**Fig. 3**)<sup>12</sup>. EB III lay-

Table 1: Archaeological periodization and stratigraphic phases of Khirbat al-Batrāwi.

| Archaeological             | Absolute        | Site Period  | Phases of   | Phases of  | Phases of  | Phases of  | Phases of  |
|----------------------------|-----------------|--------------|-------------|------------|------------|------------|------------|
| Period                     | Chronology      |              | Area A West | Area B     | Area B     | Area E     | Area F     |
|                            |                 |              |             | North      | South      |            |            |
| EB I                       | 3400-3000 BC    | Batrawy I    | -           | -          | -          | -          | -          |
| EB II                      | 3000-2700 BC    | Batrawy II   | -           | Phase 5    | Phase 5    | Phase 3b-a | Phase 3    |
| EB IIIA                    | 2700-2500 BC    | Batrawy IIIa | _           | Phase 4b-a | Phase 4    | Phase 2    |            |
| EB IIIB                    | 2500-2300 BC    | Batrawy IIIb | Phase 4c-b  | Phase 3c-b | Phase 3c-b |            |            |
| EB IVA                     | 2300-2200 BC    | Batrawy IVa  | Phase 4a    | Phase 3a   | Phase 3a   | -          | -          |
| EB IVB                     | 2200-2000 BC    | Batrawy IVb  | Phase 3d-a  | Phase 2d-a | Phase 2e-a | -          | Phase 2c-a |
| Later Periods              | 2000 BC-1950 AD | Batrawy V    | Phase 2     | -          | -          | -          | -          |
| Contemporary frequentation | 1900-2005 AD    | Batrawy VI   | Phase 1     | Phase 1    | Phase 1    | Phase 1    | Phase 1    |

- 11. Evidence of a previous Batrawy I (Early Bronze I) occupation was detected at the southern edge of Area C, in the north-western sector of the site, where a cupmark emerging on the bedrock and a cave, possibly used as cistern, gave back a few pottery materials dating from this period.
- 12. 2006 excavations in Area A West included a 7 x 4m trench opened to the east of the 2005 area (the southern half of square BkII15 and square Bk II16), and two squares opened to the south of the 2005 area (BiII17 and BjII17).



3. EB IVB House L.240 with stone paved installation S.243, silos S.245 and square cist S.249 inserted in bench B.251, from south-west.

ers and structures were also reached in Area A West, after the removal of the EB IV village in squares already excavated in the first season, <sup>13</sup> where a more substantial structure, with a series of connected food production and storage devices (**Fig. 4**), was brought to light.

#### Stratigraphy of Area A West

The stratigraphic sequence established in 2005 (Nigro 2006a: 237; Sala 2006: 63-75, tab. 3.1) was confirmed and deepened in 2006 with the distinction of four stratigraphic phases, from the topsoil (Phase 1) down to the deepest EB III layers so far reached (Phase 4), founded directly over the bedrock. Phase 1 includes the uppermost layer of humus as well as the traces of recent ephemeral frequentation of the Acropolis (such as fireplaces, modern burials, and plunder pits). Phase 2 covers the time span from the definitive abandonment of the Early Bronze Age settlement up to the Islamic and modern periods, with frequent and scattered building activi-



4. Food production and storage devices of Period Batrawy III (Early Bronze III) on the Acropolis, with a mortar encircled by stones (S.221) and a circular silos (S.223).

ties; during this phase Cairns I and II were erected. A small portion of Cairn II was removed in square BkII6, apparently set up just above the abandoned EB IV layers and structures. Phase 3 includes stratigraphic units related to Batrawy IVb village, the last final sedentary occupation of the *khirbat* (Early Bronze IVB, 2200-2000BC), from terracing activities carried out before its erection (Activity 3d), <sup>14</sup> to its construction (Activity 3c) and use (Activity 3b), to its final abandonment (Activity 3a) at the very end of the 3rd millennium BC. Phase 4 groups archaeological deposits and a few substantial structures belonging to Period Batrawy III (Early Bronze III).

The village of Period Batrawy IVb (Early Bronze IVB)

In Area A West, a major rectangular house (L.20) with several annexes was excavated in the first season (Nigro 2006a: 238-240, figs. 17-19; Nigro ed. 2006: 89-93, figs. 3.31-3.40). A second house (L.240), showing the same NE-SW orientation, was excavated in 2006 (**Fig. 3**); it hosted a stone-paved installation (S.243), a silo (S.245) and a square cist (S.249) inserted in a small bench (B.251), similar to the triple installation in House L.20.<sup>15</sup> Flint and stone tools, as well as pottery, provide a wide representative

<sup>13.</sup> The area excavated in 2005 included the southern half of squares BiII15 and BjIII15, and squares Bi II16 and BjII16 (Nigro 2006a: 236-237, note 26; Nigro ed. 2006: 63, note 3).

Similar terracing operations accomplished in order to regularize the underlying remains of Period Batrawy

III were detected in the easternmost squares of Area A East, where wall W.23+W.5 and wall W.19 retained the collapsed structures of the EB III town (Nigro 2006a: 237-238, figs. 10-11; Nigro ed. 2006: 77-81, figs. 3.16-3.21).

<sup>15.</sup> Nigro 2006a: 238-240; Nigro ed. 2006: 90.

inventory of domestic materials of this period.

Two more squares were opened in order to enlarge the area southwards. In BjII17 a further portion of House L.50 (Nigro 2006a: 240; Nigro ed. 2006: 95-96, figs. 3.44, 3.47) was brought to light, opening towards courtyard L.30, where a fragmentary installation was uncovered (S.246); in BiII17 the southern extension of court L.100 (Nigro ed. 2006: 94-96) was found badly damaged by erosion and ravaging.

### Structures of Period Batrawy III (Early Bronze III)

EB III remains were reached at several spots in Area A West, proving to be badly preserved due to a violent destruction and to razing activities by the inhabitants of the EB IVB village which settled on the same area. 16 Nevertheless, a major wall 2.0m wide (W.225+W.227) was brought to light, with an attached floor made of crushed and pressed limestone upon which some smashed storage jar fragments were lying. The wall was E-W oriented and its outline was followed for a length of 6m. To the west, in BhII16, a courtyard hosted some devices (Fig. 4): a mortar embedded into the floor and encircled by stones (S.221) and a circular silo (S.223). Such installations were destroyed at the end of Early Bronze IIIB, as testified by associated pottery finds (Fig. 5).

### Area B North: The Early Bronze II-III Fortification System

Investigations in Area B were expanded towards the north, the south and the west, subdividing the area into two sectors, respectively north and south of the main city-wall. Area B North, thus, included squares BoII4, BpII4, BoII5 BpII5, BqII6, BpII6 (**Fig. 1**). This allowed us to identify a triple line of fortifications (**Figs. 6-7**), with several annexed defensive structures, which will be described below according to their stratigraphic and structural sequence.

Stratigraphy of Area B North

Excavations confirmed the general stratigraphy established in the first campaign (Nigro 2006a: 240-242; Nigro ed. 2006: 155-166, tab. 4.1, fig. 4.18), reaching an earliest phase (Phase 5), which represents the foundation of the citywall and its earliest use in the Early Bronze II (2900-2700BC). From top to bottom, the sequence was the following: under the uppermost layers of dust (Phase 1), Phase 2 includes a stone embankment made in order to regularize the collapsed defensive structure of the EB III city. Phase 3 represents the latest reconstruction, utilization and destruction of the defensive system during the Early Bronze IIIB, comprising the double city-wall with the main wall (W.103a)<sup>17</sup> and the outer wall (W.155), and an adjoining outer scarp-wall (W.165). Phase 4, which marks a major constructive floruit, includes the main city-wall (W.103b) with a refurbished stone superstructure, the outer wall (W.155) and an attached round outwork (W.185). They were built after a major collapse of the Phase 5 (Early Bronze II) earliest city-wall (W.103c) and gate (L.160).

### The Outer Embankment of Period Batrawy IV (Early Bronze IV)

While inside the collapsed EB III city-wall EB IV structures leaned on it (Area B South; see § 6.2), the northern edge of the village was delimited by regularizing the heap of stones collapsed from the city-wall, the outer wall and the other defensive structures, and modelling its sloping surface into a steep embankment, which probably had a supporting more than defensive purpose.

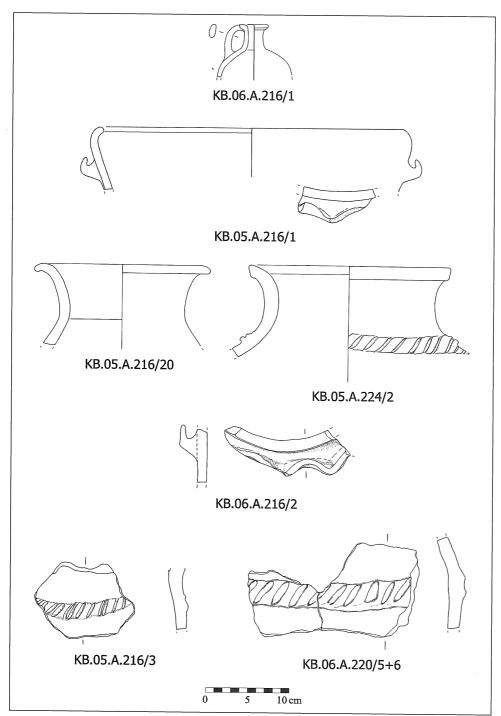
### The Double City-Wall of Period Batrawy III (Early Bronze III)

After the earthquake destruction which brought to a sudden end the EB II city, and caused the partial collapse of the gate (see § 5.4), the

<sup>16.</sup> No EB II remains were found on the Acropolis of Khirbat al-Batrāwī, since it was completely rebuilt at the beginning of Early Bronze IIIA, after some regularization of the bedrock.

<sup>17.</sup> The stratigraphy of the city-wall was preliminarily established in season 2005, distinguishing three main constructive phases corresponding respectively to Phase 3 (Early Bronze IIIB), Phase 4 (Early Bronze IIIA) and Phase 5 (Early Bronze II). All sections of

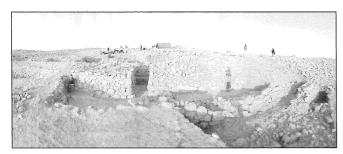
the city-wall have thus been named according to such a sequence with different letters: for example, the most recent reconstruction of its outer face in Phase 3 was called W.103a; the previous constructive phase (Phase 4) was called W.103b, and the lowest courses belonging to the earliest original building phase (Phase 5) were called W.103c (Nigro ed. 2006: 163, note 10, fig. 4.18).



5. Selection of EB IIIB pottery fragments from the Area A West

defensive system in Area B North, at the most sensitive and open side of the site, underwent a general reconstruction. The gate was blocked (W.157; **Fig. 8**), and the superstructure of the main city-wall (W.103b) was rebuilt using medium size stones up to a height of around 8.0m, surmised thanks to a staircase (W.181) uncovered inside the wall in square BoII6 (**Fig. 9**). The staircase was presumably made of wooden posts and tables supported by a flight of stone steps, fixed into the inner face of the wall and protruding 0.3-0.5m from it. The original stretches in

which the wall was subdivided (Nigro ed. 2006: 176-177) were linked one to the other (and this indicates in several spots the height upon which the wall was reconstructed), and a 1.6m-wide massive outer wall (W.155) was erected around 1.5m from the main wall, thus doubling the line of fortification (Figs. 6-7). The outer wall W.155 had an outer battering face made up of polygonal boulders and an inner face made of medium size stones regularly displaced; in between there was a filling of stones and limestone chops. At the moment, there is no evidence to attempt a



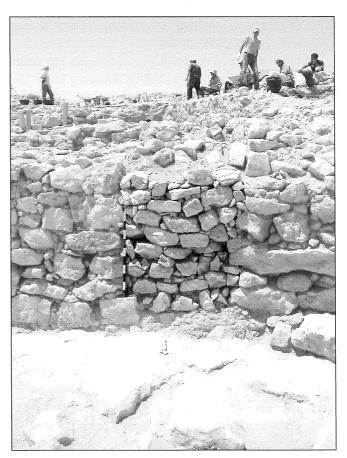
6. General view from north of Area B North at the end of 2006 excavations, with the articulated EB III fortification system. Three parallel lines of fortification walls were brought to light: wall W.103c-a, the inner and main city-wall; wall W.155, the outer wall; and the reinforcing buttress W.165. In the middle of wall W.103 the EB II blocked city-gate L.160 has been excavated.



7. General view of the EB IIIB triple line of fortifications in Area B North, from west, with the main city-wall W.103ca. in the background, the outer wall W.155 in the middle, and the reinforcing scarp-wall W.165 in the foreground. To the left, the EB IIIA round defensive outwork W.185, and the to right the EB IV supporting

reconstruction of the elevation of the outer wall. The street running along the city-wall became a corridor in between the outer and the mainwall; its floor (L.144; Nigro ed. 2006: 191, figs. 4.53-4.54) was re-plastered and was in use until a violent destruction. The same situation was detected inside the blocked gate and the main city-wall, where an open area (a plaza?) paved by a lime plastered floor (L.148) was covered by a 15cm thick burnt layer (F.146) with charcoal, superimposed by a stratum (F.136) of ashes and materials collapsed from the city-wall itself (Nigro ed. 2006: 184-187, figs. 4.45, 4.48-4.50).

After this violent destruction, which occurred at the end of Early Bronze IIIA (2700-2500BC), the northern defence was again improved by widening the outer wall with a further battering wall (W.165), constructed with irregular boulders leaning on a rubble filling lying against the face of the outer wall (**Figs. 6-7**). This marked



8. The blocked EB II city-gate L.160.



9. The inner staircase (W.181), which led to the top of the EB III main city-wall W.105c-b, from west.

the passage to the Early Bronze IIIB (2500-2300BC), and was accompanied at other spots all around the site by the reconstruction of several bastions and protruding towers.

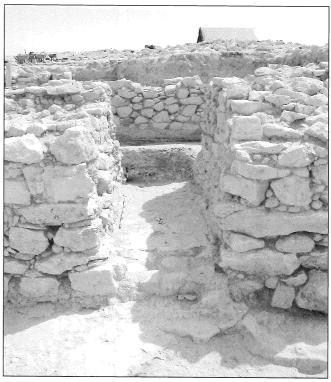
The Earliest City-Wall and Gate (Period Batrawy II, Early Bronze II)

Excavations in Area B North reached the earliest occupational layers lying directly over the bedrock and consisting of the earliest fortification wall of the Early Bronze II (2900-2700BC). The city-wall was made of huge limestone blocks and boulders (some exceeding 1.5m in length), carefully set into the rock, with battering foot in order to make it firmer (Nigro ed. 2006: 175-176, fig. 4.32). It was built in separated stretches of 6-8m length, according to a technique already known from many Early Bronze urban sites in Palestine and Jordan, in order to prevent the dangerous effects of earthquakes (Nigro ed. 2006: 176-177, note 26). 18 The inner filling of the wall was made by medium size limestone undressed stones, placed in layers with pebbles, limestone chips and mud mortar.

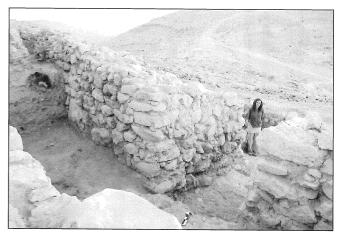
In spite of the monumental city-wall, the gate was a simple opening, 1.6m wide, since the town was approachable only by pedestrians and onagers (donkeys) through a street which flanked the wall. Jambs were reinforced especially on the outside, and a step marked the entrance itself (Figs. 10-11). The jambs supported a capstone on the outer side and a wooden beam on the inside. There is no evidence for the presence of towers adjoined to this early gate, even though the area was completely reconstructed when the gate was blocked at the beginning of the Early Bronze IIIA. Two earthquake cracks testify to the destruction of the gate capstone, which presumably caused the end of use of the gate itself. The simple layout of the gate, nonetheless, finds several comparisons in contemporary EB II defensive architecture of the region, such as at Khirbat Karak, 19 'Ayy, 20 'Arād 21 and, later on, also at Bāb adh-Dhrā<sup>1,22</sup>

#### Area B South: the Early Bronze IV Village and the Early Bronze IIIB Quarter Inside the City-Wall

Area B South was enlarged both towards the west and the south, including squares BoII7,



10. The EB II city-gate L.160, from north.



11. The western jamb of the EB II city-gate L.160 from the corridor inside the main city-wall.

BpII7, BpII8, BrII8 and BpII9 (**Fig. 1**), where stratified structures of the EB II-III city and the EB IVB village piled up a 2.5m high stratigraphy.

#### Stratigraphy of Area B South

The third season of excavations in Area B South allowed us to dig out a more articulated

<sup>18.</sup> See below note 27.

<sup>19.</sup> The south-east gate in Wall A, possibly also blocked at the beginning of the Early Bronze III (Greenberg and Paz 2005: 84, 86-89, fig. 8, 10-14).

<sup>20.</sup> The Citadel Gate at Site A (Callaway 1980: 63-65, figs. 38, 41); the Postern Gate (Callaway 1980: 72-73,

figs. 48-49, 51) and the Lower City Gate (Callaway 1980: 114-115, figs. 74-75) at Site L.

<sup>21.</sup> Amiran and Ilan 1996: 20-22.

<sup>22.</sup> The EB III West Gate in Fields IV and XIII, also blocked during the Early Bronze III (Rast and Schaub 2003: 272-280).

stratigraphy in respect of that previously fixed in the first season. Under the topsoil (Phase 1), five different activities (Activities 2e-2a) of the Early Bronze IV were distinguished corresponding to two major constructive phases (2e, 2c) of the Batrawy IVb village (Nigro ed. 2006: 77, note 36). The underlying strata illustrated a series of stages all within Phase 3 (Early Bronze IIIB) Building B1 had a long-lasting life. The erection of Building B1 (Activity 3c), which marks the beginning of Phase 3, represents a clear stratigraphic change in the sequence, visible in many sections and especially in the corridor inside the main city-wall, while a clear layer of destruction marks the end of the same phase (Activity 3b). Underneath, a distinguished series of superimposed layers at least 0.5m thick outlines Phase 4, the EB IIIA occupation of the open area within the city-wall, which also ends in fierce conflagration (Activity 4a). The earliest strata, so far reached in the gate passageway on the inner side of the city-wall, are the top-layers of Phase 5 (Early Bronze II).

The Dwelling Quarter of Period Batrawy IVb (Early Bronze IVB) on the Northern Slope

The latest occupational phase included several houses built inside the collapsed EB III city-wall. In squares BoII6+BoII7 a rectangular structure (L.450), abutting directly over the inner edge of the collapsed city-wall, was characterized by a stone-paved double installation, presumably devoted to the processing of liquids (wine?). On the eastern side, this house reused the massive western wall of Building B1. On the opposite side of the area, in square BqII8 a more substantial house (L.122), excavated in year 2005 (Nigro 2006a: 242-243, fig. 21; Nigro ed. 2006: 170-174, figs. 4.19, 4.24-4.26) and belonging to the same constructive phase, illustrated a similar stratigraphic setting, also reusing major underlying EB IIIB structures. In the central sector of Area B South, in squares BpII8 + Bp II9 (northern half), two constructive phases were detected. A more recent phase

included a wide square house (L.354+L.356), with a semi-circular central installation (L.370) devoted to food production and storage (with a bench or a platform, and a bin). This house was apparently abandoned as is indicated by a flint blade found on the working platform (B.374) abutting against the inner side of western wall W.353. Outside the northern wall (W.359) of the house a child burial (D.350) was set underneath the wall.<sup>23</sup> In the underlying layer, sparse remains of an ephemeral initial occupation (huts and related installations) of the village were uncovered, including hearths, cists, and stone platforms. Hole-mouth jars fragments found in large quantity spread all over the area belong to the same EB IVB local horizon of pottery from the overlying more substantial structures (Figs. **12-13**).

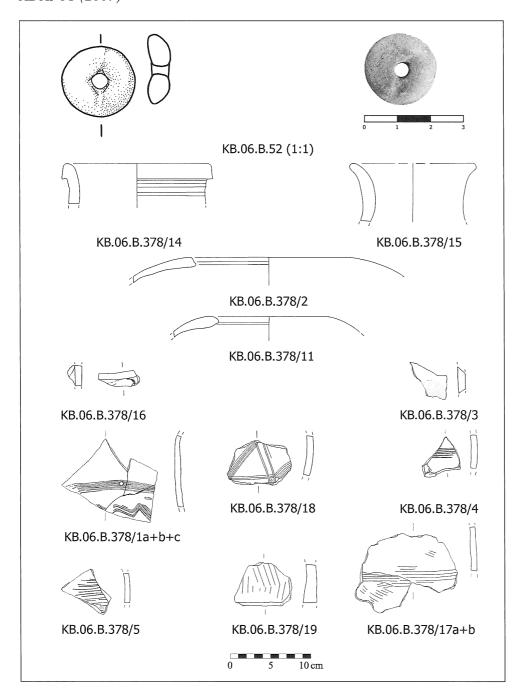
#### The Early Bronze IIIB Building B1

A huge building (Building B1) was erected in Early Bronze IIIB in the area just inside the blocked city-gate (Fig. 14). It had rectangular a plan and a staircase (B.421) to the upper floor. Against the eastern side of the building, outside it, a semicircular oven (T.413) was built with a corbelled vault and a floor paved with basalt stones, presumably devoted to communal food production. A large amount of pottery (Fig. 15) and a variety of animal bones were found in layers contemporary to the life of Building B1 and its annexed facility, indicating that the inhabitants of Khirbat al-Batrāwī supplemented a "classical" near-eastern diet with wild animals from the steppe and fish from the underlying perennial river. In the meantime, also, charred charcoal and seeds testified to a wide range of horticultural products assuring more than basic subsistence to the Batrawy population. The large amount of pattern combed jars pottery sherds retrieved, out of almost 30% of preservation ware, possibly suggest that olive oil, usually stored and shipped in this kind of containers, was not for the most part locally produced but was received from the district to the north and west.<sup>24</sup>

big storage jars. The combing is mainly horizontally applied, alternated with perpendicular crossing. These vessels employed medium coarse yellowish red, red-dish-yellow and light brown fabrics, or grey and light grey ones, with white and grey limestone grits and volcanic sand tempers of medium or medium-high

<sup>23.</sup> This is the second burial of this kind found on the mound; the first one (D.200) was discovered in 2005 in Area D, on the south-western spur of the hill (Nigro ed. 2006: 11, figs. 1.11-1.12).

<sup>24.</sup> Pattern-combed storage vessels include both medium size jars for temporary storage and transportation, and



12. Polished limestone bead and pottery fragments from the last EB IVB rectangular House L.354+L.356 in Area B South.

The Early Bronze IIIA Layers Inside the City-Wall

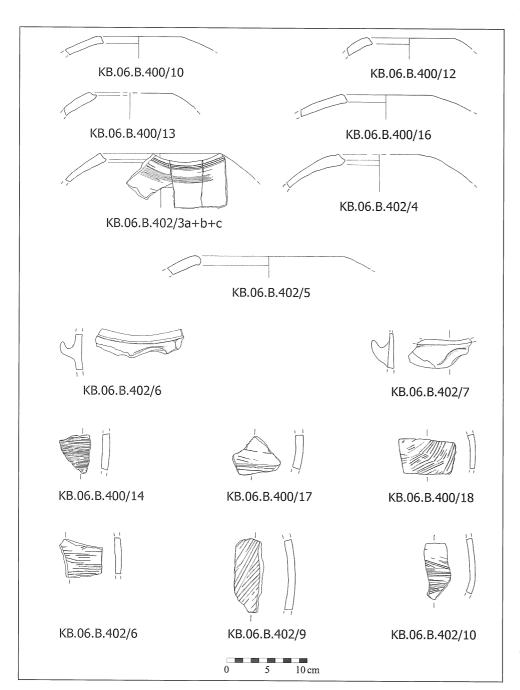
EB IIIA layers in Area B South were reached and examined only in the corridor between W.109 and the inner face of the main city-wall (W.105b),<sup>25</sup> where they were represented by several burnt layers (F.444, F.446, F.448) and by

the underlying plastered floor L.148 (Nigro ed. 2006: 184-187, figs. 4.45, 4.48-4.50), as well as in the inner section of the city-gate after the removal of the wall covering it (W.157). EB IIIA layers inside the city-wall have not been excavated yet, being underneath the massive structures and superimposed floors of Building B1.

frequency. Vessels were usually high or medium-high fired, and mainly handmade. Batrawy III pattern-combed storage vessels belong almost exclusively to two different broad morphological groups of jars: jars with flaring neck and everted rim, and hole-mouth jars with flattened or slightly recessed rims, both of them with flat base. A few of these pattern-combed

storage jars belong to a Metallic Ware production of a high fired quite depurated fabric.

25. The inner face of the main city-wall in trench BpII7+BqII7 was named wall W.105, while its outer face in trench BpII6+BqII6 was called wall W.103 (Nigro ed. 2006: plans III-IV).



13. Pottery sherds from the initial ephemeral EB IVB occupation in Area B South.

#### Area D: the Early Bronze IV occupation and the Early Bronze III Fortification Structures at the South-Western Corner of the Site

The major fortification works at the southwestern corner of the site were investigated by opening six squares<sup>26</sup> on the south-eastern side of the spur, uncovering the inner face of the citywall and corner tower (Tower D1), as well as a series of superimposed structures inside it.

#### Stratigraphy of Area D

Under the topsoil (Phase 1), at least two oc-

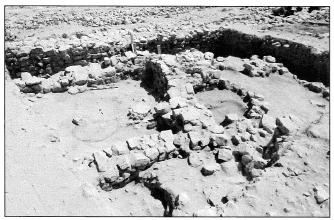
26. The following squares were opened on the southern edge of the spur: BfIII14, BgIII14, BhIII14, BiIII14,

cupational phases of Early Bronze IV were uncovered (Phase 2), relating to structures erected upon collapsed EB II-III major defensive buildings. The latter belonged respectively to Phase 3 (Early Bronze III), and Phase 4 (Early Bronze II).

#### The Early Bronze IV Occupation

On top of the spur a rectangular building was erected on the inner part of the previous tower, with several food producing installations, among which was a round platform paved with stone

BgIII15, BhIII15.



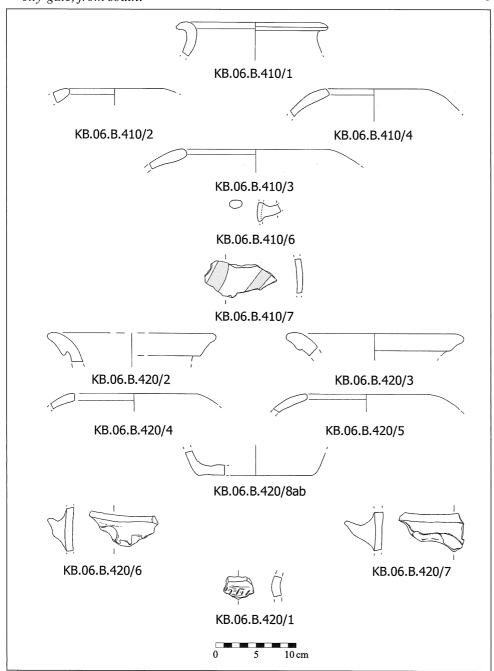
14. General view of EB IIIB Building B1 and the attached semicircular oven T.413, erected inside the blocked city-gate, from south.

slabs (Fig. 16) and reused basalt stone grinders.

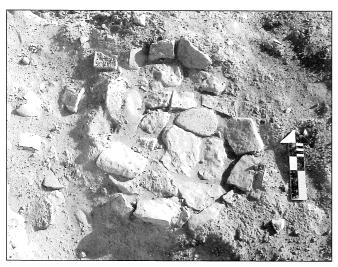
The Early Bronze III Defensive Structures at the South-Western Corner of the Site

The major building inside the city-wall, which runs all around the curvilinear edge of the spur, is a rectangular tower, around 12 x 8m, with a central squared pillar made of limestone boulders, and a corridor running east-west. A door leading to a possible staircase erected around the pillar opened towards the corridor looking south.

Further east, in square BhIII14, excavation was deepened under the EB III foundations of the tower, showing an earlier wall related to the



15. EB IIIB pottery sherds from Building B1.



16. Round stone-paved platform of Early Bronze IV in Area D.

city-wall and perpendicular to them (of an original EB II tower?). A niche was also uncovered on the inner side of the city-wall, provisionally interpreted as a blocked postern or passageway. The stratigraphy inside the city-wall in squares BhIII15 and BiIII14 showed a thick layer of destruction referable to a violent event, tentatively attributed to the end of Period Batrawy IIIa (Early Bronze IIIA).

### Area E: Early Bronze II City-Wall and Related Layers on the Southern Side of the Town

A sounding was opened roughly at the middle of the southern line of fortification in squares CdIII9 + CeIII9 (**Fig. 17**), with the aim of checking the architecture, stratigraphy and chronology of the visible remains of the city-wall preserved on this side of the mound.

#### Stratigraphy of Area E

Area E suffered drastic erosion, and, at least along the southern edge of the cliff, also pillage of large boulders from the city-wall. Strata were all eroded according to the slope and they illustrated three main phases from the upper surface



17. General view of Area E, with the sounding opened roughly at the middle of the southern line of the EB II-III city-wall, from north.

to the bedrock. Phase 1 was the topsoil; Phase 2 included two main strata (F.701, F.702) of erosion and abandonment of a massive heap of collapsed building material (apparently greyish mud-bricks); Phase 3 consisted of a thick burnt layer of destruction (F.704, F.706) dating from the Early Bronze II (**Fig. 18**), accumulated on a floor lying directly over the bedrock (L.710; see § 8.2).

The Early Bronze II City-Wall on the Southern Side of the Site

In Area E the city-wall was cleaned for a length of around 10 m, just beside a small ravine, which cuts into it; corresponding to a joint between two separate sections of the defensive structure,<sup>27</sup> at a change in its orientation. Only the lower courses of the massive structure were preserved belonging to the original defence line erected all around the site in Early Bronze II. The defensive work, consisting of a single wall running along the very edge of the cliff, was strongly eroded on the outer side, where its outer face was rarely preserved, only the lower courses of limestone boulders set into the bedrock.

Conversely, the inner face of the wall was preserved on four superimposed courses of unworked stones, tied up with mortar and small

figs. 152-154, 391], Tall Ta'annek [Lapp 1969: 9, fig. 2], at-Tall [Callaway 1980: 113-114, figs. 75, 85], Tall as-Sulṭān [Kenyon 1981: 100, 213, 262, 374, pls. 83a, 201; Nigro 2006c: 370-371], Bāb adh-Dhrā' [Rast and Schaub 2003: 280-283] and Numayra [Rast and Schaub 1980: 42, fig. 15]), and it was aimed mainly at standing out earthquake effects (Nigro ed. 2006: 176-177); it is possible, moreover, that every stretch corresponded to the wall portion attributed to a single team of workers during the construction (Wright 1985: 177; Nigro 2006c: 371-372).

<sup>27.</sup> The Batrawy II city-wall was built in separated juxtaposed stretches (each around 6-8m long), as it was also evident in Area B (in trench BrII7+BsII7 excavated in 2005), where a junction between two of such sectors (named wall W.103c to the west and wall W.101c to the east) is visible on the northern outer face of the main city-wall (Nigro ed. 2006: 176, fig. 4.35, pl. IV). This building technique is well-known from other EB II-III defensive systems in Southern Levant (such as, for instance, at Khirbat Karak [Greenberg and Paz 2005: 94, fig. 17], Tall al-Mutasallim [Loud 1948, 66,



18. EB II pottery materials from the burnt layers accumulated over the floor excavated inside the city-wall in the sounding opened in Area E.

limestone chips. Inside it, where the sounding was opened, a well refined floor of limestone marl and small pebbles (L.710) was uncovered, after the removal of a thick heavy burnt layer (F.704, F.706).

## Area F: the Fringes of the Early Bronze IV Village and the Early Bronze II-III Monumental Building on the Easternmost Terrace

The exploration of Khirbat al-Batrāwī was further expanded by opening a new area on the inner part of the easternmost Terrace V (Nigro ed. 2006: 22, fig. 1.2), including ten squares (**Fig. 1**), due to the presence of an emerging east-west oriented massive wall. (Nigro ed. 2006: fig. 1.25). Structures visible on the surface turned out to belong to a massive EB II-III building and to sparse EB IV houses.

#### ${\it Stratigraphy of Area F}$

Under the topsoil (Phase 1), Phase 2 included the collapse and abandonment of various EB IVB dwellings (represented by a widespread layer of erratic stones), their use and their construction, represented by several fillings and structures. These dwellings were established over the abandoned ruins of a major building, founded directly over the bedrock, which was preliminarily attributed to Phase 3, covering the

whole urban phase at Batrawy.

The Village of Period Batrawy IVb (Early Bronze IVB) on the Easternmost Terrace

The rural village arisen on Khirbat al-Batrāwī during Early Bronze IVB consisted of several clusters of domestic units irregularly displaced over the mound, one of which was that uncovered in Area F (**Fig. 19**). Such dwellings showed only a single constructive phase, and, thus, presumably represent a somewhat short-lived occupation of Terrace V, towards the end of Early Bronze IV.

A major house was identified in squares CoII17, CpII17, CpII18, including a large unit (L.530), with a raised platform and a cist in the middle, a round bin in the south-eastern corner, and a separate rectangular room (L.560) in the opposite south-western corner. A semicircular storeroom (W.515) was adjoined to the western side of the unit. West of the house, the area of the earlier building was left open, even though another circular device (\$.511) leaned on its southern wall, while to the north of it another unit was erected with a main wall (W.519) and a mortar embedded into the floor west of it. Further to the north-west, in square CnII16, a rectangular unit (L.540) was partly preserved, apparently joined with other subsidiary curvilinear structures, one of which (S.538) cut into the western wall of the house. As in Area A West,<sup>28</sup> the entrance to this unit was through the short side, marked by a flat stone (L.558).

A third domestic unit (L.520) was unearthed in square CpII18, delimited by wall W.559. It was added to the southern wall of House L.530, possibly as a successive enlargement of the latter. The southern wall of the same unit leaned on the round platform of the previous temple (see below).



19. General view of the EB IVB dwellings and installations in Area F, on the easternmost terrace (V) of the Khirbat, from west.

The Early Bronze II-III Broad-Room Temple

As stated above, the EB IVB domestic devices in Area F were erected all around the ruins of a major building, which stretched E-W over an area of around 400 sqm, including a forecourt (L.504) with some cult installations (Fig. 20). The building consisted of a broad-room (L.500) delimited by a solid wall 1.0-1.2m wide, with an embossment on both sides of the entrance, located at two thirds of its length. The inner dimensions of the broad-room were 2.7 x 11.0, with a ratio 1:4. The entrance was 1.36 m wide, and opened southwards onto a forecourt paved with crushed limestone. Against the southern façade a bench or the basis of a protruding pillar (\$.536) abutted. In the forecourt, facing the entrance, there was a stone-lined round platform (S.510), 0.35m high, erected around an emergence of the bedrock, with a diameter of 2.5m; in the centre of the platform there was a slab with a circular hollow in the middle.

Just west of the entrance, a circle of stones in the floor of the courtyard was possibly the basis for a self-standing bethyl. Inside the broadroom, a slab embedded into the floor in the western side suggested the possibility that, at least in a single phase of use, the roof of the *cella* was supported by a central row of wooden pillars.

The overall plan of the building and the circular platform in the forecourt suggesting it can be to interpreted as a broad-room temple, according to a religious architectural typology



20. General view of Area F, on the easternmost terrace (V) of the site, from south. In the foreground, the raised circular platform S.510; in the background, the massive remains of broad-room temple which occupied the area in the Early Bronze II-III, and the nearby sparse superimposed dwellings of the EB IVB village.

well attested to in Southern Levant during the Early Bronze Age, similar to the renowned EB II-III sanctuary of Bāb adh-Dhrā'.<sup>29</sup>

#### **Conclusions**

The second season of excavations and restorations at Khirbat al-Batrāwī provided important new insights into the history of the site, which turned out to be a major urban centre during the Early Bronze II-III in the Upper Wādī az-Zar-qā', and a rural village in an advanced phase of the Early Bronze IV.

Excavations in Area B North allowed to us identify a complex series of defensive works. starting with the original EB II city-gate and city-wall, set directly over the bedrock, followed by the successive development of the fortification system, with the addition of an outer wall in Early Bronze IIIA, and of a further scarp-wall in Early Bronze IIIB, in use until the final destruction of the town. In Area B South, a major rectangular building (Building B1) was brought to light inside the city-wall, dating from Early Bronze IIIB. The same area was reoccupied in the last two centuries of the 3rd millennium BC by a village, with two successive constructional phases, which shows the gradual settlement of a rural community over the ruins of the preceding town. In its second phase of life, the village spread all over the hill with several clusters of houses like those brought to light in Areas A and F. In Area D, the investigation of the major defensive tower at the south-western corner of the site started, while in Area E, the city-wall was explored in its earliest phase at the middle of the southern side of the site. Finally, in Area F a main building was discovered, provisionally interpreted as a broad-room temple of a well known Early Bronze Age Levantine typology. While further excavations are needed to clarify architecture and function of these major buildings, a vivid picture of the Early Bronze Age town of Batrawy in North-Central Jordan is starting to be depicted, also through the study of material culture remains and paleobothanic and archaeozoological data.<sup>30</sup>

<sup>28.</sup> House L.20 (Nigro 2006a: 238, figs. 17-18; Nigro ed. 2006: 89, figs. 3.31-3.33).

<sup>29.</sup> Rast and Schaub 2003: 157-166, 321-335. For a general appraisal on the Early Bronze Age sacred architecture in the Southern Levant see Sala 2007.

<sup>30.</sup> More detailed information is offered in the Expedition preliminary reports published in the series ROSAPAT (= Rome «La Sapienza» Studies on the Archaeology of Palestine & Transjordan).

#### **Bibliography**

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 (= Judean Desert Studies). Jerusalem.

Callaway, J.A.

1980 The Early Bronze Age Citadel and Lower City at Ai (et-Tell): A Report of the Joint Archaeological Expedition at Ai (et-Tell). No. II. Cambridge, Mass.

Greenberg, R. and Paz, Y.

2005 The Early Bronze Age Fortifications at Tel Beth Yerah. *Levant* 37: 81-103.

Kenyon, K.M.

1981 Excavations at Jericho. Volume Three. The Architecture and Stratigraphy of the Tell. London.

Lapp, P.W.

1969 The 1968 Excavations at Tell Ta'annek. *BASOR* 195: 2-49.

Loud, G.

1948 *Megiddo II. Seasons of 1935-39* ( = Oriental Institute Publication 62). Chicago.

Nigro, L.

2006a Preliminary Report of the First Season of Excavations by the University of Rome "La Sapienza" at Khirbat al-Batrawi (Upper Wadi az-Zarqa'). *ADAJ* 50: 229-248.

2006b Khirbet al-Batrawy: una città del Bronzo Antico tra il deserto basaltico e la Valle del Giordano. *Scienze dell'Antichità* 13 (in press).

2006c Sulle mura di Gerico. Le fortificazioni di Tell es-Sultan come indicatori della nascita e dello sviluppo della prima città di Gerico nel III millennio a.C. Pp. 349-397 in F. Baffi, R. Dolce, S. Mazzoni, F. Pinnock (eds.), *Ina Kibrat Erbetti. Studi di Archeologia orientale dedicati a Paolo Matthiae.* Rome.

2006d Khirbet al-Batrawy - Zarqa District. Urban

Origins in the Wadi Zarqa. Munjazåt 2006 (in press).

2006e Preliminary Report of the First Season of Excavations of Rome "La Sapienza" University at Khirbet al-Batrawy (Upper Wadi az-Zarqa, Jordan), in J.M. Córdoba et al. (eds.), Proceedings of the Fifth International Congress on the Archaeology of the Ancient Near East, Madrid, April 3<sup>rd</sup>-8<sup>th</sup> 2006. Madrid (in press).

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.

Palumbo, G. (ed.)

1994 JADIS, the Jordan Antiquities Database and Information System: a Summary of the Data. Amman.

Rast, W.E. and Schaub, R.Th.

1980 Preliminary Report of the 1979 Expedition to the Dead Sea Plain, Jordan. *BASOR* 240: 21-61.

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.

Sala, M.

2006 Area A. Stratigraphy. Pp. 63-76 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.

2007 *L'architettura sacra della Palestina nell'Età del Bronzo Antico I-III* (= Contributi e Materiali di Archeologia Orientale XIII). Rome.

Wright, G.R.H.

Ancient Buildings in South Syria and Palestine ( = Handbuch der Orientalistik 7). Leiden - Köln.