

UNIVERSIDAD AUTÓNOMA DE MADRID

Proceedings of the 5th International Congress  
on the Archaeology of the Ancient Near East



**Universidad Autónoma de Madrid**

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the Ancient Near East**

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#### **Programme - Programa**

# Preliminary report of the first season of excavations of Rome «La Sapienza» University at Khirbet al-Batrawy (Upper Wadi az-Zarqa, Jordan)

Lorenzo Nigro, Rome

## Abstract

Rome «La Sapienza» University Expedition to Palestine & Jordan resumed its activity on the field in Jordan in year 2005 starting a new project on Early Bronze Age urbanization in «marginal» regions, focusing on the previously unexplored site of Khirbet al-Batrawy, a central settlement in the Upper Wadi az-Zarqa in Northern Transjordan. Khirbet al-Batrawy was a fortified town controlling the access to the Wadi az-Zarqa, one of the major eastern tributaries of the River Jordan, exercising a primary role in the road network of antiquity. The discovery and investigation of Khirbet al-Batrawy has important effects on the study of urbanisation in fringe areas and, with an occupational sequence covering the entire urban Early Bronze Age, represents a favourite case study for the investigation of the early urban civilization of ancient Jordan.

**Keywords:** Jordan, Wadi az-Zarqa, earliest urbanization, peripheral area, crossroad, fortified town, city-wall, Early Bronze Age, desert.

## 1. Introduction

Rome «La Sapienza» University Expedition to Jordan<sup>1</sup> resumed its archaeological activities in the Upper Wadi az-Zarqa after five years of interruption,<sup>2</sup>

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<sup>1</sup> Rome «La Sapienza» Expedition to Jordan started its research activity in December 2004 thanks to the kind help of the Department of Antiquities of Jordan, and, especially of its General Director, Dr. Fawwaz al-Khraysheh, to whom I address my heartfelt thank. The Academic Authorities of Rome «La Sapienza» University, namely the Vice-Rector, Prof. Paolo Matthiae, the Dean of the Faculty of Humanistic Sciences, Prof. Roberto Antonelli, and the Director of the Department of Historical, Archaeological and Anthropological Sciences of Antiquity, Prof. Clementina Panella, have generously supported the Expedition. Rome «La Sapienza» team during the first season included: Lorenzo Nigro, Director; Andrea Berti, Architect; Maura Sala, Supervisor of Area A; Andrea Polcaro, Supervisor of Area B; Giovanna Marinelli, Area B; Marta D'Andrea, Elisabetta Gallo, Daria Montanari, Valentina Tumolo. The representative of the Department of Antiquities, who gave an invaluable support to the Expedition, was the Inspector of the Zarqa district, Mr. Romel Ghayib.

<sup>2</sup> Rome «La Sapienza» University worked in Jordan from 1987 to 1999, with a series of archaeological surveys and soundings focused on the Wadi el-Yabis, Wadi az-Zarqa and Wadi adh-Dhulayl basins, under the scientific coordination of P. Matthiae, and the direction on the field of G. Palumbo, which identified more than 300 previously unknown sites, with a chronological span ranging from the Prehistory to the Islamic Period. A major aim of the Expedition in the 90ties was the safeguard of the Jordanian archaeological heritage, which was epitomized in the catalogue of archaeological sites of Jordan called *JADIS (Jordan Archaeological Databank & Information System*, Palumbo ed. 1994), still now a fundamental tool in the

with a systematic excavation conducted under the aegis of the Department of Antiquities of Jordan at the Early Bronze Age fortified site of Khirbet al-Batrawy (fig. 1), in the northern periphery of the city of Zarqa (the Hashemite Kingdom of Jordan). Excavations were supported by Rome «La Sapienza» University, the Italian Ministry of Foreign Affairs,<sup>3</sup> and the Italian Ministry of Education, University and Scientific Research, with the cooperation of the Queen Rania's Institute of Tourism and Heritage of the Hashemite University of Zarqa.<sup>4</sup> Renewed excavations were conceived as a deepening and an implementation of previous research activities in the Wadi az-Zarqa basin, for which the site of Khirbet al-Batrawy, a fortified town of the Early Bronze Age, with negligible successive superimpositions (such as shepherds' enclosures and a few modern pits, burials and fireplaces), was chosen as the key site of the district for the study of the origins, development and trends of early urbanisation in the north-central region of Jordan.<sup>5</sup> The site has been also chosen because it was deemed yielding a high archaeological potential, due to the monumentality of its defensive structures, and for its location in the north-western periphery of the city of Zarqa, within a modern urban area but on an isolated hill, which made feasible its valorisation with the creation of an archaeological park.<sup>6</sup>

The first season of excavations took place in May-June 2005 and was aimed at investigating the main topographical and chronological features of the site.

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management and protection of the Country Archaeological Heritage. On the Wadi el-Yabis survey see: Palumbo - Mabry 1988; Palumbo *et al.* 1990; 1993; on the Wadi az-Zarqa and Wadi adh-Dhulayl surveys see: Palumbo *et al.* 1996; 1997; Caneva *et al.* 2001. Khirbet al-Batrawy was surveyed in the 90ties and identified as an Early Bronze Age site but not investigated; it was indicated in *JADIS* with the place-name «Jreyyeh» (*JADIS* site n. 2516.011, p. 2.172).

<sup>3</sup> The Author would like to thank the Italian Embassy in Amman, in the persons of H.E. Gianfranco Giorgolo, Ambassador of Italy, and Dr. Marco Canaparo for their cooperation, and the Italian Ministry of Foreign Affairs – General Directorate for Cultural Promotion and Cooperation, Office V, in the persons of the Counselor Francesco Saverio De Luigi and Dr. Paola Cordone.

<sup>4</sup> 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, Prof. Sultan Maani. The Queen's Rania Institute of Tourism and Cultural Heritage team also included Dr. Fardus Ajlouni and Dr. Bilal R. Khrisat.

<sup>5</sup> This area, for its climatic and geographic characteristics, is highly promising for studying the origins and diffusion of the earliest urban civilization in the Southern Levant. It lies, in fact, at the fringes of three different ecological systems: the central Transjordanian hills, crossed north-south and east-west by the Wadi az-Zarqa; to Jordan Valley to the west; and the semi-arid steppe and the black basalt desert to the east, at the south-western edge of the great volcanic plateau. It thus offers a favourable context for the study of urban development, adaptive strategies of local communities and relationships between natural resources and urban features at the dawn of the urban civilization in Levant.

<sup>6</sup> The north-eastern flank of the hill of Khirbet al-Batrawy is cut by a huge abandoned limestone quarry. Great part of the nearby hill to the north was, in fact, removed around fifteen years ago by the same quarry, that has modified the landscape in the proximities of the site, but that actually represent a suitable area for the future development of an archaeological park. The site itself is heavily threatened by modern building activities.

## 2. *Geographic and environmental setting of the site*

Especially significant is the location of the site in respect of water sources and relating to routes of the ancient road network: Khirbet al-Batrawy controlled the Upper Wadi az-Zarqa, which represents the easternmost permanent tributary of the Jordan River at western border of the Syro-Arabic Desert. It had access to a conspicuous amount of fresh water, and controlled a very important crossing of the river: the site lay, in fact, at a main crossroad at the end of various tracks through the steppe and the desert, in direct connection with the major uadiat of the Black Basalt Desert of Southern Syria and Northern Jordan.<sup>7</sup>

The fortified town of Batrawy arose on the top of a cliff, from where it dominated a large part of the Upper Wadi az-Zarqa. The site could exploit a very favourable riverside environment allowing intense agriculture (horticultural products) and animal breeding, and controlled a series of minor sites such as Tell es-Sukhne North, Jebel er-Reheil and Tell el-Bireh to the north,<sup>8</sup> or er-Reseifeh to the south.<sup>9</sup> For its location it was, however, exposed to direct and continuous relationships with the nomads living in the adjacent desert.

<sup>7</sup> The desert, which is often seen as a barrier, was actually a bridge especially in the earliest tentative steps of urbanization (one has nonetheless to stress the fact that at the other end of the desert tracks there was the rising Sumerian urban civilization), as the case of the Early Bronze IA city Jawa testifies to (Helms 1981; 1984; Betts 1991). Several sites visited by the Expedition during a preliminary survey can be mentioned as being part of this network (from east to west, Hawshiyān, Karyat Khisha al-Sletin, Salatin, Tell Umm el-Quttein, Qasr al-Hallabat, Tell el-Qihati; for a preliminary mention of these sites see Palumbo ed. 1994; Betts *et al.* 1995). The presence of huge settlements such as Jawa itself, or Tell Afīhe, previously unknown, and small outposts such as Rukeis (Betts *et al.* 1996: 33-38) Qars Useykhim (Al-Khourī ed. 2003: 154-172) and Qasr al-Hallabat hint at the existence of an alternative path to urbanization, which should be further investigated.

<sup>8</sup> The Wadi az-Zarqa is a permanent water course, that with its 96 Km of length represents the second tributary of the Jordan River, after the Wadi Yarmouk, and constitutes the natural border of the central Jordan highlands, controlled by Amman (Rabbat Ammon in the Iron Age, Philadelphia in the Hellenistic and Roman times). The river rises near Amman and runs at first towards north-east for around 30 Km, as long as in the Zarqa plain it bends toward north-west and crosses the mountains, connecting itself with the Wadi adh-Dhulayl. In correspondence of this connection the valley was large and well irrigated and the EB II settlement of Tell es-Sukhne North (Palumbo ed. 1994: site nr. 2517.027; Chesson *et al.* 1995; Palumbo *et al.* 1996: 385-386, 401-403, tab. 6; Palumbo *et al.* 1997: 14) exploited this extremely favourable environment. The river prosecutes for 5 Km north-west and the centre of Tell el-Bireh (Glueck 1939: 213-214; Palumbo ed. 1994: site nr. 2417.021), possibly a fortified settlement, controlled this stretch, after which, the river goes down steeply westwards, flowing into the Jordan south of Deir 'Alla (the last 10 km turning towards southwest), describing an overall arc of around 270°. Today the river is dry for most of the year south of the confluence with Wadi adh-Dhulayl, but this is a recent phenomenon due to the use of the springs in the area between the cities of Amman and Zarqa; until a few years ago, it was possible to fish in the Wadi az-Zarqa even in summer.

<sup>9</sup> The EB IV site of er-Reseifeh was surveyed in the 30ies by N. Glueck (Glueck 1939: 205-207); nowadays it is mostly destroyed because of the modern occupation (for more detailed information see Palumbo 1990: 57; 2001: 241-242).

### 3. *Stratigraphy and preliminary periodization*

Ceramic materials recovered from the surface of the khirbet appeared basically related to three periods: the Early Bronze Age II, III and IV. While EB II and III (with a remarkable prevalence of the latter period), were present everywhere on the site, EB IV pottery was mainly concentrated on the uppermost terrace and in some spots along the perimeter of the site, probably reflecting the last occupation of the mound. These initial observations were confirmed by systematic excavations, which involved EB III and IV occupational layers on the Acropolis and on the northern side of the khirbet, without reaching, up to now, underlying deposits of the Early Bronze II. The preliminary survey of the site surface, as well as the stratigraphic sequences established in the two main excavated Areas A and B, lead to the preliminary archaeological periodization illustrated in Table 1.

Early Bronze Age III (Batrawy III) structures and materials were recovered in Area B, where a 20 m long stretch of the fortification wall was brought to light (see § 6), and from some spots on the Acropolis (Area A), underneath the final EB IV occupation. The Early Bronze Age IV (Batrawy IV) settlement has been investigated mainly on the summit of the Acropolis (Area A), where houses and domestic installations were uncovered, and it has been identified to some extent also in the area of the northern city-wall (Area B), as well as in some other places of site.<sup>10</sup> The chronological definition of stratified cultural horizons (= periods) cannot, at the present moment, be corroborated by means of radiocarbon dates, and the proposed periodization has been preliminary fixed basing upon the examination of material culture remains (basically pottery and flints); it will be, thus, further checked in the next seasons.<sup>11</sup> Nonetheless, the interest of Khirbet al-Batrawy lays namely in the fact that the site was exclusively occupied during the Early Bronze Age, for a chronological span that approximately ranges from the first half to the very end of the 3<sup>rd</sup> millennium BC.

### 4. *Survey and topography of the site*

The site of Khirbet al-Batrawy (Lat. 32°05' N, Long. 36°04' E) measures 4 hectares, and has a roughly triangular shape, with the base on its western side, where it overlooks the underlying valley of the Wadi az-Zarqa. It lies on top of a rocky hill<sup>12</sup> at an average elevation of 660 a.s.l.<sup>13</sup>

The general topography of Khirbet al-Batrawy was surveyed at the beginning of the first season and the ancient fortification wall emerging at its edges was detected and documented all around the cliff. A topographic grid based on 5 × 5

<sup>10</sup> This is perhaps the case of jar-burial D.200, sunk into the ruins of the south-western tower (D1; see below).

<sup>11</sup> Especially the duration of each suggested Batrawy period is, therefore, to be considered highly tentative and conventional, also based on the chronology commonly adopted in the region (Stager 1992: Volume I: 28-39, Volume II: fig. 16; Mazar 1992: 108-109, tab. 3; Philip 2001: 168-169).

<sup>12</sup> Khirbet al-Batrawy is the southernmost of a series of cliffs bordering to the east the Wadi az-Zarqa, that begins at the point where the wadi crosses more sharply the mountains of the Jordan highlands.

<sup>13</sup> The highest point of the site is 676 a.s.l.

m squares was established (fig. 2),<sup>14</sup> and a detailed documentation of some of the utmost visible architectural features of the site was drawn, such as the towers in its north-western (Tower C1; fig. 3) and south-western corners (Tower D1; see below), as well as the emerging structures in the north-east (L.330).

The ancient town was structured in five sloping terraces from west to east, delimited by battering walls, which regularized the natural crests of the hill, from the Acropolis, on the summit of Terrace I, to the eastern edges of the khirbet.<sup>15</sup>

Terrace I occupied the central part of the western top of the site, where the Acropolis of the Early Bronze Age town was located, and where, successively, two cairns (I-II) were built over the ruins of the latter. The second terrace has a crescentic plan and encircled terrace I to the north, east and south, incorporating the south-western corner of the hill. Terrace III has a relatively limited average width (around 20 m) and crosses the site north-south in the middle.<sup>16</sup> The walls separating terraces II, III and IV were clearly visible on the surface on the northern side of the site. Terrace IV is twice wider than the previous one, and apparently preserved archaeological remains in a fairly good state. The fifth and lowest terrace occupies the eastern corner of the hill; in the middle a huge building was recognized on the surface, with at least three walls delimitating a courtyard with a major installation in its south-eastern corner; a third cairn (III) was erected at the eastern end of the same terrace, just inside the rests of a major corner tower.

### 5. *The fortifications and the entrances to the town*

The defensive system of the town of Batrawy was built all around the edge of the rocky hill by exploiting any cliff and spur. The main fortification work was a solid stone wall, from which at irregular intervals, depending on the natural conformation of the edge of the khirbet, bastions and towers projected. Due to the triangular shape of the mound, the main pinpoints of the defence were, of course, the corners, where huge tower-fortresses were located. The line of fortifications is illustrated clockwise starting from the north-western corner.

The north-western corner (Area C) hosted a rectangular tower (Tower C1; fig. 3), with two protruding bastions, one abutting towards the west (W.301)<sup>17</sup> and the

<sup>14</sup> The grid is divided into 100 x 100 m squares, indicated by capital letters on the west-east axis (A-D) and by Roman numbers (I-IV) on the north-south one; each 100 x 100 m square is further subdivided into 400 5 x 5 squares, indicated by small letters on the west-east axis and Arabic numbers on the north-south one. Each square takes the name of the peg to north-east; this method allows to give an independent name to each square in the grid, maintaining the indication of the larger sector provided by the capital letter and the Roman number.

<sup>15</sup> Nowadays, the surface of the site is entirely covered by rocks and erratic stones deriving from the collapse and destruction of Early Bronze Age buildings and, especially, fortifications, and by the remains of the later terrace walls. Four modern stone enclosures are present on top of the hill (fig. 2): one to the north-west (a); a second (c), which is the largest one, between Terrace I and II, a small third one (d) just east of Area B; and a fourth one further to the east (b).

<sup>16</sup> Some walls are visible emerging on the ground on terrace III, which on the basis of the preliminary observation of their building technique may be tentatively attributed to Period Batrawy IIIb (Early Bronze Age IIIB).

<sup>17</sup> The western bastion projects 1.9 m and was 6.3 m long on the north-south axis.

other towards north (W.303), built directly on a rock terrace with big unworked limestone blocks.

Further to the east, a major wall (W.305) projected from the line of fortifications towards north-west, up to the very edge of the spur, possibly in order to protect an entrance to the town, not far from the saddle, which represented the easiest access to the site. An advanced line of fortification was indicated by wall W.307, a NW-SE structure detected on the lowest step of the north-western spur towards the northern saddle. Roughly at the mid of the northern side, an inset in the outer face of the city-wall corresponds to a shallow depression, where Area B was opened (see below § 6). Just to the east of Area B, the city-wall again projects, presumably due to the presence of a huge rectangular bastion, protecting the eastern half of the northern side. In the eastern corner, the city-wall followed the curvilinear orientation of the spur.

Roughly 45 m west of the eastern corner on the southern side, a ravine in the edge of the hill indicated the location of a gateway, of which only some huge pier blocks were preserved, and which was approached through a passageway running south-west/north-east at the foot of the cliff and turning left to the north-west into the town.<sup>18</sup> This entrance was especially defended by the structures built over the spur to the west of it, which was neatly higher than the ramp of the passage itself. From that point onwards the city-wall rose again up to the south-western corner. Here (Area D), a huge tower (Tower D1) was detected on the ground, controlling the Wadi az-Zarqa Valley at a strategic turn, which offered a wide panoramic view.<sup>19</sup>

The western side was the best protected one due to the steep cliff, and at least two projecting terraces, which hosted offsets or protruding towers built with large boulders set directly over the bedrock, aimed at allowing a watchful overlooking of the edge of the hill towards the valley. The town of Batrawy during the Early Bronze III, thus, showed a very articulated defensive system, which testifies to its fully urban status.

### **5. Area A: *The Early Bronze IV village on the Acropolis***

Area A was opened on the summit of the Acropolis, where some alignments of stones on the surface suggested the presence of a substantial occupation. Two separated sectors were investigated, respectively to the south-east (Area A East)<sup>20</sup> and to the north-west (Area A West)<sup>21</sup> of Cairn I.

<sup>18</sup> It seems reasonable that from this entrance a street climbed the side towards the Acropolis.

<sup>19</sup> The collapsed remains of the tower were used for some jar burials during the Ancient Bronze IVB, when the inhabited area of Khirbet al-Batrawy was reduced to the only acropolis; one of these burials was identified and excavated: it is a simple burial in jar (D.200).

<sup>20</sup> Excavations started in Area A East in squares BoII18, BnII18 e BoII19, and were successively extended in squares BnIII19+BmII19.

<sup>21</sup> Excavations in A West included the southern half of squares BIII15 and BjIII15, and squares Bi II16 and BjII16; the east-west baulks BiII15/16 and BjII15/16 were removed at the end of the season.

### 5.1. Stratigraphy of Area A

Four stratigraphic phases have been provisionally distinguished in Area A. Phase 1, includes the modern ephemeral frequentation of the hill (see Table 1), illustrated by various features, such as shepherds' fences, fireplaces, and some modern burials and pits.<sup>22</sup> Phase 2 covers the time span from the definitive desertion of the Early Bronze Age settlement up to the Islamic and modern periods, alternating to long periods of abandonment; during this phase the two cairns were erected. Phase 3 represents the final sedentary occupation of the khirbet in antiquity, when a rural village was standing on the summit of the Acropolis and several domestic units were grouped around open areas with various devices and installations. An overall stratum of collapsed stones (Activity 3a) and flimsy sandy soil, which was the result of a prolonged abandonment, filled the ruins of this village. After its removal, various architectural features emerged (Activity 3c, see below). Phase 4 groups archaeological deposits and a few substantial structures belonging to some Early Bronze III buildings, reached at the moment only in limited spots of the Area.<sup>23</sup>

### 5.2. The Village of Period Batrawy IV (Early Bronze IV)

Two separated quarters of the Period Batrawy IV (Early Bronze Age IV) village were uncovered respectively in Area A East and West. In Area A East, a distinctive feature was wall W.23,<sup>24</sup> a boundary wall which delimited the village to the east in squares BoII18 and BoII19, by terracing and levelling the collapsed remains of the underlying Batrawy III town.<sup>25</sup> The dwellings consisted of domestic units with main living rooms and several annexed spaces, which housed food producing installations, silos, benches, stores and other devices. Distinctive features of these structures were their irregular arrangement around courtyards and lanes, the curvilinear layout of annexes in respect of the main rooms, and the use of single line walls built of irregular fieldstones patched together with mud mortar and limestone chops. In squares BmII19+BnII19 (fig. 4), a main domestic unit (L.74b+L.76b) had the entrance opening south-west, with a threshold consisting of two juxtaposed slabs (L.43); it was characterized by the presence of a raised bench made of flat stones (B.63). To the east, a series of circular subsidiary rooms, possibly used as storerooms and pens, were grouped in between the main domestic units and a courtyard (L.54b+L.78b), where a circular silos (S.37) with a diameter of 86 cm, made of stone slabs and dug into the underlying layers, was

<sup>22</sup> In the last quarter of the 20th century the city of Zarqa expanded encircling the site on the southern and eastern sides, while a huge limestone quarry was excavated on the hill to the north.

<sup>23</sup> Early Bronze Age IIIB structures were exposed in squares BoII18 and BoII19.

<sup>24</sup> In square BoII19, the remains of another sustaining wall (W.19) were uncovered, which was shifted 1 m inwards to the west and exhibited the same north-south orientation of wall W.23, though preserved mainly just in the cobble preparation for the foundation of the wall itself. This wall retained a filling (F.18) which provided Early Bronze IIIB and IV pottery materials.

<sup>25</sup> Inside this terrace wall there was a filling (F.26), in which Early Bronze Age III and IV pottery materials were found (see e.g. an *amphoriskos*: KB.05.A.26/1) and three pierced sea-shells (inventory numbers: KB.05.A.29, KB.05.A.30, KB.05.A.36).

brought to light. The silos opening (C.29) consisted of two vertical limestone slabs, preceded by a third flat stone embedded in the floor in order to facilitate the filling and emptying of the installation. S.37 leaned on a demarcation wall (W.3), stretching west-east up to W.23. Pottery retrieved in these units included cooking and preservation wares (mainly hole-mouth jars), distinguished by the characteristic enveloped ledge-handles, plastic rope decorations, irregular combed and band-combed decorations, as well as some domestic tools (two basalt and flint blades, two spindle whorls and a grinding stone).<sup>26</sup> North of wall W.3, in square BnIII18, there was another dwelling unit with a row of small square chambers (L.6b, L.10b, L.12b) flanking an open space (L.8b; fig. 5). Also in these units some vessels of cooking and preservation ware were found, as well as a limestone pestle (fig. 6).

In Area A West (fig. 7), another portion of the Batrawy IV village was excavated in a similar stratigraphic situation, including a rectangular (5.80 × 2.70 m) house (L.20), oriented south-east/north-west, with the entrance on the short side (L.226). The walls of L.20 were made of large fieldstones displaced in a single row with their long side across the width of the wall itself. Against the southern wall (W.81) of this house a triple installation was located with two juxtaposed square basins/cists (S.207, S.209), made of vertical limestone slabs, and a third parallel stone to the west: one cist was paved with two flat stones, while the second had a mortar fixed inside (fig. 8); the third one was presumably devoted to host a vat or another vessel, thus suggesting a tripartite food transformation activity. The western part of L.20 was raised due to the presence of a platform (B.214), introduced by a stone-lined step, with a big jar was smashed over it.<sup>27</sup> In front of the entrance to L.20, a small yard (L.30) introduced to the door of another possible unit (L.50). Roughly at the middle of L.30, in front of L.226, a mortar<sup>28</sup> was embedded into the floor, to be used for food preparation. In courtyard L.30, a basalt grinding stone and grinder were, in fact, found<sup>29</sup>, as well as fragmentary pots and jars with combed decoration. A third house (L.60)<sup>30</sup> was entered through a lane (L.40),<sup>31</sup> and, apparently, had the same orientation of L.20; its entrance was marked by a stone paved threshold (L.208). Two other rooms were identified to the south-west and west of L.20: L.70, which was delimited by a major wall (W.213) to the south and by a stone alignment (W.211) which leaned on W.81; and L.80, a curvilinear structure, flanking the rear wall (W.205) of L.20.

The overall picture provided by Area A is that of a relatively small village with rectangular houses flanked by courtyards and subsidiary structures (many of which curvilinear in plan) in use for a single constructive phase.

The investigation of lower layers (Phase 4) was carried out in very limited spots of Area A East and revealed the presence of more substantial structures of Early Bronze Age III (Batrawy III), which will be further explored in the next season.

<sup>26</sup> Respectively, KB.05.A.62, KB.05.A.43, KB.05.A.49, KB.05.A.56, KB.05.A.50.

<sup>27</sup> In L.20 a basalt pestle (KB.05.A.78) has been retrieved, as well as cooking and preservation wares, with plastic rope decorations and enveloped ledge-handles.

<sup>28</sup> KB.05.A.69.

<sup>29</sup> KB.05.A.57 and KB.05.A.63.

<sup>30</sup> A basalt grinding stone (KB.05.A.68) was retrieved in room L.60.

<sup>31</sup> A stone pestle (KB.05.A.61) and two combed pottery sherds were found in room L.40.

## 6. Area B: the Early Bronze III City-Wall

Area B was opened on the shallow depression at the centre of the northern edge of the site, where the gentle slope of the bedrock made easier the access to the town, and where the city-wall seemed preserved at a higher elevation, due to the deep accumulation. One trench was excavated across the city-wall in squares BpII6+BqII6 and BpII7+BqII7,<sup>32</sup> a square (BqII8) was investigated to the south inside the city-wall, and another couple of squares (BrII7+BsII7) were opened to the east on the outer face of the latter (fig. 9).

### 6.1. The Stratigraphy of Area B

Four stratigraphic phases have been preliminarily distinguished in Area B. Phase 1 illustrates a long period of abandonment, during which erosion and wind-blown activities accumulated a soft stratum of dust (topsoil). Phase 2 includes the foundation, use and collapse of a major Early Bronze IV structure, identified in BqII8, as well as two somewhat earlier pits dug against the inner face of the city-wall in BqII7. Phase 3 corresponds to the latest reconstruction (Activity 3c) and use (Activity 3b) of the city-wall, before the definitive abandonment of the EB III town (Activity 3a). Finally, Phase 4, illustrates the earliest use so far identified of the city-wall (Activity 4c) and its end, testified to by a violent destruction (Activity 4b), of which visible signs were detected inside the town.

### 6.2. Fringes of Batrawy IV village (Early Bronze IV)

The uppermost layer of occupation in Area B was represented by the corner of a building built just inside the previous collapsed city-wall in square BqII8 (fig. 10), which showed a relatively solid field-stone masonry (W.117) and a stone-paved installation (S.127) inside it. While inside the building, which extended towards the east, a floor of beaten earth was identified (L.122), outside it to the west an open area with a very partially preserved stone-flagged pavement (L.152) had been badly ravaged by later pillage activities.<sup>33</sup> Further to the north-west in square BqII7, two pits (P.129, P.130) were cut against the inner face of the collapsed city-wall, probably in order to be used as refuse pits;<sup>34</sup> one was eventually sealed with a heap of stones (F.113).

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<sup>32</sup> Due to the thickness of the city-wall, the areas actually excavated resulted to be the south-eastern quarter of square BpII6 and the southern half of BqII6 to the north of the wall, and the eastern half of BpII7 and square BqII7 to the south of it. The baulks in between these squares were removed at the end of the season for the sake of a better reading of the major structure.

<sup>33</sup> In the south-western corner of the square a curvilinear structure (W.123) may belong to a fence or a subsidiary room similar to those excavated in Area A.

<sup>34</sup> Ceramic materials from these pits resulted from the underlying earlier layers of Batrawy III; pottery sherds were very fragmentary.

### 6.3. The city-wall of Period Batrawy III (Early Bronze III)

The main feature so far identified in Area B is the massive stone-built city-wall, which has been brought to light in two stretches. The city-wall was WNW-ESE oriented in the westernmost stretch in BpII6+BqII6+BpII7+BqII7, and turned straight to the east in BrII7+BsII7. The wall was built with outer slightly battering faces made up with large boulders in the lower courses, and big stones in the upper ones, blocked with limestone chops and cobbles. The core of the wall was filled in with layers of middle-size stones tied by mud mortar. Both on the inner and outer face of the city-wall vertical partitions were visible, indicating that it consisted of juxtaposed blocks, as usual in defensive architecture of Early Bronze Age Southern Levant in order to stand out against earthquake effects. The width of the wall varies from 2.90 to 3.20 m, and its preserved height reaches 2.0 m. It shows at least a major reconstruction of the elevation, when the inner partition in separated blocks was abandoned.

In BpII7+BqII7, another massive structure (W.109) was brought to light, preliminary interpreted as a wall parallel to the city-wall, turning towards south (inside the city);<sup>35</sup> the corridor in between the two walls was filled in by layers of compacted earth and collapsed stones (F.106, F.118) from the superstructures of both the city-wall and wall W.109 (the latter felt down towards the north). Under this stratum of stones, a layer of destruction (F.124) covered an earthen floor (L.133), illustrating the later use of these structures (Phase 3).

The removal of floor L.133 allowed to identify a destruction layer (F.136, F.146), which was basically composed of sandy soil with ash and charcoal, thus attesting to the fierce fire which brought to a violent end the life of Phase 4 town. The layer of destruction covered a fine plastered floor (L.148), which at the present state of investigations is the earliest floor brought to light inside the town (fig. 9).

Archaeological deposits outside the city-wall were investigated in BpII6+BqII6 (west) and in BrII7+BsII7 (east). In the former trench the heap of collapsed stones (F.111) was higher and thicker than inside the city-wall, thus demonstrating that the latter felt down northwards; the largest boulders, fallen from the outer face of the wall, were found at the bottom of the heap, while small and medium size stones were on top. A thin layer of soil (F.112) was accumulated below the stones, corroborating the observation that the city-wall felt abruptly northwards; beneath F.111 and F.112 there was a floor of beaten earth (L.134), laid upon a preparation of limestone chops (F.140),<sup>36</sup> which presumably represents one major constructive phase (the last?) of Batrawy III defences. Underneath the layer of fragmentary stones there was a grey sandy filling (F.138), which covered a packed stratum of reddish clayish soil, including scattered pottery sherds (F.142). This stratum was laid upon a chalk gritty plastered floor (L.144), resting directly on the bedrock (fig. 11).

<sup>35</sup> The collapsed prosecution of W.109 in BqII8 shows very clearly that the wall turned decisively southwards.

<sup>36</sup> The layer of small limestone fragments was exposed for a too restricted area to establish if they actually represent a regularization of collapsed stones, or a real preparation for floor L.134.

In BrII7+BsII7 the same stratigraphy was encountered. The uppermost heap of collapsed stones (F.107, F.110) covered the eastern prosecution of floor L.134, resting on the preparation of limestone chops F.140.

The excavation along the outer face of the city-wall allowed to show the lowest courses of boulders of this imposing structure founded on the bedrock and slightly abutting off, in order to strengthen its outer foot.

The overall plan and elevation of the city-wall in Area B exhibit a very massive stone structure, with an articulated layout, including changes in orientation and offsets, depending both on the orography of the khirbet and on defensive reason, which can be compared with the fortification of a series of hilly urban centres of Southern Levant, such as Khirbet ez-Zeraqon and Tell el-Husn (Pella) in Transjordan, or Khirbet el-Makhruq, et-Tell ('Ai), Tell Ta'annek, and Khirbet Yarmouk in Palestine.

#### 6.4. Structures inside the city-wall of Period Batrawy III (Early Bronze III)

In BqII8, Period Batrawy III was represented by the southern collapsed prosecution of W.109, and by a round structure W.135 (fig. 12), discovered in the eastern half of the square, which was characterized by a 8 cm thick and well refined plaster revetment inside (a silos?). No floor was so far reached in this square, and various ceramic materials were found in the filling of this phase (F.132).

### 7. Conclusions

The first season of excavation at Khirbet al-Batrawy confirmed that this site was a major Early Bronze Age centre of the Upper Wadi az-Zarqa basin, occupied by a fortified town in the Early Bronze III and re-occupied by a village in the Early Bronze IV, with almost no successive superimpositions nor occupations.<sup>37</sup>

Located on the roadway connecting the Black Desert of basalt stone (and the caravan tracks crossing it north-south towards Arabia and Syria, and west-east towards Mesopotamia) of north-eastern Jordan to the trails of the az-Zarqa and Jordan Valleys, Batrawy controlled a strategic junction at the time of the earliest urban development of this region, and, in the meantime, it played the role of central place in respect of the Upper Wadi az-Zarqa basin, a fertile ecological niche at the fringes of the semi-arid steppe. The site seems thus highly promising, especially because it fully flourished during the Early Bronze III, thus filling a certain gap in the archaeological information so far available from the region. Of course, deeper and larger investigations are needed to confirm the preliminary data illustrated in the present contribution. Anyway, the systematic excavations started by Rome «La Sapienza» University in cooperation with the Queen Rania's Institute of the Hashemite University of Zarqa, under the aegis of the Department of Antiqui-

<sup>37</sup> It is to be noted that of all the EB II sites of the az-Zarqa Valley (Jebel er-Reheil, Tell es-Sukhne North, Tell el-Bireh), Khirbet al-Batrawy is at the moment the only one which shows the presence of EB III materials and structures, very rare in the surrounding area (Jebel er-Reheil, for instance, was occupied in the EB II, and then abandoned and re-occupied in the EB IV; Palumbo *et al.* 1996: 385-386, 393-401).

ties of Jordan, hopefully will contribute not only to a thorough knowledge of its history and material culture, but also will offer the opportunity of rehabilitate it for a tourist valorisation of its area.

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**Fig. 1: General view of the site of Khirbet al-Batrawy, from north. To be noted the characteristic triangular shape of the khirbet, isolated and protected on the top of a natural rocky hill.**

Archaeological Period	Absolute Chronology	Period of the site	Phases of Area A	Phases of Area B
Early Bronze I <sup>38</sup>	3400-3000 BC	Batrawy I	-	-
Early Bronze II	3000-2700/2650 BC	Batrawy II	-	-
Early Bronze IIIA	2700/2650-2450 BC	Batrawy IIIa	-	Phase 4
Early Bronze IIIB	2450-2300 BC	Batrawy IIIb	Phase 4b-d	Phase 3b-c
Early Bronze IVA	2300-2200 BC	Batrawy IVa	Phase 4a	Phase 3a
Early Bronze IVB	2200-2000 BC	Batrawy IVb	Phase 3	Phase 2
Later periods	2000 BC-1900 AD	Batrawy V	Phase 2	-
Modern frequentation	1900-2005 AD	Batrawy VI	Phase 1	Phase 1

**Tab. 1: Preliminary periodization of the occupational phases at Khirbet al-Batrawy.**

<sup>38</sup> Neither structures nor materials of this period have been found on the site so far, even though a possible occupation of the khirbet during the Early Bronze I has to be tested.

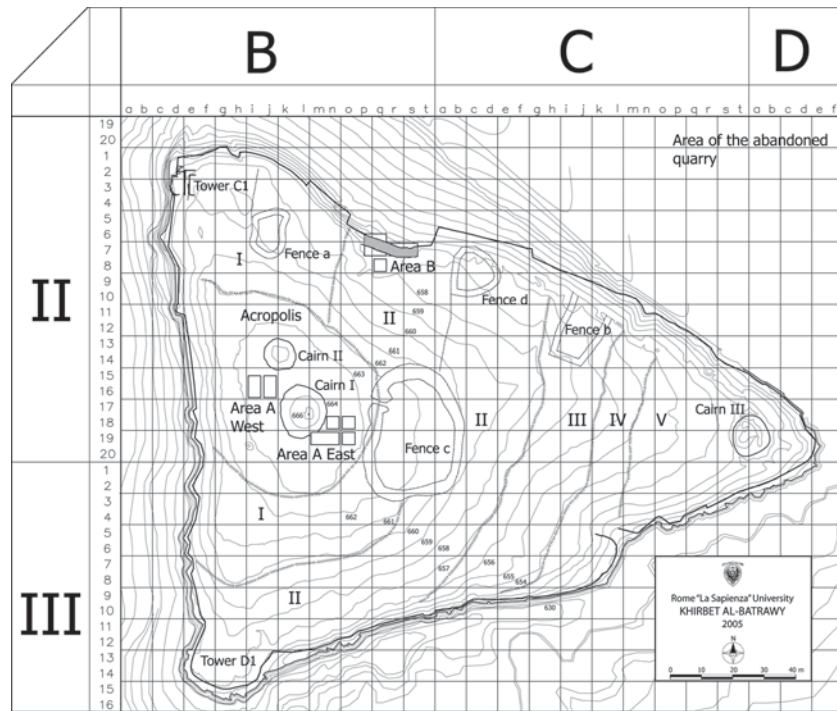


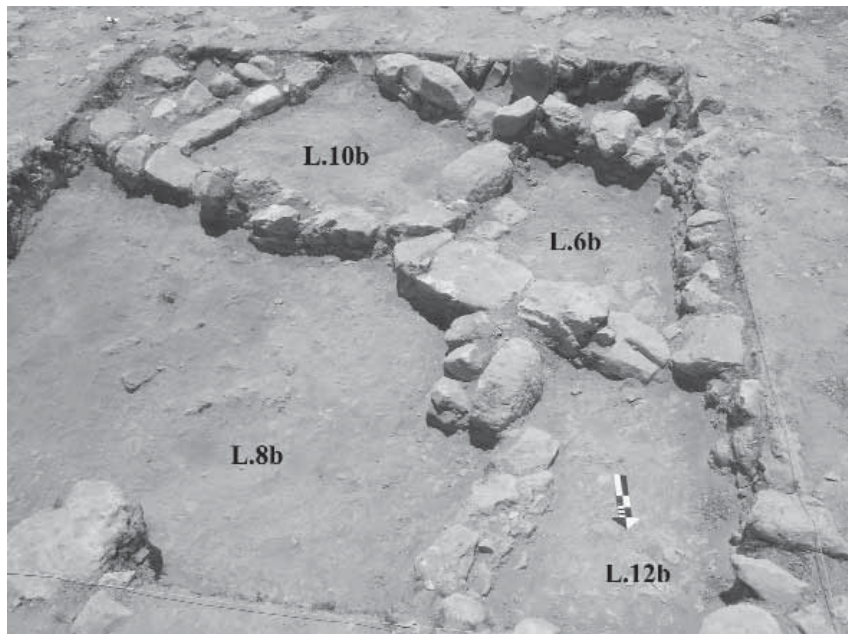
Fig. 2: Topographical plan of Khirbet al-Batrawy at the end of the 2005 seas on of excavations.



Fig. 3: The stone basement of the rectangular tower erected in the north-western corner of the site (Tower C1), from south.



**Fig. 4:** General view from south of the domestic structures and circular devices in the eastern sector of the Batrawy IV (EB IV) village on the Acropolis of Khirbet al-Batrawy (squares BmII19+BnII19; Phase 3).



**Fig. 5:** The small rectangular rooms of the Batrawy IV village in BoII18, from south (Phase 3).

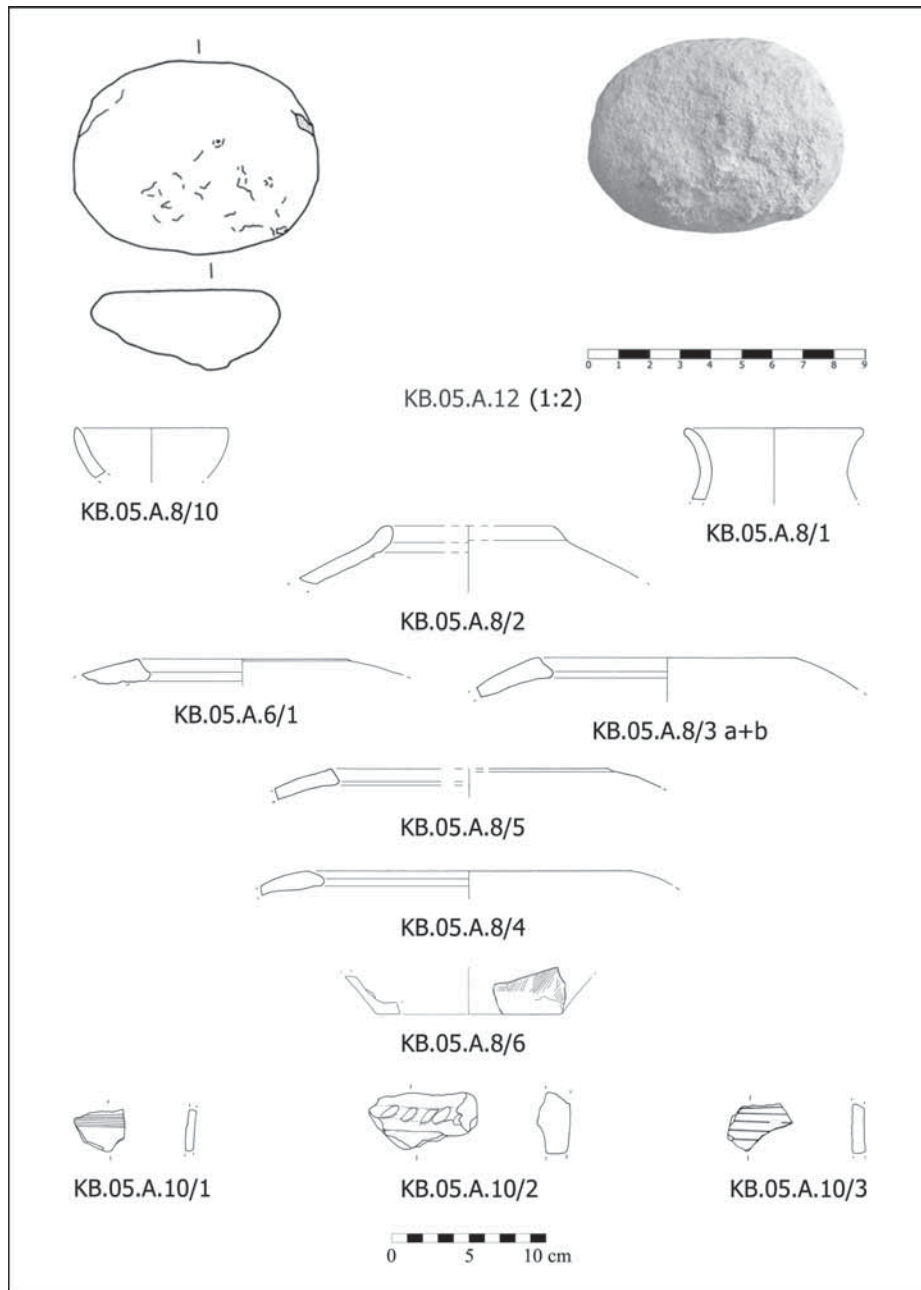
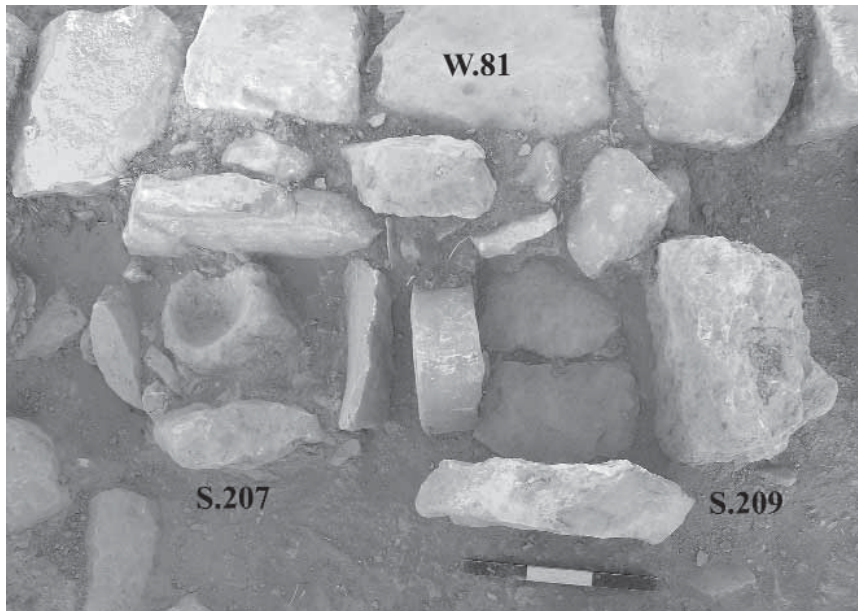


Fig. 6: EB IV materials retrieved in rooms L.6b, 10b and courtyard L.8b, in square BnII18 (Phase 3b).



**Fig. 7:** General view from south-east of the western sector of the Batrawy IV village; at the center, house L.20 and courtyard L.30; on the right, lane L.40 and room L.60 (Phase 3).



**Fig. 8:** The two square cist-installations S.207 and S.209, built against the southern wall W.81 of house L.20.



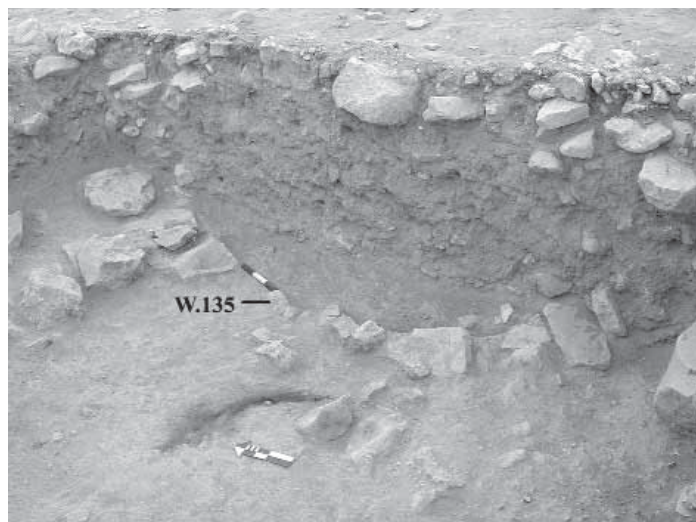
**Fig. 9: General view of Area B from west with the EB III fortifications, the plastered floor L.148 inside the city-wall (Phase 4) and the structures of Phase 3 excavated in BqII8.**



**Fig. 10: The fringes of the Batrawy IV (EB IV) village in Area B, with building W.117 and the stone-paved installation S.127 in BqII8 (Phase 2), from south-east.**



**Fig. 11:** The chalk gritty plastered floor L.144 excavated outside the city-wall W.103 in BpII6+BqII6 (Phase 4), from north-west. To be noted the lowest courses of boulders of the city-wall founded on the bedrock and slightly projecting off.



**Fig. 12:** The semicircular structure W.135 in BqII18 (Phase 3), from west.