KHIRBET AL-BATRAWY II

The EB II city-gate, the EB II-III fortifications, the EB II-III temple
Preliminary report of the second (2006) and third (2007) seasons of excavations

Edited by LORENZO NIGRO

ROME 2008
«LA SAPIENZA» EXPEDITION TO PALESTINE & JORDAN
ROME «LA SAPIENZA»

EXPEDITION TO PALESTINE & JORDAN
KHIRBET AL-BATRAWY II

The EB II city-gate, the EB II-III fortifications, the EB II-III temple. Preliminary report of the second (2006) and third (2007) seasons of excavations

Edited by

LORENZO NIGRO

with contributions by

LORENZO NIGRO, MAURA SALA, KHALED DOUGLAS, GIOVANNA MARINELLI, ANDREA POLCARO and FRANCESCA ALHAIQUE

ROME 2008
L. Nigro (ed.)
Khirbet al-Batrawy II. The EB II city-gate, the EB II-III fortifications, the EB II-III temple. Preliminary report of the second (2006) and third (2007) seasons of excavations
(= Rome «La Sapienza» Studies on the Archaeology of Palestine & Transjordan, 6)

© Copyright 2008 «La Sapienza» Expedition to Palestine & Jordan
Sezione Vicino Oriente - Dipartimento di Scienze Storiche Archeologiche e Antropologiche dell'Antichità
Via Palestro, 63 - 00185 Rome - ITALY

All rights reserved. Copy or reproduction of parts of text or illustrations is strictly forbidden without the explicit written permission given by «La Sapienza» Expedition to Palestine & Jordan.

pp. 412, 17 x 24 cm, B/W illustrations.

ISSN 1826-9206
CONTENTS

0. Premise: Rome “La Sapienza” Expedition to Jordan
   [by Lorenzo Nigro] ................................................................. v
   0.1. Foreword: general framework of the Pilot Project .................... v
   0.1.1. The second season (2006) of excavations at Khirbet al-Batrawy ... vi
   0.1.2. The third season (2007) of excavations at Khirbet al-Batrawy .... vii
   0.2. Introduction to the present volume ..................................... viii
   Acknowledgements ...................................................................(ix

1. Introduction [by Lorenzo Nigro] ................................................... 1
   1.1. Activities .............................................................................. 1
   1.1.1. Excavations and surveys in the second season (2006) .............. 2
   1.1.2. Excavations and surveys in the third season (2007) .................. 2
   1.1.3. Restorations in the second (2006) and third season (2007)........ 4
   1.2. Topographical observations on the site and its surroundings ....... 5
   1.2.1. The edge of hill on the southern side .................................... 6
   1.3. Stratigraphy and chronology ................................................. 7

2. Area A West: the Early Bronze II-III structures and the Early Bronze
   IV village on the western side of the Acropolis [by Lorenzo Nigro] .... 9
   2.1. Stratigraphy [by Maura Sala] ................................................ 10
   2.1.1. Phase 1: recent periods and ephemeral frequentation
          of the Acropolis .................................................................... 11
   2.1.2. Phase 2: later building activities ........................................ 12
   2.1.3. Phase 3: stratigraphy of Batrawy IV village ......................... 13
   2.1.4. Phase 4: stratigraphy of Batrawy IIIb structures ................... 18
   2.1.5. Phase 5: Batrawy IIIa occupation ....................................... 18
   2.1.6. Phase 6: Batrawy II occupation ......................................... 19
   2.2. Architecture & finds: the Early Bronze II-III structures
       and the Early Bronze IV Village on the Acropolis [by Lorenzo Nigro] ... 20
   2.2.1. Structures of Period Batrawy II-IIIa (Early Bronze II-IIIA) ..... 20
   2.2.2. Structures of Period Batrawy IIIb (Early Bronze IIIB) ............ 21
   2.2.3. The village of Period Batrawy IV (Early Bronze IVB) ............. 28
   2.2.4. General overview of the Batrawy IV village in Area A West ...... 36
   List of pottery, objects and samples by contexts ................................ 37
   Catalogue of pottery and small finds [by Maura Sala] ..................... 39

3. Area B North: the Early Bronze II-III fortification system
   [by Lorenzo Nigro] .................................................................. 65
   3.1. Stratigraphy [by Lorenzo Nigro - Andrea Polcaro] ..................... 66
   3.1.1. Phase 1: abandonment ..................................................... 67
   3.1.2. Phase 2: Batrawy IV installations ....................................... 67
   3.1.3. Phase 3: stratigraphy of Batrawy IIIb fortification system ...... 68
3.1.4. Phase 4: stratigraphy of Batrawy IIIa fortification system .......... 73
3.1.5. Phase 5: stratigraphy of Batrawy II fortification system .......... 75
3.2. Architecture & finds: the EB II city-gate and the EB II-III triple line of fortifications [by Lorenzo Nigro] .................................................. 77
3.2.1. The earliest city-wall and city-gate
(Period Batrawy II, Early Bronze III) ............................................... 77
3.2.2. The double city-wall of Period Batrawy IIIa (Early Bronze IIIA) .. 89
3.2.3. The triple city-wall of Period Batrawy IIIb (Early Bronze IIIB) .... 100
3.2.4. The final destruction of Batrawy IIIb defensive system .......... 101
3.2.5. The outer embankment of Period Batrawy IV (Early Bronze IVB) 102
List of pottery, objects and samples by contexts ..................................105
Catalogue of pottery and small finds [by Maura Sala] ..........................107

4. Area B South: the Early Bronze IIIIB quarter and the Early Bronze IV village inside the city-wall [by Lorenzo Nigro] .................................127
4.1. Stratigraphy [by Giovanna Marinelli] ..........................................127
4.1.1. Phase 1: abandonment ..........................................................128
4.1.2. Phase 2: stratigraphy of Batrawy IV dwelling quarter ...............129
4.1.3. Phase 3: stratigraphy of Batrawy IIIb structures ......................137
4.1.4. Phase 4: stratigraphy of Batrawy IIIa occupation ....................145
4.2.1. Layers of Period Batrawy IIIa (Early Bronze IIIA)
inside the city-wall .................................................................148
4.2.2. Building B1 of Period Batrawy IIIb (Early Bronze IIIIB) .......... 151
4.2.3. The dwelling quarter of Period Batrawy IV (Early Bronze IVB)
on the northern slope ..............................................................164
List of pottery, objects and samples by contexts ..................................177
Catalogue of pottery small finds [by Maura Sala] ................................181

5. Area D: the Early Bronze III fortification structures and the Early Bronze IV occupation at the south-western corner of the site [by Khaled Douglas - Lorenzo Nigro] ............................................241
5.1. Stratigraphy ..............................................................................242
5.2. Architecture: the EB III south-western tower
and the EB IV occupation ..............................................................243
5.2.1. Early Bronze III defensive structures at the south-western corner of the site .................................................................243
5.2.2. The Early Bronze IV occupation ...........................................244

6. Area E: the Early Bronze II city-wall and related layers
on the southern side of the hill [by Maura Sala] ................................245
6.1. Stratigraphy ..............................................................................246
6.1.1. Phase 1: abandonment ..........................................................248
6.1.2. Phase 2: erosion of Batrawy III layers ...................................248
6.1.3. Phase 3: destruction of Batrawy IIIa fortification system .........248
6.1.4. Phase 4: stratigraphy of Batrawy II fortification system ..........250
6.2. Architecture & finds: the EB II city-wall on the southern side of the site.................................................................251
List of pottery, objects and samples by contexts..........................256
Catalogue of pottery and small finds [by Maura Sala] ..............257

7.1. Stratigraphy [by Maura Sala].................................................270
  7.1.1. Phase 1: topsoil and ephemeral frequentation of the site ....270
  7.1.2. Phase 2: stratigraphy of Batrawy IV village....................272
  7.1.3. Phase 3: Phase 3: Batrawy III re-construction of the broad-room temple .........................................................275
  7.1.4. Phase 4: Batrawy II erection of the broad-room temple ......275
7.2. Architecture & finds: the Broad-Room Temple and the EB IV installations [by Lorenzo Nigro]........................................276
  7.2.1. Batrawy II Temple F1.......................................................276
  7.2.2. Batrawy III Temple F2.....................................................285
  7.2.3. The broad-room temple and its setting in the religious architectural tradition of Southern Levant..........................292
  7.2.4. The village of Period Batrawy IV on the easternmost Terrace V.294
List of pottery, objects and samples by contexts.........................306
Catalogue of pottery and small finds [by Maura Sala] ..............307

8. Bibliography.............................................................................319

Appendix A. Faunal remains [by Francesca Alhaique] ..................327
Appendix B. Along the river: 2007 survey of the Upper and Middle Wadi az-Zarqa [by Maura Sala] .............................................359
Chapter 0  

**0. Premise: Rome “La Sapienza” Expedition to Jordan**  
[by Lorenzo Nigro]

After the preliminary survey of Upper Wadi az-Zarqa in December 2004, and the first season of excavations at Khirbet al-Batrawy (May-June 2005), research activities of Rome “La Sapienza” University continued in years 2006 and 2007 with systematic excavations and restorations at the site of Khirbet al-Batrawy, chosen as focus of the Pilot Project (§ 0.1.), and with a survey of the valley itself aimed at a finer definition of human settlement variations during the Bronze and Iron Ages.

**0.1. Foreword: general framework of the Pilot Project**

The Pilot Project of surveys, excavations and restorations works in Upper Wadi az-Zarqa started in the ‘80ies of the last century thanks to the work of Gaetano Palumbo, and it was first aimed at a comprehensive territorial study of this crucial region of Jordan, where several decisive historical transformations and cultural achievements took place in pre-classical periods. In year 2004, Rome “La Sapienza” resumed research activities choosing a major Early Bronze Age site, Khirbet al-Batrawy, as the focus of a thorough study on the origins of Jordanian early urbanism. The Pilot Project foresees an overall study of the site and of the Upper Wadi az-Zarqa Valley, its relationship with the landscape and its history, architecture and material culture. Moreover, due to the peculiar characteristics of the hill of Batrawy, a rehabilitation project has been put forward, foreseeing the restorations of the Early Bronze Age city, and the implementation of an archaeological...
park. For the latter reasons, systematic restoration works were carried on since the first season, mainly at the northern city-wall and city-gate (Area B North), but also on the Acropolis (Area A West) and on the easternmost terrace (Area F), where a major public building was discovered. The Pilot Project, conceived in cooperation with the Department of Antiquities, also envisages the creation of a local antiquarium, where finds from the site will be displayed.

Fig. 0.1 - General view of the site of Khirbet al-Batrawy (in the centre), dominating the Upper Wadi az-Zarqa Valley (in the right background), from north (2007).

0.1.1. The second season (2006) of excavations at Khirbet al-Batrawy
The second season of excavations at Khirbet al-Batrawy took place from May 5th to June 15th 2006 on the behalf of the Jordan Department of Antiquities and its director Dr. Fawwaz al-Khraysheh, with the support of Rome "La Sapienza" University, the Italian Ministry of Foreign Affairs, and the Italian Ministry of Education, University and Scientific Research, and the partnership of the Queen Rania's Institute of Tourism and Heritage of the Hashemite University of Zarqa.

5 Nigro 2006d; 2007a.
6 Rome "La Sapienza" team in year 2006 included: L. Nigro, director; M. Sala, Supervisor of Areas A West, E and F; A. Polcaro, Supervisor of Area B North; G. Marinelli and P. Vecchio, Supervisors of Areas 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 an invaluable support to the Expedition, was Inspector Romel Ghrayib.
7 Students and scholars of the Queen Rania's Institute of Tourism and Heritage of the Hashemite University of Zarqa participated in the dig under the direction of Dr.
Excavations were carried out in six areas: Area A West on the Acropolis (§ 2); Area B North across and outside the northern fortification line (§ 3); Area B South just inside the northern fortification line (§ 4); Area D at the south-western corner of the hill; Area E roughly at the middle of the southern side of the site, just inside the fortification line (§ 5); Area F on the easternmost terrace (§ 6).

During the season restoration works were also carried out at the northern city-wall in Area B North (§ 1.1.2.), starting from the eastern stretch of the main EB II-III city-wall westwards.

0.1.2. The third season (2007) of excavations at Khirbet al-Batrawy

The third season of excavations at Khirbet al-Batrawy took place from May 20th to June 20th 2007 on the behalf of the Jordan Department of Antiquities and its director Dr. Fawwaz al-Khraysheh, with the support of Rome “La Sapienza” University, the Italian Ministry of Foreign Affairs, and the Italian Ministry of Education, University and Scientific Research, and the partnership of the Queen Rania’s Institute of Tourism and Heritage of the Hashemite University of Zarqa. During the third season, excavations were focused on two areas: Area B North across and outside the EB II-III northern fortification line and the EB II city-gate (§ 3), and Area F, where the EB II-III broad-room temple had been identified (§ 6).

Restoration works during the third campaign were concentrated on the EB II city-gate in Area B North (§ 1.1.2.), which was fully rehabilitated (fig. 0.2-0.3).

0.2. Introduction to the present volume

Results of the second and third seasons (2006, 2007) are thoroughly illustrated in the following chapters. The Introduction (Chapter 1) is dedicated to an overall presentation of the activities carried out during the two seasons, as well as to the updating of the general topography and stratigraphy of the site in the light of latest results.
Fig. 0.2 - General view from north of the site of Khirbet al-Batrawy at the end of 2007 season, with the restored stretch of the main EB II-III northern city-wall and EB II city-gate.

Chapters 2-7 describe excavation results obtained respectively in Areas A West, on the Acropolis, Area B North, on the northern line of fortifications, Area B South, inside the northern city-wall, Area D, in the south-western corner, Area E, inside the southern fortification line, and Area F, on the lowest Terrace V, with stratigraphy, architecture and finds; all chapters are followed by the list of finds arranged by contexts (with the aim of highlighting associations between pottery, tools and objects and to provide a comprehensive distributive figure), and by a detailed catalogue of retrieved items, including drawings and photos in plates, with dating and, when possible, comparisons.

Appendix A by Francesca Alhaique is the report on faunal remains retrieved in the two 2006 and 2007 seasons. The catalogue of collected animal bones samples allows to check references previously offered in the main text during the description of finding contexts.

---

10 Pottery is always illustrated by scale 1:4; the scale of objects drawings and photos is indicated in plates. Pottery and objects drawings were realized in year 2006 by M. D’Andrea, G. Pagliari and V. Tumolo; in year 2007 they were realized by V. Tumolo. Pottery photos were done by A. Di Michele and E. Gallo. Pottery register was filed by M. Sala. Object register was filed by D. Montanari. Sample register was filed by I. Salimbeni, P. Vitolo and A. Di Michele. Plates of pottery and objects were done by E. Gallo, D. Montanari and M. Sala.

11 Catalogues were filed by M. Sala.
Appendix B by Maura Sala is the detailed report on the survey carried out by the Expedition in 2007, with a systematic presentation of sites and some general remarks on the road network and settlement variations during the Early Bronze in the Upper Wadi az-Zarqa.

Acknowledgements

The Expedition wishes to express his deepest thank to Dr. Fawwaz al-Khraysheh, General Director of the Department of Antiquities of Jordan, for his enduring support, and to all the staff of the Department for its effective and prompt cooperation. A particular appreciation is addressed to the Head of Excavation Sector, Dr. Khalil Hamdan, to the Inspector, Romil Ghrayib, and to the personnel of the Zarqa Office of the Department for their helpful collaboration on the field.

The activity of Rome “La Sapienza” Expedition to Jordan was made possible thanks to the encouragement of Prof. Paolo Matthiae, whom I wish to deeply thank, and to the strong support of the Department of Historical, Archaeological and Anthropological Sciences of Antiquity of Rome “La Sapienza” University, in the person of its former Director, Prof. Clementina Panella, and its current Director, Prof. Gilda Bartoloni. A grateful thank is also due to the other Academic Authorities of Rome “La Sapienza” University, the former President, Prof. Renato Guarini, the current President, Prof. Luigi Frati, the former Dean of the Faculty of Humanistic Sciences, Prof. Roberto Antonelli, the current Dean of the Faculty, Prof.
Roberto Nicolai, Prof. Mario Liverani, and all members of the Research Commission of the University.
The project of archaeological investigation and restoration at Khirbet al-Batrawy is supported by Rome “La Sapienza” University, the Italian Ministry of Foreign Affairs$^{12}$, and the Italian Ministry of Education, University and Scientific Research. It was carried out in cooperation with the Queen Rania’s Institute of Tourism and Heritage of the Hashemite University of Zarqa, under the scientific coordination of Dr. Khaled Douglas, Head of the Department of Sustainable Tourism. Our thank is also extended to the former President of the Hashemite University, Prof. Omar Shdeifat, to the current President, Prof. Abdelrahim Hunaiti, and to the Dean of the Queen Rania’s Institute of Tourism and Heritage, Prof. Ahmad Al-Malabeh.
The Expedition express its gratefulness to the Italian Embassy in Amman, in the persons of the former Ambassador of Italy, H.E. Gianfranco Giorgolo, and the present Ambassador of Italy, H.E. Francesco Fransoni, Dr. Marco Canaparo and Dr. Emanuele Manzitti; and to the Ambassador of the Hashemite Kingdom of Jordan in Italy, Her Royal Highness Wijdan Al Hashemi, for their kind cooperation.
As results of our work start to be divulgated, I wish to thank all personnel at Rome “La Sapienza” University who made possible prompt publication of excavations reports (Dr. Isabella Brancoli Verger), and the creation of our internet site (www.lasapienzatojordan.it; Dr. Salvatore Tricoli), and the members of the Administrative Secretariat.
Last but not least, I wish to thank all the young members of the Expedition, for their abnegation and positive participation in the excavation.

Rome, 20$^{th}$ December 2008

Lorenzo Nigro

---

$^{12}$ A special thank is addressed to Counsellor Luciano Galli, and Dr. Paola Cordone of the General Directorate for Cultural Promotion and Cooperation, Office V.
1. Introduction [by Lorenzo Nigro]

The second (2006) and third (2007) seasons of excavations, restorations
and surveys in the Upper Wadi az-Zarqa and at the site of Khirbet al-
Batrawy (fig. 1.1)\(^1\) provided a significant amount of data concerning the
history of this Early Bronze II-III urban centre of Southern Levant, as well
as they illustrated the pivotal role of the ancient road network played at
that time by Upper Wadi az-Zarqa as easternmost fluvial basin at the
fringes of the desert, and favourite bridge towards the Jordan Valley\(^2\).
Moreover, during the same seasons, systematic restorations allowed to
protect some of the monuments brought to light by excavations (§ 1.1.2.).

Fig. 1.1 - General view of the northern side of Khirbet al-Batrawy with
the restored EB II-III main city-wall and EB II city-gate, from north
(2007).

1.1. Activities on the field: archaeological investigations and
surveys and restorations

Research and restoration activities were carried out with the strong
cooperation of the Department of Antiquities, which also was able to
expropriate the land occupied by the site, and to actively take part in
logistic operations and restoration works (see acknowledgements § 0.3.).

---

\(^1\) Nigro 2006a; 2006b; 2006d; 2007a; 2007b; 2008; in press; Nigro ed. 2006;
Nigro - Sala - Polcaro 2008.

1.1.1. Excavations and surveys in the second season (2006)

During the second season (2006), excavations were conducted in six areas (fig. 1.2):

- Area A West, on the Acropolis, where part of a wall belonging to an EB II-III major building, EB IIIB domestic installations, and a group of EB IVB dwellings were exposed (§ 3);
- Area B North, on the northern slope of the hill, where the EB II city-gate and the triple line of fortifications of the EB II-III city were uncovered (§ 4);
- Area B South, inside the northern EB II-III main city-wall, where an EB IIIB building (B1), and a cluster of EB IVB dwellings with at least two structural phases were brought to light;
- Area D, at the south-western corner of the khirbet, where an EB II-III tower-fortress (D1), partially re-employed in Early Bronze IVB, was delimited (§ 5);
- Area E, roughly at the middle of the southern edge of the site, where a stretch of the main EB II fortification wall was investigated;
- Area F, on the easternmost Terrace V, where a major EB II-III Breitraum building and a later group of EB IVB houses were brought to light (§ 6).

Moreover, during season 2006 a survey of the immediate surroundings of the site was carried out, exploring the steep slopes of the khirbet (fig. 1.3) and of the nearby hills.

1.1.2. Excavations and surveys in the third season (2007)

During the third season (2007), excavations were concentrated on two areas, since the season was mainly devoted to restoration and survey:

- Area B North, where the area facing the EB II city-gate and west of it was further investigated;
- Area F, where the EB II-III broad-room building and the EB IVB dwelling quarter were further explored.

A systematic survey was then carried out in Upper Wadi az-Zarqa, checking all EB centres and indentifying some previously unknown sites; moreover, the paleo-environment and the ancient road-network of the valley were studied through geo-morphological and topographic investigations and analyses.

---

4 See Appendix B.
5 Nigro - Sala - Polcaro 2008, §§ 1, 3-4.
Fig. 1.2 - Topographical plan of Khirbet al-Batrawy (2006-2007).

Fig. 1.3 - General view from south of the southern cliffs of Khirbet al-Batrawy, with the EB III semi-circular tower in the south-western corner (to the left).
1.1.3. Restorations in the second (2006) and third seasons (2007)
Keeping safe and valorising monuments uncovered at Khirbet al-Batrawy has been a strategic goal of ROSEPAJ since the beginning of the work. The discovery of the EB II-III fortifications and city-gate on the northern side of the hill, the only side approachable by visitors, made it necessary to proceed with systematic restoration works, which were carried out starting from the second season (2006). The main EB II-III inner city-wall, made of big limestone blocks and boulders and preserved up to 2 m (§ 3.2.1.), was restored for a stretch of 12 m, starting from square BsII7 and proceeding westwards up to square BoII6.
Restoration consisted of cleaning and protection of the upper surface of the wall and of a strip 0.5 m high on the façade walls (both inner [W.121 + W.105 + W.161] and outer [W.101 + W.103 + W.163]) from the upper edges down (figs. 1.4-1.5). Blocks and boulders were fixed with antique-like mortar, in order to prevent gradual dismantling and erosion. Restoration works allowed to appreciate the building technique of the city-wall, with the inner and outer curtain walls and the filling of the wall body (W.104) consisting of regular layers of stones (§ 3.2.1.).

Fig. 1.4 - Restoration works at the EB II-III city-wall of Khirbet al-Batrawy (2006).

---

6 Nigro 2005, § 0.2; Nigro ed. 2006, iii-vii.
2008 Introduction 5

Fig. 1.5 - General view of the EB II-III city-wall of Khirbet al-Batrawy, from east; in the foreground, the restored stretch of the city-wall (2006).

Fig. 1.6 - General view of the EB II-III restored city-wall and EB II city-gate, from north-east (2007).
During the third season (2007) restoration activities were focused on the EB II city-gate (fig. 1.6; § 3.2.1.). The door-jambs were fully restored from top to bottom (figs. 1.7-1.9); also the entrance step and the floor of the passage inside the gate were re-plastered and protected. Restorations carried out not only preserved monuments from natural and human damages and corruption, but made them readable to the general visitor, in view of future realization of tourist paths through the EB II-III city-wall and city-gate.

Fig. 1.7 - Restored eastern door-jamb W.183, from north-west.

Fig. 1.8 - Restored western door-jamb W.156, from north-east.

Fig. 1.9 - Restored eastern door-jamb W.183 from the top of city-wall W.163 + W.161.
1.2. Topographical observations on the site and its surroundings
During the second (2006) and third (2007) seasons the surroundings of Khirbet al-Batrawy were carefully explored with the aim of investigating possible outworks at the foot of the steep slopes and cliffs encircling the hill, as well as of distinguishing the paths/roads giving access to the site. In the second season (2006) also the western slopes of the hill facing Khirbet al-Batrawy to the north were explored. Here several caves were identified, possibly used as tombs for the inhabitants of Batrawy. In the third season (2007) the southern side of the hill was examined, where the modern city has reached the very foot of the site (fig. 1.3).

The examination of the western and southern slopes of the cliff showed that the edge of the hill was intentionally cut and modelled in order to make it inaccessible and to protect the city-walls from attack.

1.2.1. The edge of the hill on the southern side
An accurate topographic survey of the southern slopes of the hill of Batrawy was carried out during the third season (2007). The examination of the rocky cliffs showed that a vertical steps protected the south-western corner of the site, directly overlooking the path approaching the site from the Zarqa river bank, on this side. Vertical cuts and rocky steps protected the whole side, especially at the bottom of the city-wall running on the upper edge of the rock. Only an interruption was noticed in correspondence of the southern city-gate, where the path climbing the slope, after a turn, entered the line of fortification7. At the bottom of the cliff, to the south-west, a series of caves and vertical cuts (fig. 1.3) possibly indicate an area from where limestone blocks employed in the stone foundations of the city-walls were taken away.

1.3. Stratigraphy and chronology
Archaeological investigations carried out during the second and third seasons of excavations allowed to further clarify the stratigraphic sequence put forward after the first season (tab. 1.1). In various areas stratigraphy was established down to bedrock and phases appeared more clearly subdivided. Namely, in Area A West, Batrawy III (EB III) structural layers were distinguished; in Area B South, two superimposed Batrawy IV (EB IVB) phases were identified; in Area B North, the whole EB II-III sequence of defensive structures was reconstructed; as well as in Area D and F, where respectively the south-western Tower D1, and the broad-room Temple F, with at least a Batrawy II and III constructional phases, were

7 Nigro ed. 2006, 32, figs. 1.37-1.38.
superimposed by Batrawy IV dwellings. Moreover, some sparse finds, supported the hypothesis of a pre-urban frequentation of the khirbet during the Early Bronze I. Updated data confirm the general stratigraphy of the site as subdivided into six main periods (Batrawy I-VI): Batrawy I when the site was a satellite cult place of the nearby Jnaneh; Batrawy II-III represent the early urban floruit of the settlement during the Early Bronze Age II-III, between 2850-2300 BC, when the site was a strongly fortified town; Batrawy IV, when a EB IVB rural village is the latest stable occupation of the hill; Batrawy V, which includes all sporadic frequentations (with the erection of three Cairns) of the site after its abandonment around 2000 BC until modern times; Batrawy VI, which groups sporadic finds from irregular frequentation of the hill in modern times.

<table>
<thead>
<tr>
<th>Site Period</th>
<th>Archaeological Period</th>
<th>Absolute Chronology</th>
<th>Stratigraphic phases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batrawy I</td>
<td>EB I</td>
<td>3400-3000 BC</td>
<td>-</td>
</tr>
<tr>
<td>Batrawy II</td>
<td>EB II</td>
<td>3000-2700 BC</td>
<td>Phase 6 Phase 5b-a</td>
</tr>
<tr>
<td>Batrawy IIIa</td>
<td>EB IIIA</td>
<td>2700-2500 BC</td>
<td>Phase 5b-a Phase 4b-a Phase 4b-a</td>
</tr>
<tr>
<td>Batrawy IIIb</td>
<td>EB IIIB</td>
<td>2500-2300 BC</td>
<td>Phase 4b-a Phase 3c-b Phase 3d-b</td>
</tr>
<tr>
<td>Batrawy IVa</td>
<td>EB IVA</td>
<td>2300-2200 BC</td>
<td>- Phase 3a Phase 3a Phase 2</td>
</tr>
<tr>
<td>Batrawy IVb</td>
<td>EB IVB</td>
<td>2200-2000 BC</td>
<td>Phase 3d-a Phase 2d-a Phase 2e-a</td>
</tr>
<tr>
<td>Batrawy V</td>
<td>Later Periods</td>
<td>2000 BC-1950 AD</td>
<td>- - - -</td>
</tr>
<tr>
<td>Batrawy VI</td>
<td>Contemporary frequentation</td>
<td>1900-2007 AD</td>
<td>Phase 1 Phase 1 Phase 1 Phase 1</td>
</tr>
</tbody>
</table>

Tab. 1.1 - Archaeological periodization and stratigraphic phases of Khirbet al-Batrawy.

As regards general periodization and chronology, Batrawy I period may be tentatively considered corresponding to EB IB (3200-3000 BC); Batrawy II, instead, begins somewhat later of Palestinian/Transjordanian EB II, i.e. in EB IIB (2850-2700 BC). Conversely, Batrawy IIIa roughly corresponds to EB IIIA (2700-2500 BC), while Batrawy IIIb to EB IIIB (2500-2300 BC). After the end of the urban phase, around 2300 BC, a gap of occupation follows, so that Batrawy IV should be synchronized with EB IVB (2200-2000 BC). Batrawy V covers the time span from the abandonment of the hill around 2000 BC and to Islamic Period.
2. Area A West: the Early Bronze II-III structures and the Early Bronze IV village on the western side of the Acropolis
[by Lorenzo Nigro]

Archaeological investigations in Area A West, on top of the Acropolis in Terrace I, were carried on in the second season (2006) widening the excavation area to the west by opening squares BkII15 (southern half) and BkII16, and to the south by opening squares BiII17 and BjII17, where a further portion of the EB IV village was excavated. Moreover the dig was deepened down to the bedrock in order to obtain a complete sequence of occupation in the area in the southern half of squares BiII15 and BjIII15, and in squares BiII16 and BjII16, where after the removal of some ruined installations of Batrawy IV village excavated in 2005 (fig. 2.1), EB II-III structures were brought to light. Baulks BiII15/BjII15, BiII16/BjII16, BjII15/BkII15 and BkII16/17 were excavated progressively during the dig (fig. 2.2).

Fig. 2.1 - Domestic structures of Batrawy IV village excavated in Area A West at the end of 2005 season, from south-west.

1 Nigro 2006d, 57; 2007a, 348-349, fig. 3.
2 Nigro 2006a, 238-240, figs. 17-18; 2006b, 677-682, figs. 19-31; 2008, § 5, figs. 4-8; Nigro ed. 2006, 89-100, 3.15-3.51, plan II.
2.1. Stratigraphy

The stratigraphy of Area A West is illustrated below; structures and finds from occupational and destruction layers of Periods Batrawy II, III and IV (Phases 6-3) will be thoroughly described in §§ 2.2.1.-2.2.3.

Six stratigraphic phases have been preliminarily distinguished in Area A West (tab. 2.1), from the uppermost layer of humus (Phase 1) down to the earliest EB II layers (Phase 6) excavated directly upon the bedrock.

<table>
<thead>
<tr>
<th>Absolute Chronology</th>
<th>Archaeological Period</th>
<th>Site Period</th>
<th>Phases of Area A West</th>
</tr>
</thead>
<tbody>
<tr>
<td>3400-3000 BC</td>
<td>Early Bronze I</td>
<td>Batrawy I</td>
<td>-</td>
</tr>
<tr>
<td>3000-2700 BC</td>
<td>Early Bronze II</td>
<td>Batrawy II</td>
<td>Phase 6</td>
</tr>
<tr>
<td>2700-2500 BC</td>
<td>Early Bronze IIIA</td>
<td>Batrawy IIIa</td>
<td>Phase 5b-a</td>
</tr>
<tr>
<td>2500-2300 BC</td>
<td>Early Bronze IIIB</td>
<td>Batrawy IIIb</td>
<td>Phase 4b-a</td>
</tr>
<tr>
<td>2300-2200 BC</td>
<td>Early Bronze IVA</td>
<td>Batrawy IVA</td>
<td>-</td>
</tr>
<tr>
<td>2200-2000 BC</td>
<td>Early Bronze IVB</td>
<td>Batrawy IVb</td>
<td>Phase 3d-a</td>
</tr>
<tr>
<td>2000 BC-1900 AD</td>
<td>Later Periods</td>
<td>Batrawy V</td>
<td>Phase 2</td>
</tr>
<tr>
<td>1900-2007 AD</td>
<td>Contemporary frequentation</td>
<td>Batrawy VI</td>
<td>Phase 1</td>
</tr>
</tbody>
</table>

Tab. 2.1 - Archaeological periodization and stratigraphy of Area A West.

Fig. 2.2 - General view of Area A West to the north-west of Cairn I (in the left foreground) at the beginning of 2006 season; in the central background, Cairn II.

---

3 For a preliminary presentation see Nigro 2007a, 347-348.
4 The stratigraphy detected in 2006 excavations in Area A West has substantially reconfirmed and deepened the occupational sequence of the Acropolis proposed for the 2005 season (Nigro 2006a, 237; Nigro ed. 2006, 63-75).
2.1.1. Phase 1: recent periods and ephemeral frequentation of the Acropolis
Phase 1 includes the topsoil (Activity 1a) as well as the modern ephemeral frequentation of the khirbet (Activity 1b), attested to by various features (modern burials, plunder pits and fireplaces)\(^5\).

Activity 1a: topsoil
The uppermost layer of humus (F.0) is represented by a natural accumulation of dust during the last centuries. It consists of a shallow layer of windblown compact sandy soil (10-12 cm deep) with small and medium erratic stones, plants roots, and a few scattered EB III-IV pottery sherds, homogeneously distributed all over the excavated area with a slight sloping from east to west. The collapsed remains of the underneath EB IV structures directly emerge on it (fig. 2.3).

Fig. 2.3 - Area A West: squares BkII15 (southern half) and BkII16 before the beginning of excavations in 2006, from north; in the background, Cairn I.

\(^5\) See Nigro ed. 2006, 64.
A few sporadic tools were retrieved on the surface: a tabular scraper⁶, some flint blades⁷, and two flint tools (fig. 2.4)⁸.

Activity 1b: contemporary frequentation
Activity 1b is illustrated by some stratigraphic features from the ephemeral contemporary frequentation of the hill, such as several plunder pits, fireplaces, and modern burials⁹.

2.1.2. Phase 2: later building activities
Phase 2 covers the time-span from the final desertion of the Early Bronze Age settlement up to modern periods, with scattered building activities, such as the erection of the two cairns on the summit of the Acropolis¹⁰, alternating to long periods of abandonment.

These activities have been very partially investigated in Area A West in the SE corner of square BkII16, where a portion of Cairn I was excavated (F.233). The cairn was built up just above the abandoned EB IV structures, but no diagnostic material has been recovered from it.

⁶ KB.06.A.18 (pl. I).
⁷ KB.06.A.15, KB.06.A.19, KB.06.A.21.
⁸ KB.06.A.6, KB.06.A.7.
⁹ One of this modern burials (D.93) was found in 2005 season in square BjII16 (Nigro ed. 2006, 89).
¹⁰ On the dating and presence of these stone-piled structures (cairns and tumuli) in northern Transjordanian highlands see Palumbo 1992, 45-46, 54-58; Palumbo et al. 1996, 376, 380; Polcaro 2008.
2.1.3. Phase 3: stratigraphy of Batrawy IV village

Phase 3 groups layers and structures related to the Batrawy IV village (Period Batrawy IVb; Early Bronze IVB, 2200-2000 BC): the preliminary terracing works carried out over the collapsed EB III structures (Activity 3d), the construction (Activity 3c) and life (Activity 3b) of the village, its final abandonment (Activity 3a) at the very end of the 3rd millennium BC\(^1\). 

Activity 3a: abandonment and collapse of Batrawy IV village

Activity 3a was represented by an overall stratum of flimsy sandy soil and stones of medium and small size, resulting from the collapsing and prolonged abandonment of the ancient structures, which filled in the ruins of Batrawy IV houses and domestic installations (figs. 2.5-2.6).

![Image](image-url)  

**Fig. 2.5** - Area A West: the layer of collapsed stones F.232 (Activity 3a) in square BjII17, from south; in the background, Cairn II.

\(^1\) The same sequence for the Batrawy IV village was detected in Area A East (Nigro 2006a, 237; Nigro ed. 2006, 65-72).
Fig. 2.6 - Area A West: the layers of collapsed stones F.231, F.236 and F.238 (Activity 3a), excavated inside and outside House L.240 in trench BkII15 + 16, from north (left) and from north-east (right).

The layer (20-25 cm deep) was uniformly spread all over the excavated area, and it was named F.238 (in between the emerging top of EB IV walls W.237 and W.239), F.231 (south of wall W.237) and F.236 (east of wall W.239) in trench BkII15 + 16, F.232 in square BjII17, and F.241 in square BII17. Animal bones\(^\text{12}\), scattered pottery sherds of EB IV simple, cooking and storage wares, as well as some domestic tools and objects (fig. 2.7)\(^\text{13}\) were retrieved in these fillings (pl. III).

12 Samples KB.06.FR.20 and KB.06.FR.32 from filling F.232, KB.06.FR.21 from filling F.236.

13 A flint blade (KB.06.A.25) and a tinder-lock (KB.06.A.13; pl. III) from filling F.232.
Activity 3b: use of Batrawy IV village
A single phase of utilization has been detected so far in the Batrawy IV village on the Acropolis (Area A). Its use (Activity 3b) is attested to by a shallow layer of buff and flimsy sandy soil, with fragmentary limestone and chalk inclusions, scattered EB IVB pottery sherds (pls. IV-V), and animal bones, excavated immediately under the collapsed stones of Activity 3a. Stratigraphic units associated to Activity 3b were investigated in squares BkI15 (southern half) and BkI16 to the west (F.248), and in squares BilI17 (F.256) and BjiI17 (F.244) to the south, where units and spaces of the Batrawy IV village were brought to light; namely, filling F.248 in House L.240, F.244 in courtyard L.30, and F.256 in the southern enlargement of courtyard L.100.

Activity 3c: construction of Batrawy IV village
Activity 3c represents the erection of the Batrawy IV village on the Acropolis (plan). All the structures belong to a single constructive phase, which has been attributed more precisely to Period Batrawy IVb (Early Bronze IVB). In Area A West, Batrawy IV domestic units were respectively: in trench BkI15 + 16, House L.240 (delimitated by walls W.237 and W.239), with related installations B.252, S.243, S.245, S.249 and S.251, and its outer courtyard L.250 to the south-east; in square BjiI17, the south-western corner of House L.50 (delimitated by walls W.247 and W.89) to the north-east and central courtyard L.30 with installation S.246 to the west; and in square BilI17, the southern enlargement of courtyard L.100 (see § 2.2.2.).

Activity 3d: terracing activities
The construction of Batrawy IV village was preceded by terracing and levelling operations (Activity 3d), carried out in order to regularize the natural slope of the khirbet and the collapsed remains of the underneath Batrawy IIIb (EB IIIB) occupation. No chronological gap separates Activity 3d and Activity 3c, which belong to a single constructive phase.

---

14 The Batrawy IV village on the Acropolis arose, in fact, somewhat during the 22nd century BC, in Period Batrawy IVb, perhaps after a short period of abandonment of the site (Early Bronze IVA, 2300-2200 BC; Period Batrawy Iva; Nigro 2006a, 231-233; Nigro ed. 2006, 38-40, tab. 1.1).

15 The same terracing activities were detected in Area A East in the easternmost squares Boll18 and Boll19, where it was represented by the north-south retaining wall W.23 and fillings F.26 and F.32 in square Boll18, and by the southern end of wall W.23+W.5, the sustaining wall W.19 and fillings F.4 and F.18 in square Boll19 (Nigro 2006a, 237-238, Nigro ed. 2006, 70-72).
Activity 3d has been identified in squares BiII16 + BjII16, where it was represented by stratigraphic unit F.216, a levelling filling of dark greyish sandy soil and rubble with a dense concentration of small erratic stones, limestone chops and chalk inclusions, a great amount of animal bones and pottery sherds (fig. 2.8), leaning on the southern face of EB IIIB wall W.225 up to southern edge of the trench BiII16 + BjII16 (fig. 2.9). Several EB IIIB and sporadic EB IV pottery materials were retrieved in this filling (pls. VI-VII), as well as a flint blade and a flint tool.

Fig. 2.8 - Pottery and other finds from filling F.216 (Activity 3d).

16 In the eastern part of square BjII16, filling F.216 leans on and partially cuts filling F.234, that is a layer of compacted collapsed yellowish mud-bricks of Batrawy IIIa occupation (see below § 2.1.5.), thus clearly setting its stratigraphic position (fig. 2.10).
17 Samples KB.05.FR.89, KB.05.FR.97, KB.06.FR.1, KB.06.FR.23, KB.06.FR.47, KB.06.FR.78.
18 This layer was identified and partially excavated already in 2005 (pl. VI), but its nature and stratigraphic position was clarified only in 2006 season.
19 Such as three envelope ledge handles (KB.05.A.216/12, KB.06.A.216/3, KB.06.A.216/13, pls. VI, VII).
20 KB.06.A.11.
21 KB.06.A.16 (fig. 2.8).
Fig. 2.9 - Southern section of squares BiII16 + BjII16.

Fig. 2.10 - Northern section of squares BiII16 + BjII16.
2.1.4. Phase 4: stratigraphy of Batrawy IIIb structures

Phase 4 groups archaeological deposits and a few structures belonging to the Batrawy IIIb occupation on the Acropolis (Early Bronze IIIB, 2500-2300 BC), detected at the moment only in the southern half of squares Bill15 and BjII15, and in squares Bill16 and BjII16, and directly sealed by Batrawy IV structures\(^{22}\).

Activity 4a: destruction and collapse of Batrawy IIIb occupation

The destruction and collapse of Batrawy IIIb structures were represented in the eastern sector of the trench (BjII15 + 16) by a homogenous filling of light brown sandy soil, with scattered small stones and limestone grits, animal bones and pottery sherds (pls. VIII-X; § 2.2.2.), distinguished in different archaeological deposits separated by the top of the emerging Batrawy IIIb structures: F.96 north of wall W.227, F.98 and F.204 south of wall W.225.

In the western sector of the trench (in Bill15 + 16), the same Batrawy IIIb destruction and collapse were illustrated by a layer of brown sandy soil with small stones, fragmentary limestone and chalk inclusions, and scattered pottery sherds (pl. X), excavated in the northern part in square Bill15 and named F.224. In the southern part of this sector (square Bill16), where installations S.223, S.221 and S.257 were located, the same activity was, instead, represented by a layer of yellowish-brown sandy-clayish soil with numerous small erratic stones, fragmentary mud-bricks and pottery sherds (pl. XII), named filling F.258.

Activity 4b: construction of Batrawy IIIb structures

In squares BjII15 + 16, Activity 4b was illustrated by the last re-utilization of wall W.225+W.227, associated to the floor of crushed white limestone grits L.220, which joined the southern outer face of wall W.225 (§ 2.2.2.)\(^ {23}\).

In the western sector of the trench (Bill15 + 16), the same activity was represented by the NE-SW oriented wall W.215, and by some installations for food preparation and conservation: cist S.235, and installations B.221 and S.223 (§ 2.2.2.).

2.1.5. Phase 5: Batrawy IIIa occupation

Phase 5 includes structures and archaeological deposits related to Batrawy IIIa occupation (Early Bronze IIIA, 2700-2500 BC).

---

\(^{22}\) Stratigraphic units related to EB IIIB occupation underneath below the EB IV village were already partially excavated in season 2005 (Nigro ed. 2006, 63, note 5), but their presentation has been deferred to the present volume.

\(^{23}\) Floor L.220 was partly cut by pit P.97 (Activity 3a), excavated in 2005 season (Nigro ed. 2006, 67).
In the southern half of BjII16 (south of Wall W.225), underneath Batrawy IIIb (EB IIIB) floor L.220, a layer of compact yellowish-brown sandy soil (F.234), mixed to collapsed yellowish mud-bricks and limestone chops, EB III pottery sherds (pl. XII)\(^{24}\) and scattered animal bones\(^{25}\), sloping from east to west, was distinguished and excavated (fig. 2.10)\(^{26}\). This layer was interpreted as the collapse (Activity 5a) of the Batrawy IIIa re-utilization of wall W.225+W.227 (Activity 5b; § 2.2.1.).

2.1.6. Phase 6: Batrawy II occupation

Phase 6 represents the earliest (EB II) occupation of the Acropolis. The original construction of wall W.225+W.227 belongs to this phase, since the building appears to have been erected directly on the bedrock (§ 2.2.1.). Bedrock was reached in Area A West in the SE corner of square BjII16 at the elevation of 663.60 a.s.l., in the central part of trench BjII15 + BjII15 + BjII16 + BjII16 (where structure W.225+W.227 was eroded) at the elevation of 663.38 a.s.l., and it sharply sloped towards the west (according to the natural slope of the *khirbet*).

\(^{24}\) A Simple Ware jar (KB.06.A.234/2), a storage hole-mouth jar (KB.06.A.234/4), a jar with Grain Wash decoration (KB.06.A.234/1), and a big *pithos* with rope decoration (KB.06.A.234/5) were found in this filling (pl. XII).

\(^{25}\) Sample KB.06.FR.21.

\(^{26}\) This layer was already visible in 2005 underneath floor L.220 in the cut of pit P.97 (Activity 3a), dug in courtyard L.30 of Batrawy IV House L.20 (Nigro ed. 2006, 67).
2.2. Architecture & finds: the Early Bronze II-III structures and the Early Bronze IV village on the Acropolis [by Lorenzo Nigro]

2.2.1. Structures of Period Batrawy II-IIIa (Early Bronze II-IIIA)
Area A West suffered strong erosion and pillaging in antiquity after the final destruction of the city of Batrawy III. The ruins of buildings erected on the Acropolis were drastically razed when the Batrawy IVb dwellings were built on the same spot (fig. 2.11).

Fig. 2.11 - General view of Batrawy II-III (EB II-III) structures in Area A West, from east; in the foreground, wall W.225+W.227.

Nonetheless, in the middle of the main trench (squares BiII15 + BiII16 + BiII15 + BkII15), the remains of a monumental structure were brought to light, oriented 110°/200°. Such a structure consisted of two curtain walls (W.225 to the south; W.227 to the north), made with big regular stones (fig. 2.12), and an inner bedding of limestone chops and pebbles (W.259; fig. 2.13), as typical in foundation of major mud-brick walls. This structure was preserved for a relatively short stretch (2.8 m), in respect of its width (2 m), but the cut of its foundation trench on bedrock allowed to follow it for at least 6 m. To the southern curtain wall (W.225) a floor (L.220) was linked, which, however, represents the latest Batrawy IIIb (EB IIIB) reuse of the structure (§§ 2.1.4.; 2.2.2.). Below it, a layer of crushed yellowish mud-bricks leaning against the southern face of wall W.225 was interpreted as the destruction of the Batrawy IIIa (EB IIIA) utilization of the building (§
2.1.5.), which, however, was apparently erected directly on bedrock when
the city of Batrawy was built on the hill during the Early Bronze II.

![Image of Batrawy II (EB II) wall W.225+W.227 in the central sector of
Area A West (squares BjII15 + BjII16), from east.]

2.2.2. Structures of Period Batrawy IIIb (Early Bronze IIIb)
Floor L.220 extended south of wall W.225+W.227 occupying the south-
eastern quarter of square BjII16; it consisted of a crushed limestone grits
pavement (figs. 2.14-2.15), above which there were some fragments of
two *pithoi* with rope-like decoration (fig. 2.16).\(^{27}\)
In the destruction layers above the floor (F.96, F.98 and F.204; § 2.1.4.),
six hole-mouth pots\(^{28}\), two Simple Ware small jars\(^{29}\) – one presumably
equipped with its stopper\(^{30}\) – were retrieved; the bottom and a handle of a

---

\(^{27}\) KB.06.A.220/1-3 (pls. XI-XII), KB.06.A.220/5-6 (pl. XI).

\(^{28}\) KB.05.A.96/2 (pl. VIII), KB.05.A.98/1, KB.05.A.204/3, KB.05.A.204/4,
KB.05.A.204/6, KB.05.A.204/7 (pl. IX).

\(^{29}\) KB.05.A.96/1 (pl. VIII), KB.05.A.204/8 (pl. IX).

\(^{30}\) KB.05.A.67 (pl. VIII).
storage jar\textsuperscript{31}, a big \textit{pithos} (fig. 2.17)\textsuperscript{32}, and two hole-mouth jar rims\textsuperscript{33} were also found. The same fillings included also several faunal remains\textsuperscript{34}.

\textsuperscript{31} KB.05.A.96/4, KB.05.A.96/5 (pl. VIII).
\textsuperscript{32} KB.05.A.204/14 (pl. X).
\textsuperscript{33} KB.05.A.204/2, KB.05.A.204/5 (pl. IX).
\textsuperscript{34} Samples KB.05.FR.76, KB.05.FR.77 and KB.05.FR.101 from filling F.96; KB.05.FR.73, KB.05.FR.74 from filling F.204; KB.05.FR.98 from floor L.220.
Fig. 2.15 - Detail of the two smashed *pithoi* on pavement L.220, from south-west.

Fig. 2.16 - Fragments of the two *pithoi* and jars found on floor L.220.
Fig. 2.17 - Fragments of big *pithos* KB.05.A.204/14.

Fig. 2.18 - Plan of Batrawy IIIb (EB IIIB) structures in Area A West.
West of floor L.220, in BiII16, sparse remains of the same EB IIIIB occupation (fig. 2.18), similar in orientation to those discovered in Area A East, were uncovered. A 0.7 m thick wall (W.215) oriented NE-SW was connected with a bench (B.221; fig. 2.19), including a limestone mortar (KB.06.A.108; fig. 2.20), and connected to the west with an oval silos (S.223), lined with thin stones set vertically into the floor (fig. 2.21).

Fig. 2.19 - Batrawy IIIb (EB IIIIB) installations west of floor L.220 (in BiII16), from south; in the foreground, bench B.221 with mortar KB.06.A.108; in the left background, oval silos S.223.

Fig. 2.20 - Limestone mortar KB.06.A.108 embedded in bench B.221.

For the coeval structures detected on the eastern side of the Acropolis (squares Boll18, BnII18 and Boll19; phase 4) see Nigro ed. 2006, 73-74, 109-116.
Fig. 2.21 - Batrawy IIIb (EB IIIB) installations in square BiI16, from west; in the left foreground, oval silos S.223; in the background, bench B.221 with mortar KB.06.A.108.

Also these remains suffered the razing activities of the Batrawy IV settlers. Nonetheless, in the related strata (F.258) a limestone pestle (to be referred to the mortar; fig. 2.22)\(^{36}\) and a working table (fig. 2.23)\(^{37}\) with small holes (provoked by the repeated percussions) were retrieved. Ceramic material included fragments of four hole-mouth pots and a pithos (pl. XII).

North of wall W.227, in the southern half of BiI15, a rectangular cist (S.235) paved with a limestone slab was also uncovered (fig. 2.24), presumably used in food processing; here, the destruction layer F.224 gave back a pithos (fig. 2.25)\(^{38}\).

\(^{36}\) KB.06.A.48.
\(^{37}\) KB.06.A.55.
\(^{38}\) KB.05.224/1 (pl. X).
Fig. 2.22 - Pestle KB.06.A.48.

Fig. 2.23 - Working table KB.06.A.55.

Fig. 2.24 - Rectangular cist (S.235) in square BII15, from north.

Fig. 2.25 - Pithos KB.05.224/1 retrieved in square BII15.
2.2.3. The village of Period Batrawy IV (Early Bronze IVB)
The extension of the excavated area also allowed to improve our knowledge of the western cluster of dwellings erected on Terrace I in Period Batrawy IV (fig. 2.26)\textsuperscript{39}.

\textit{Fig. 2.26 - Plan of Batrawy IV dwellings in Area A West.}

\textsuperscript{39} Nigro 2006a, 238-240, figs. 17-18; 2006b, 677-682, figs. 19-31; 2007a, 348-349, fig. 3; 2008, § 5, figs. 4-8; Nigro ed. 2006, 89-100, figs. 3.31-3.51, plan II.
House L.240
East of the rectangular house (L.20) with several annexed structures excavated in the first season\(^{40}\), a second house (L.240), showing the same NE-SW orientation, was excavated in 2006 (fig. 2.27)\(^{41}\). The main entrance (L.254) to this house (fig. 2.28) was at the middle of its south-eastern side (W.237), consisting of a wall made with big stones and ending with rounded corners (fig. 2.29).

\(^{40}\) Nigro 2006a, 238-240, figs. 17-19; Nigro ed. 2006, 89-93, figs. 3.31-3.40.
\(^{41}\) House L.240 was brought to light in squares BkII15 (southern half) + BkII16 + 15/BkII15 (southern half) + BjII16/BkII16 (northern half).
Fig. 2.28 - House L.240: detail of entrance L.254, with two stones of the threshold, from south.

Fig. 2.29 - General view of House L.240, from north-east; in the foreground, the rounded corner of wall W.237 + W.239, with circular bin S.245 abutting on bench B.252.
On both sides of the entrance a series of installations were aligned against the inner face of the wall (fig. 2.30). To the south-west, there was a square cist (S.249) set into a small bench (B.251, fig. 2.31), similar to the triple installation in House L.20\textsuperscript{42}, while to the north-east, a circular bin (S.245) abutting on a bench (B.252), leaning on the inner face of the north-eastern wall (W.239) of the room (fig. 2.32). In the middle of the unit, just in front of the silos and the bench, there was a circular platform (S.243), paved with medium size flat stones (fig. 2.33). A small wall (W.261) protruded from the platform towards the south-west, enclosing the space delimited by the western wall of the house.

The western side of House L.240 was, in facts, delimited by two walls: wall W.203 and wall W.85, the latter excavated in 2005 running parallel to W.79 of House L.20, with which it formed the entryway (L.40) to an inner yard. Two facing pilasters (W.263, W.229) connected House L.240 with House L.20, and served as door-jambs for the passage (L.260) to the former. From entryway L.40 a further door (L.208) opened into the western part of the domestic unit\textsuperscript{43}.

![Fig. 2.30 - House L.240, with installations aligned along the inner face of wall W.239, from north.](image)

\textsuperscript{42} Nigro 2006a, 238-240, fig. 19; Nigro ed. 2006, 90, figs. 3.35-3.36.

\textsuperscript{43} Nigro 2006a, 240, figs. 17-18; Nigro ed. 2006, 97-98, figs. 3.31-3.33, 3.45-3.46, 3.48.
Ceramic material from House L.240 basically consists of fragments of Simple Ware jars and storage jars, among which a Metallic Pattern-Combed specimen\textsuperscript{44}. Faunal remains were also retrieved in this domestic unit\textsuperscript{45}.

\textsuperscript{44} KB.06.248/1 (pl. IV).
\textsuperscript{45} Sample KB.06.FR.35 from filling F.244.
South of House L.20, two more squares were opened (BiI17, BjI17), in order to complete the investigation of this group of dwellings. In square BiI17 the southern extension of court L.100 was brought to light, even tough badly damaged by erosion and ravaging⁴⁶; while in BjI17 a further portion of House L.50⁴⁷ was explored together with courtyard L.30⁴⁸. House L.50 can, thus, be reconstructed as a rectangular structure stretching east-west, opposite to House L.20 and in some way mirroring it to the east. The southern wall (W.247) of this house was made of big juxtaposed stones set on place as stretchers (fig. 2.34).

⁴⁶ Nigro ed. 2006, 94-96, figs. 3.31, 3.41.
⁴⁷ Nigro 2006a, 240; Nigro ed. 2006, 95-96, figs. 3.44, 3.47; this dwelling is partly buried beneath Cairn I.
⁴⁸ Nigro 2006a, 240, figs. 17-18; Nigro ed. 2006, 95, figs. 3.44, 3.46.
Fig. 2.34 - General view of courtyard L.30 in square BjII17; in the left background, installation S.246; in the right background, the SW corner (W.89 + W.247) of House L.50.

In courtyard L.30, roughly 1.2 m west from the SW corner of House L.50, a fragmentary installation was uncovered (S.246), composed by a cists and two slabs possibly used as working tables (fig. 2.35). Finds from this open space (L.30/F.244) include a flint sickle\(^{49}\), several animal bones\(^{50}\), and scattered fragments of hole-mouth pots and jars\(^{51}\).

In the southern extension of court L.100 (BiiI17), several artefacts were found in filling F.256 (fig. 2.36): a flint tool\(^{52}\), two small Simple Ware jars\(^{53}\), three hole-mouth pots\(^{54}\), a storage jar\(^{55}\), two envelope ledge handles\(^{56}\), and three hole-mouth jars\(^{57}\), as well as some faunal remains\(^{58}\).

---

\(^{49}\) KB.06.A.39 (pl. IV).

\(^{50}\) Samples KB.06.FR.36, KB.06.FR.37, KB.06.FR.40 KB.06.FR.37 from filling F.244.

\(^{51}\) KB.06.244/1 (pl. V).

\(^{52}\) KB.06.A.44.

\(^{53}\) KB.06.A.256/9, KB.06.A.256/10 (pl. IV).

\(^{54}\) KB.06.A.256/18, KB.06.A.256/19 (pl. IV), KB.06.A.256/14 (pl. V).

\(^{55}\) KB.06.A.256/1 (pl. IV).

\(^{56}\) KB.06.A.256/16, KB.06.A.256/17 (pl. IV).

\(^{57}\) KB.06.A.256/11, KB.06.A.256/12, KB.06.A.256/13 (pl. V).

\(^{58}\) Samples KB.06.FR.41 and KB.06.FR.56 from filling F.256.
Fig. 2.35 - Installation S.246 in courtyard L.30, from north.

Fig. 2.36 - Pottery fragments from courtyard L.100 in square BiI17.
2.2.4. General overview of the Batrawy IV village in Area A West

EB IVB dwellings excavated in Area A West allow to complete the picture of the village of Batrawy IV on Terrace I, already sketched out after the first season\(^59\). Two clusters of dwellings arose on the top of the site, grouping three rectangular main domestic units, each with its annexed structures and installations. The rectangular houses faced with their front sides common spaces or yards, while the rear sides usually opened towards inner courtyards or compounds.

Installations within domestic units are mainly series of square cists, mortars embedded into benches and round bins; while installations in open spaces included working tables, platforms, and round silos and curvilinear storage devices.

Both clusters of dwellings on Terrace I seemingly arose after the initial EB IVB occupation on the northern edge of the site (§ 4.1.2.) and had a relatively short life (a single stratigraphic and constructive phase; § 2.1.3.), being abandoned at the very end of the 3\(^{rd}\) millennium BC.

---

\(^{59}\) Nigro ed. 2006, 101-102, fig. 3.51.
## LIST OF POTTERY, OBJECTS AND SAMPLES BY CONTEXTS

### Area A West

#### Cleaning

**Pottery:** Simple Ware: 1 bowl, 3 jars, 22 frags. uns.  
Cooking Ware: 3 hole-mouth pots, 32 frags. uns.  
Storage Ware: 1 *pithos*; 3 jars, 2 hole-mouth jars, 2 pushed-up ledge handles, 56 frags. uns.  
Specialized Production: 1 Red Polished Ware fragm.

**Lithics:** 2 Flint Tools (KB.06.A.6, KB.06.A.7), 1 Flint Blade (KB.06.A.15)

**Objects:** 2 Stoppers/Counters (KB.06.A.5, KB.06.A.2), 1 Spindle Whorl (KB.06.A.3)

**Plate:** I, II

#### F.0

**Lithics:** 1 Tabular Scraper (KB.06.A.18)

**Tools:** 2 Flint Blades (KB.06.A.19, KB.06.A.21)

**Plate:** I

#### L.30

**Lithics:** 1 Flint Sickle (KB.05.A.39)

**Pottery:** Simple Ware: 1 jar, 6 frags. uns.  
Cooking Ware: 1 hole-mouth pot, 10 frags. uns.  
Storage Ware: 2 jars, 19 frags. uns.

**Objects:** 1 Stopper/Counter (KB.05.A.67)

**Samples:** Animal Bones (KB.05.FR.76, KB.05.FR.77, KB.05.FR.101)

**Plate:** VIII

#### F.96

**Pottery:** Cooking Ware: 1 hole-mouth pot, 1 fragm. uns.  
Storage Ware: 8 frags. uns.

**Plate:** IX

#### F.204

**Pottery:** Simple Ware: 1 jar, 9 frags. uns.  
Cooking Ware: 4 hole-mouth pots, 25 frags. uns.  
Storage Ware: 1 *pithos*, 2 hole-mouth jars, 44 frags. uns.  
Specialized Production: 1 Red Polished fragm.

**Samples:** Animal Bones (KB.05.FR.73, KB.05.FR.74)

**Plate:** IX, X

#### F.216

**Pottery:** Simple Ware: 1 vat, 1 jug, 1 jar, 40 frags. uns.  
Cooking Ware: 4 hole-mouth pots, 35 frags. uns.  
Storage Ware: 3 *pithoi*, 11 jars, 2 pushed-up ledge handles, 3 enveloped ledge handles, 80 frags. uns.

**Lithics:** 1 Flint Tool (KB.06.A.16), 1 Flint Blade (KB.06.A.11)

**Samples:** Animal Bones (KB.05.FR.89, KB.05.FR.97, KB.06.FR.1, KB.06.FR.23, KB.06.FR.47), 1 Horn (KB.06.FR.78)

**Plate:** VI, VII

#### L.220

**Pottery:** Storage Ware: 2 *pithoi*, 3 jars, 51 frags. uns.

**Samples:** Animal Bone (KB.05.FR.98)

**Plate:** XI, XII

#### F.224

**Pottery:** Simple Ware: 6 frags. uns.  
Cooking Ware: 10 frags. uns.  
Storage Ware: 2 *pithoi*, 9 frags. uns.

**Plate:** X

#### F.232

**Pottery:** Simple Ware: 3 jars, 8 frags. uns.  
Cooking Ware: 3 frags. uns.  
Storage Ware: 1 jar, 1 hole-mouth jar, 1 enveloped ledge handle, 15 frags. uns.

**Lithics:** 1 Flint Blade (KB.06.A.25)

**Objects:** 1 Tinder-lock (KB.06.A.13)

**Samples:** Animal Bones (KB.06.FR.20, KB.06.FR.32), Coal (KB.06.PR.2)

**Plate:** III

#### F.234

**Pottery:** Simple Ware: 1 jar, 1 fragm. uns.  
Storage Ware: 1 *pithos*, 1 jar (with Grain Wash decoration); 1 hole-mouth jar, 19 frags. uns.

**Plate:** XII

#### F.238

**Pottery:** Simple Ware: 1 jar  
Cooking Ware: 1 hole-mouth pot  
Storage Ware: 1 jar

**Plate:** III

#### F.244

**Pottery:** Simple Ware: 2 frags. uns.  
Cooking Ware: 2 frags. uns.  
Storage Ware: 1 hole-mouth jar, 5 frags. uns.

**Samples:** Animal Bones (KB.06.FR.36, KB.06.FR.37, KB.06.FR.40)

**Plate:** V

---

* Fragm. = fragment; frags. = fragments; uns. = unselected.
F.248
Pottery: Simple Ware: 1 fragm. uns.
Cooking Ware: 1 hole-mouth pot
Storage Ware: 1 jar, 8 fragms. uns.
Samples: Animal Bones (KB.06.FR.35)
Plate: IV

F.256
Pottery: Simple Ware: 2 jars, 3 fragms. uns.
Cooking Ware: 3 hole-mouth pots, 15 fragms. uns.
Storage Ware: 1 jar, 3 hole-mouth jars, 2 enveloped ledge handles, 40 fragms. uns.
Lithics: 1 Flint Tool (KB.06.A.44)
Samples: Animal Bones (KB.06.FR.41, KB.06.FR.56)
Plate: IV, V

F.258
Pottery: Simple Ware: 3 fragms. uns.
Cooking Ware: 4 hole-mouth pots, 8 fragms. uns.
Storage Ware: 1 pithos, 8 fragms. uns.
Tools: 1 Pestle (KB.06.A.48), 1 Working Table (KB.06.A.55), 1 Limestone Mortar (KB.06.A.108)
Plate: XI
Notes on Pottery Plates
Where inclusions are described, they generally correspond to the following categories:
White/whitish/light gray/grayish = limestone
Gray/dark gray/black = basalt, and sometimes chert (especially larger vessels)
Orange/red/dark red (usually in a very low frequency) = basalt, shale or grog
**Pl. I - Small finds from Area A West, cleaning and surface**


Pl. VI - Pottery from Area A West, squares BiII16+BjII16, filling F.216 (Activity 3d)


Pl. VII - Pottery from Area A West, squares BiII16+BjII16, filling F.216 (Activity 3d)


Chapter 2 - Catalogue

Pl. VIII - Small finds and pottery from Area A West, squares BjII15+16, filling F.96 (Activity 4a)


Pl. X - Pottery from Area A West, square BjII16, filling F.204 (Activity 4a) and square BiII15, filling F.224 (Activity 4a)


Pl. XI - Pottery from Area A West, square BjII16, filling L.220 (Activity 4a)


Pl. XII - Pottery from Area A West, squares BjII16 and BiII16, fillings L.220 and F.258 (Activity 4a), and square BjII16, F.234 (Phase 5)


3. Area B North: the EB II-III fortification system
[by Lorenzo Nigro]

Archaeological investigations in Area B (fig. 3.1) during the second (2006) and third (2007) seasons were extended towards the north, the south and the west, subdividing the area into two main sectors, north and south of the main city-wall; what follows is, thus, the report on monuments excavated north of the latter, while Area B South is illustrated in chapter 4. Area B North, outside the main city-wall (W.103 + W.105), included squares BnII4 (eastern half) + Boll4 + Bpl4 + Boll5 + Bpl5 + Boll6 + Bpl6 + Bql6, in order to accomplish a comprehensive exploration of the northern slope of the hill (fig. 3.2). Here, excavation reached the earliest defensive works at the site, dating back from Early Bronze II, and allowed to identify the main city-gate of this period (§ 3.2.1.), as well as the successive lines of fortifications (§§ 3.2.2.-3.2.3.), with several annexed structures, which lasted in use until the end of the Early Bronze IIIB, and which will be described in detail below, according to their stratigraphic and constructive sequence.

Fig. 3.1 - General view of the area excavated on the northern slope of Khirbet al-Batrawy with the restored stretch of the EB II-III main city-wall and EB II city-gate at the end of 2007 season, from north.
Fig. 3.2 - General view from west of the northern slope of Khirbet al-Batrawy: in the background, the restored stretch of the EB II-III main city wall excavated in seasons 2005-2007 (Area B North); in the foreground, its emerging prosecution towards the west (2007).

3.1. Stratigraphy of Area B North [by Lorenzo Nigro - Andrea Polcaro]

Excavations confirmed the general stratigraphy established in the first campaign\(^1\), reaching an earliest phase (Phase 5), which represents the foundation of the city-wall and its earliest use in the Early Bronze II (2900-2700 BC).

<table>
<thead>
<tr>
<th>Absolute Chronology</th>
<th>Archaeological Period</th>
<th>Site Period</th>
<th>Phases of Area B North</th>
</tr>
</thead>
<tbody>
<tr>
<td>3400-3000 BC</td>
<td>Early Bronze I</td>
<td>Batrawy I</td>
<td>-</td>
</tr>
<tr>
<td>3000-2700 BC</td>
<td>Early Bronze II</td>
<td>Batrawy II</td>
<td>Phase 5b-a</td>
</tr>
<tr>
<td>2700-2500 BC</td>
<td>Early Bronze IIIA</td>
<td>Batrawy IIIa</td>
<td>Phase 4b-a</td>
</tr>
<tr>
<td>2500-2300 BC</td>
<td>Early Bronze IIIIB</td>
<td>Batrawy IIIb</td>
<td>Phase 3c-b</td>
</tr>
<tr>
<td>2300-2200 BC</td>
<td>Early Bronze IVA</td>
<td>Batrawy IVa</td>
<td>Phase 3a</td>
</tr>
<tr>
<td>2200-2000 BC</td>
<td>Early Bronze IVB</td>
<td>Batrawy IVb</td>
<td>Phase 2d-a</td>
</tr>
<tr>
<td>2000 BC-1900 AD</td>
<td>Later Periods</td>
<td>Batrawy V</td>
<td>-</td>
</tr>
<tr>
<td>1900-2007 AD</td>
<td>Contemporary frequention</td>
<td>Batrawy VI</td>
<td>Phase 1</td>
</tr>
</tbody>
</table>

Tab. 3.1 - Archaeological periodization and stratigraphy of Area B North.

\(^1\) Nigro 2006a, 240-242; Nigro ed. 2006, 155-166, tab. 4.1, fig. 4.18.
3.1.1. Phase 1: abandonment
Natural erosion is the main agent for the accumulation during several centuries of a layer of soft dust 0.1-0.3 m thick on top and at the bottom of the northern slope, which was named F.0 as in previous campaigns2. A fragmentary spindle whorl3, a fragmentary limestone mortar4 and a few scattered EB III-IVB pottery sherds were retrieved in this layer (pl. XIII).

3.1.2. Phase 2: Batrawy IV installations
Phase 2 includes the EB IV reutilization of the collapsed city-wall transformed into an embankment supporting the dwelling quarter built just over and inside the defensive line (fig. 3.3). Three activities were distinguished, respectively: the final abandonment of this structure (W.180a, Activity 2a); the use of the embankment (W.180b, Activity 2b); its construction (W.180c, Activity 2c; figs. 3.54-3.55). Scattered EB IIIB5 and EB IVB pottery sherds were retrieved from embankment W.180a-c (pl. XV). To the use of the embankment was also related a filling (F.158) of sandy brown soil with scattered small stones, excavated just inside its southern line, in the SW corner of square BoII6. A spindle whorl (fig. 3.4)6, a flint blade (fig. 3.5)7, and a limestone mortar (fig. 3.6)8, as well as scattered EB IIIB-EB IVB pottery sherds (pl. XIV) were retrieved from this filling.

Fig. 3.3 - The emerging inner face (W.161a) of the EB II-III main city-wall in square BoII6, after the removal of the uppermost layer of dust, from south-east; to the south-west of it, EB IVB Wall W.153.

3 KB.06.B.12 (pl. XIII).
4 KB.06.B.85.
5 Among which two fragments of storage jars with Grain Wash decoration: KB.06.B.180/6, KB.06.B.180/7 (pl. XV).
6 KB.06.B.43.
7 KB.06.B.41.
8 KB.06.B.46.
3.1.3. Phase 3: stratigraphy of Batrawy IIIb fortification system

The enlargement of excavated area confirmed the stratigraphic subdivision already recognized after the first season of Phase 3, the latest fortification system of the urban stage of life of Batrawy (IIIb), into three activities, respectively the definitive abandonment (3a), destruction (3b) and last reconstruction-use (3c) of the main Early Bronze Age city-wall and of the attached outer lines of defence.

Activity 3a: abandonment of Batrawy IIIb fortification system

The uppermost layers of collapse of the latest reconstruction of the city-wall (i.e. W.103a+W.163a) are some thick oblique fillings of rubble (F.154 in BoII5 + BoII6; F.175 BpII6 + BqII6; figs. 3.7-3.9) including stones of various size, within which, after the final destruction (F.154c, F.175c), at least two successive collapses (F.154b-c, F.175b-c) were identified9. A layer of collapsed stones (F.179) was detected also outside the Outer Wall (W.155), as witness of the final abandonment of the site10.

9 A few EB IIIB pottery sherds were retrieved in these layers of collapsing, among which a fragment with Grain Wash decoration (KB.06.B.154/1, pl. XV).
10 A layer of abandonment, F.162, was identified, but only partially excavated, also inside the inner side of the main city-wall (W.161a), in squares BoII6 + BpII6:
A depredation pit (P.170) was identified against the outer face of the main wall in square BoII5, filled in with rubble and discharged materials (F.169), with a concentration of charcoal pointing at remains of wooden structure burnt and collapsed cut by the pit (fig. 3.6).

**Activity 3b: destruction of Batrawy IIIb fortification system**
Underneath the layer of rubble and collapsed stones (F.154) a stratum of greyish ashy soil, with a heap of broken mud-bricks (F.149), represents the violent destruction which brought to a sudden end the city of Batrawy IIIb (fig. 3.10). The same destruction layer was identified in between Outer Wall W.155 and Scarp-Wall W.165 (F.174), consisting of a dark friable and ashy soil with EB III pottery fragments (pl. XVI) and a few animal bones. North of the scarp-wall, the layer of destruction was preserved with its maximum thickness, consisting of a layer of friable dark brown soil with small stones (F.184), broken mud-bricks and scanty EB III pottery sherds (fig. 3.11), covering a compacted layer of ashes (F.188) with small charcoal, limestone chops and fragments of reddish-yellow mud-bricks.

**Activity 3c: reconstruction of Batrawy IIIb fortification system**
As already noticed after the first season\(^{11}\), the main city-wall was reconstructed at the beginning of Phase 3\(^{12}\), together with the other parallel lines of fortification. In the eastern part\(^{13}\) of the corridor between W.103a+W.163a and W.155, Phase 3 floor was preserved (L.159), consisting of a pavement of beaten earth laid over a layer of limestone chops (F.164; figs. 3.8-3.9)\(^{14}\) thrown over and obliterating the Batrawy IIIa destruction layer in order to regularize the Batrawy IIIb new path approaching the city.

---

\(^{11}\) Nigro 2006a, 242-243; Nigro ed. 2006, 163-164.

\(^{12}\) The Batrawy IIIb main city-wall comprises the inner body (W.104a), and its outer (W.103a+W.163a) and inner (W.105a+W.161a) curtain walls.

\(^{13}\) Street L.159 was preserved only in squares BpII6 + BqII6 (fig. 3.8).

\(^{14}\) This filling also included small pebbles, scattered animal bones and a great amount of EB IIIa pottery sherds (pls. XI-X), among which some specimens of specialized productions such as 1 Khirbet Kerak Ware fragment (KB.06.B.164/1), 5 Red Polished Ware fragments (KB.06.B.164/3, KB.06.B.164/4, KB.06.B.164/5, KB.06.B.164/6, KB.06.B.164/24), 1 Red Burnished Ware fragment (KB.06.B.164/2), and sherds with Grain Wash decoration (KB.06.B.164/7).
Fig. 3.7 - Western section of squares BoI15 + BoI14.
Outer Wall W.155 was repaired and reinforced by adding a further Scarp-Wall W.165 with a rubble filling in between the two structures called F.176 (east section) + F.178 (west section). Another structure, leaning against W.165, protruded towards the north: W.177.
Fig. 3.10 - Top of ashy layer F.149 in between main Inner City-wall W.163 and Outer Wall W.155, from east.

Fig. 3.11 - Top of EB III B destruction layer F.184 out of Scarp-Wall W.165, from east.
3.1.4. Phase 4: stratigraphy of Batrawy IIIa fortification system

Phase 4 groups stratigraphic units and structures belonging to a preceding stage of life of the city, that of Batrawy IIIa, of which two different moments were distinguished: the final destruction (Activity 4a) and the construction (Activity 4b).

Activity 4a: destruction of Batrawy IIIa fortification system

The final destruction of Batrawy IIIa has been identified in Boll5 in between the main city-wall and the Outer Wall. A thick layer of ashes and charcoal (F.167; figs. 3.12-3.13), including fragmentary yellowish mudbricks, limestone grits and scattered materials (animal bones and pottery sherds).

Activity 4b: construction of Batrawy IIIa fortification system

To this activity belongs the first reconstruction of the main city-wall, which envisaged the blockage of the city-gate, by the erection of wall W.157 (figs. 3.14-3.15), and a complete reconstruction of the structure (§ 3.2.2.). The contemporary erection of Outer Wall W.155, was accompanied

---

15 W.103b+W.163b + W.104b + W.105b+W.161b.
by the repair of street L.144b (L.144a), especially along its northern edge cut by W.155 (P.171), by means of a filling of small stones (F.173). A round structure (W.185), merged into wall W.155, was added to the defence in the area facing the blocked gate (squares Boll4 + Bpl4 + Boll5 + Bpl5).

Fig. 3.13 - General view of the western section of squares Boll5 + Boll4, from north-east.

Fig. 3.14 - Beginning of the removal of blockage wall W.157 inside city-gate L.160, from west.
3.1.5. Phase 5: stratigraphy of Batrawy II fortification system
Phase 5 is basically constituted by the destruction layer (Activity 5a) marking the end of the Batrawy II city, and the original constructional phase (Activity 5b).

Activity 5a: destruction of Batrawy II city-gate and city-wall
A layer around 0.2-0.3 m thick preserved only in two spots in the excavated area, namely in square BoII5 (to the west) F.168 (fig. 3.16) and within the gate passage (F.172), including fragmentary grayish mud-bricks and small pebbles, illustrates the collapse and destruction of the city-gate and earliest city-wall of Batrawy II (fig. 3.17).

Activity 5b: construction of Batrawy II city-gate and city-wall
The earliest city-wall and city-gate L.160 were erected directly over the bedrock and included the two doorjambs (W.183 to the east, W.156 to the west), entrance step L.182, marking the passage into the gate, floor L.186 into the passage, and street L.144b outside the gate. All features were linked each other.
Fig. 3.16 - EB II collapse layer F.168 above street L.144, from north-east.

Fig. 3.17a-b - Stratigraphy inside city-gate L.160, showing destruction layer F.172, from north.
3.2. Architecture & finds: the EB II city-gate and the EB II-III triple line of fortifications [by Lorenzo Nigro]

Excavations in the area north of the main city-wall reached the bedrock, thus thoroughly illustrating the progressive transformation of the defensive system in this strategic spot of the town (fig. 3.18), from the earliest city-wall of the Early Bronze II (2900-2700 BC) up to the last urban defence – the outer scarp-wall of the EB IIIB (2300 BC) –, and to the latest embankment of the EB IVB (2200-2000 BC) village (see below).

Fig. 3.18 - General view of the EB II-III triple line of fortifications excavated in Area B North, from north: W.103+W.163, the inner and main city-wall; W.155, the Outer Wall; adjoined Scarp-Wall W.165; in the middle, city-gate L.160 was excavated.

3.2.1. The earliest city-wall and city-gate (Period Batrawy II, Early Bronze II)

The earliest defence of Batrawy (fig. 3.19) was a solid wall 2.9-3.2 m wide, consisting of a lower foundation made of huge limestone blocks and boulders (some exceeding 1.5 m in length by 1.0 in width) on the northern outer face (W.103c+W.163c; figs. 3.20-3-21), and of big blocks (0.5 x 0.6 m) on the southern inner curtain (W.105c+W.161c; fig. 3.22). The inner core of the wall (W.104c) was made by medium size undressed stones laid in regular layers with pebbles, limestone chops and mud mortar. The outer (W.103c+W.163c) and inner (W.105c+W.161c) walls were carefully set into the bedrock\(^\text{16}\), and the outer wall exhibited a battering foot in order to make firmer the whole structure\(^\text{17}\).

\(^{16}\) Usually the elevation of the inner foot of the main city-wall is around 0.5-1 m higher than that of the outer one.

\(^{17}\) Nigro ed. 2006, 175-176, fig. 4.32.
Fig. 3.19 - Plan of EB II city wall W.103c+W.163c+W.104c+W.161c and city gate L.160.
Fig. 3.20 - The huge limestone boulders set in the lower foundation of the northern outer face (W.163c) of the EB II city-wall, from north.

Fig. 3.21 - Big limestone blocks in the foundation of W.163c, from north.

Fig. 3.22 - Big blocks on the southern inner curtain W.105c, from south.

Fig. 3.21 - Big limestone blocks in the foundation of W.163c, from north.
This imposing stone foundation was 2.3 m high around the gate and 2 m in the rest of the area; it supported a mud-brick superstructure up to 4 m high with battering sides, reaching on top a hypothetical width of 2.2 m, presumably with a wooden coronation and a continuous parapet slightly protruding from the façade (fig. 3.23).

The city-wall was built in separated stretches of 6-8 m length in order to prevent dangerous effects of earthquakes, a technique also attested to in other Early Bronze urban sites in Palestine and Jordan.

Fig. 3.23 - Schematic reconstruction of a stretch of Batrawy II city-wall.

---

18 Actually, there is no information on the dimension of this brick superstructure. Fragments of greyish mud-bricks were retrieved in the destruction layers of Period Batrawy II, however even the dimensions of the bricks is uncertain (0.6 x 0.4 x 0.16 m), while the height of the superstructure has been calculated according to the presumed height of the later EB III city-wall, suggested by a flight of steps of a staircase discovered inside wall W.105b+W.161b (staircase W.181, § 3.2.2.).


20 See below note 27.
Street L.144 (Period Batrawy II, Early Bronze II)

A street (L.144b) run along the city-wall on its outer side (figs. 3.24-3.25)\(^{21}\), paved with a layer of a gritty chalk plastering the bedrock and regularizing its surface (at some spots also stone fillings were used to make the street floor more regular). The collapse layer lying over the street, F.168, preserved only in square BoII5 (§ 3.1.4.), included EB II sherds (pl. XXI), a stone blade\(^{22}\), and various fragments of greyish mud-bricks.

\(^{21}\) This street was already partially identified in the first season (Nigro 2006a, 245, fig. 26; Nigro ed. 2006, 191, figs. 4.53-4.54).

\(^{22}\) KB.06.B.74 (pl. XXI).
Fig. 3.25 - Street L.144b along the outer face W.163c of Batrawy II city-wall, from east; to the right, filling of small stones F.173 along its northern edge cut by Batrawy IIIa Outer Wall W.155.
The city-gate of Period Batrawy II (Early Bronze II)
In spite of the monumentality of the city-wall, the EB II gate was a simple opening, 1.6 m wide, since the town was approachable only by pedestrians and equids (onagers or donkeys) through the street (L.144b) which flanked the wall (figs. 3.26-3-28). A 0.27 m step (B.182) marked the entrance (figs. 3.29-3.30) to the passage, paved with a plastered floor (L.186), and flanked by reinforced door-jambs made of bigger and carefully intermingled blocks, which supported a monolithic capstone (2.4 x 0.7 x 0.35 m) on the outer side and a wooden beam on the inside (as it is indicated by burnt traces on the faces of the stones in between the beams were inserted). At least four wooden beams were presumably employed in the ceilings of the gate passage and supported the brick superstructure (fig. 3.56).

Fig. 3.26 - General view of Batrawy II city-gate L.160, from north-east; note the step (B.182) marking the entrance, the plastered floor (L.186) above bedrock inside the passage and the battering boulders at the foot of the city-wall.

23 The elevation outside the gate is 54.49 m, while the floor inside the gate was 55.01 m.
Fig. 3.27 - Front view of the northern outer side of EB II city-wall W.103+W.163 with city-gate L.160.

Fig. 3.28 - Front view of the southern inner side of EB II city-wall W.105+W.161 with city-gate L.160.
Fig. 3.29 - EB II city-gate L.160, from north; note step B.182 marking the entrance to passage L.186.

Fig. 3.30 - Step B.182 of city-gate L.160, opening on street L.144b, flanking city-wall W.103c+W.163c, from north-east.
The eastern jamb (W.183) was made, on its outer side, by a series of alternately superimposed cubic and rectangular limestone blocks (figs. 3.31-3.32); the western jamb (W.156) was reinforced by a large slab on its fourth course of stones, linked to a huge block visible on the northern façade of the main wall (figs. 3.33-3.34, 3.36). Such a strengthening device was set in the wall just above a protruding buttress (W.187), preserved only at the lowest course of stones over the bedrock (fig. 3.35), perhaps to be connected with a passage through the street running along the city-wall (L.144b). In spite of its apparently simple layout, the EB II gate at Batrawy accomplished mainly defensive purposes, since due to its dimensions (the passageway was a corridor 1.6 m wide and 3.2 m long), it was easy to be looked out and to be locked in case of enemy attack; it was, anyhow, the main access to the town, as its location on the city perimeter and the organization of spaces inside and outside it testifies to.

Nonetheless, the plan of gate L.160 finds several comparison in contemporary EB II defensive architecture of the region, such as at Khirbet Kerak24, Tell el-Far'ah North25, et-Tell/'Ai26, Arad27, Khirbet ez-Zeraqon28, and, later on in EB III, also at Bab edh-Dhra29.

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 and an outer wall (W.155) was added to the defense at the beginning of the Early Bronze IIIA (see below § 3.2.2.).

24 The South-East Gate in Wall A (2.5 m wide; Greenberg - Paz 2005, 84, 86-89, fig. 8, 10-14; Greenberg et al. 2006, 239-244, plans 6.2, 6.4).
25 De Vaux 1962, 221-234, pls. XIX-XXI.
26 The Citadel Gate at Site A (around 1 m wide and 4.5 m long; Callaway 1980, 63-65, figs. 38, 41); the Postern Gate (around 1 m wide; Callaway 1980, 72-73, figs. 48-49, 51) and the Lower City Gate (around 1 m wide; Callaway 1980, 114-115, figs. 74-75) at Site L.
27 The Western Gate in Area T (2.50-2.70 m wide), the Gate in Area N (2.10 m wide), and the Postern Gate in Area K (0.80 m wide): Amiran - Ilan 1996, 20-22, pls. 68-70, 78, 85-86, 90-93.
28 The City-Gate in the Lower City fortifications (around 2.0-2.5 m wide; Douglas 2007, 9, figs. 3, 6-12, pls. 1-5; phase 4g-a; EB II). Just 7 m north-west of the main city-gate a postern 0.80 m wide (sortie-postern) was opened across the city-wall W1 (Douglas 2007, 10). According to excavators, it was closed after a little while already during the Early Bronze II (Douglas 2007, 14; phase 4d).
29 The EB III West Gate in Fields IV and XIII, also blocked during the Early Bronze III (Rast - Schaub 2003, 272-280, fig. 10.12). A possible EB III postern (around 1.50 m wide) at Tell Ta'anek, detected on the western side of the site (Lapp 1964, 12, fig.4), exhibited instead a bent-axis plan.
Two sharp earthquake cracks on the eastern jamb (fig. 3.37) testify to the destruction of the lintels and possibly of the capstone of the passageway, which presumably caused a general collapse, so that the gate went out of use at the end of the Early Bronze II.\footnote{Nigro 2007a, 352; in press a, § 6. This was the case of other centres of the North-Central Jordan Valley: Pella/Tell el-Husn, Tell Abu Kharaz and Tell es-Sa‘idiyyeh, which were apparently destroyed in the same period and by a similar agent (Bourke 2000, 233-235). Such a conflagration apparently caused by an earthquake is attested to also at Megiddo (Finkelstein, Ussishkin and Peersmann 2006, 49-50), ‘Ai (Callaway 1980, 147; 1993, 42), Jericho/Tell es-Sultan (Kenyon 1957, 175-176, pl. 37a; 1981, 373, pls. 200-201, 343a; Nigro 2006c, 359-361, 372-373). Also at Khirbet ez-Zeraqon, phase 3 (EB II) ends in a fierce conflagration (Douglas 2007, 27-28), though it is not surely ascribable to an earthquake.}
Fig. 3.34 - Front view of western jamb W.156.

Fig. 3.35 - Protruding buttress W.187 to the west of the entrance of city-gate L.160, from north-east.

Fig. 3.36 - General view of city-gate L.160, from inside the city.
Fig. 3.37 - Earthquake cracks visible on the eastern jamb (W.156) of city-gate L.160.

3.2.2. The double city-wall of Period Batrawy IIIa (Early Bronze IIIA)
After the destruction which caused the partial collapse of the gate and brought to a sudden end the EB II city, the defensive system in Area B North, at the most sensitive and exposed side of the town, underwent a general reconstruction. The gate was blocked by a solid wall made\textsuperscript{31} with

\textsuperscript{31} EB II city-gates at 'Ai were partly blocked already in the late Early Bronze II (the Citadel Gate and the Postern Gate; Callaway 1980, 113-115), partly at the beginning of the Early Bronze III (the Lower City Gate; Callaway 1980, 152-154). Also at Khirbet Kerak, EB II south-east gate in Wall A was possibly blocked at the beginning of the Early Bronze III (Greenberg - Paz 2005, 89, figs. 13-14; Greenberg \textit{et al}. 2006, 245, fig. 6.18, plan 6.5). The same happened in the Early
big stones (W.157; figs. 3.38-3-40)\textsuperscript{32}, and the superstructure of the main city-wall (W.103b+163b + W.104b+ W.105b+W.161b) was rebuilt employing medium size stones up to a height of around 4.0-5.0 m; only the upper section of the structure was built up with reddish mud-bricks up to 8 m. The original stretches in which the main wall was subdivided\textsuperscript{33} were tied up one to the other (on its outer face this indicates in several spots the height from which the wall was reconstructed).

\textbf{Fig. 3.38 - City-gate L.160 after the blockage (W.157) at the beginning of the Early Bronze IIIA, from north.}

\textsuperscript{32} Only a few pottery sherds were retrieved in wall W.157 dating back from EB II/early EB IIIA (pl. XXI).
\textsuperscript{33} Nigro ed. 2006, 176-177.
Fig. 3.39 - Front view of the northern outer side of EB II city-wall W.103+W.163 with blocking wall W.157.

Fig. 3.40 - Front view of the southern inner side of EB II city-wall W.105+W.161 with blocking wall W.157.
The Outer Wall (W.155): structure, parallels and significance
A major change in the defence system in Area B North was the doubling of the fortification line by adding a 1.6-1.8 m-wide massive outer wall (W.155) around 1.7 m off of the main wall and parallel to it (fig. 3.41; plan I).

The Outer Wall (W.155) was set directly into the bedrock by regularizing a natural step (P.171) and filling in with rubble (F.173) the gap resulting on its inner side between the wall and the floor of the street running along the main inner Wall (fig. 3.42).

The Outer Wall (W.155) had an outer battering face made up of huge polygonal boulders (fig. 3.43) and an inner face made of medium size stones regularly intermingled; in between there was a filling of small stones and limestone chops (fig. 3.44). At the moment, there is no evidence to attempt a reconstruction of the elevation of the outer wall and its coronation, which however was at least 3 m high, in order to protect the passageway leading to the EB III gate. A gate has, in fact, to be surmised opened through the main inner wall west of the previous one, since the street between main city-wall W.103b+W.163b and Outer Wall W.155 runs up westwards (see below).
Fig. 3.42 - The western stretch of Outer Wall W.155; south of it, rubble filling F.173 regularizing the natural step of the bedrock (P.171).

The addition of an outer wall at the beginning of EB III, i.e. the doubling and thickening of the defensive system, is a feature common to several Southern Levantine sites, among which some of the most renowned cities of
the Early Bronze Age from et-Tell/’Ai, Khirbet Yarmouk, Tell es-
Sultan/Jericho, Tell el-Mutesellim/Megiddo, Tell Ta’anek/Taanach.
In the case of Batrawy, this addition involved only the more exposed
northern side of the site, since on the western and southern flanks of the
triangular hill the steep cliff made it impossible to add any further
fortification line. However, some strategic spots along the main wall were
fortified with protruding bastions and towers (fig. 3.57), as in other sites of
the region.

In many Palestinian sites, in fact, the addition of an outer wall during EB
IIIA was accompanied by the erection of huge rectangular towers and
bastions at selected spots of the fortification line, or all around it (as
recently pointed out for the EB III fortification system at Khirbet Kerak).
Such strengthening and widening of town defences, from the one hand

34 Callaway 1980, 113-121.
35 De Miroschedji 1990, 57*-59*.
36 Marchetti - Nigro 1998, 32-39, 81-94; Nigro 2006c, 369-372; 2006e, 8-9; in
press b, § 4.
37 Loud 1948, 70-76, ,figs. 158, 392-393.
38 Lapp 1967, 7-12.
40 Greenberg - Paz 2005, 94-97, fig. 1; Greenberg et al. 2006, 248-267, fig. 6.1.
point to the unstable political situation of Southern Levant during EB III, when rising urban polities confronted each other continuously and war became a structural element of the life of this kind of “urban society” \(^{41}\), from the other hand, testify to the centralization of goods and people to be protected within the city-walls. In the specific case of Khirbet al-Batrawy, the strongly defended nature of the hill made the massive EB III fortifications at some extent even excessively huge. However, such powerful defence works may indicate a kind of military vocation of the town, which has been considered a “citadel” or a big “castle”.

![Fig. 3.44 - View of Outer Wall W.155 from inside the city, from southwest; note the inner face made of medium size stones and the core made of small stones and limestone chops.](image)

Street L.144a and the EB IIIA destruction layer (F.167) over it

With the addition of the outer wall, the street running along the city-wall became a corridor in between the latter and the main inner wall; its floor (L.144a) consisted of the beaten surface of a layer of collapsed material (F.168; § 3.1.5.), gradually running up westwards. Street L.144a remained in use until a violent destruction, which left a thick layer of ashes over it (F.167; § 3.1.4., figs. 3.12). A copper bar (fig. 3.45)\(^{42}\)

---


\(^{42}\) KB.06.B.73.
was a distinct find from this layer, together with a flint blade (fig. 3.46)\textsuperscript{43} and several animal bones\textsuperscript{44}. Ceramic material from this layer (fig. 3.47) includes hemispherical bowls, Simple Ware jars, a Red-Polished jug, and some fragments of Simple Painted jars), as well as a Grain Wash fragment (pl. XVII), two hole-mouth cooking pots (pl. XVIII). Also storage jars with flaring neck and everted rim and hole-mouth jars were present, and a *pithos* (pl. XVIII). This pottery indicate a dating of the destruction layer towards the end of EB IIIA (around 2500 BC)\textsuperscript{45}.

The staircase (W.181)
The superstructure of the EB III city-wall was further investigated due to the discovery of some steps of a staircase (W.181), abutting from the inner face of the refurbished main city-wall (W.105b+W.161b) in square BoI16 (fig. 3.48). The staircase was presumably made of wooden posts and shelves fixed on a flight of steps consisting of stone slabs protruding 0.3-0.5 m from the inner face (W.161b) of the wall (fig. 3.49). The height of each step was around 0.3 m, thus showing that at least 20 steps were enough to reach the top of the city-wall.

\textsuperscript{43} KB.06.B.59.
\textsuperscript{44} KB.06.FR.68, KB.06.FR.89.
\textsuperscript{45} 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 15 cm thick burnt layer (F.146) with charcoals, 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).
Fig. 3.47 - EB IIIA ceramic material and small finds from layer F.167.

Fig. 3.48 - EB III staircase W.181 abutting from city-wall W.161b, from west; note the burnt traces left by wooden steps.
The curvilinear Outwork W.185
In squares BoII4 + BpII4 + BoII5 + BpII5 a massive curvilinear structure was exposed, preserved only in the lowest foundation courses of stones, which was apparently dismantled when Scarp-Wall W.165 was erected in EB IIIB (fig. 3.50; plan I). Outwork W.185 was linked to Outer Wall W.155, having its southern limit merging into the northern face of the latter (fig. 3.51), with its outer faces employing bigger and more regular stones, and an inner body of medium size not worked stones and limestone chops. It had a varying width of 2.7-3.0 m, and may be tentatively interpreted, due to the curve orientation of its northern face, as a defensive outwork or a sustaining buttress (its concave shape in plan seems to corroborate the latter hypothesis). The difficulties in reading this structure are due to its preservation state, since it was partly dismantled, partly integrated into the following Scarp-Wall W.165, and only further excavations may suggest a more precise interpretation.

46 At the beginning of the Early Bronze III a curvilinear defensive outwork, 7.50 m long × 3.80-4.80 m wide (W.14, 1.80-2.00 m thick), was added outside the main city-wall of the Lower City at Khirbet ez-Zeraqon, next to the city-gate (Douglas 2007, 30, figs. 4, 14-18, 26, plans 6-9; phase 2, Early Bronze IIIA). At Khirbet Kerak a series of round towers were inserted in the late EB III city-wall (Fortification C; Greenberg - Paz 2005, 94-96, figs. 1-2, 5-6; Greenberg et al. 2006, 249-267).

47 The width of wall W.185 may be calculated from its northern concave outer face to its convex southern limit, which coincides with the northern outer face of wall W.155, that is around 3.0 m.
Fig. 3.50 - The EB III triple line of Batrawy fortifications, with the main EB II-III city-wall in the background, EB IIIA Outer Wall W.155 in the middle, and EB IIIB reinforcing Scarp-Wall W.165 in the foreground. To the left, the EB IIIA round defensive Outwork W.185, and to the right the EB IV supporting embankment, from west.

Fig. 3.51 - The EB IIIA double line of Batrawy fortifications with the main EB II-III city-wall in the background, EB IIIA Outer Wall W.155 in the middle, and round Outwork W.185 in the foreground, from north.
3.2.3. The triple city-wall of Period Batrawy IIIb (Early Bronze IIIB)
After the second violent destruction (§ 3.1.4.), which occurred at the end of Early Bronze IIIA (around 2500 BC), the northern defence of Batrawy was again thickened with a further scarp-wall (W.165), leaning against Outer Wall W.155 (figs. 3.41, 3.52).

![Image of the EB IIIB triple line fortification](image)

**Fig. 3.52 - The EB IIIB triple line fortification, from east; from left to right: the EB II-III main city-wall W.103+W.163, EB IIIA-B Outer Wall W.155 (in the middle) and EB IIIB reinforcing Scarp-Wall W.165.**

Actually, wall W.165 was made up by a solid stone wall again with a battering outer face, built up in less regular courses of big blocks in respect of those of wall W.155, and by a filling of rubble roughly 0.5 wide laid against the outer face of W.155. Wall W.165 was 1.2 m wide, and it was preserved maximum at a height of 2 m (fig. 3.52).
Fig. 3.53 - The EB IIIIB triple line fortification, from west: in the left foreground, EB IIIB Scarp-Wall W.165; in the middle, EB IIIA-B Outer Wall W.155; in the right background, the EB II-III main city-wall W.103+W.163.

In BoII4 a transversal wall (W.177) abutted on wall W.165 partly overlying the western face of Phase 4 wall W.185. Such a structure, uncovered for a length of 1.3 m on with a north-south orientation, had a width of around 1 m and presumably was part of a further buttress added to the outer side of the city-wall during EB IIIB.

3.2.4. The final destruction of Batrawy IIIb defensive system

The triple line fortification of Batrawy in Early Bronze IIIIB suffered a fierce destruction which cut away the superstructure of both the main city-wall, Outer Wall W.155 and even Scarp-Wall W.165. The room in between these
structures was, in facts, filled up with thick layers of dark ashes, burnt broken bricks and friable soil.48.

3.2.5. The outer embankment of Period Batrawy IV (Early Bronze IV)

The final destruction of the city of Batrawy left a great amount of fallen stones on the slopes of the hill, deriving from the violent collapse of the fortifications. After a period of abandonment, when the *khirbet* was resettled in the Early Bronze Age IV, one major cluster of dwellings was the central saddle at the middle of the northern side of the site, corresponding to Area B South. Here, inside the remains of the EB II-III inner main city-wall, a series of houses arose in EB IV, while, on the outer slope of the hill, in Area B North previous collapsed fortifications were filled up with stones, in order to regularize the northern flank of the site and to protect the village on top of it. The EB IV embankment or rampart (figs. 3.54-3.55), since it had an outer revetment of somewhat carefully laid stones, also had the purpose of supporting the city-wall remains upon which EB IV dwellings had been established.

![Fig. 3.54 - EB IV embankment W.180, from north-east.](image)

48 The destruction layer against the outer face of main city-wall W.103+W.163 and in between the latter and Outer Wall W.155 was called F.149; that in between Outer Wall W.155 and Scarp-Wall W.165 was called F.174, and the destruction layer covering the outer collapsed face of Scarp-Wall W.165 was called F.184.
Fig. 3.55 - EB IV embankment W.180, from west.
Fig. 3.56 - 3D reconstruction of Batrawy II (EB II) city-gate L.160.

Fig. 3.57 - 3D reconstruction of one of the protruding rectangular towers of Batrawy IIIb (EB IIIB) fortification system.
## LIST OF POTTERY, OBJECTS AND SAMPLES BY CONTEXTS

### Area B North

**F.0**
- **Pottery:** Simple Ware: 1 bowl, 1 jug, 21 frags. uns.
- Storage Ware: 1 *pithos*, 3 jars, 36 frags. uns.
- Specialized Production: 1 Metallic Ware fragm.

**Tools:**
- 1 Mortar (KB.06.B.85)

**Objects:**
- 1 Spindle Whorl (KB.06.B.12)

**Plate:** XIII

**W.157**
- **Pottery:** Simple Ware: 1 jug
  - Cooking Ware: 4 frags. uns.
  - Storage Ware: 3 jars (1 with Grain Wash decoration), 1 enveloped ledge handle, 4 frags. uns.

**Lithics:**
- 1 Flint Blade (KB.06.B.41), 1 Spindle Whorl (KB.06.B.43)

**Tools:**
- 1 Mortar (KB.06.B.46)

**Plate:** XIX

**F.154**
- **Pottery:** Simple Ware: 7 frags. uns.
  - Cooking Ware: 4 frags. uns.
  - Storage Ware: 3 jars (1 with Grain Wash decoration), 1 enveloped ledge handle, 4 frags. uns.

**Plate:** XV

**F.158**
- **Pottery:** Simple Ware: 1 bowl, 1 jug, 1 hole-mouth jar, 15 frags. uns.
  - Cooking Ware: 11 frags. uns.
  - Storage Ware: 1 *pithos*, 4 jars, 1 hole-mouth jar, 2 envelope ledge handle, 51 frags. uns.
  - Specialized Production: 1 Red Burnished Ware fragm., 1 Red Polished Ware fragm., 2 Metallic Ware frags.

**Lithics:**
- 1 Flint Blade (KB.06.B.41), 1 Spindle Whorl (KB.06.B.43)

**Tools:**
- 1 Mortar (KB.06.B.46)

**Plate:** XIV

**L.159**
- **Pottery:** Simple Ware: 5 frags. uns.
  - Cooking Ware: 7 frags. uns.
  - Storage Ware: 2 frags. uns.
  - Specialized Production: 1 Red Polished Ware fragm.

**F.162**
- **Pottery:** Simple Ware: 1 jug, 15 frags. uns.
  - Cooking Ware: 1 hole-mouth pot, 18 frags. uns.
  - Storage Ware: 8 jars (2 with Grain Wash decoration), 10 frags. uns.

**Samples:**
- Animal Bones (KB.06.FR.46, KB.06.FR.52)

**Plate:** XVI

**F.164**
- **Pottery:** Simple Ware: 1 jug, 2 hole-mouth jars, 112 frags. uns.
  - Cooking Ware: 3 hole-mouth pots, 105 frags. uns.

**Storage Ware:**
- 2 *pithoi*, 6 jars (1 with Grain Wash decoration), 3 hole-mouth jars, 56 frags. uns.
  - Specialized Production: 1 Khirbet Kerak Ware fragm., 5 Red Polished Ware frags., 1 Red Burnished Ware fragm.

**Plate:** XIX, XX

**F.167**
- **Pottery:** Simple Ware: 3 bowls, 1 jar, 87 frags. uns.
  - Cooking Ware: 2 hole-mouth pots, 97 frags. uns.

**Storage Ware:**
- 1 *pithos*, 3 jars (1 with Grain Wash decoration), 2 hole-mouth jars, 99 frags. uns.
  - Specialized Production: 4 Red Polished Ware frags., 2 Simple Painted Ware frags.

**Lithics:**
- 1 Flint Blade (KB.06.B.59)

**Tools:**
- 1 Copper Bar (KB.06.B.73)

**Samples:**
- Animal Bones (KB.06.FR.68, KB.06.FR.89), Coal (KB.06.PR.85)

**Plate:** XVII, XVIII

**F.168**
- **Pottery:** Simple Ware: 1 jug, 48 frags. uns.
  - Cooking Ware: 37 frags. uns.

**Storage Ware:**
- 1 hole-mouth jar, 33 frags. uns.
  - Specialized Production: 3 Red Polished Ware frags., 2 Metallic Ware frags.

**Lithics:**
- 1 Stone Blade (KB.06.B.74).

**Samples:**
- Animal Bone (KB.06.FR.91)

**Plate:** XXI

**F.169**
- **Pottery:** Simple Ware: 1 jug, 43 frags. uns.
  - Cooking Ware: 32 frags. uns.

**Storage Ware:**
- 2 jars, 24 frags. uns.

**Samples:**
- Animal Bone (KB.06.FR.80), Coal (KB.06.PR.50)

**Plate:** XVI

**F.174**
- **Pottery:** Simple Ware: 1 bowl, 14 frags. uns.
  - Cooking Ware: 5 frags. uns.

**Storage Ware:**
- 2 jars, 20 frags. uns.
  - Specialized Production: 1 Red Polished Ware fragm.

**Plate:** XVI
F.178
Pottery: Simple Ware: 1 jar, 2 frags. uns.
Cooking Ware: 4 frags. uns.
Storage Ware: 5 frags. uns.
Specialized Production: 1 Red Burnished Ware fragm.

W.180
Pottery: Simple Ware: 2 jars, 1 hole-mouth jar, 5 frags. uns.
Cooking Ware: 1 hole-mouth pot, 2 frags. uns.
Storage Ware: 2 jars (with Grain Wash decoration), 4 frags. uns.
Plate: XV

F.184
Pottery: Simple Ware: 1 jar, 1 hole-mouth jar, 1 envelope ledge handle, 4 frags. uns.
Cooking Ware: 1 hole-mouth pot, 18 frags. uns.
Storage Ware: 2 jars, 7 frags. uns.
Specialized Production: 1 Red Polished Ware fragm., 2 Simple Painted Ware frags.
AREA B NORTH

CATALOGUE OF POTTERY AND SMALL FINDS
Pl. XIII - Small finds and pottery from Area B North, filling F.0 (Phase 1)


KB.06.B.0/9, jug. Class: Simple Ware. State of preservation: base. Technique of manufacture: handmade. Firing: medium-high. Fabric colour: 2.5YR5/1 (reddish gray). Temper/inclusions: mineral (white); dimension: small; frequency: low. Base diameter: 1.6 cm; wall width: 0.6 cm; base width: 1.1-0.9 cm. Dating: EB III.


[Pl. XIV]


Pl. XV - Pottery from Area B North, fillings F.154 and F.180 (Phase 2)


Pl. XVI - Pottery from Area B North, fillings F.162 (Activity 3a) and F.174 (Activity 3b)


KB.06.B.167/18, bowl. Class: Simple Ware. State of preservation: base. Technique of manufacture: wheel. Firing: medium-high. Fabric colour: core 10YR6/1 (gray)+2.5YR6/6 (light red). Temper/inclusions: mineral (white, dark gray); dimension: small, medium; frequency: medium-high. Diameter: 5 cm; rim width: 0.6 cm; base width: 0.9 cm. Dating: EB IIIA.


Pl. XIX - Pottery from Area B North, filling F.164 (Activity 4a)


Pl. XIX

Pl. XX - Pottery from Area B North, filling F.164 (Activity 4a)


Pl. XXI - Pottery from Area B North, wall W.157 (Activity 4b) and layer F.168 (Activity 5a)


KB.06.B.168/6, hole-mouth jar. Class: Storage Ware. State of preservation: rim. Technique of manufacture: handmade. Firing: low. Fabric colour: 2.5YR5/2 (weak red). Temper/inclusions: mineral (white, gray); dimension: medium-small; frequency: medium-high. Diameter: 16 cm; rim width: 1.1 cm; wall width: 0.9 cm. Description: hole-mouth jar with slightly recessed rim. Dating: EB II.


4. Area B South: the EB IIIB quarter and the EB IV village inside the city-wall [by Lorenzo Nigro]

Excavations in Area B South started from squares BpI7 + BqI7 (southern half) and BqI8, already explored in the first season, and were enlarged to squares BpI6 (SW quadrant), BpI7, BpI7, BqI7 (southern half), BpI8, BqI8, BrI8, BpI9 (northern half).

Fig. 4.1 - General view of the Area B South inside the main EB II-III city-wall (W.105+W.161) of Khirbet al-Batrawy, from east.

4.1. Stratigraphy of Area B South [by Giovanna Marinelli]

Archaeological research in Area B South allowed to preliminarily distinguish four major phases, including the topmost layer of humus (Phase 1), five different activities (Activities 2a-2e) of the EB IV village (Phase 2), the underlying strata illustrating following stages of long-lasting life of EB IIIB Building B1 (Phase 3), up to EB IIIA layers associated to the life of an area apparently free from buildings within the city-wall (Phase 4).
Tab. 4.1 - Archaeological periodization and stratigraphy of Area B South.

4.1.1. Phase 1: abandonment
Phase 1 includes the long periods of abandonment of the site, when it was exposed to atmospheric erosion, and some rare episodes of frequentation. This is generally reflected by a 10-15 cm layer of dusty earth rich in plant roots (F.0), that is homogeneously present all over the area, and from which a few Phase 2 structures emerge (fig. 4.2). A Canaanean blade\(^1\), two flint tools (fig. 4.3) and a stone mortar (fig. 4.4)\(^2\) were collected from the surface.

<table>
<thead>
<tr>
<th>Absolute Chronology</th>
<th>Archaeological Period</th>
<th>Site Period</th>
<th>Phases of Area B South</th>
</tr>
</thead>
<tbody>
<tr>
<td>3400-3000 BC</td>
<td>Early Bronze I</td>
<td>Batrawy I</td>
<td>-</td>
</tr>
<tr>
<td>3000-2700 BC</td>
<td>Early Bronze II</td>
<td>Batrawy II</td>
<td>Phase 5</td>
</tr>
<tr>
<td>2700-2500 BC</td>
<td>Early Bronze IIIA</td>
<td>Batrawy IIIa</td>
<td>Phase 4b-a</td>
</tr>
<tr>
<td>2500-2300 BC</td>
<td>Early Bronze IIIIB</td>
<td>Batrawy IIIb</td>
<td>Phase 3d-b</td>
</tr>
<tr>
<td>2300-2200 BC</td>
<td>Early Bronze IVA</td>
<td>Batrawy IVa</td>
<td>Phase 3a</td>
</tr>
<tr>
<td>2200-2000 BC</td>
<td>Early Bronze IVB</td>
<td>Batrawy IVb</td>
<td>Phase 2e-a</td>
</tr>
<tr>
<td>2000 BC-1900 AD</td>
<td>Later Periods</td>
<td>Batrawy V</td>
<td>-</td>
</tr>
<tr>
<td>1900-2006 AD</td>
<td>Contemporary</td>
<td>Batrawy VI</td>
<td>Phase 1</td>
</tr>
</tbody>
</table>

\(^1\) KB.06.B.9 (pl. XXII).
\(^2\) KB.06.B.1, KB.06.B.10 and KB.06.B.4.

Fig. 4.2 - Area B South: squares Br117 (southern half) + Br118 at the beginning of excavations in 2006, from south.
4.1.2. Phase 2: stratigraphy of Batrawy IV dwelling quarter
Phase 2 includes layers associated with the Early Bronze Age IV occupation of the site (Activities 2a-2f), among which two major structural phases could be singled out: Activity 2c, the final permanent settlement on Khirbet al-Batrawy, the remains of which are partially visible on the surface of the site, and are referable to domestic units; and Activity 2e, the earliest settlement phase - not identified in other Areas at Batrawy, less preserved but distinguishable under the later structures.

Activity 2a: abandonment of Batrawy IV dwelling quarter
Activity 2a, consisting of layers of dusty earth with stones and rubble from the collapsed walls, such as F.436 and F.452 in BoII6 + BoII7, F.352 and F.366 in BpII8 + BpII9 (fig. 4.5), F.368 in BpI9, and F.385 and F.414 in BrI7 + BrI8 (figs. 4.6-4.7), represents the abandonment of the EB IV village. Two more fillings belonging to this activity, F.363 in BpI7 and F.358 in baulk BqI7/8, are layers of dust with fragmentary limestone and chalk inclusions, and scattered pottery sherds (pls. XXII-XXIII, XXXVI)4.

3 The absence of rubble might be explained by the fact that there were no structures nearby, with the exception of flimsy wall W.359 and deposition D.350, which will be illustrated below.
4 These correspond to F.102 excavated in 2005 in trench BpI7 + BqI7 (Nigro ed. 2006, 155-156).
Material collected from all these fillings (fig. 4.8) included animal bones\(^5\), sherds of different types of wares and few small finds\(^6\), that are associable to the domestic activities carried out in the underlying houses.

\(^5\) KB.06.FR.4, KB.06.FR.7 and KB.06.FR.9 from filling F.352, KB.06.FR.8 from filling F.366, KB.06.FR.59 from filling F.385, KB.06.FR.73 from filling F.414, KB.06.FR.108 from filling F.452.

\(^6\) A flint tool (KB.06.B.8; fig. 4.9) from filling F.352, a limestone cutting base (KB.06.B.20) from filling F.366, two stone pestles (KB.06.B.22, KB.06.B.24) from filling F.368, and a limestone weight (KB.06.B.51; pl. XXII) from filling F.358.
Activity 2b: remains of last use of Batrawy IV dwelling quarter
The actual use of the late EB IV structures is attested in BoI6 + BoI7 by thin compact layers of light brown soil F.434, F.438 in stone-paved room L.450, and by filling F.456 (in the southern part of BoI7) in room L.477. In the rest of the area collapsed structures obliterated all evidence of these houses life.
A secondary burial, D.350, built in vertically set stones adjacent to wall W.359, is most likely to be attributed to this activity (§ 4.2.3.).
In baulk BqI17/8 to the same activity belongs filling F.360 (pl. XXII)\(^7\), in which a small pit, P.362b, lined with stones and filled with ash and bones, was cut\(^8\).

---

**Activity 2c: construction of Batrawy IV dwelling quarter**

Activity 2c corresponds to the latest major building activity carried out on the site before its final abandonment. Structures belonging to this activity were brought to light in all excavated squares. In the westernmost trench, Boll16 + Boll17, the latest building phase of Batrawy IVb is represented by walls W.153 and W.441 with partition wall W.443, enclosing stone-paved-room L.450. To the south walls W.445, ending with bin B.463, and two

\(^7\) A copper pivot (KB.06.B.31), and some animal bones (KB.06.FR.16) were retrieved in this filling.

\(^8\) From its filling F.362a a sharpening tool (KB.06.B.27; fig. 4.10), and some animal bones (KB.06.FR.3, KB.06.FR.5, KB.06.FR.6, KB.06.FR.12) were retrieved.
concentric curvilinear structures (W.451 and W.471) belong to the same constructive phase.

In the central trench (BpII7 + BpII8 + BpII9) Activity 2c is represented by House L.354, enclosed by walls W.359, W.351, W.353 and W.361. Inside the house, device L.370, a small storage facility delimited by walls W.355, W.357 and W.361, lies with installation B.365. In the northern part of L.354 (in BpII8), adjacent to W.357, is a rectangular stone platform (B.367), and an adjacent device (L.356). In the south-eastern corner of L.354 oval installation B.374 is built against to W.353.

In the easternmost trench (BrII7 + BrII8), the only structure to be associated to Activity 2c was found in BrII8: W.407, a E-W oriented stone wall, most likely related to wall W.117, a structure excavated and removed during the previous season.

Activity 2d: levelling and use of the earliest Batrawy IV structures

Activity 2d represents the levelling layer between the two major building activities of Phase 2 (Activity 2e and 2c), and it has been identified up to now only in BpII7 + BpII8. Levelling layers F.378 (in BpII7 + BpII8) and F.462 (in BoII7) consist of sandy soil mixed with stones, chalky fragments, animal bones, EB IVB pottery sherds (pl. XXV; fig. 4.11), and traces of yellowish mud-bricks.

Fillings F.390 and F.394 (fig. 4.13), consisting of very friable sandy soil with limestone inclusions and sparse EB IVB pottery sherds (pl. XXVII), represent, instead, the use of Activity 2e structures (§ 4.2.3.).

Finally, F.383 was an incoherent heap of stones with scattered animal bones excavated in the southernmost part of BpII8.

---

9 Two fragmentary basalt grinding stone (KB.06.B.29, KB.06.B.45) were part of its structure, and were collected when the wall was dismantled.

10 Work in this square, after the removal of the topsoil and the abandonment layer F.414 (Activity 2a), was limited to its southernmost part, including baulk BrII7/BrII8.


12 KB.06.AR.24, KB.06.AR.29.

13 KB.06.FR.22, KB.06.FR.33 and KB.06.FR.62 from filling F.378, and KB.06.FR.129 from filling F.462.

14 A stone bead (KB.06.B.52; pl. XXV) from filling F.378, a flint blade (KB.06.B.98) and a small basalt mortar (KB.06.B.99) from filling F.462 were also found, as well as a door socket (KB.06.B.47; fig. 4.12).

15 KB.06.FR.61, KB.06.FR.69.
Activity 2e: earliest Batrawy IV occupation
The earliest building phase of Batrawy IVb has been detected up to now only in square BpI18. Here a stone floor (L.402), delimited by a wall (W.405) with several connected installations (B.377, W.403, B.404, oven T.406) was uncovered.
Layer F.400 represents the use of floor L.402, on which several smashed jars were found *in situ* (§ 4.2.3.). A deep pit, P.426b in the southernmost part of BpII8 (fig. 4.14), must belong to the latest part of this activity, possibly just before, or during the desertion of the above mentioned structures.

*Fig. 4.14 - Pit P. 426b cut in the SW corner of square BpII8.*

Underneath F.378 and F.462, traces of occupation activities associated to those parts of Building B1 still standing at the time are the following: L.408 in the southern part of BpII8, a very hard, though extremely fragmentary, floor made of limestone marl mixed with gravel, on which a small circular installation (B.393) was also built; L.468 in BoII7, a fragmentary floor in strongly pressed earth, ca. 15 cm thick without inclusions. Both floors cover the razed parts of two Building B1 walls, respectively the southern extension of W.389 and the northern stretch of W.439. It is likely that D.395 (figs. 4.15-4.16), a disturbed burial found in the baulk between

---

16 A Canaanite blade (KB.06.B.62; pl. XXXIV), some animal bones (KB.06.FR.60), and scattered EB IIIB pottery sherd (pl. XXXIV) come from this filling.

17 Three skull fragments (KB.06.B.HR.121) were found in D.395, which are currently under analysis.
BpI18 and BqI18, must be related to this activity. The burial was set in the filling of an earlier structure, T.413, a large oven that will be described below.

Fig. 4.15 - Burial D.395 set in the abandonment filling of oven T.413, from south.

Fig. 4.16 - Detail of burial D.395, from north.
4.1.3. Phase 3: stratigraphy of Batrawy IIIb structures

Phase 3 groups all stratigraphic units related to the activities carried out between the second part of EB III (Period Batrawy IIIb, Early Bronze IIIB) and EB IVB (Period Batrawy IVb), from the construction of the huge Building B1 (Phase 3d), throughout its various stages of use and its final abandonment (Phase 3a), and the different layers testifying the use of the corridor between Building B1 and the main fortification wall (W.105a+W.157+W.161a).

Activity 3a: final abandonment of Batrawy IIIb structures

Activity 3a corresponds to a brief re-occupation of part of the large Batrawy IIIb building, and its final abandonment filling F.387 (in baulk BplI8/BqlI8; fig. 4.17), consisting of friable silt soil with scattered animal bones\(^{18}\), and pottery sherds (pl. XXXIX).

Fig. 4.17 - General view of abandonment filling F.387 (Activity 3a) in square BplI8, from south-east.

In BplI7 fill F.470 mainly including rubble and stone is the result of collapse of stone walls of Building B1. Similar evidence in squares BrI7 + BrI8 is represented by layer F.411 (pl. XXXV), which consisted of a heap of stones.

\(^{18}\) KB.06.FR.81.
fallen from W.409 (east of Building B1), immerged the usual buff, sandy soil (fig. 4.18). A concentration of large stones mixed in sandy friable soil (F.417) is found in the south-western corner of BqII8, again a rest of a collapsed structure (a complete mud-brick was found while excavating this layer), which points to the presence of more, significant structures southwards.

Fig. 4.18 - General view of layer of collapsed stones F.411 in squares BrII7 + BrII8, fallen from W.409, from south.

In the northern part of the baulk, a filling of sandy soil with ashy lenses, F.382, represents this activity in the area between the fortification wall and the structures in BqII8.

In the north-western corner of BpII7, between the emerging summit of walls W.109 and W.105 there was a fill of silt and friable earth, F.380, possibly the result of levelling work in the corridor.

---

19 Some animal bones were found in F.411 (KB.06.FR.93).
20 Some animal bones were retrieved in this layer (KB.06.FR.98).
21 This layer corresponds to F.118 excavated during the 2005 campaign (Nigro ed. 2006, 158). A soapstone whetstone (KB.06.B.34; fig. 4.19) and a rectangular cutting base (KB.06.B.33; fig. 4.20) are associated to it, as well some animal bones (KB.06.FR.28, KB.06.FR.39).
In Bpl I7 + BpI I8, a layer of beaten earth, F.410 (pl. XXXIX; figs. 4.21-4.22)\(^22\), in which two pits were cut, P.397b (in BplI8; fig. 4.20) and P.399b (in BplI),\(^23\) seals the collapse layer within Building B1.

\(^{22}\) A basalt grinding stone (KB.06.B.63) was found in F.410, together with a charcoal sample (KB.06.PR.63).

\(^{23}\) The very friable fillings of these pits (F.397a and F.399a) were mixed with small and medium sized stones, EB III pottery sherds (pl. XXXVIII), and animal bones (KB.06.FR.72 and KB.06.FR.74 from F.397a, and KB.06.FR.76 from F.399a).
Fig. 4.22 - Grinding stone KB.06.B.63 and pottery from filling F.410

Fig. 4.23 - Top of pit P.397b cut in layer F.410a in square BpII8, from west.

Traces of the abandonment in BpI8 consisted of a filling of ashes, F.376, in which Phase 2c wall W.125, exposed during the 2005 campaign\textsuperscript{24}, was embedded\textsuperscript{25}.

\textsuperscript{24} Nigro (ed.) 2006, 157, 171.

\textsuperscript{25} From the dismantling of wall W.125 two objects a door socket (KB.06.B.26; fig. 4.24) and a grinding stone (KB.06.B.28; fig. 4.25) were found. Both items can be associated to filling F.376, from which two samples of charred wood (KB.06.PR.25,
Activity 3b: destruction of Building B1

Activity 3b in Building B1 is represented by destruction layer F.420 in the large northern room (in BpII7 + BpII7 + BpII8), made of beaten yellowish earth with grey lenses and occasional traces of charcoals. This layer was also cut by the lowest part of P.397b in its centre (fig. 4.26). In the north-western corner of the room a heap of stones (F.473) has been interpreted as the collapsed corner of walls W.109 + W.439. In the southern part of BpII8, a layer of sandy brownish soil (F.432) mixed with stones of different sizes and scattered animal bones filled up the southernmost room of Building B1 and covered the southern stretch of W.389. Pit P.426b (Activity 2e) cuts this layer. This must represent the abandonment layer over which L.408 (Activity 2d) was laid. In baulk BpII7/8 a very compact layer of yellow clayish earth (most likely decayed mud-bricks), F.386, was identified; it was limited to the area of the baulk between W.139 and W.469. A thick layer of ashes, F.388, also including small charcoals and lumps of chalk, was excavated in the western sector of BpII8 and represents the destruction in the area west of Building B1.

KB.06.PR.26) and several animal bones (KB.06.FR.17, KB.06.FR.18, KB.06.FR.86) were collected.

KB.06.FR.126.

A limestone whetstone (KB.06.B.32; fig. 4.27) was collected from excavation of filling F.386, as well as some animal bones (KB.06.FR.30).

This layer most likely corresponds to F.120, excavated in BqII8 in season 2005 (Nigro ed. 2006, 161).
Activity 3c: use of Building B1
Activity 3c represents the earliest phase of use so far excavated in Building B1, and it was identified in the northern room with filling F.431 (in BpI7 + BpI7 + BpI8).
Within semi-circular oven T.413 the phase of use is represented by a layer of ashes (F.412), covering a flooring made of small basalt slabs (L.415)\textsuperscript{29},

\textsuperscript{29} Nigro - Marchetti 1998, 42-44, fig. 1:30.
and by ashy layer F.418, excavated after the removal of the basalt flooring L.415.

In baulk BpI7/8, to the north-east of oven T.413, an entrance (L.464) in between W.469 + W.409 and W.139 was identified (fig. 4.58): a series of strata filled up passage L.464: F.392, F.427, F.453, F.459, F.461 (§ 4.2.2.).

North of Building B1, in BpI7, in easternmost part of the corridor between W.109 and W.105, two compact layers, F.375 and F.379, made of greyish-brown soil with ashy lenses and scattered charcoals, were excavated above EB IIIIB street L.424, the western prosecution of street L.133 excavated in 2005.

Activity 3d: construction of Building B1
This activity represents the construction of Building B1, and related street L.424 inside city-wall W.105+W.121.

Walls W.109, W.389, W.439, W.391, and floor L.430 inside Building B1 can be attributed to this activity.

Several features are related to this floor: staircase W.421 against wall W.389; bench B.425 against the northern face of W.391; installation B.425; with roughly square hearth T.440. Pit P.423b, filled with a compact layer of ash with scattered animal bones (F.423a) and lined with black silt (figs. 4.28-4.29), is probably connected with the use of the above mentioned hearth.

![Fig. 4.28 - Pit P.423b in floor L.430, from west.](image)

---

30 Nigro ed. 2006, 179-181, pl. III.
31 KB.06.FR.109.
Fig. 4.29 - Pit P.426b in the SW corner of square BpI18, in the foreground; in the middle, top of ashy pit P.423b cut in the middle of floor L.430; in the background, city-wall W.105, from south.

Buttress W.373, leaning on W.109 and W.389, and the large semicircular structure T.413 were built together with the rest of Building B1. Both structures lean on the building. It seems possible that also W.469, an extension eastwards of W.109, was built at this time.

Within oven T.413, the original floor was a very compact yellow clay flooring with traces of firing, labelled L.422.

Since the excavation in BrI17 + BrI18 did not reach layers belonging to this activity, the construction of W.409 cannot be associated to it with certainty. Nevertheless it seems likely (§ 4.2.2.) that it belongs to this phase of the town’s life.

In street L.424, pit P.422b was identified, excavated against W.105 (fig. 4.30): its cut presented steep walls and its filling was ashy, friable and rich
in large fragments of animal bones\textsuperscript{32}; its uppermost part consisted of a thin layer of gravel and chipped limestone. Both in the south-eastern part of BpI\textsuperscript{7}, L.416, consisting of soil mixed with chalky white inclusions, also belongs to this activity, and it represents a repair of the street.

\begin{figure}[h]
\centering
\includegraphics[width=0.8\textwidth]{Fig_4.30.jpg}
\caption{Fig. 4.30 - Pit P.422b cut in floor L.424 against city-wall W.105+W.157+W.161, from south-west.}
\end{figure}

\subsection*{4.1.4. Phase 4: stratigraphy of Batrawy IIIa occupation}

A distinguished series of superimposed layers at least 0.5 m thick outlines Phase 4, the EB IIIA occupation of the open area within the city-wall, which also ends in fierce conflagration (Activity 4a). Phase 4 was only partially explored in the space between Phase 3 Building B1 and the fortification wall of the town, W.105+W.157+W.161. The stratigraphic units associated to Phase 4 belong to the Early Bronze IIIa occupation of the site, before the construction of Building B1. The limited area excavated does not allow, for now, a clear distinction of activities, but under L.424 a series of compacted layers (F.444, F.446, F.448, F.454 and L.458, the lowest exposed in this season; figs. 4.31-4.33) of clayish earth mixed with grey ash lenses (occasionally with darker traces of burning) and tiny charcoal and limestone chalk inclusions were found. These were separated by very thin layers of silt and pressed ash, rich in the above-mentioned inclusions, decayed organic materials, and EB IIIA sparse pottery sherds (pl. XLVIII). The only exception was F.446, which was characterized by the presence of heterogeneous materials such as flint sherds, large animal bones, small sized stones and white limestone nodules.

\textsuperscript{32} KB.06.FR.82.
Fig. 4.31 - Top of destruction layer F.446 excavated under floor L.424 in between city-wall W.105+W.157+W.161 (to the left) and EB IIIB wall W.109 (to the right), from west.

Fig. 4.32 - Top of destruction layer F.448 excavated in between city-wall W.105+W.157+W.161 and EB IIIB wall W.109 (in the background), from north-east.
Fig. 4.33 - Front view of the northern face of wall W.109 and related layers.
4.2. Architecture & finds: the EB III B Building B1 and the EB IV dwelling quarter

As stratigraphy made clear, remains so far exposed in Area B South cover the time span from EB IIIA to EB IVB. The earliest (EB IIIA) layers so far reached were excavated only in the corridor between Building B1 and the inner face of the main city-wall, while the other phases were investigated in the whole area (fig. 4.34).

Fig. 4.34 - General view of the Area B South with Building B1 and oven T.413, inside the main EB II-III city-wall (W.105+W.161) of Khirbet al-Batrawy, from south-east.

4.2.1. Layers of Period Batrawy IIIa (Early Bronze IIIA) inside the city-wall

EB IIIA layers exposed inside the main city-wall (W.161b) in Bpl17 belonged to an open space (a street or a square) covered by series of layers (F.444, F.446, F.448, F.454, F.466) all deriving from a fierce conflagration, which included yellowish-brown soil with mud-brick fragments, limestone nodules, gravel and dark ash lenses\(^{33}\), concealing a

\[^{33}\] Such fillings also included animal remains, mainly donkeys, sheep and wild species: KB.06.FR.103 from F.444, KB.06.FR.102 from F.446, KB.06.FR.117 from F.448, KB.06.FR.114 from F.454.
floor made of greyish clay with a fine lime plastered surface (L.458), to be considered the western prosecution street L.148 (figs. 4.35-4.37).
Pottery material from layers concealing street L.458 includes a radially burnished platter with upright pointed rim34, a Simple Ware bowl35 and small jar36, a pithos37, and a series of hole-mouth jars and pots38. Two fragments of storage jar with Grain Wash decoration39, and two pattern combed sherds40 complete the inventory (pl. XLVIII).

Fig. 4.35- EB IIIA street L.148+L.458 excavated in seasons 2005-2007 inside the main city-wall (W.105+W.161), from west; to the right, EB IIIIB Building B1.

34 KB.06.B.446/1 (pl. XLVIII).
35 KB.06.B.446/4 (pl. XLVIII).
36 KB.06.B.446/3 (pl. XLVIII).
37 KB.06.B.446/5 (pl. XLVIII).
38 Hole-mouth jars: KB.06.B.444/2, KB.06.B.446/6, KB.06.B.446/7; hole-mouth pots KB.06.B.444/1, KB.06.B.446/8, KB.06.B.446/9 (pl. XLVIII).
39 KB.06.B.446/2, KB.06.B.448/2 (pl. XLVIII).
40 KB.06.B.444/3, KB.06.B.446/10 (pl. XLVIII).
Fig. 4.36 - EB IIIA street L.458, from east.

Fig. 4.37 - EB IIIA street L.148+L.458, excavated in corridor in between EB II-III city-wall W.105+W.161 and EB III B wall W.109, from east.
4.2.2. Building B1 of Period Batrawy IIIb (Early Bronze IIIb)

Excavations in squares BoII7 + BpII7 + BqII7 + BpII8 and BqII8, just inside the EB II blocked city-gate, revealed a rectangular building of fairly large dimensions (7.5-7.8 x 5.5-5.8 m) erected over the raised EB IIIA destruction layers and attributed to Batrawy IIIb. It was built with its long side roughly parallel to the main city-wall (W.105a + W.157 + W.161a), and extended southwards (fig. 4.38).

![Building B1 with oven T.413, from south-east.](image)

**Fig. 4.38 - Building B1 with oven T.413, from south-east.**

Main architectural features of Building B1

The northern wall (W.109) of the building was aligned regularly 1.8 m south of the main city-wall (W.105a + W.157 + W.161a); it was built up with big stones placed with their plain sides on the outer face of the structure (figs. 4.39-4.40). It is linked to the west to wall W.439 and to the east to wall W.389, both structures showing the same building technique. The overall length of the structure is 7.5 m; its width is around 0.7-0.8 m; its northern outer face was visible in corridor L.133, showing at least nine superimposed courses of stones up to a preserved height of 1.2 m (fig. 4.41). No mud-bricks were preserved in the elevation, even though it they were used for the upper store as a collapsed specimen testifies to (fig. 4.42).
Fig. 4.39 - Northern wall W.109, from west.

Fig. 4.40 - Northern outer face of wall W.109, from north-west.
Fig. 4.41 - Front view of the inner southern face of wall W.109.

The western side of Building B1 consisted of wall W.439, stretching from the NW corner of the structure (fig. 4.43), made of regular limestone blocks, southwards up to the southern limit of the excavations.

Fig. 4.42 - Collapsed mud-brick from the super-structure of Building B1.

Fig. 4.43 - NW corner W.139 + W.439 of Building B1, from north.

The eastern wall was also a solid structure (W.389), with a considerable high state of preservation in its southern stretch (fig. 4.44), where a lower course of flat stones (W.421) protruded inside the room, probably in order to support a wooden staircase leading to the upper store. In the earliest phase so far reached the main room was paved with a compact layer of beaten earth (L.430); a flat stone (B.465), encircled by small stones, set into this floor not far from the staircase probably was the base of a wooden post supporting the ceilings and in the meantime the balcony of the staircase itself (fig. 4.45).
In the vicinity of the slab there was a square hearth (T.440) paved with basalt fragments (fig. 4.46), and flanked by a sort of small barrier or bench (W.475) lined with small stones laid on their long sides. A shallow pit in the middle of L.430, P.423b (in BpI18), filled with a compact layer of ash and lined with black silt (fig. 4.47), is probably connected with the use of the hearth.

A further semicircular installation (B.472), lined with stones, was in the north-western corner of the room (fig. 4.48).
The southern wall of room L.430, W.391, was a thinner (0. ) partition wall\textsuperscript{41}. Along its northern face there was a bench (B.425) 0.3 m wide made

\textsuperscript{41} South of wall W.391, there was another room of the building, which, however, has not yet been excavated
with small irregular stones (fig.4.49). In this phase, there was a 0.23 m gap (L.437) left between wall W.391 and the eastern wall W.389 (fig. 4.50), perhaps originally occupied by a wooden post. Filling F.431 over floor L.430 gave back a few pottery sherds belonging to the ordinary domestic horizon of EB IIIB (pl. XL); also some animal bones were collected from the area around T.440 and slab W.465\textsuperscript{42}.

\textsuperscript{42} KB.06.FR.97.
The building was set on fire as it shown by layer F.420 (fig. 4.51), a layer with fragments of yellowish mud-bricks, ashes and charcoals. In this layer, among several ceramic fragments, two *pithos*\(^43\) and two hole-mouth pots\(^44\) were found (pl. XL; fig. 4.52)\(^45\).

\(^{43}\) KB.06.B.420/2, KB.06.B.420/3 (pl. XL).
\(^{44}\) KB.06.B.420/4, KB.06.B.420/5 (pl. XL).
\(^{45}\) In F.420 also some animal bones were collected (KB.06.FR.87).
Semicircular oven T.413
Against the eastern wall (W.389) of Building B1 a semicircular structure (T.413), apparently roofed with a corbelled dome, abutted (fig. 4.53).

The original floor (L.422) of the oven was a very compact yellow clay plaster (fig. 4.54) with pebble inclusions; at a certain moment the structure was newly paved with basalt slabs and reemployed ground stones and grinders (L.415; figs. 4.55-4.56)46.
Ashy fillings over and in between the two floors (figs. 4.57) testify to their continue use and gave back several pottery sherds (pl. XLI) and animal bones47.

47 KB.06.FR.96.
Fig. 4.54 - Oven T.413, with its original flooring (L.422), abutting from the eastern wall (W.389) of Building B1, from south-east.

Fig. 4.55 - Oven T.413 with latest basalt-paved flooring L.415, from east.
Structures east of Building B1: entrance L.464 and wall W.409
The northern wall of Building B1 continued eastwards with wall W.469, again running parallel to the main city-wall, up to an interruption, possibly an entrance, where a floor of greyish beaten earth was uncovered (L.464); the latter covered a step made of slabs (L.467), marking the entrance (fig. 4.58). The structures continued further east with wall W.409 (fig. 4.59-4.60), showing the same building technique and stratigraphic setting of wall W.109.

A series of strata filled up the passage north of L.464: F.392 and F.427, two greyish friable filling in which a carnelian bead (fig. 4.61,a)\(^{48}\), Canaanean blade\(^{49}\) and a fragment of the base of a Khirbet Kerak jug\(^{50}\) were found with scattered animal bones\(^{51}\); F.453 and F.459 consisting of dark brown soil mixed with small stones and scattered animal bones\(^{52}\);

\(^{48}\) KB.06.B.40.
\(^{49}\) KB.06.B.97 (pl. XLII).
\(^{50}\) KB.06.B.427/1.
\(^{51}\) KB.06.FR.31 from F.392; KB.06.FR.118 and KB.06.FR.132 from F.427.
\(^{52}\) KB.06.FR.112 from F.453, KB.06.FR.116 from F.459.
F.461, the lowest layer, was characterised by white inclusions, charcoals and scattered animal bones. In the latter filling two clay stoppers were found (fig. 4.61,b).
Ceramic materials from these fillings all belong to the EB IIIB horizon, including two deep bowls, a juglet, a red-polished jug, two *pithoi* and several hole-mouth jars and pots (pls. XLII-XLIII, XLV-XLVI)\(^{55}\).

\(^{55}\) Also some fragments of Simple Painted Ware and fragmentary storage jars with Grain Wash decoration were retrieved in these fillings.
EB IIIB layers inside the city-wall: street L.424

A series of superimposed strata filling up the corridor between wall W.109 and the inner face of main city-wall (W.105a + W.157 + W.161a) illustrated a major destruction sealing the floor of the street running along the inner fortification line. Destruction layers F.375 and F.379 contained charcoal, ashes and burnt mud-brick fragments, as well as a series of pottery shapes, including Simple Ware jars, a *pithos*, some hole-mouth pots and several fragments of Grain Wash storage jars. The fillings also gave back several animal bones, as usual in street contexts, often used for throwing rubbish from the surroundings buildings.

Street L.424 (fig. 4.62) consisted of a layer of a quite compact greyish soil with small chalk inclusions (in the south-eastern corner L.416 represents a repair of the street with lime and greyish soil).

---

56 KB.06.B.375/6, KB.06.B.379/8, KB.06.B.379/10, KB.06.B.379/11 [pl. XLIV].
57 KB.06.FR.48 from F.375, KB.06.FR.75 from F.379.
58 This street is the western prosecution of L.133 (Nigro ed. 2006, 179-181).
59 Some animal bones were found in L.416 (KB.06.FR.83), while scattered animal bones (KB.06.FR.104) and four hole-mouths were collected from L.424 (pl. XLVII).
4.2.3. The dwelling quarter of Period Batrawy IV (Early Bronze IVB) on the northern slope

Excavations inside the main city-wall in Area B South illustrated two superimposed structural phases of the EB IV village arisen on the hill of Batrawy after a certain period of abandonment followed to the final destruction of the EB IIIIB town (§ 3.2.4.)\(^60\). Three different units were investigated respectively to the west, inside the previous city-wall (in squares BoI\(16 + BoI\(17\)), in the central area above Building B1 (in squares Bp\(17 + Bp\(18 + Bp\(19\), and in the western half of Bq\(18\)), and to the east, again just inside the previous line of fortification above wall W.409, in square Br\(18 + Br\(7/86\).

Earliest dwellings (Activity 2e)

The earliest occupational layers were detected in the central sector (figs. 4.63-4.64, 4.66), where a working area was uncovered, consisting of a stone paving (L.402), delimited on the west by a NNE/SSE oriented wall (W.405), with a couple of circular installations (B.377, B.404; fig. 4.656) leaning against a bench (W.403), and a rectangular slab (W.371) in the middle (the slab possibly served to support a wooden post).

---

\(^{60}\) Nigro ed. 2006, 38-40.
Fig. 4.64 - General view of the earliest EB IV installations in Area B South, from west.

Fig. 4.65 - Detail of circular installations B.377 and B.404 and rectangular slab W.371.
To the east, a more substantial structure (W.401), consisting of a row of middle size stones set with their length across the width of the wall itself, delimited the house on its southern side. At the southern end of wall W.405 an oval fireplace (T.406) with an upright stone was also uncovered (fig. 4.67).\(^{61}\)

\(^{61}\) In the area of the oven, an ashy layer (F.381) with animal remains (KB.06.FR.57) and some EB IVB pottery (pl. XXVIII) was excavated.
In the fillings covering floor L.402 (F.390, F.394), and smashed on the floor itself (F.400; fig. 4.68)\(^{62}\) several fragments of Storage Ware were found\(^{63}\), as well as some tools\(^{64}\) and a lot of lot of animal bones\(^{65}\).

---

\(^{62}\) One jar shows a combed decoration on the rim (KB.06.B.402/3 [pl. XXX]), while two others show a rope-like decoration (KB.06.B.400/3 [pl. XXXIII], KB.06.B.400/19 [pl. XXXI]).

\(^{63}\) Smashed on the floor (F.400), numerous fragments of simple and storage jars and hole-mouth jars were found, as well as an almost complete jar with combed decoration on the shoulder (KB.06.B.400/1) numerous fragments of pattern combed jars (pls. XXIX-XXXIII). In F.390 and F.394 pithoi, hole-mouth and pattern combed jars were also retrieved (pl. XXVII).

\(^{64}\) In F.400 a pestle (KB.06.B.53, pl. XXIX) and a polishing stone (KB.06.B.49) were found, while in F.390 a gypsum fragment (KB.06.B.35) a stone pestle (KB.06.B.36) a stopper/counter (KB.06.B.38) and spindle whorl (KB.06.B.42); in F.394 a Canaanese blade (KB.06.B.37) was found (figs. 4.69-4.70).

\(^{65}\) Faunal remains from F.400 were collected with KB.06.FR.51, while those from F.402 with KB.06.FR.56. From F.390 some animal bones (KB.06.FR.45) an a fragmentary goat horn (KB.06.FR.27); from F.394 a sea-shell (KB.06.FR.34) and some more animal bones (KB.06.FR.32, KB.06.FR.43).
Floruit of the rural village (Activity 2c)
In its second and last stage of life (Activity 2c), the rural village arisen on the ruins of Khirbet al-Batrawy assumed a less ephemeral character and dwellings were often repaired and reinforced. A more coherent structure was built in square BoI16 + BoI17 with a northern wall (W.153) consisting of a single line of fieldstones parallel to the crest of the collapsed city-wall (fig. 4.71-4.72) re-adapted as embankment supporting the dwelt area ($\S$ 3.2.5.), and an eastern wall (W.441) made up with the same technique, not exactly orthogonal to the latter. In between the two structures, there was a room L.450, carefully paved with flagstones, in which a thin partition wall (W.443) made of vertical slabs was set (figs. 4.73-4.75), apparently dividing two sectors to be used in agricultural products transformation and food preparation (one may hypothesize for liquids such as wine/grapes juice and olive oil).
In the fillings inside room L.450 some fragmentary storage jars (including some pattern-combed sherds) and Simple Ware jars were collected (pl. XXIII).
The domestic unit extended to the south in the southern half of BoI17, being delimited by a solid wall made up of two flanking rows of stones (wall W.445). The latter ended to the south into an oval installation (bin B.463). East of wall W.445, there were two concentric curvilinear structures.
(wall W.451 and W.471), to be interpreted as pens or storage devices (fig. 4.76). In filling F.456 within this room (L.476) a *pithos*, some storage jars (here also some pattern combed fragments, pl. XXIV) and a few animal bones\(^66\) were collected.

---

**Fig. 4.71 - Single-line wall W.153, Fig. 4.72 - Single-line wall W.153, from west; to the left, EB IV from south; in the background, EB IV embankment W.180.**

**Fig. 4.73 - EB IV room L.450 inside the EB II-III city-wall, from west.**

\(^{66}\) KB.06.FR.115.
The central working area in BpI18 was gradually transformed into a built up house (House L.354), by embossing wall W.405 with the addition of another row of stones (W.361) on its western side, and by erecting a wall (W.357 + W.401a), by incorporating previous installations (bench B.403, B.377, B.404) and, thus, enclosing the unit to the north. The opposite southern wall of the domestic unit (W.353), was a structure NW-SE oriented, alternating stones of different size, and located 2.85 m south of W.401 (fig. 4.76-4.77). At the eastern end of wall W.353, against the inner northern face of the structure, a working platform (B.374) was added including a slab, and a semicircular device coated with chalk plaster (fig. 4.78). Upon the slab, a Canaanean blade\textsuperscript{67} and some cut animal bones\textsuperscript{68} were found. B.374 was lined in plaster and paved with a stone slab on which a flint blade\textsuperscript{69}, and several small animal bone fragments\textsuperscript{70} were found.

\textsuperscript{67} KB.06.B.23 (pl. XXVI).
\textsuperscript{68} KB.06.FR.15.
\textsuperscript{69} KB.06.B.23.
\textsuperscript{70} KB.06.FR.15.
Fig. 4.76 - General view of the latest EB IV dwellings and installations in the central working area Bpl I8+Bpl I9, from south.

Fig. 4.77 - Working platform B.374 flanked to the east by a chalk-plastered semicircular device, from north; on the slab flint blade KB.06.B.23.
Fig. 4.78 - Plan of Phase 2c (EB I VB) dwelling quarter in Area B South.
The north-western corner of House L.354, was occupied by a storage facility (L.370), delimited by a curvilinear wall (W.355) and possibly dome-roofed (fig. 4.79); inside it in the south-western corner there was a slab-lined bin of roughly rectangular shape (B.365), with a slab in the middle (fig. 4.80).

Fig. 4.79 - General view of the latest EB IV dwellings and installations in the central working area BpI8+BpI9, from south-west.

Fig. 4.80 - Curvilinear storage facility L.370 with bin B.365, from west.
The space north of W.357 + W.401 hosted a rectangular platform (B.367), made with small stones and limestone chops (fig. 4.81), flanked by a pen (L.356), enclosed to the north by a flimsy wall (W.359). In the south-western quadrant of square BpI7, a series of stones vertically set against the prosecution of wall W.359 covered a burial (D.350; figs. 4.82-4.83), presumably the secondary burial of an infant with a flint blade⁷¹ and a small jar and a jug associated (pl. XXVI; fig. 4.84)⁷².

---

⁷¹  KB.06.B.14.
⁷²  Jar KB.06.B.350/1 and jug KB.06.B.350/2 (pl. XXVI).
Fillings representing the use of House L.354 gave back a mortar 73 and a stone pestle 74 (fig. 4.85), some sparse Storage Ware fragments (pl. XXVI), and several animal bones 75.

The easternmost structure of this part of the EB IVB village was excavated already in the first season; the NW corner of a major structure with a thick wall (House L.117) was then uncovered 76. This building, like House L.438

73 KB.06.B.17.
74 KB.06.B.30.
75 KB.06.FR.10, KB.06.FR.11, KB.06.FR.13 from L.354, and KB.06.FR.14 from device L.356.
to the west, is distinctly different from the other rectangular domestic unit of the village, suggesting that the structures erected along the perimeter of the settlement had thicker walls. In the second and third season, in facts, a double-lined stone wall (W.407), connected with the latter structure was excavated, built just above preceding EB IIIIB structures, following the same alignment parallel to the inner face of the collapsed city-wall. This structure shows that the dwellings along the northern edge of the settlement were united by a continuous line of walls perhaps for the sake of protection of the village (one has to stress that the mid of the northern side of the hill was the easiest access to the site).

The Batrawy IVb rural village at the northern edge of the site

At a general conclusive overview, the northern portion of the Batrawy IVb (EB IVB) village so far investigated, included at least two rectangular domestic units (L.354 + L.402), of the kind with elongated plan already illustrated by the discoveries of the first campaign in Area A on the Acropolis, each flanked by a courtyard with storage facilities and other installations (platform, bins, pens), and two more substantial structures built just inside the previous collapsed city-wall, one to the north-west, with a distinguished flagstone pavement pointing to liquid transformation activities, the other, to the north-east, with food producing installations inside. As stated above, the most noticeable difference in respect of the dwelling clusters on the Acropolis and in Area F (on the easternmost terrace of the hill), is the thickness of the houses walls along the outer northern perimeter of the dwell area.

This village, flourished during the last century of the 3rd millennium BC, was eventually abandoned, leaving the site deserted for millennia.
**List of Pottery, Objects and Samples by Contexts**

### Area B South

**F.0**
- **Pottery:** Simple Ware: 1 bowl, 1 fragm. uns.
  - Storage Ware: 6 fragms. uns.
  - Specialized Production: 1 Painted Ware fragm., 1 Metallic Ware fragm.
- **Lithics:** 2 Flint Tools (KB.06.B.1, KB.06.B.10), 1 Canaanite Blade (KB.06.B.9)
- **Place:** XXII

**W.125**
- **Pottery:** Simple Ware: 4 fragms. uns.
  - Cooking Ware: 6 fragms. uns.
  - Storage Ware: 31 fragms. uns.
- **Tools:** 1 Grinding Stone (KB.06.B.28)
- **Objects:** 1 Door Socket (KB.06.B.26)
- **Lithics:** 1 Flint Blade (KB.06.B.14)
- **Samples:** Animal Bones
- **Plate:** XXVI

**D.350**
- **Pottery:** Simple Ware: 1 jug, 1 jar
- **Lithics:** 1 Flint Tool (KB.06.B.8)
- **Samples:** Animal Bones
- **Plate:** XXVI

**F.352**
- **Pottery:** Simple Ware: 3 fragms. uns.
  - Cooking Ware: 2 fragms. uns.
  - Storage Ware: 1 jar, 7 fragms. uns.
- **Lithics:** 1 Flint Tool (KB.06.B.8)
- **Samples:** Animal Bones (KB.06.FR.4, KB.06.FR.7, KB.06.FR.9)
- **Place:** XXII

**L.354**
- **Pottery:** Storage Ware: 1 jar, 1 hole-mouth jar, 5 fragms. uns.
- **Tools:** 1 Pestle (KB.06.B.17), 1 Mortar (KB.06.B.30)
- **Samples:** Animal Bones (KB.06.FR.10, KB.06.FR.11, KB.06.FR.13)
- **Place:** XXVI

**L.356**
- **Pottery:** Storage Ware: 2 jars, 5 fragms. uns.
- **Samples:** Animal Bones (KB.06.FR.14)
- **Place:** XXVI

**F.358**
- **Pottery:** Simple Ware: 11 fragms. uns.
  - Cooking Ware: 1 hole-mouth pot, 3 fragms. uns.
  - Storage Ware: 2 jars, 16 fragms. uns.
- **Objects:** 1 Stone Weight (KB.06.B.51)
- **Place:** XXII

**F.360**
- **Pottery:** Cooking Ware: 12 fragms. uns.
  - Storage Ware: 2 jars, 32 fragms. uns.
- **Objects:** 1 Copper Pivot (KB.06.B.31)
- **Samples:** Animal Bones (KB.06.FR.16)
- **Place:** XXII

**F.362a**
- **Objects:** 1 Sharpening Tool (KB.06.B.27)
- **Samples:** Animal Bones (KB.06.FR.3, KB.06.FR.5, KB.06.FR.6, KB.06.FR.12)

**F.366**
- **Pottery:** Simple Ware: 3 fragms. uns.
  - Cooking Ware: 1 hole-mouth pot
  - Storage Ware: 5 fragms. uns.
- **Objects:** 1 Cutting Base (KB.06.B.20)
- **Samples:** Animal Bones (KB.06.FR.8)
- **Place:** XXVI

**F.368**
- **Tools:** 2 Pestles (KB.06.B.22, KB.06.B.24)

**B.374**
- **Lithics:** 1 Canaanite Blade (KB.06.B.23)
- **Samples:** Animal Bones (KB.06.FR.15)
- **Place:** XXVI

**F.375**
- **Pottery:** Simple Ware: 1 bowl, 2 jars, 2 fragms. uns.
  - Cooking Ware: 1 hole-mouth pot, 17 fragms. uns.
  - Storage Ware: 2 jars (1 with Grain Wash decoration), 28 fragms. uns.
- **Samples:** Animal Bone (KB.06.FR.48)
- **Place:** XLV

**F.376**
- **Pottery:** Simple Ware: 1 jar, 4 fragms. uns.
  - Cooking Ware: 1 hole-mouth pot, 8 fragms. uns.
  - Storage Ware: 2 "pithos", 2 jars, 27 fragms. uns.
  - Specialized Production: 1 Red Polished Ware Jug
- **Samples:** Animal Bones (KB.06.FR.17, KB.06.FR.18, KB.06.FR.86), Coal (KB.06.PR.25, KB.06.PR.26)
- **Place:** XXXVIII

**F.378**
- **Pottery:** Simple Ware: 1 jar, 1 jug, 4 fragms. uns.
  - Cooking Ware: 3 hole-mouth pots, 31 fragms. uns.
  - Storage Ware: 1 "pithos", 7 jars, 2 hole-mouth jars, 1 enveloped ledge handle, 71 fragms. uns.
  - Specialized Production: 1 Metallic Ware fragm.
- **Objects:** 1 Door Socket (KB.06.B.47), 1 Stone Bead (KB.06.B.52)
- **Samples:** Animal Bones (KB.06.FR.22, KB.06.FR.33, KB.06.FR.62), Plaster (KB.06.AR.24, KB.06.AR.29)
- **Place:** XXV
<table>
<thead>
<tr>
<th>Context</th>
<th>Pottery</th>
<th>Cooking</th>
<th>Storage</th>
<th>Specialized Production</th>
<th>Samples</th>
<th>Plate</th>
</tr>
</thead>
<tbody>
<tr>
<td>F.379</td>
<td>Simple Ware: 1 fragm. uns.</td>
<td>Cooking Ware: 4 hole-mouth pots, 19 fragms. uns.</td>
<td>Storage Ware: 4 jars (3 with Grain Wash decoration), 1 pithos, 38 fragms. uns.</td>
<td>Specialized Production: 1 Red Polished Ware jug</td>
<td>Animal Bone (KB.06.FR.75)</td>
<td>XLIV</td>
</tr>
<tr>
<td>F.381</td>
<td>Simple Ware: 1 fragm. uns.</td>
<td>Cooking Ware: 1 hole-mouth pot, 9 fragms. uns.</td>
<td>Storage Ware: 1 hole-mouth jar, 3 jars, 1 enveloped ledge handle, 6 fragms. uns.</td>
<td></td>
<td>Animal Bone (KB.06.FR.57)</td>
<td>XXVIII</td>
</tr>
<tr>
<td>F.382</td>
<td>Simple Ware: 1 fragm. uns.</td>
<td>Cooking Ware: 2 hole-mouth pots, 36 fragms. uns.</td>
<td>Storage Ware: 2 hole-mouth jars, 2 enveloped ledge handles, 1 pushed-up ledge handle, 64 fragms. uns.</td>
<td></td>
<td>Animal Bones (KB.06.FR.28, KB.06.FR.39)</td>
<td>XXVIII</td>
</tr>
<tr>
<td>F.383</td>
<td>Simple Ware: 4 fragms. uns.</td>
<td>Cooking Ware: 2 hole-mouth pots, 36 fragms. uns.</td>
<td>Storage Ware: 2 hole-mouth jars, 2 enveloped ledge handles, 1 pushed-up ledge handle, 64 fragms. uns.</td>
<td></td>
<td>Animal Bones (KB.06.FR.61, KB.06.FR.69)</td>
<td>XVIII</td>
</tr>
<tr>
<td>F.385</td>
<td>Simple Ware: 1 jar, 2 fragms. uns.</td>
<td></td>
<td>Storage Ware: 2 fragms. uns.</td>
<td></td>
<td>Animal Bone (KB.06.FR.59)</td>
<td></td>
</tr>
<tr>
<td>F.386</td>
<td>Simple Ware: 7 fragms. uns.</td>
<td></td>
<td>Storage Ware: 1 jar, 12 fragms. uns.</td>
<td></td>
<td>Animal Bone (KB.06.FR.32)</td>
<td>XXVIII</td>
</tr>
<tr>
<td>F.387</td>
<td>Simple Ware: 2 jars, 1 pithos, 9 fragms. uns.</td>
<td></td>
<td>Storage Ware: 2 hole-mouth jars, 2 enveloped ledge handles, 1 pushed-up ledge handle, 64 fragms. uns.</td>
<td></td>
<td>Animal Bone (KB.06.FR.81)</td>
<td>XXXIX</td>
</tr>
<tr>
<td>F.388</td>
<td>Simple Ware: 12 fragms. uns.</td>
<td></td>
<td>Storage Ware: 14 fragms. uns.</td>
<td></td>
<td>Animal Bone (KB.06.FR.81)</td>
<td>XXXVIII</td>
</tr>
<tr>
<td></td>
<td>Simple Ware: 3 fragms. uns.</td>
<td></td>
<td>Storage Ware: 2 jars, 1 pithos, 9 fragms. uns.</td>
<td></td>
<td>Animal Bone (KB.06.FR.75)</td>
<td>XXVIII</td>
</tr>
<tr>
<td>F.390</td>
<td>Simple Ware: 3 fragms. uns.</td>
<td></td>
<td>Storage Ware: 2 jars, 1 pithos, 9 fragms. uns.</td>
<td></td>
<td>Animal Bone (KB.06.FR.56)</td>
<td>XIX, XXXX</td>
</tr>
<tr>
<td>Location</td>
<td>Pottery</td>
<td>Cooking Ware</td>
<td>Storage Ware</td>
<td>Specialized Production</td>
<td>Tools</td>
<td>Samples</td>
</tr>
<tr>
<td>----------</td>
<td>---------</td>
<td>--------------</td>
<td>--------------</td>
<td>------------------------</td>
<td>-------</td>
<td>---------</td>
</tr>
<tr>
<td>L.408</td>
<td>Simple Ware: 1 jar</td>
<td>8 fragments uns.</td>
<td>2 jars, 21 fragments uns.</td>
<td></td>
<td></td>
<td>Floor (KB.06.FR.60),</td>
</tr>
<tr>
<td>F.410</td>
<td>Simple Ware: 2 fragments uns.</td>
<td>3 hole-mouth pots, 14 fragments uns.</td>
<td>2 fragments uns.</td>
<td>1 Simple Painted Ware fragment</td>
<td>1 Grinding Stone (KB.06.B.63)</td>
<td>Coal (KB.06.PR.63)</td>
</tr>
<tr>
<td>F.411</td>
<td>Simple Ware: 3 fragments uns.</td>
<td>1 hole-mouth pot, 2 fragments uns.</td>
<td>6 jars, 3 hole-mouth jars, 26 fragments uns.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F.412</td>
<td>Simple Ware: 1 beaker, 1 jug, 1 hole-mouth, 6 fragments uns.</td>
<td>19 fragments uns.</td>
<td>1 jar, 70 fragments uns.</td>
<td>4 Simple Painted Ware fragments, 1 Red Burnished Ware, 2 Metallic Ware jars</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F.414</td>
<td>Simple Ware: 1 jug, 1 bowl</td>
<td>3 jars, 1 hole-mouth jar, 1 pithos, 33 fragments uns.</td>
<td></td>
<td>1 Metallic Ware jar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F.416</td>
<td>Cooking Ware: 5 fragments uns.</td>
<td>5 fragments uns.</td>
<td>5 fragments uns.</td>
<td></td>
<td></td>
<td>Animal Bone (KB.06.FR.83)</td>
</tr>
<tr>
<td>F.417</td>
<td>Storage Ware: 5 fragments uns.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Animal Bone (KB.06.FR.98)</td>
</tr>
<tr>
<td>F.418</td>
<td>Simple Ware: 2 jugs, 1 fragment uns.</td>
<td>11 fragments uns.</td>
<td>3 jars, 1 hole-mouth jar, 41 fragments uns.</td>
<td>1 Simple Painted Ware jar, 1 Red Polished Ware jug</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F.420</td>
<td>Simple Ware: 1 jar, 4 fragments uns.</td>
<td>2 hole-mouth pots, 6 fragments uns.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F.422a</td>
<td>Simple Ware: 1 fragment uns.</td>
<td>4 fragments uns.</td>
<td>3 fragments uns., 4 fragments uns.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F.423a</td>
<td>Simple Ware: 1 fragment uns.</td>
<td>3 hole-mouth pots, 13 fragments uns.</td>
<td>1 jar, 1 hole-mouth jar, 7 fragments uns.</td>
<td>2 Red Polished Ware jugs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L.424</td>
<td>Simple Ware: 1 fragment uns.</td>
<td>2 hole-mouth pots, 10 fragments uns.</td>
<td>3 jars (2 with Grain Wash decoration), 1 hole-mouth jar, 1 pithos, 56 fragments uns.</td>
<td>3 Simple Painted Ware fragments, 3 Red Polished Ware jugs, 1 Khirbet Kerak Ware jug</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F.427</td>
<td>Simple Ware: 1 vat, 7 fragments uns.</td>
<td>2 hole-mouth pots, 10 fragments uns.</td>
<td>3 jars (2 with Grain Wash decoration), 1 hole-mouth jar, 1 pithos, 56 fragments uns.</td>
<td>3 Simple Painted Ware fragments, 3 Red Polished Ware jugs, 1 Khirbet Kerak Ware jug</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F.428a</td>
<td>Simple Ware: 2 jars, 1 jug, 4 fragments uns.</td>
<td>1 hole-mouth pot, 9 fragments uns.</td>
<td>2 jars, 45 fragments uns.</td>
<td>1 Red Polished Ware jug, 1 Red Polished Ware fragment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F.431</td>
<td>Simple Ware: 2 jars, 8 fragments uns.</td>
<td>1 hole-mouth pot, 9 fragments uns.</td>
<td>2 jars, 1 pushed-up ledge handle, 28 fragments uns.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Specialized Production: 1 Simple Painted Ware fragm., 1 Red Polished Ware fragm.

Samples: Animal Bone (KB.06.FR.97)
Plate: XL

Pottery: Cooking Ware: 1 hole-mouth pot, 3 fragms. uns.
Storage Ware: 1 jar, 15 fragms. uns.

Samples: Animal Bone (KB.06.FR.126)
Plate: XXXIV

Pottery: Storage Ware: 3 jars
Plate: XXIII
F.438

Pottery: Simple Ware: 2 jars
Storage Ware: 3 jars, 1 hole-mouth jar, 1 pushed-up ledge handle, 1 fragm. uns.
Plate: XXIII
F.444

Pottery: Cooking Ware: 1 hole-mouth pot, 11 fragms. uns.
Storage Ware: 1 jar, 1 hole-mouth, 34 fragms. uns.

Samples: Animal Bone (KB.06.FR.103)
Plate: XLVIII
F.446

Pottery: Simple Ware: 1 jar, 1 bowl, 5 fragms. uns.
Cooking Ware: 2 hole-mouth pots, 12 fragms. uns.
Storage Ware: 2 jars (1 with Grain Wash decoration), 2 hole-mouth jars, 1 pithos, 26 fragms. uns.

Specialized Production: 1 Red Burnished Ware platter

Samples: Animal Bone (KB.06.FR.102)
Plate: XLVIII
F.448

Pottery: Simple Ware: 1 basin, 3 fragms. uns.
Cooking Ware: 10 fragms. uns.
Storage Ware: 1 jar (with Grain Wash decoration), 26 fragms. uns.

Samples: Animal Bone (KB.06.FR.117)
Plate: XLVIII
F.452

Pottery: Cooking Ware: 1 hole-mouth pot, 1 fragm. uns.
Storage Ware: 18 fragms. uns.

Samples: Animal Bone (KB.06.FR.108)
Plate: XXIII
F.453

Pottery: Simple Ware: 1 fragm. uns.
Cooking Ware: 1 fragm. uns.
Storage Ware: 4 fragms. uns.

Samples: Animal Bone (KB.06.FR.112)
F.454

Samples: Animal Bone (KB.06.FR.114)

F.456

Pottery: Simple Ware: 1 jug, 6 fragms. uns.
Storage Ware: 5 jars, 1 pithos, 1 fragm. uns., 16 fragms. uns.

Specialized Production: 1 Red Polished Ware fragm., 1 Red Burnished Ware fragm., 1 Metallic Ware (?) jug

Samples: Animal Bone (KB.06.FR.115)
Plate: XXIV
F.457

Pottery: Storage Ware: 4 fragms. uns.

F.459

Pottery: Simple Ware: 1 jar, 1 vat, 16 fragms. uns.
Cooking Ware: 1 hole-mouth pot, 33 fragms. uns.
Storage Ware: 3 jars (1 with Grain Wash decoration), 1 hole-mouth jar, 1 pithos, 49 fragms. uns.

Specialized Production: 1 Simple Painted Ware jug, 2 Simple Painted Ware fragms. uns.

Samples: Animal Bone (KB.06.FR.116)
Plate: XLV, XLVI
F.461

Pottery: Simple Ware: 2 jars
Cooking Ware: 2 hole-mouth pots, 22 fragms. uns.
Storage Ware: 1 hole-mouth jar, 30 fragms. uns.

Specialized Production: 1 Red Polished Ware fragm. uns.

Objects: 2 Stoppers/Counters (KB.06.B.100, KB.06.B.101)
Samples: Animal Bone (KB.06.FR.125)
Plate: XLV, XLVI
F.462

Pottery: Cooking Ware: 5 fragms. uns.
Storage Ware: 6 fragms. uns.

Lithics: 1 Flint Blade (KB.06.B.98)
Tools: 1 Mortar (KB.06.B.99)

Samples: Animal Bone (KB.06.FR.129)
AREA B SOUTH

CATALOGUE OF POTTERY AND SMALL FINDS
Pl. XXII - Small finds and pottery from Area B South, squares BpII8+9 and BqII7/8, fillings F.0 (Phase 1), F.352 and F.358 (Activity 2a), F.360 (Activity 2b)

KB.06.B.9, Canaanite blade. Context: BpII9, F.0. State of preservation: fragmentary. Material: flint. Technique of manufacture: chipped. Material colour: 10YR5/4 (yellowish brown). Height: max. 5.2 cm; length: 1.6 cm, min. 1.3 cm; thickness: max. 0.5 cm, min. 0.3 cm. Description: Canaanite blade with irregular trapezoidal section and two dorsal ridges. Dating: EB IVB. Bibliography: Palumbo 1990, fig. 62:1.


Pl. XXV - Small finds and pottery from Area B South, squares BpII7+8, filling F.378 (Activity 2d)


Chapter 4 - Catalogue


KB.06.B.354/3, beaker. Class: Simple Ware. State of preservation: rim, neck, shoulder. Technique of manufacture: wheel. Firing: high. Fabric colour: 7.5YR6/3 (light brown). Temper/inclusions: mineral (white, dark gray); dimension: small; frequency: low. Diameter: 7.5 cm; rim width: 0.4 cm; wall width: 0.5 cm. Dating: EB IVB.


Pl. XXVII - Pottery from Area B South, squares BpII8, fillings F.390 and F.394 (Activity 2d)


[Pl. XXVII]


Pl. XXVIII - Pottery from Area B South, square BpII8, fillings F.381 and F.383 (Activity 2d)


Chapter 4 - Catalogue ROSAPAT 06

[Pl. XXVIII]


Pl. XXIX - Small finds and pottery from Area B South, square BpII8, layer F.400 and floor L.402 (Activity 2d)


Pl. XXX - Pottery from Area B South, square BpII8, layer F.400 and floor L.402 (Activity 2d)


Chapter 4 - Catalogue


**Pl. XXXI - Pottery from Area B South, square BpII8, layer F.400 (Activity 2d)**


[Pl. XXXI]

Pl. XXXII - Pottery from Area B South, squares BpII8/BpII9, layer F.400 (Activity 2d)


KB.07.B.400/2

KB.07.B.400/1b

KB.07.B.400/1a

KB.07.B.400/1g
Pl. XXXIII - Pottery from Area B South, squares BpII8/BpII9, layer F.400 (Activity 2d)


Pl. XXXIV - Small finds and pottery from Area B South, square BpII8, floor L.408 (Activity 2d) and filling F.432 (Activity 3b)


Pl. XXXVI - Pottery from Area B South, squares BrII7+BrII8, filling F.414 (Activity 2a)


KB.06.B.428/4, jug. Class: Simple Ware. State of preservation: rim, neck. Technique of manufacture: wheel. Firing: medium-high. Fabric colour: 5YR7/3 (pink). Temper/inclusions: mineral (white, gray, dark red); dimension: small, medium, large; frequency: medium. Diameter: 5 cm; rim width: 0.6 cm; wall width: 0.6 cm. Description: small jar with long slightly flaring neck and everted rim. Dating: EB IIIA. Bibliography: Harrison 1997, fig. 5.30:7; de Miroschedji 2000, fig. 18.4:2.


KB.06.B.103

KB.06.B.428/3

KB.06.B.428/4

KB.06.B.428/5

KB.06.B.428/1

KB.06.B.428/7

KB.06.B.428/8
Pl. XXXVIII - Pottery from Area B South, squares BqII7/8+BqII8, fillings F.376 (Activity 3a), F.386 and F.388 (Activity 3b), squares BpII7+8, fillings F.397b and F.399b (Activity 3a).


Pl. XXXIX - Pottery from Area B South, square BpII8, fillings F.387 and F.410 (Activity 3a)


Pl. XLII - Small finds and pottery from Area B South, squares BqII7/BqII8, filling F.427 (Activity 3c)


KB.06.B.97 (1:2)

KB.06.B.427/10

KB.06.B.427/11

KB.06.B.427/16

KB.06.B.427/13

KB.06.B.427/12

KB.06.B.427/15

KB.06.B.427/14
Pl. XLIII - Pottery from Area B South, square BqII7/BqII8, filling F.427 (Activity 3c)


Pl. XLIV - Pottery from Area B South, square BpII7, fillings F.375 and F.379 (Activity 3b)


Chapter 4 - Catalogue ROSAPAT 06

[Pl. XLV]


Chapter 4 - Catalogue


Chapter 4 - Catalogue ROSAPAT 06

[Pl. XLVI]

PK. XLVII - Pottery from Area B South, square BqII8, street L.424 (Activity 3c) and filling F.136 (Activity 4a)


Pl. XLVIII - Pottery from Area B South, square BpII7, layers F.444, F.446, F.448 (Phase 4)


Pl. XLIX - Pottery from Area B South, squares BoII7+BpII8, cleaning

KB.07.B.cleaning/1

KB.07.B.cleaning/2

KB.07.B.cleaning/3

KB.07.B.cleaning/4

KB.07.B.cleaning/5

KB.07.B.cleaning/6

KB.07.B.cleaning/7

KB.07.B.cleaning/8

KB.07.B.cleaning/9


5. Area D: the Early Bronze III fortification structures and the Early Bronze IV occupation at the south-western corner of the site [by Khaled Douglas - Lorenzo Nigro]

In the third season (2006) one more excavation area was opened at the south-western corner of the site\(^1\) with the aim of investigating major fortification works already identified in the first season during the preliminary survey of the whole *khirbet*\(^2\). Six squares\(^3\) were opened on the south-eastern side of the corner spur, uncovering the inner face of the city-wall and a huge tower (Tower D1), as well as a series of superimposed structures. Structures and layers were preliminary explored reaching EB IIIA floors in the easternmost squares so far excavated, while in the western squares excavation exposed EB IVB layers and installations within the top of the collapsed EB II-III city-wall.

---

\(^{\ast}\) Excavations in this area were carried out by Queen Rania’s Institute of Tourism and Cultural Heritage under the direction of Prof. Khaled Douglas. A more detailed report on this work will appear in a next issue of the present series.

\(^2\) Nigro ed. 2006, 32-33, figs. 1.39-1.42.

\(^3\) The following squares were opened on the southern edge of the spur: BfIII14, BgIII14, BhIII14, BlIII14, BgIII15, BhIII15.
5.1. Stratigraphy

Stratigraphy in Area D was similar to that of Area B North (§ 3.1.), with the topsoil (Phase 1), covering all periods after the abandonment of the Early Bronze Age site at the end of 3rd millennium BC (subdivided into two activities: 1a-1b); Phase 2 representing the Early Bronze IVB village (at least two superimposed occupational stages, subdivided into four activities: 2a-2d); Phase 3 with several layers connected to the second and third major reconstructions of the main city-wall (three activities: 3a-3c), which on the western and southern sides of the site was not doubled due to the steep edge of the cliff; Phase 4 (not yet excavated) attributed to the earliest structures and layers of use of the city, dating back to Early Bronze II (2850-2700 BC).

Fig. 5.2 - General view of excavations at the EB III city-wall (to the right) and tower (to the left) in Area D, from west.

---

4 For a preliminary presentation see also Nigro 2007a, 355.
5 Nigro ed. 2006, 33, figs. 1.43-1.45. On the fortifications morphology along the southern side of the site see § 6 in this volume.
5.2. Architecture: the EB III south-western tower and the EB IV occupation

5.2.1. 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 8 m, with a central squared pillar made of limestone boulders, and a corridor running east-west. A door leading to the possible staircase erected around the pillar opened towards the corridor looking south (fig. 5.3).

Further east, in square BhIII14, excavation was deepened under the EB III foundations of the tower, showing an earlier wall related to the 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 slit which controlled the foot of the hill (fig. 5.4).

Stratigraphy inside the city-wall in squares BhIII15 and BilI14 showed a thick layer of destruction referable to a violent event, tentatively attributed to the end of Period Batrawy IIIa (Early Bronze IIIA).

Fig. 5.3 - The rectangular pillar and the corridor inside the EB III huge tower, from west.
5.2.2. The Early Bronze IV occupation
On top of the spur a rectangular structure was erected on the inner part of the previous tower, with some food producing installations, among which a round platform paved with stone slabs and reemployed basalt stone grinders (fig. 5.5). However, due to its location, it could possibly have served as watch tower (as it predecessor of the urban phase).

6 On the western side of this structure, in between it and the main city-wall a jar burial had been discovered in the first season (deposition D.200; Nigro ed. 2006, 11, figs. 1.11-1.12, pl. III).
6. Area E: the Early Bronze II city-wall and related layers on the southern side of the hill [by Maura Sala]

A probe (4 × 2 m) was opened inside the main Batrawy II-III city-wall roughly at the middle of the southern fortification line (fig. 6.1), in squares CdIII9 + CeIII9 (also excavating baulk CdIII9/CeIII9), with the aim of checking the architecture, stratigraphy and chronology of the city-wall on this side of the mound.

In Area E the main city-wall was cleaned for a length of around 10 m, and the sounding was opened just aside a small ravine (fig. 6.2), which cut through it in correspondence of a joint between two separated sections of the defensive structure, at a change of its orientation (fig. 6.3).

A major achievement of this sounding was the confirmation that the city-wall preserved here dates back from the Early Bronze II (2900-2700 BC), since the later EB III reconstructions collapsed and were almost completely obliterated by erosion, and that the fortified town of Batrawy was founded at the beginning of the 3rd millennium BC.

Fig. 6.1 - The probe opened in Area E, east of a small ravine which cut through the southern line of fortifications, from north.

---

1 Nigro 2007a, 357-358, figs. 1, 17.
2 The Batrawy II city-wall was built in separated juxtaposed stretches (each around 8 m long), as it was also evident in Area B North (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) was visible on the northern outer face of the main city-wall (Nigro 2006a, 243; Nigro ed. 2006, 176-177, note 26, fig. 4.35, pl. IV). For a detailed analysis of this well-known building technique from EB II-III defensive systems in Southern Levant see Area B North, §§ 3.2.1.-3.2.3.; Nigro 2006c, 370-371; 2006e, 9; 2007a, 352, 357; in press, §§ 4.2.-4.3.
3 Nigro 2007a, fig. 18.
Fig. 6.2 - The small ravine which cut the EB II-III city-wall roughly at the middle of the southern fortification line, in correspondence of a joint between two separated sections of the defensive structure, from east.

Fig. 6.3 - The ravine through the southern fortification line, from south; note the junction between two separated section of the city-wall and the edge of the bedrock upon which the main city-wall was erected.
6.1. Stratigraphy

Area E suffered drastic erosion, and, at least along the southern edge of cliff, also pillage of large limestone blocks from the city-wall, that is preserved only in the lower courses of its boulders set into the bedrock and belonging to the original defence line erected all around the site in Early Bronze II.

Strata were all eroded according to the slope of the *khirbet* and they illustrated four main phases (tab. 6.1; fig. 6.4), from the topmost shallowest layer of humus to the earliest strata related to the destruction of Batrawy II city-wall, founded directly upon the bedrock (Phase 4). Structures and finds from destruction layers of Phase 4 will be thoroughly described in § 6.2.

<table>
<thead>
<tr>
<th>Absolute Chronology</th>
<th>Archaeological Period</th>
<th>Site Period</th>
<th>Phases of Area E</th>
</tr>
</thead>
<tbody>
<tr>
<td>3400-3000 BC</td>
<td>Early Bronze I</td>
<td>Batrawy I</td>
<td>-</td>
</tr>
<tr>
<td>3000-2700 BC</td>
<td>Early Bronze II</td>
<td>Batrawy II</td>
<td>Phase 4b-a</td>
</tr>
<tr>
<td>2700-2500 BC</td>
<td>Early Bronze IIIA</td>
<td>Batrawy IIIa</td>
<td>Phase 3</td>
</tr>
<tr>
<td>2500-2300 BC</td>
<td>Early Bronze IIIB</td>
<td>Batrawy IIIb</td>
<td></td>
</tr>
<tr>
<td>2300-2200 BC</td>
<td>Early Bronze IVA</td>
<td>Batrawy IVa</td>
<td>Phase 2</td>
</tr>
<tr>
<td>2200-2000 BC</td>
<td>Early Bronze IVB</td>
<td>Batrawy IVb</td>
<td></td>
</tr>
<tr>
<td>2000 BC-1900 AD</td>
<td>Later Periods</td>
<td>Batrawy V</td>
<td></td>
</tr>
<tr>
<td>1900-2007 AD</td>
<td>Contemporary frequetation</td>
<td>Batrawy VI</td>
<td>Phase 1</td>
</tr>
</tbody>
</table>

Tab. 6.1 - Archaeological periodization and stratigraphy of Area E.

Fig. 6.4 - Northern section of probe in squares CdII9 + CelII9.
6.1.1. Phase 1: abandonment
Phase 1 was the topsoil and illustrates a long period of abandonment, during which erosion and windblown activities accumulated a very shallow layer of dust (F.0), sloping from north to south inside and on the top of the Batrawy II-III city-wall (W.705), with a few scattered pottery sherds.

6.1.2. Phase 2: erosion of Batrawy III layers
Phase 2 corresponds to the erosion and abandonment of the massive heap of EB III destruction layers inside the collapsed Batrawy II-III city-wall (W.705). It is represented by filling F.701, a layer of greyish sandy soil, 10-15 cm high, homogeneously excavated all over the sounding, with limestone grits, small stones and traces of ash, as well as scattered animal bones and a few pottery sherds, sloping from north to south according to the natural slope of the southern side of the *khirbet*.

6.1.3. Phase 3: destruction of Batrawy IIIa fortification system
Phase 3 corresponds to the destruction of the Batrawy IIIa city-wall. It is represented by a thick heavy burnt layer of soft dark brownish-grey soil (F.702 in the probe, F.703 in the ravine), 50 cm (to the west) to 70 cm (to the east) high, sloping from north to south and from west to east according to the natural slope of the bedrock, with sparse charcoals and lens of ashes, scattered limestone grits, chalky fragments and traces of yellowish mud-bricks (probably remains of the superstructure of the EB IIIA city-wall; figs. 6.5-6.6), as well as burned animal bones, one bone tool and one transverse arrowhead, and pottery sherds (figs. 6.7-6.8; pls. LI-LII).

---

4 Sample KB.06.FR.111.
5 Pottery included fragments of Simple and Storage Wares, as well as sherds of specialized productions, such as 2 Simple Painted Ware fragments (KB.06.E.701/1, KB.06.E.701/2, pl. L), 3 Red Polished Ware and 2 Metallic Ware fragments, one combed-decorated (KB.06.E.701/15, pl. L).
6 The latest EB IIIB destruction layer, related to the final destruction of the Batrawy III city-wall, was not preserved in this area, due to the violent erosion and windblown activities that deeply affected this side of the *khirbet*. For a detailed analysis of the successive and superimposed reconstructions, destructions and occupational phases of the Batrawy fortification system see Area B North, § 3.2.
7 Layer F.703 was only partially excavated in a cleaning operation of the sector immediately to the west of probe in squares CdII9 + CeII9, where a violent collapse had heavily damaged the westerner stretch (W.707) of the city-wall, since it directly emerged under the shallow abandonment layer F.701 which covered the whole area.
8 Samples KB.06.FR.107 and KB.06.FR.119.
9 KB.06.E.95 (pl. LI).
10 KB.06.E.96 (pl. LI).
Fig. 6.5 - General view of Area E with the top of the destruction layers of the Batrawy IIIa city, from north-west: F.702 in the probe, F.703 in the ravine.

Fig. 6.6 - Top of EB IIIA destruction layer F.702 excavated in the probe opened in Area E, from east.

Beside fragments of common Simple and Storages Wares, also in the Grain Wash variant (such as specimen KB.06.E.702/1, pl. LI), a few sherds of distinctive EB IIIA specialized productions, such as Red Burnished (platter KB.06.E.702/4, pl. LI) and Red Polished Wares (jug KB.06.E.703/4, pl. LII) were retrieved in these layers.
6.1.4. Phase 4: stratigraphy of Batrawy II fortification system
Phase 4 illustrates the erection (Activity 4b), first utilization and sudden end, testified to by a thick collapse layer in the fillings inside the town (Activity 4a), of Batrawy II fortification system during the Early Bronze II.

Activity 4a: destruction of Batrawy II fortification system
Deposits of Period Batrawy II have been clearly identified in the sounding inside the southern line of the main Batrawy city-wall (W.705), where a thick layer of destruction and collapse was accumulated on a floor lying directly over the bedrock. Here, an upper stratum (F.704) of grey clayish-sandy soil, 20-25 cm high, with ashy lenses, charcoals and small limestone chops probably from the Batrawy II city-wall superstructure, as well as scattered animal bones (samples KB.06.FR.106 and KB.06.FR.123) and pottery sherds (pl. LIII), covered a greyish layer (F.706), 20 cm thick, basically composed of compacted charcoals, ash and crushed greyish mudbricks, with numerous limestone grits, chops and mud mortar from the EB II city-wall collapsed superstructure (§ 6.2.), as well as a few pottery sherds (pl. LIV). Both these layers sloped from north to south and from west to east according to the natural slope of the bedrock.

Activity 4b: erection of Batrawy II fortification system
Activity 4b represents the erection of Batrawy II city-wall, the earliest phase of the Batrawy fortification system, similarly detected in Area B North (§ 3.1.4.). It is illustrated by the inner face of city-wall W.705 and the earliest floor exposed inside the town (L.710), lying directly upon the bedrock, in trench CdIII9 + CelII9 (§ 6.2.), and by the inner face of the westerner juxtaposed stretch of city-wall W.707, further to the west.
6.2. Architecture & Finds: the EB II city-wall on the southern side of the site

Though badly eroded, the main EB II-III city-wall was preserved along the whole southern side of the *khirbet* (figs. 6.9-6.10). Since the later Early Bronze III reconstructions collapsed and were almost completely obliterated by erosion, the original EB II foundation of the city-wall and the related passage inside the city were reached and brought to light in Area E.

![General view of the main EB II-III city-wall (W.705 + W.707) and related floor L.710, preserved along the southern side of Khirbet al-Batrawy, from east.](image)
Fig. 6.10 - Plan of Batrawy II (EB II) city-wall and related floor inside the city.
The defensive work, consisting of a single wall running on the very edge of the cliff, was strongly eroded on the outer side, where its outer face was preserved only for the lower courses of limestone boulders directly set into the bedrock (fig. 6.11). Conversely, the inner face of the wall was preserved on four superimposed courses of unworked stones, tied up with mortar and small limestone chops (figs. 6.12-6.13).

Fig. 6.11 - The southern outer face of EB II city-wall W.705, preserved only in its lower foundation courses of limestone boulders, form south.

Fig. 6.12 - Detail of the inner face of EB II city-wall W.705, with unworked stones tied up with mortar and small limestone chops, from north.
As well documented in the EB II main city-wall in Area B North (§ 3.2.1.),
the Batrawy II city-wall was built in separated juxtaposed stretches (each
around 6-8 m long)\(^{12}\), according to a well-known technique attested to in
many Early Bronze fortified sites in Palestine and Transjordan, in order to
prevent dangerous effects of earthquakes\(^{13}\).

Inside city-wall W.705, where the sounding was opened, a well refined
floor (L.710) of limestone marl and small pebbles, lying directly over the
bedrock (fig. 6.14), was uncovered after the removal of a thick heavy
destruction layer (F.704, F.706). From the latter layer, scattered fragments
of EB II common wares were retrieved\(^{14}\), as well as some specimens of EB
II typical specialized productions, such as Red Burnished\(^{15}\) and Red
Polished\(^{16}\) vessels (pls. LIII-LIV). A flint blade\(^{17}\) and a Canaanese blade\(^{18}\)
were also retrieved in layer F.706.

\(^{12}\) In trench BrII7+BsII7 excavated in 2005 a junction between two of such sectors
(named wall W.103c to the west and wall W.101c to the east) was visible on the
northern outer face of the main city-wall (Nigro ed. 2006, 176, fig. 4.35, pl. IV).

\(^{13}\) Nigro ed. 2006, 176-177, in particular note 26.

\(^{14}\) Two fragments of storage jars with Grain Wash decoration from layer F.706 can
be noticed (KB.06.E.706/7, KB.06.E.706/8; pl. LIV).

\(^{15}\) A platter (KB.06.E.704/1) and a bowl (KB.06.E.704/6) from layer F.704 (pl.
LIII), and three platters (KB.06.E.706/1, KB.06.E.706/2, KB.06.E.706/3) from layer
F.706 (pl. LIV).

\(^{16}\) Three jugs (KB.06.E.704/7, KB.06.E.704/14, KB.06.E.704/15) from layer F.704
(pl. LIII), and a jar (KB.06.E.706/5) from layer F.706 (pl. LIV).

\(^{17}\) KB.06.E.86 (pl. LIV).

\(^{18}\) KB.06.E.102 (pl. LIV).
A typical feature of this phase was the presence of fragmentary light-greyish mud-bricks in the layers of collapse, belonged to the superstructure of the EB II city-wall. The greyish mud-bricks of the city-wall superstructure were split over the stone foundations and left a thick stratum of greyish dump all around the defences, especially visible on the southern inner side of the khirbet.

The Batrawy II fortifications in Area E show that a violent earthquake brought to a sudden end the earliest city. Traces of such a dramatic event were detected both on the northern and southern city-wall, in Areas B North (§ 3.2.1.) and E. It provoked almost the full collapse of the mud-brick superstructure and seriously damaged the 2 m high stone foundations of the Batrawy II city-wall, as it is clearly documented in the cracks and inner collapses detected in the EB II city-wall and city-gate in Area B North (§§ 3.1.4., 3.2.1.).

Fig. 6.14 - Floor L.710 excavated inside city-wall W.705, from east.
LIST OF POTTERY, OBJECTS AND SAMPLES BY CONTEXTS

Area E

F.701
Pottery: Simple Ware: 1 jar, 1 jug, 3 fragms. uns.
Cooking Ware: 9 fragms. uns.
Storage Ware: 3 hole-mouth jars, 3 jars (1 with Grain Wash decoration), 30 fragms. uns.
Specialized Production: 2 Simple Painted Ware fragms., 3 Red Polished Ware fragms., 2 Metallic Ware fragms.

Samples: Animal Bone (KB.06.FR.111)
Plate: L

F.702
Pottery: Simple Ware: 1 jar, 4 fragms. uns.
Cooking Ware: 4 fragms. uns.
Storage Ware: 4 hole-mouth jars, 1 thumb-indentled ledge handle, 1 jar (with Grain Wash decoration), 25 fragms. uns.
Specialized Production: 1 Red Polished Ware fragm., 1 Red Burnished Ware platter

Lithics: 1 Canaanean Blade (KB.06.E.96)
Tools: 1 Bone Tool (KB.06.E.95)
Samples: Animal Bone (KB.06.FR.119)
Plate: LI

F.703
Pottery: Simple Ware: 2 juglets, 2 jars, 1 fragms. uns.
Storage Ware: 1 jar, 2 pushed-up ledge handles, 10 fragms. uns.
Specialized Production: 1 Red Polished Ware fragm.

Samples: Animal Bone (KB.06.FR.107)
Plate: LII

F.704
Pottery: Simple Ware: 3 jars, 1 jug, 3 fragms. uns.
Cooking Ware: 6 fragms. uns.
Storage Ware: 1 pithos, 2 jars, 1 hole-mouth jar, 2 pushed-up ledge handles, 22 fragms. uns.
Specialized Production: 3 Red Polished Ware jugs, 2 Red Burnished platters

Samples: Animal Bones (KB.06.FR.106, KB.06.FR.123)
Plate: LIII

F.706
Pottery: Simple Ware: 1 jar, 11 fragms. uns.
Cooking Ware: 2 fragms. uns.
Storage Ware: 1 ledge handle, 2 jars (with Grain Wash decoration), 48 fragms. uns.
Specialized Production: 1 Red Polished Ware fragm., 3 Red Burnished Ware platters

Lithics: 1 Flint Blade (KB.06.E.86), 1 Canaanean Blade (KB.06.E.102)
Plate: LIV
AREA E

CATALOGUE OF POTTERY AND SMALL FINDS
Chapter 6 - Catalogue ROSAPAT 06

Pl. L - Pottery from Area E, filling F.701 (Phase 2)


Pl. LI - Small finds and pottery from Area E, sounding in squares CdIII9+CeIII9, layer F.702 (Phase 3)

KB.06.E.95, bone tool. Context: CdIII9+CeIII9, F.702. State of preservation: fragmentary. Material: bone. Technique of manufacture: chipped. Material colour: 10YR8/2 (white). Height: max. 0.5 cm, min. 0.1 cm; length: 2.2 cm; thickness: 0.2 cm. Description: bone tool with two dorsal ridge and trapezoidal section. Dating: EB IIIA.


Chapter 6 - Catalogue ROSAPAT 06

[Pl. LI]

Pl. LII - Pottery from Area E, layer F.703 (Phase 3)


**Pl. LIII - Pottery from Area E, sounding in squares CdIII9+CeIII9, layer F.704 (Activity 4a)**


KB.06.E.704/8, jug. **Class: Simple Ware. State of preservation: base. Technique of manufacture: handmade. Firing: medium-high. Fabric colour: 7.5YR5/1 (gray). Temper/inclusions: mineral (whitish); dimension: small, medium-small; frequency: medium. Diameter: 4 cm; rim width: 0.6 cm; wall width: 0.45 cm; base width: 4.1 cm. Dating: EB II.**

Chapter 6 - Catalogue ROSAPAT 06

[Pl. LIII]


Pl. LIV - Small finds and pottery from Area E, sounding in squares CdIII9+CeIII9, layer F.706 (Activity 4a)


[Pl. LIV]


7. Area F: the EB II-III Broad-Room Temple and the Early Bronze IV village on the easternmost terrace
[by Lorenzo Nigro]

The exploration of the Early Bronze Age town of Batrawy was extended in 2006-2007 by opening a new area on the easternmost Terrace V (fig. 7.1)\(^1\), where Cairn III lies\(^2\), just aside the bedrock step (in some spots reinforced by a scarp-wall) between Terrace IV and V\(^3\).

![Fig. 7.1 - General view of Area F on the easternmost Terrace V at the beginning of excavation (2006), from west.](image)

Ten squares were opened\(^4\). Quite monumental structures visible on the surface turned out to belong to an EB II-III religious building (§ 7.2.1.), which stretched E-W over an area of around 400 sqm, belonging to a temple type well attested to in Southern Levant during the Early Bronze

---

\(^1\) Nigro ed. 2006, 22, fig. 1.2.
\(^2\) Cairn III belongs to the same building activity as Cairns I and II, erected on the summit of Terrace I somewhat during the long periods of abandonment (Period Batrawy V), after the definitive desertion of the Early Bronze Age settlement at the end of the 3rd millennium BC (Nigro ed. 2006, 40, 65, note 7).
\(^3\) Nigro 2007a, 358-359, fig. 1.
\(^4\) Squares CnII17 + CoII17 + CnII18 + CoII18 + CpII18 + CnII19 + CoII19, also excavating north-south baulks CnII17/CoII17, CnII18/CoII18, CoII18/CpII18 and CnII19/CoII19, and east-west baulks CnII17/CnII18, CoII17/CoII18 and CoII18/CoII19; square CnII16 and trench CpII17 + CqII17, including north-south baulk CpII17/CqII17. Baulks CoII17/CpII17 and CpII17/CpII18 were removed in 2007 season.
Age (similar to the renowned EB II-III sanctuary of Bab edh-Dhra')\(^5\), and to sparse EB IV houses (§ 7.2.2.), which provided a set of tools and pottery illustrating a single stratigraphic phase (thus, presumably representing a somewhat short-lived occupation of Terrace V, towards the end of Early Bronze IV).

**7.1. Stratigraphy** [by Maura Sala]

The stratigraphy of Area F is illustrated below\(^6\); structures and finds from occupational layers and architectural operations of Phases 2, 3 and 4 will be thoroughly described in §§ 7.2.1. and 7.2.2. Four stratigraphic phases have been preliminarily distinguished in Area F (tab. 7.1), from the uppermost layer of humus (Phase 1) down to the earliest EB II broad-room building (Phase 4), thus covering the whole urban phase at Batrawy.

<table>
<thead>
<tr>
<th>Absolute Chronology</th>
<th>Archaeological Period</th>
<th>Site Period</th>
<th>Phases of Area F</th>
</tr>
</thead>
<tbody>
<tr>
<td>3400-3000 BC</td>
<td>Early Bronze I</td>
<td>Batrawy I</td>
<td>-</td>
</tr>
<tr>
<td>3000-2700 BC</td>
<td>Early Bronze II</td>
<td>Batrawy II</td>
<td>Phase 4</td>
</tr>
<tr>
<td>2700-2500 BC</td>
<td>Early Bronze IIIA</td>
<td>Batrawy IIIa</td>
<td>Phase 3</td>
</tr>
<tr>
<td>2500-2300 BC</td>
<td>Early Bronze IIIB</td>
<td>Batrawy IIIb</td>
<td></td>
</tr>
<tr>
<td>2300-2200 BC</td>
<td>Early Bronze IVA</td>
<td>Batrawy IVa</td>
<td>-</td>
</tr>
<tr>
<td>2200-2000 BC</td>
<td>Early Bronze IVB</td>
<td>Batrawy IVb</td>
<td>Phase 2c-a</td>
</tr>
<tr>
<td>2000 BC-1900 AD</td>
<td>Later Periods</td>
<td>Batrawy V</td>
<td>-</td>
</tr>
<tr>
<td>1900-2007 AD</td>
<td>Contemporary</td>
<td>Batrawy VI</td>
<td>Phase 1</td>
</tr>
</tbody>
</table>

**Tab. 7.1 - Archaeological periodization and stratigraphy of Area F.**

**7.1.1. Phase 1: topsoil and ephemeral frequentation of the site**

Phase 1 includes the topsoil (Activity 1a), a shallow layer of windblown sandy soil (F.0) with small and medium erratic stones, plants roots, and a few scattered EB III-IV pottery sherds, homogeneously distributed all over the excavated area, as well as some traces of recent ephemeral frequentation of the *khirbet*, from the last centuries up to nowadays (Activity 1b), illustrated by different features, such as shepherds’ fences, bonfires and plunder pits. The topsoil has an average thickness of 10 cm, with a slight sloping from west to east, and it covered directly the collapsed remains of the underlying Early Bronze Age structures (fig. 7.2).

---


\(^6\) For a preliminary presentation see Nigro 2007a, 358.
A few domestic tools have been retrieved directly from the surface, namely three grinding stones (figs. 7.3-7.5).

Fig. 7.2 - Early Bronze Age structures and collapse layers emerging on Terrace V (square CnI118), after the removal of the shallow uppermost layer of humus, from south.

Fig. 7.3 - Grinding stone KB.06.F.50.

KB.06.F.50, KB.06.F.56, KB.06.F.57.
7.1.2. Phase 2: stratigraphy of Batrawy IV village
Phase 2 groups stratigraphic units related to the Batrawy IV village, from its construction (Activity 2c) and use (Activity 2b), represented by several fillings and structures, to its final abandonment (Activity 2a) without any violent destruction at the very end of the 3rd millennium BC. Also Batrawy IV structures in Area F were thus submitted to weather and pillage (such as that for the construction of Cairns III on the easternmost tip of Terrace V, and later shepherds' fences and scarp-walls)\(^8\).

**Activity 2a: abandonment and collapse of Batrawy IV village**
Activity 2a is represented by a widespread layer of buff and friable dusty soil with rubble and erratic boulders from the collapsed stone walls of EB IV domestic units, and their prolonged abandonment; they were: F.501 in squares CnII8 + CoII8 + CoII19, F.508 in squares CnII17 + CoII17, F.565 in baulk CoII17/CpII17, F.568 in baulk CpII17/CpII18, F.513 in square CpII18, F.518 in square CnII16, F.526 in square CqII17, F.532 in square CpII17 and F.544 in square CnIII19. This stratum (20-25 cm deep) was uniformly spread all over the squares excavated and filled in the ruins of EB IV domestic units and installations (figs. 7.6-7.7).
Scattered pottery sherds, mainly of EB IVB simple and storage wares\(^9\), as well as some domestic tools\(^10\), were retrieved in these fillings (pl. LV; fig. 7.8).

---

\(^8\) Nigro 2006a, 235; Nigro ed. 2006, 18-23.

\(^9\) Such as some diagnostic EB IV envelope ledge handles (KB.05.A.2/3, KB.05.A.49/1, pl. IV; KB.05.A.27/2, KB.05.A.95/6), and combed decorated jars (KB.05.A.1/2, pl. IV; KB.05.A.95/10, KB.05.A.95/11, pl. XVI; fig. 3.4).

\(^10\) Two flint tools (KB.06.F.72, KB.06.F.75) from filling F.526.
Fig. 7.6 - Area F: layer of collapsed stones F.565 (Activity 2a) excavated within device L.564, from west; from it installation S.545 and bench B.542 emerge.

Fig. 7.7 - Area F: layer of collapsed stones F.513 (Activity 2a) excavated in House L.520 in square Cpl118, from south-west.
Activity 2b: use of Batrawy IV village

The use of Batrawy IV structures on Terrace V (Activity 2b) belongs to a single stratigraphic phase and it is represented by a shallow layer of buff and friable sandy soil with sparse EB IV pottery sherds (pls. LV-LIX) and animal bones, even though in some spots remains of collapsed structures obliterated the evidence of the houses life itself.

Stratigraphic units related to Activity 2b were respectively: F.502 in squares CnII8 + CoI18, in the open space south of wall W.505 (see below § 7.2.1.); F.506 in square CoII19; F.512 in square CnII17 and F.516 in square CoII17 within absidal device L.564; F.514 in square CpII18 within House L.520; F.524 in square CnII16 within House L.540; F.528 in square CqII17 and F.534 in square CpII17 within House L.530.

Activity 2c: construction of Batrawy IV village

Activity 2c represents the erection of Batrawy IV dwellings on the easternmost Terrace V, which showed only a single constructive phase belonging to the very end of the 3rd millennium BC. They were: House L.530 in central squares CpII17 + CqII17 and CpII18, including walls W.517 to the south, W.525+W.531 to the east, W.533 to the north, and W.543 to the west, with raised platform S.552 (delimited by walls W.551 and W.533), circular installation S.529, semi-circular bin S.523 in the SE corner, and separated rectangular room L.560 (delimited by walls W.547 and W.549) in the opposite SW corner; an absidal device L.564 (delimited by semi-circular wall W.515) with bench B.542 to the west of House L.530 in square CoII17; unit L.520 in square CpII18, enclosed by wall W.559; House L.584 (delimitated by walls W.519 and W.541) with its western courtyard L.588 and circular device S.511 in square CnII17 + CoII17; House L.540 (delimitated by walls W.535, W.537 and W.539) to the northwest in square CnII16, with semi-circular installations S.538 and S.556.
7.1.3. Phase 3: Batrawy III re-construction of the broad-room temple

Phase 3 groups architectural operations belonging to Batrawy III (EB III) occupation, namely: the reconstruction (W.505) of the central stretch of the façade-wall of the broad-room temple collapsed at the end of Phase 4, with installation S.536 abutting on the southern side of it; the reconfiguration of the *cella*, with platform B.585 and niche L.580; the addition of protruding wall W.577, and the flight of steps (W.507) adjoined to the north-eastern side of circular platform S.510 (§ 7.2.1.).

The superimposed structures of Batrawy IV village and the shallowness of archaeological deposits in this area completely obliterated the evidence of the successive use of such a monumental building, the structures of which was also partially cut and re-employed by the later EB IV settlers.

7.1.4. Phase 4: Batrawy II erection of the broad-room temple

Phase 4 represents the original erection of broad-room Temple F1 during Early Bronze II (Batrawy II Period), including *cella* L.500 in squares Cm II18 + CnII8 + CoII8 + CmII17 + CnII17 + CoII17, delimited to the south by wall W.563, to the north by wall W.521, to the west by wall W.586, to the east by wall W.561, and opened towards the south on courtyard L.504 with circular platform S.510 in square CoII19.
7.2. Architecture & finds: the Broad-Room Temple and the EB IV installations [by Lorenzo Nigro]

Area F suffered severe erosion and pillage due to its location in the immediate vicinity of the northern borough of the modern city of Zarqa. Nonetheless, it was chosen because of the emergence of a stone structure running E-W\textsuperscript{11}, which turned out to belong to the façade-wall of a major building, recognized as an EB II-III broad-room temple. As stratigraphy illustrated (§ 7.1.), this building was founded with the city of Batrawy in Early Bronze II (Phase 4), and remained in use until its final destruction at the end of Early Bronze IIIB (Phase 3a). Afterwards Area F was abandoned for a certain while (a century or something more), until a cluster of EB IVB domestic units arose on the eastern plateau of Terrace V, partly obliterating the older building, its forecourt, and annexed structures to the north and to the east.

7.2.1. Batrawy II Temple F1

The EB II-III sanctuary brought to light in Area F extended over a surface of around 400 sqm, including a broad-room temple and its forecourt (figs. 7.9-7.10).

---

\textsuperscript{11} Nigro ed. 2006, figs. 1.22, 1.25.
Fig. 7.10 - General view of the EB II-III broad-room temple in Area F, from south; in the foreground, platform S.510 in courtyard L.504.

The original building (Temple F1, Phase 4; Early Bronze II; plan III) is a rectangular structure leaning to the west, with its short side (W.586), on the bedrock step which separates Terraces IV and V, and it had its major axis E-W oriented. It was delimited by a solid wall, preserved only at foundation level on its southern (the main façade, W.563W+W.563E), western (W.586) and northern sides (W.521) (in the latter only for its central stretch); the eastern wall (W.561), and especially the north-eastern corner of the building, had been cut off by the Batrawy IV (Phase 2) domestic units erected north and east of the religious structure; only the inner south-eastern corner of the cella was preserved (fig. 7.11), with a stretch of the eastern wall (W.561).

The southern façade
The original southern wall (W.563W+W.563E) of the temple was 1 m thick, employing big fieldstones regularly set in it with their plain side on the outer faces and an inner filling of limestone chops and pebbles (figs. 7.12-7.13). The corners of the rectangular building were founded directly on the bedrock, while the central part of the structure was erected upon an intentional filling (F.566) consisting of small stones and compact soil (without any pottery sherds), laid in a shallow depression at the centre of Terrace V (fig. 7.14).
Fig. 7.11 - General view of the EB II-III broad-room temple and round platform in Area F, from E-SE; in the foreground, the south-eastern corner of the *cella* (W.563E + W.561).

Fig. 7.12 - The western end of original southern wall W.563, in the foreground, from west.
This eventually caused the central stretch of the façade-wall (W.563) to fall down at a major earthquake strike towards the end of EB II\textsuperscript{12}.

\textsuperscript{12} This is the same earthquake which caused a general collapse of the EB II fortifications attested to in Areas B North (§§ 3.1.4., 3.2.1.) and E (§ 5.1.4., 5.2.), and the end of use of city-gate L.160 in Area B North (Nigro 2007a, 352; in press, § 6).
**Entrance L.592**
The original (Phase 4) entrance was a passage 1.4 m wide, with a 0.1 m shallow step opened around at two thirds of the length of the southern façade wall. The height of the door may be reconstructed 2.0 m high.

**Cella L.590**
The rectangular *cella* had inner dimensions 12.5 x 2.7 m; along the main axis four stone slabs to be used as pillar-bases were aligned, so that the two in the eastern half of the broad-room stood on both sides of the entrance passage. They were embedded into the floor (L.590) made of beaten earth and chalk grits. A niche (L.562) was opened into the northern wall of the building facing the entrance (fig. 7.15). The niche was 1.3 m wide and 0.8 m deep; it was paved with stones with an inner step 0.2 m high; inside the niche a small slab, set in the NW corner, exhibited two circular shallow depressions (small cup-marks?). This detail suggests that the niche was the original cult focus of the *cella* (figs. 7.16-7.17).
The broad-room Temple F1 superstructure

The width of the perimetral walls and the dimensions of the entrance suggest that the building was at least 3.8 m high. The superstructure above the stone foundation was made of greyish mud-bricks while the ceilings were made with wooden beams at least 3.0 m long. The roof was apparently supported by a rows of four wooden pillars (around 0.2 m of diameter) aligned on the main axis of the cella at a regular distance of 2.5 m one from the other, that is roughly the width of the cella itself (fig. 7.18).
Fig. 7.18 - Reconstruction of Temple F1 (Phase 4; Early Bronze II).
The forecourt
The temple opened to the east towards an open courtyard (L.504) paved with crushed limestone. In front of the entrance, at the south-eastern edge of the bedrock spur upon which the whole sanctuary is founded, there was a circular platform (S.510), 2.5 m diameter, 0.45 m high, lined with stones and erected partly exploiting an emergence of the bedrock (figs. 7.10-7.11, 7.19). In the middle of the platform there was a slab with a shallow circular cup-mark (fig. 7.20)\(^\text{13}\). This structure may be confidently interpreted as an open air altar, of a well known Palestinian Early Bronze Age typology\(^\text{14}\).

Just aside Altar S.510 to the west, a circle of stones (S.503), roughly in the centre of the courtyard, possibly was the basis of a self-standing betyl (fig. 7.21).

---

\(^{13}\) Similar to those visible on the steps leading on the top of round Altar 4017 at Tell el-Mutesellim/Megiddo (Finkelstein - Ussishkin 2000, 71, fig. 3.50)

\(^{14}\) See for instance: Altar 4017 at Tell el-Mutesellim/Megiddo (Loud 1948, 70, 73-76, figs. 164-165; Sala 2008, 214-219); circular platform i0.1 in the sacred area of Khirbat ez-Zeraqon (Genz 2002, 94-96, fig. 2; Sala 2008, 243-244), and the semicircular platform (\textit{locus} 13) in Field XII at Bab edh-Dhra' (Rast - Schaub 2003, 321-332; Sala 2008, 288).
Fig. 7.20 - Detail of Altar S.510 with the central slab with a shallow circular cup-mark, from west.

Fig. 7.21 - Installation S.503 to the north-west of Altar S.510, from north.
7.2.2. Batrawy III Temple F2
After the collapse which badly damaged the original temple, the sacred building was reconstructed at the beginning of EB IIIA according to the same general plan, but with some important transformation in the *cella* (plan IV).
The central stretch of the temple façade-wall was rebuilt for a length of around 4 m west and 2 m east of the entrance (L.550). The new wall (W.505) was slightly thicker (1.2 m) of the earlier one (W. 563); stones were placed as stretchers through the wall itself and the inner filling was made with medium size stones (figs. 7.22-7.23).
Entrance L.550
The entrance opened roughly at two thirds of the southern façade of the broad-room, and consisted of a 1.36 m wide passage (L.550; figs. 7.23-7-24). The western jamb was completely preserved, while the eastern one was kept safe only on the inner side. The threshold was marked by a 0.15 m step within the passage, since the floor of the cella was at a slightly higher elevation in respect of that of the forecourt. The door lintels were reconstructed 2 m high, while the whole building may have reached a height of 4.0 m (see below).

Cella L.500
Entrance L.550 introduced to an elongated broad-room (L.500), 12.5 m long by 2.7 m width, according to a common rule of Early Bronze Age

---

15 Conversely from what previously stated (inner dimensions of the broad-room 2.7 x 11.0 m; Nigro 2007a; 359; in press, § 5), the actual dimensions of the cella were 2.7 x 12.5 m, since the western end of the broad-room was excavated only in 2007 season.
sacral architecture in Southern Levant. The floor of the cella was a carefully beaten layer of clayish reddish soil (fig. 7.24).

When the central sector of the temple was reconstructed in Phase 3 (EB IIIA), the niche was blocked and another focus for the cult was established in the room, by raising its western end (figs. 7.25-7.26). This kind of raised platform (B.585), marked by a stone-lined step (W.581) 0.2 m high at three quarter of the length of the room, hosted a series of cult installations: a couple of vertical slabs (south W.576, north W.574) placed as antae delimited a central niche (L.580), further slightly raised (fig. 7.27); this niche was inserted into the western wall (W.586) for a depth of 0.1 m. In front of the niche and roughly aligned with the two orthostates, there were two circular bases (south W.583, north W.573) for a couple of betyls (fig. 7.28-7.29). On the left southern side of the platform, a small wall (W.578) made with stones set vertically into the platform enclosed an area also paved with flagstones, ending to the east with a big slab (B.572) protruding from step W.581 and abutting on the northern face of W.505W, possibly used for offerings or sacrifices. On the opposite side of the platform, in the north-western corner of the cella, a raised bench (B.589) was located.

![Fig. 7.25 - Raised platform B.585 erected in the western end of Temple F2, from east.](image)

16 The broad-room cella represents the classic Early Bronze Age type of Palestinian sacred architecture (Kempinski 1992a; de Miroschedji 1993; Sala 2008), and preserves a local religious architectural tradition descending from the Chalcolithic Period (as the sacred precincts of En-Gedi and Tuleilat el-Ghassul testify to; Ussishkin 1980; Seaton 2000; Sala 2005; 2008, 3-30, 291-294).
Fig. 7.26 - General view of Temple F2, from west; in the foreground, raised platform B.585 with niche L.580.

Fig. 7.27 - Detail of central niche L.580 in raised platform B.585, from east.
Fig. 7.28 - Detail of the two betyls in front of raised platform B.585, from east.

Fig. 7.29 - Detail of betyl W.583.

Such a re-articulated layout of the cult focus points to the importance conveyed to the niche and to the idea of "sancta sanctorum", now distinguished by the raised platform and the series of installations illustrated. Moreover, the western wall of the temple, as the niche, were set into a step of the bedrock, being directly connected with the virgin soil of the khirbet.
The broad-room Temple F2 superstructure

As regards the reconstruction of the temple superstructure, it was made up with yellowish mud-bricks, probably overlaid with lime plaster inside and mud plaster outside. With Phase 3 reconstruction, the height of the building was apparently higher (4 m), as the increased width of perimetral walls testify to. The ceilings again consisted of wooden beams larger than those previously used in Temple F1, displaced across the whole width of the building (fig. 7.30), since the stone bases of Phase 4 were covered by Phase 3 floor without being replaced.

Fig. 7.30 - Reconstruction of the western sector of Temple F2 with niche L.580 (Phase 3; Early Bronze III).
The forecourt

The original courtyard (L.504) remained in use except for the addition of installation S.536 at the centre of the façade of the temple. Moreover, two lateral walls (only the western wall was actually preserved *in situ*, W.577) were erected protruding from the corners of its main façade (fig. 7.31) and delimiting the western and eastern sides of the court.

Installation S.536 was a stone-lined semicircular basis (horse shaped) which presumably supported a pillar with a religious significance.

As regards the main cult installation, platform S.510, it was repaired on the northern side (possibly slightly raised and enlarged), and a flight of four flat steps (W.507) consisting of limestone slabs was added on its north-western side (fig. 7.32), in order to offer and easier access to its top.

Fig. 7.31 - Western lateral wall W.577 of Temple F2, from south.
7.2.3. The broad-room temple and its setting in the religious architectural tradition of Southern Levant

The broad-room temple brought to light on the easternmost terrace of Khirbet al-Batrawy, for its plan and stratigraphy, can be easily ascribed to a typology of sacred buildings known in Southern Levant from the Late Chalcolithic Period (as the sacred precincts of En-Gedi and Tuleilat el-Ghassul testify to)\(^{17}\). This kind of cult place is characterized by the rectangular elongated plan (with a ratio length/width of 1:4-1:6), the entrance on the long side, and by the presence of a forecourt with cult installations\(^{18}\). The most monumental example of such a plan is offered by the temple of et-Tell/ ’Ai in Palestine, which shows the same niche in the rear wall of the *cella*\(^{19}\), and the same row of pillar bases as the broad-room temple of Batrawy in Phase 4 (EB II).

Nevertheless, the most striking parallel for the temple in Area F at Batrawy, apparently is the EB II-III sanctuary of Bab edh-Dhra’ (fig. 7.33)\(^{20}\). The latter sacred building not only exhibits similar plan and dimensions of the Batrawy temple, including the round cult platform in the forecourt, but also followed a comparable development through time. It had, in facts, an inner row of pillars in the EB II layer along its main axis, while in the EB III phase was distinguished by a raised platform occupying the northern end of the elongated *cella*, which hosted the cult focus of the temple.

\(^{17}\) Sala 2008, 3-30, 291-294.

\(^{18}\) In Wadi az-Zarqa basin an example this kind of religious building is attested to at Jebel Mutawwaq, the major EB IA sites in this district.

\(^{19}\) Marquet-Krause 1949, 16, pl. VIII:3.

The presence, in a very panoramic spot of the site, of a monumental religious building suggests that Temple F was a major focus point in the landscape surrounding the town since the time of the rise of the city of Batrawy. It was, in facts, erected with the town itself in the Early Bronze II, thus indicating another basic function of the fortified town: to host the religious centre of the district, once that the main sanctuary of Jebel al-Mutawwaq\textsuperscript{21} had been abandoned.

---

\textsuperscript{21} Fernández-Tresguerres Velasco 2004; 2005.

---

Fig. 7.33 - Plans of the EB III temples and related installations at Bab edh-Dhra' (to the left; after Rast - Schaub 2003, fig. 10.57) and Khirbet al-Batrawy (to the right).
7.2.4. The village of Period Batrawy IV on the easternmost Terrace V

Two clusters of Batrawy IV domestic units arose on the northern and eastern edges of Terrace V in the last century of the 3rd millennium BC (fig. 7.35)\(^\text{22}\). EB IV occupation developed in a single constructive phase, apparently during the later phase of Period Batrawy IV, and lasted maximum a century, showing the same general layout and structural features already noticed in Area A\(^\text{23}\).

Dwellings followed a general orientation NE-SW, markedly different from that of the monumental building of the Batrawy II-III (EB II-III) period (§ 7.2.1.), and hosted a number of installations (fig. 7.365).

**House L.530**

A major domestic unit was identified in squares CoII17, CpII17, CqII17, CpII18, including a central room (L.530) with a roughly rectangular plan, delimited by single-line walls (figs. 7.37-7.38). To the west there was a main wall (W.543), ending to the south with a door L.548, which gave access to a rectangular entrance room (L.560), delimited to the north by wall W.547 and to the east by wall W.549; a second door (L.582), opened in wall W.549, introduced from the entrance L.560 to the central space L.530. Outer door L.548 had a threshold made with two flanking slabs (fig. 7.39). Both doors L.548 and L.582 leaned against the main southern wall of the whole unit, wall W.517, made up with big irregular stones, showing regular circular hollows for vertical wooden posts (?) on their top, probably deriving from the foundation of the Batrawy II-III temple (two of these stones exhibit circular hollows on their upper surface: fig. 7.40).

\(^{22}\) For a preliminary presentation see Nigro 2007a, 358.

\(^{23}\) Nigro 2006a, 237-240; 2006b, 677-682; Nigro ed. 2006, 101-102; pp. 28-36 in this volume. EB IV dwellings in Areas A and F exhibited, in fact, elongated rectangular plans and were flanked by courtyards and subsidiary structures, many of which curvilinear in plan (see below for instance device L.564, figs. 7.36, 7.49-7.50). The agglutinant juxtaposition of houses and devices was also a shared characteristic of EB IV dwelling clusters in Area A and F. From the architectural point of view, EB IV houses were entirely made of unworked stones, usually displaced in only one row, whit small wooden posts employed in ceilings of major rectangular units, while circular or semicircular structures should have been covered with mud and leafy branches and, in some cases, with corbelled stone or mud-brick vaults. The shared plain architectural features shown by the EB IV dwelling quarters erected on the Acropolis and on the easternmost Terrace V differ a little bit from those exhibited by EB IV houses in Area B South, where at least two superimposed constructive phases were distinguished (Nigro 2007a, 352-353; §§ 4.1.2., 4.2.3. in this volume).
Fig. 7.35 - Plan of Batrawy IV Village on easternmost Terrace V.
Fig. 7.36 - The eastern cluster of Batrawy IV domestic units on Terrace V, from west; in the foreground, semicircular device L.564; in the left background, central unit L.530; in the right background, adjoined House L.520.

Fig. 7.37 - General view of Batrawy IV domestic units on Terrace V, from east; in the foreground, central unit L.530; in the background, the EB II-III broad-room temple.
Fig. 7.38 - General view of central unit L.530, from west, before the removal of baulks ColI17/CpI17 and CpI17/CpI18.

Fig. 7.39 - Detail of wall W.517 with the circular hollows on the upper surface of its stones, from S-south-west.

Fig. 7.40 - Detail of western wall W.543 (House L.530) with threshold L.548, from south-west.
The western wall (W.543) was interrupted to the north (in CqII17) due to the presence of two rectangular bins (S.545 and S.546: fig. 7.41), lined with stones and paved with pebbles and limestone chops. In the corner between the southern wall (W.517) and the eastern wall (W.525) there was a semicircular bin (S.523), similar to an analogous device excavated in Area B South\(^24\) (fig. 7.42). In the centre of the house (L.530), in CqII17, there was a storage device (S.553), with a cist (S.552) in its SW corner, where two almost complete hole-mouth jars\(^25\) were retrieved (fig. 7.43). North of the platform there was a stone circle flanked by two slabs (S.529; fig. 7.44). House L.530 was enclosed to the north-east by walls W.531 + W.533.

Ceramic materials from House L.530 included several cooking pots and hole-mouth jars (pls. LVIII-LIX; figs. 7.45-7.46), some small jars of Simple Ware\(^26\) and Metallic Ware\(^27\), and at least three more storage jars\(^28\).

---

\(^24\) Nigro ed. 2006, 173, figs. 4.19, 4.30 (bin S.127).
\(^25\) KB.06.F.530/1, KB.06.F.530/2 (pl. LIX).
\(^26\) KB.06.F.534/2, KB.06.F.534/3 (pl. LIX).
\(^27\) KB.06.F.534/1, KB.06.F.534/6 (pl. LIX).
\(^28\) Storage jars included one hole-mouth (KB.06.F.534/14, pl. LVIII) and two jars with cylindrical neck and everted rim (KB.06.F.534/4, pl. LIX).
A flint flake\textsuperscript{29} and a limestone mortar\textsuperscript{30} (fig. 7.47) were found west of the platform.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{fig742.png}
\caption{Semicircular bin S.523 in the SE corner of House L.530, from north.}
\end{figure}

\begin{figure}[h]
\centering
\includegraphics[width=0.4\textwidth]{fig743.png} \hspace{0.5cm} \includegraphics[width=0.4\textwidth]{fig744.png}
\caption{Hole-mouth jars smashed on the floor of House L.530.}
\end{figure}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{fig744.png}
\caption{Installation S.529 north of storage device S.553 in House L.530.}
\end{figure}

A storeroom (L.564) was adjoined to the western side of the unit (fig. 7.48), delimited by a semi-circular wall (W.515); a working bench (B.542) was adjoined to wall W.515 on its inner side in CoII17 (figs. 7.49-7.50).

\textsuperscript{29} KB.06.F.88 (pl. LVII).

\textsuperscript{30} KB.06.F.87; a similar specimen was found in Area A West (Nigro ed. 2006, 95, fig. 3.43).
Fig. 7.45 - Hole-mouth jar KB.06.F.530/1.

Fig. 7.46 - Hole-mouth jar KB.06.F.530/2.

Fig. 7.47 - Pottery, flint flake and limestone mortar from House L.530.

Fig. 7.48 - General view of Batrawy IV domestic units, from east; in the right foreground, House L.530 + L.564; in the left foreground, House L.520.
Fig. 7.49 - Semicircular storage L.564, with bench B.542 and rectangular bin S.545, from east.

Fig. 7.50 - Rectangular storeroom L.560 and semicircular device L.564, from west.
Structures west and south of House L.530
West of the house, the area of the earlier broad-room building was left open, even though a circular accessory device (S.511) was erected upon its southern wall (W.505; fig. 7.51). Moreover, in CnII17 and CoII17 a sub-rectangular dwelling (L.584) was built abutting on the northern wall (W.521) of the previous building. The western wall (W.519) of this domestic unit was flanked by a limestone mortar31 embedded into the floor of the yard (L.588) facing the house (fig. 7.52). Inside the house a limestone loomweight32 was found, of an elongated type. Ceramic material included Simple Ware and Storage Ware jar fragments (pls. LV-LVI), and a fragment of a pattern combed jar33. Scattered animal bones were also retrieved34.

Fig. 7.51 - Circular device S.511, from west.

31 KB.06.F.107.  
32 KB.06.F.68 (pl. LV).  
33 KB.06.F.512/4 (pl. LVI).  
34 KB.06.FR.64 and KB.06.FR.84.
Further to the north-west, in square CnI16, a rectangular unit (L.540) was partly preserved (figs. 7.53-7.54), apparently joined with other subsidiary curvilinear structures, one of which (S.538) cut into the western wall of the house (fig. 7.55). As in Area A West\(^3\), the entrance (L.558) to this unit was through the short side (north), marked by a flat stones serving as threshold\(^4\).

\(^3\) House L.20 (Nigro 2006a, 238, figs. 17-18; Nigro ed. 2006, 89, figs. 3.31-3.33).

\(^4\) The threshold originally consisted of two juxtaposed slabs; the western one had been removed.
Fig. 7.54 - House L.540 with slab-paved threshold L.558 on northern wall W.537, from east.

Fig. 7.55 - Curvilinear structure S.538 cut into the western wall (W.539) of the House L.540.

Finds from House L.540 included a spindle whorl\textsuperscript{37}, several fragments of Storage Ware jars\textsuperscript{38}, and a jug with rope decoration at the bottom of the neck (fig. 7.56)\textsuperscript{39}, as well as some animal bones\textsuperscript{40}.

\textsuperscript{37} KB.06.F.81 (pl. LVII).
Another domestic unit (L.520) was unearthed further south, in square CpI18. It was delimited by wall W.559, a structure added to the southern wall (W.517) of House L.530, possibly as a successive enlargement of the latter (fig. 7.57). The southern wall of the same unit leaned on the round platform of the previous temple (see § 7.2.1.).

Fig. 7.56 - Fragmentary spindle whorl and pottery sherds from House L.540.

Fig. 7.57 - House L.520 added to the southern wall of House L.530, from south.

38 KB.06.F.524/1, KB.06.F.524/2, KB.06.F.524/3, KB.06.F.524/4 (pl. LVII).
39 KB.06.F.524/5 (pl. LVII).
40 KB.06.FR.90.
## LIST OF POTTERY, OBJECTS AND SAMPLES BY CONTEXTS

### Area F

<table>
<thead>
<tr>
<th>Context</th>
<th>Tools</th>
<th>Pottery</th>
<th>Samples</th>
<th>Lithics</th>
<th>Object</th>
<th>Plate</th>
</tr>
</thead>
<tbody>
<tr>
<td>F.0</td>
<td>3 Grinding Stones (KB.06.F.50, KB.06.F.56, KB.06.F.57)</td>
<td>Simple Ware: 1 jar, 1 fragm. uns.</td>
<td>Simple Ware: 1 fragm. uns.</td>
<td>Simple Ware: 1 fragm. uns.</td>
<td>Loomweight (KB.06.F.68)</td>
<td>LV</td>
</tr>
<tr>
<td>F.501</td>
<td></td>
<td>Cooking Ware: 1 fragm. uns.</td>
<td>Storage Ware: 1 fragm. uns.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F.502</td>
<td></td>
<td>Storage Ware: 1 fragm. uns.</td>
<td>Samples: Animal Bone (KB.06.FR.49)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F.506</td>
<td></td>
<td>Simple Ware: 1 fragm. uns.</td>
<td>Food: 1 jar, 2 fragms. uns.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F.512</td>
<td></td>
<td>Cooking Ware: 1 fragm. uns.</td>
<td>Storage Ware: 1 fragm. uns.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Storage Ware: 1 fragm. uns.</td>
<td>Plates: LV, LVI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F.514</td>
<td></td>
<td>Simple Ware: 1 jar, 14 fragms. uns.</td>
<td>Simple Ware: 1 fragm. uns.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F.518</td>
<td></td>
<td>Cooking Ware: 1 fragm. uns.</td>
<td>Storage Ware: 1 fragm. uns.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F.524</td>
<td></td>
<td>Simple Ware: 1 fragm. uns.</td>
<td>Storage Ware: 1 fragm. uns.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F.526</td>
<td></td>
<td>Simple Ware: 1 fragm. uns.</td>
<td>Storage Ware: 1 fragm. uns.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Simple Ware: 1 fragm. uns.</td>
<td>Simple Ware: 1 fragm. uns.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Simple Ware: 1 fragm. uns.</td>
<td>Simple Ware: 1 fragm. uns.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Simple Ware: 1 fragm. uns.</td>
<td>Simple Ware: 1 fragm. uns.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Simple Ware: 1 fragm. uns.</td>
<td>Simple Ware: 1 fragm. uns.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Simple Ware: 1 fragm. uns.</td>
<td>Simple Ware: 1 fragm. uns.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Simple Ware: 1 fragm. uns.</td>
<td>Simple Ware: 1 fragm. uns.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Simple Ware: 1 fragm. uns.</td>
<td>Simple Ware: 1 fragm. uns.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Simple Ware: 1 fragm. uns.</td>
<td>Simple Ware: 1 fragm. uns.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Simple Ware: 1 fragm. uns.</td>
<td>Simple Ware: 1 fragm. uns.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Simple Ware: 1 fragm. uns.</td>
<td>Simple Ware: 1 fragm. uns.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Additional Notes
- **L.530**: Cooking Ware: 9 fragms. uns. Storage Ware: 2 hole-mouth jars, 2 fragms. uns.
- **Plate**: LIX
- **Object**: 1 Flint Flake (KB.06.F.88)
- **Plate**: LVII, LVIII, LIX
AREA F

CATALOGUE OF POTTERY AND SMALL FINDS

KB.06.F.75, flint blade. Context: CqII17, F.526. State of preservation: fragmentary. Material: flint. Technique of manufacture: chipped. Material colour: 10YR5/2 (grayish brown). Height: max. 3 cm, min. 1.6 cm; length: 6 cm; thickness: max. 1.5 cm, min. 0.3 cm. Dating: EB IVB. Bibliography: Meyerhof 1989, pl. 38:11B:42; Palumbo 1990, fig. 65:1, 67:2; McConaughy 2003, fig. 16.12:c.


KB.06.F.512/6, jar. Class: Storage Ware. State of preservation: base, wall. Technique of manufacture: handmade. Firing: medium-high. Fabric colour: core 10YR5/2 (grayish brown)+2.5YR8/8 (red). Temper/inclusions: mineral (white, gray); dimension: small, medium; frequency: medium-high. Diameter: n.r.; wall width: 0.9 cm; base width: 0.75 cm. Dating: EB IVB.
Pl. LVI - Pottery from Area F, fillings F.502, F.506, F.512 (Activity 2b)


Pl. LVII - Small finds and pottery from Area F, square CnII16, layer F.524 (Activity 2b), and square CpII17, layer F.534 (Activity 2b)


KB.06.F.524/3, jar. Class: Metallic Ware(?). State of preservation: base. Technique of manufacture: handmade. Firing: high. Fabric colour: 7.5YR5/0 (gray). Temper/inclusions: mineral (whitish, gray); dimension: small, medium, large; frequency: medium. Wall width: 0.65 cm; base width: 0.8 cm. Dating: EB IVB.


Pl. LIX - Pottery from Area F, square CpII17, layer F.534 (Activity 2b), and square CqII17, L.530 (Activity 2b)


KB.06.F.530/1

KB.06.F.530/2

KB.06.F.534/1

KB.06.F.534/2

KB.06.F.534/3

KB.06.F.534/4

KB.06.F.534/5

KB.06.F.534/6
Chapter 8  

Bibliography

ADOVASIO, J.M. et al.  
2003 "Basketry Impressions and Weaving Accoutrements from the Bāb edh-Dhrā' Town Site", in RAST-SCHAUB 2003, pp. 599-621.

AMIRAN, R.  

AMIRAN, R. et al.  

AMIRAN, R. - ILAN, O.  

BOURKE, S.  

BRAEMER, F. - ÉCHALLIER, J.-CL.  

CALLAWAY, J.A.  

CHESSON, M.S. et al.  

DAVIAU, P.M.M.  

DEVER, W.G.  
1972 "Middle Bronze Age Cemeteries at Mirzbaneh and 'Ain Sâmiya", in Israel Exploration Journal 22 (1972), pp. 95-112.

DOUGLAS, K.  

FALCONER, S. - FALL, P.  

FALCONER, S.E. - MAGNESS-GARDINER, B.

FERNÁNDEZ-TRESGUERREZ VELASCO, J.A

GARSTANG, J. et al.

GENZ, H.

GILBOA, E. - YANNAI, E.

GITIN, S.

GREENBERG, R. - PAZ, Y.
2005  “The Early Bronze Age Fortifications at Tel Beth Yerah”, in Levant 37 (2005), pp. 81-103.

GREENBERG, R. et al.

GREENBERG, R., EISENBERG, E., PAZ, S. AND PAZ, Y.

HARRISON, T.P.

HELMS, S.W.

HELMS, S.W. - MCCREERY, D.W.
HERR, L.G.

IBRAHIM, M.M. - DOUGLAS, K.

IBRAHIM, M. - QADI, N.

KAFAFI, Z.

KAMLAH, J.

KEMPINSKI, A.

KENYON, K.M.

KENYON, K.M. - HOLLAND, TH.A.

LAPP, P.W.

LEE, J.R.

LONDON, G.A.
LOUD, G.

MARCHETTI, N. - NIGRO, L.

MAZAR, A.

MAZAR, A. et al.

McCONAUGHY, M.A.

MEYERHOF, E.L.
1990  "The Early Bronze Age Fortifications at Tel Yarmut - An Interim Statement", in Eretz Israel 21 (1990), 48*-61*.

NIGRO, L.
2006e  "Results of the Italian-Palestinian Expedition to Tell es-Sultan: at the Dawn of Urbanization in Palestine", in L. NIGRO - H. TAHA (eds), Tell es-Sultan/Jericho in


PALUMBO, G. 1990 The Early Bronze Age IV in the Southern Levant. Settlement Patterns, Economy and Material Culture of a «Dark Age» (Contributi e Materiali di Archeologia Orientale III), Rome 1990.


PALUMBO, G. - PETERMAN, G.

PALUMBO, G. et al.

PHILIP, G. - BAIRED, D. (eds)
2000 Ceramics and Change in the Early Bronze Age of Southern Levant (Levantine Archaeology 2), Sheffield 2000.

PLATT, E.E.

POLCARO, A.

PRAG, K.

RAST, W.E. - SCHAU, R.TH.

RICHARD, S.
2000 “Chronology versus Regionalism in the Early Bronze IV: An Assemblage of Whole and Restored Vessels from the Public Building at Khirbet Iskander”, in L.E. STAGER - J.A. GREEN - M.D. COOGAN (eds), The Archaeology of Jordan and...

RICHARD, S. – BORAAS, R.S.

SALA, M.

SAVAGE, S.H., FALCONER, S.E. AND HARRISON T.P.

SEATON, P.

TSORI, N.

USSISHKIN, D.

DE VAUX, R.

YANNAI, E.

YOGEV, O.
FAUNAL REMAINS

Francesca Alhaique*

1. Premise

A sample of 1190 animal remains recovered during 2005 and 2006 excavations at Khirbet al-Batrawy has been analyzed. The assemblage was collected in several areas of the site and belong to different occupation phases: from the Early Bronze II to the Early Bronze VIB (tab. I). Most of the specimens could be assigned to specific chronological periods (shaded in tab. I), but a few samples from some pits or referred to levelling or terracing activities are mixed with materials from earlier phases; therefore these latter assemblages will be only briefly described and not included in the general discussion.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Early Bronze II</th>
<th>Early Bronze IIIA</th>
<th>Early Bronze IIIIB</th>
<th>Early Bronze IVB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3b</td>
<td></td>
<td></td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>3d</td>
<td></td>
<td></td>
<td>104</td>
<td></td>
</tr>
<tr>
<td>4b</td>
<td></td>
<td></td>
<td>241</td>
<td></td>
</tr>
<tr>
<td>4d</td>
<td></td>
<td></td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Area B North</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2d</td>
<td></td>
<td></td>
<td></td>
<td>367</td>
</tr>
<tr>
<td>4a</td>
<td></td>
<td></td>
<td>210</td>
<td></td>
</tr>
<tr>
<td>5a</td>
<td></td>
<td></td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Area B South</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2b</td>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>2d</td>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>3b</td>
<td></td>
<td></td>
<td></td>
<td>52</td>
</tr>
<tr>
<td>4a</td>
<td></td>
<td></td>
<td></td>
<td>50</td>
</tr>
<tr>
<td>Area E</td>
<td>4a</td>
<td></td>
<td>73</td>
<td></td>
</tr>
<tr>
<td>Area F</td>
<td>2b</td>
<td></td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

Tab. I - Distribution of the faunal sample in the different areas and activities according to chronology (shaded samples are those assigned to specific periods and that are not mixed with earlier materials).

The faunal materials were hand-collected rather than sieved; therefore the resulting assemblage may have been partially biased by this procedure (e.g., loss of smaller specimens such as carpals, tarsals, and phalanges or

* Department of Human and Animal Biology - Section of Anthropology, Rome “La Sapienza” University.
the remains of small animals); however comparisons within the site are possible because of the presumed homogeneity of the selection method adopted.

Species identification was based on the reference collections of the Università di Roma “La Sapienza”, the Istituto Italiano di Paleontologia Umana (Rome) and on published sources. The age at death was calculated according to Silver (1969), furthermore other authors have been used for each single taxon: Grigson (1982) for cattle, Payne (1973) for sheep and goat, Barone (1980) for horse and donkey. Measurements were taken following von den Driesch (1976).

The assemblage is in general quite fragmented by both ancient and modern human activities, and often the resulting Number of Identifiable Specimens (NISP) is inflated by such fragmentation. For this reason Minimum Number of Individuals (MNI) has also been calculated as a measure of species abundance. Bone surfaces are relatively well preserved therefore it has been possible to analyze modifications produced by humans or other agents.

2. Early Bronze Age II

The faunal assemblage of the Early Bronze II comes from Area E (F.704) and Area B North (F.168), both contexts are related to the destruction of the town of that period (Activity 4a in Area E and Activity 5a in Area B North).

The sample includes a total of 93 remains, 73 from F.704 and 20 from F.168 (tab. II). F.168 was located inside the walls, while F.704 was identified inside; however, the different size of the two samples does not allow significant comparisons, therefore this Early Bronze II assemblage will be treated as a whole.

Among the identified animals (tab. II), ovicaprids are, by large, the most frequent taxon (44.1% of the total number of remains) and both sheep and goat have been recognized. Cattle is the second species (9.7%) followed by equids (4.3%), in this latter case the fragmentation of the specimens did not allow to ascertain the presence of donkey and/or horse. The dog is represented by two vertebrae (2.2%). The only hunted animal is the wild goat (1.1%). As expected from the proportions among the identified species, small ungulates (21.5%) are prevalent over large ones (14%). Unidentifiable bones represent only 3.2% of the assemblage.

---

1 Barone 1980; Boessneck 1969; Davis 1980; Payne 1985; Prummel - Frisch 1986.
Tab. II - Early Bronze II: number of identified specimens (NISP) and minimum number of individuals (MNI).

Considering the minimum number of individuals (fig. 1) ovicaprines are again the main taxon, reaching 53.3%, followed by cattle with 26.7%; all the other identified species are represented by a single individual (6.7% each).

Fig. 1 - Early Bronze II: proportions among the identified species (% Minimum Number of Individuals).
The analysis of the age at death of the ovicaprines indicates the presence of a minimum number of eight animals: two very young individuals, one young, one young-adult, two prime adults and two older adults. The cattle is represented by five animals: two young individuals, two young-adults and one prime adult (fig. 2). The equid remains indicate the presence of at least one young individual. The fusion of the dog vertebrae indicates an age over two years. The wild goat is an indeterminate adult.

Almost all the elements of the skeleton of the ovicaprines are represented (fig. 3), while cattle remains are too rare to analyze body part representation.

Human modifications have been detected on 20 specimens (21.5% of the total assemblage), all from F.704. All of them are on ovicaprine or small ungulate remains (fig. 3). Skinning marks have been found on the mandible, while cuts related to disarticulation were detected on the axis, on the pelvis, on the humerus, on the scapula, and on the tibia; meat removal is indicated by marks on thoracic vertebrae, scapula, femur, and tibia. One lumbar vertebra appears to have been severed longitudinally as to cut the
animal in half along the vertebral column. Impact cones related to marrow extraction were found on small ungulate long bones. The proportion of specimens showing traces of fire is relatively high, almost 26%, but burning is always very light; most of the times contact with fire seems to have been accidental, while in some cases it may be directly related to cooking practices. Carnivore gnaw marks are present on 7.5% of the bones. The small Early Bronze II assemblage suggests that in this period human exploitation focused mainly on ovicaprids that were used for meat as well as for secondary products (milk, wool). Cattle was more rarely utilized, but apparently only as a food source. On the basis of this sample it is not possible to determine the role played by equids; wild species represented only an occasional part of the diet. The dog is very rare as number of specimens, but the marks of its teeth on the bones indicate that these animals had access to portions discarded by humans after the exploitation.

3. Early Bronze Age IIIA
A total of 260 specimens was collected in Early Bronze IIIA contexts that are related to the destruction of the Early Bronze IIIA town (Activity 4a). F.136 and F.146 in Area B North and F.448 in Area B South are located inside the walls and yielded 173 remains (66.5% of the total Early Bronze IIIA assemblage); F.142 and F.147 in Area B North have been found outside the walls and contained 87 specimens (33.5% of the total Early Bronze IIIA assemblage) (tab. III). The faunal composition inside and outside the walls is comparable (fig. 4), therefore in the following discussion the two samples will be treated together; however, relevant differences will be evidenced in the text. As in the previous period ovicaprids (tab. III) represent the most frequent group (30.8% of the total assemblage); both sheep and goat have been recognized although the first species seems to be prevalent over the second one. Cattle is the next animal (8.1%) followed by equids (6.2%); only the donkey has been surely identified, although it is not possible to exclude that some of the Equidae remains may belong to horse. The dog is very rare (0.4%). The only wild species is again Capra aegagrus (1.5%). A single bird bone complete the sample of the identified groups. As expected from the proportions among the identified species, small ungulates (28.5%) are prevalent over large ones (18.8%). Unidentifiable bones represent 5.4% of the assemblage.
Tab. III - Early Bronze IIIA: Number of Identified Specimens (NISP) and Minimum Number of Individuals (MNI).

Fig. 4 - Early Bronze IIIA: comparison inside and outside the walls among the identified species (% Number of Identified Specimens).

The minimum number of individuals (fig. 5) indicates that ovicaprines are very common (50%) followed by cattle and donkey with the same percentage (17.9% each); wild goat is 10.7% and finally the dog, represented by a single individual, is 3.6%.

There is a minimum number of 14 ovicaprines; the analysis of their age at death evidenced the presence of two very young individuals, two young animals, two young-adults, two prime adults and four older adults, the age of the last two individuals could not be ascertained with precision. The cattle is represented by five animals: two young-adults, one older adult and two more generic adult individuals. The donkey remains indicate the presence of at least five individuals: one young animal, one prime adult
and three non-specific adults (fig. 6). The only dog is older than two years. The wild goat is represented by three indeterminate adults.

Fig. 5 - Early Bronze IIIA: proportions among the identified species (% Minimum Number of Individuals).

The analysis of body part representation (fig. 7) could be done only for ovicaprines and indicates that almost all the portions of the skeleton are present; the frequency of cattle and equid remains was very low and information from this kind of analysis are not conclusive (figs. 8-9).

Fig. 6 - Early Bronze IIIA: age at death of *Ovis vel Capra*, *Bos taurus* and *Equus asinus*.

Human modifications were detected on 49 specimens (18.8% of the assemblage). The proportion between inside and outside the walls is comparable with a slight prevalence inside (20.2% vs. 16.1%). On the ovicaprines and small ungulates (fig. 7) butchering marks were identified on 30 elements: disarticulation traces were found on the scapula, on the humerus, on the ribs, on the pelvis, on the femur, on the tibia, on the scaphocuboid; modifications related to meat removal were detected on the scapula, on the humerus, on the radius, on the thoracic vertebrae, on the
ribs; impact cones related to marrow extraction were identified on humerii, radii, femurs, and several diaphysis fragments. A long bone and a femur shaft fragments display on the edges a polish produced by their use as tools. On cattle (fig. 8) disarticulation traces were identified on a thoracic vertebra, a scapula, a carpal and a calcaneum; while meat removal is indicated only by cuts on a thoracic vertebra.

**Fig. 7 - Early Bronze IIIA: anatomical representation (shaded skeletal elements) and location of butchering marks on ovicaprine and small ungulate bones.**

**Fig. 8 - Early Bronze IIIA: anatomical representation (shaded skeletal elements) and location of butchering marks on cattle bones.**

**Fig. 9 - Early Bronze IIIA: anatomical representation (shaded skeletal elements) and location of butchering marks on equid bones.**

Modifications produced by butchering have been found also on donkey remains (fig. 9): a carpal, a femur, and a calcaneum show cut marks related to disarticulation and meat removal. The same femur shows also an impact cone produced for marrow extraction although the exploitation of
this resource is more difficult in equids because of the characteristic of the medullary cavity in their long bones. In the large ungulate category cut marks and impact cones have been also identified on mandible, lumbar vertebra, humerus, tibia, and long bone diaphysis fragments. In the assemblage 14.2% of the bones display traces of fire, but burning is always very light; the percentage inside and outside the walls is very similar; in some cases combustion traces may be related to cooking, while in others they seem accidental, produced after the specimens have been discarded. Carnivore gnaw marks are present on 14.2% of the bones, but this kind of modification appears to be much more frequent inside than outside the walls (20.2% vs. 2.3%). A single specimen shows traces of rodent teeth. The Early Bronze IIIA sample analyzed indicates that in this period people herded primarily ovicaprines focusing mainly on secondary products. Bovines, although less frequently were exploited for both meat and secondary products/animal power. Even equids seem to have been a source of meat and marrow during this period. Hunting played only a minor role as food procurement strategy. The disproportion of carnivore marks inside and outside the walls may suggest that dogs lived in strict association with human habitations and easily obtained discarded parts of butchered animals.

4. Early Bronze Age IIIIB
4.1. Area A - Activity 4d

The sample related to the Activity 4d (levelling for the construction of the Early Bronze IIIIB town) in Area A is very small and includes 21 specimens from F.28. F.48. F.58. Although the activity is referred to the Early Bronze IIIIB, the materials recovered are mixed with those of earlier periods, therefore this assemblage will only be briefly described, but not included in the general discussion about the economy of this phase. Most of the specimens come from F.58 (tab. IV). Ovicaprines represent the most frequent group (47.6% of the total NISP) and sheep is the only animal surely represented. Cattle is the second species (14.3%), while equids are completely absent. Gazelle (4.8%) indicates rare hunting activity. Small ungulates represent 9.5% of the assemblage, while large ungulates are 19%. Unidentifiable remains are only 4.8% of the sample (tab. IV). Considering the minimum number of individuals (fig. 10) ovicaprines are again the dominant taxon (50%), while cattle and gazelle, with one animal, represent 25% each.
Among the ovicaprines there are at least one prime adult and one old individual; for cattle a single senile animal is represented; the gazelle is an indeterminate adult. No human modifications, including burning, have been detected on this assemblage and only one ovicaprine vertebra shows carnivore gnaw marks (4.8% of the sample).

Early Bronze IIIB

<table>
<thead>
<tr>
<th>Species</th>
<th>F. 28</th>
<th>F. 48</th>
<th>F. 58</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NISP</td>
<td>MNI</td>
<td>NISP</td>
<td>MNI</td>
</tr>
<tr>
<td>Ovis aries</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ovis vel Capra</td>
<td>9</td>
<td>2</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>Gazella gazella</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Bos taurus</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Small Ungulate</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Large Ungulate</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Unidentifiable</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>7</td>
<td>19</td>
<td>5</td>
</tr>
</tbody>
</table>

Tab. IV - Early Bronze IIIB Area A - Activity 4d: Number of Identified Specimens (NISP) and Minimum Number of Individuals (MNI).

Fig. 10 - Early Bronze IIIB Area A - Activity 4d: proportions among the identified species (% Minimum Number of Individuals)

4.2. Area B South - Activity 3b

The assemblage recovered in Area B South and related to Activity 3b is relatively small: it includes 52 specimens from the filling of a pit (F.427). Such pit was in use during the Early Bronze IIIB, but since it was cut into
Early Bronze IIIA levels, the materials recovered are mixed; therefore this sample will only be quickly illustrated, but not considered for the general discussion about Early Bronze IIIB subsistence. Ovicaprines represent the most abundant group (32.7% of the sample); among them sheep and goat are equally represented. Equids, surely indicated only by the horse, are the second taxon (7.7%) followed by cattle (3.8%). Hunting was only an occasional activity as evidenced by the presence of rare wild goat (1.9%). Small ungulates are prevalent over large ones (40.4% vs. 11.5%) and finally only 1.9% of the assemblage is unidentifiable (tab. V).

The proportions among minimum number of individuals (fig. 11) show again that ovicaprines dominate the sample (50%) followed by cattle (25%). Horse and wild goat are 12.5% each.

Among the ovicaprines there are at least four individuals: one very young animal; one young adult, and two older adults. Cattle is represented by a very young animal and a probable senile individual indicated by a pathological third phalanx. The horse and the wild goat are both present with a single animal of indeterminate adult age.

<table>
<thead>
<tr>
<th>Species</th>
<th>AREA B South - Activity 3b</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F. 427</td>
</tr>
<tr>
<td></td>
<td>NISP</td>
</tr>
<tr>
<td>Equus caballus</td>
<td>1</td>
</tr>
<tr>
<td>Equidae</td>
<td>3</td>
</tr>
<tr>
<td>Ovis aries</td>
<td>2</td>
</tr>
<tr>
<td>Capra hircus</td>
<td>2</td>
</tr>
<tr>
<td>Ovis vel Capra</td>
<td>13</td>
</tr>
<tr>
<td>Capra aegagrus</td>
<td>1</td>
</tr>
<tr>
<td>Bos taurus</td>
<td>2</td>
</tr>
<tr>
<td>Small Ungulate</td>
<td>21</td>
</tr>
<tr>
<td>Large Ungulate</td>
<td>6</td>
</tr>
<tr>
<td>Unidentifiable</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>52</td>
</tr>
</tbody>
</table>

Tab. V - Early Bronze IIIB Area B South - Activity 3b: Number of Identified Specimens (NISP) and Minimum Number of Individuals (MNI).
Human modifications, including cut and chop marks, impact cones and manufacturing traces, were identified on almost 27% of the specimens belonging to ovicaprine, cattle and even equids, as well as more generic small and large ungulates. Signs of light burning were identified on 17.3% of the sample while carnivore gnaw marks are present on 19.2% of the bones and a single specimen shows rodent gnaw marks.

### 4.3. Area A - Activity 4b

The Activity 4b, related to the destruction of the Early Bronze IIIB town, yielded a total of 241 specimens. The sample was collected from F.46, F.52, F.96. and F. 204 all located in Area A.

Ovicaprines are the most abundant taxon (26.1% of the total assemblage); both sheep and goat have been identified, but the first species is more frequent. Equids represent the second group (21.2%), with donkey prevailing over horse. Cattle is the next animal (8.1%). The wild species are gazelle (1.7%) and *Bos primigenius* (0.4%). Three remains belong to a human foetus/neonate (1.2%). Large ungulates (24.1%) are prevalent over small ones (16.2%) and there is a single small carnivore fragment (0.4%). Unidentifiable bones account for 3.7% of the sample (tab. VI).

The minimum number of individuals (fig. 12) again indicates the prevalence of ovicaprines (38.5%) followed by Equids (30.8%; donkey 23.1% and horse 7.7%). Cattle, represented by four individuals, accounts for 15.4% of the sample. Wild species are a total of 15.4%: 11.5% gazelle and 3.8% aurochs.
The analysis of the age at death of the ovicaprids indicates the presence of a minimum number of 10 individuals: three very young animals, one young, two young-adults, one prime adult, two older adults, and one

<table>
<thead>
<tr>
<th>Species</th>
<th>AREA A - Activity 4b</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F. 46</td>
</tr>
<tr>
<td></td>
<td>NISP</td>
</tr>
<tr>
<td>Homo</td>
<td>3</td>
</tr>
<tr>
<td>Equus asinus</td>
<td>1</td>
</tr>
<tr>
<td>Equus caballus</td>
<td>4</td>
</tr>
<tr>
<td>Equidae</td>
<td>2</td>
</tr>
<tr>
<td>Ovis aries</td>
<td>2</td>
</tr>
<tr>
<td>Capra hircus</td>
<td>2</td>
</tr>
<tr>
<td>Ovis vel Capra</td>
<td>6</td>
</tr>
<tr>
<td>Gazella gazella</td>
<td>1</td>
</tr>
<tr>
<td>Bos taurus</td>
<td>2</td>
</tr>
<tr>
<td>Bos primigenius</td>
<td>1</td>
</tr>
<tr>
<td>Small carnivore</td>
<td>1</td>
</tr>
<tr>
<td>Small Ungulate</td>
<td>3</td>
</tr>
<tr>
<td>Large Ungulate</td>
<td>5</td>
</tr>
<tr>
<td>Unidentifiable</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
</tr>
</tbody>
</table>

Tab. VI - Early Bronze IIIB Area A - Activity 4b: Number of Identified Specimens (NISP) and Minimum Number of Individuals (MNI).

Fig. 12 - Early Bronze IIIB Area A - Activity 4b: proportions among the identified species (% Minimum Number of Individuals).
senile. The four bovines identified include: one prime adult, one older adult and two indeterminate adult individuals. The donkey indicate the presence of a minimum number of six individuals: one young animal, one young-adult, one older adult and three indeterminate adults (fig. 13). The exact age of the two horses, the three gazelles and the single aurochs could not be ascertained.

The analysis of body part representation of the ovicaprines and small ungulates (fig. 14) indicates that whole carcasses were exploited; the anatomy of equids (fig. 15) is less complete and posterior and distal limb elements are prevalent. Head, distal front limb and proximal hind limb are present among the cattle remains (fig. 16). The near absence of axial portions in bovines and in equids may be related to the fact that these portions could not be attributed with confidence to one or the other group and were generically assigned to the large ungulate category.

![Early Bronze IIB Area A - Activity 4b: age at death of Ovis vel Capra, Bos taurus and Equus asinus.](image)

Traces produced during butchery are relatively rare in this assemblage (6.2%). Human modifications were detected on five ovicaprine and small ungulate specimens (fig. 14): skinning marks were identified on the mandible, disarticulation traces on the pelvis, and cuts related to meat removal on the radius; a humerus and a long bone shaft fragment display impact cones related to marrow extraction. On equids (fig. 15) skinning marks were detected on the mandible, dismembering traces on the humerus, and impact cones produced for marrow extraction have been identified on the humerus and the metacarpus. The only human modification identified on cattle remains is an impact cone on a tibia (fig.
Two large ungulate sacral vertebrae appear to have been sectioned in half longitudinally. A long bone shaft fragment of a large ungulate displays cut marks related to defleshing, another one shows an impact cone, and a third one has been worked and used as a tool. Almost 5% of the bones is burned, but it indicates only slight contact with fire. Carnivore gnaw marks are present on 3.3% of the bones although, with the exclusion of the small carnivore specimen, no dog remains have been recovered in this sample.

Fig. 14 - Early Bronze IIIB Area A - Activity 4b: anatomical representation (shaded skeletal elements) and location of butchering marks on ovinocaprine and small ungulate bones.

Fig. 15 - Early Bronze IIIB Area A - Activity 4b: anatomical representation (shaded skeletal elements) and location of butchering marks on equid bones.

Fig. 16 - Early Bronze IIIB Area A - Activity 4b: anatomical representation (shaded skeletal elements) and location of butchering marks on cattle bones.
The analysis of the Early Bronze IIIB assemblage of the Activity 4b suggests that ovicaprines were the main livestock, used for both secondary products and meat. Strangely also Equids, both donkey and horse, have been frequently used as food, probably exploiting even marrow. Cattle, although less frequently, represented a source of meat and secondary products as well as animal power. However, considering the meat yield of the large ungulates, they probably were more important as food source than small livestock. Gazelle and aurochs remains indicate occasional contribution of wild species to human diet.

5. Early Bronze Age IVB
5.1. Area A- Activity 3d

In area A the assemblage related to Activity 3d (terracing activities for the construction of the Early Bronze IVB village) includes 104 specimens from F.18 and F.216. The chronology of the materials is not uniform, therefore this contexts will only be briefly described and not included in the general discussion on the fauna of the Early Bronze IVB.

Almost all the assemblage comes from F.216 (tab. VII). Ovicaprines are the most abundant group (36.5%) and both sheep and goat are represented with *Ovis* slightly more frequent than *Capra*. Equids, both donkey and horse, are the second group (13.5%), followed by cattle (6.7%). Wild species are indicated by gazelle (1.9%) and aurochs (1.9%). Small ungulates represent 24% of the total assemblage while large ones are 13.5%. Unidentifiable remains account for 1.9% of the total sample (tab. VII).

Considering the minimum number of individuals (fig. 17) ovicaprines dominate the sample (36.4%). Equids are the following *taxon* (27.3%) with donkey (18.2%) prevailing over horse (9.1%). Cattle is only 9.1% of the individuals. Gazelle with 18.2% is relatively frequent, while aurochs is just 9.1%.

Among the ovicaprines there are at least one very young individual, one young-adult, one prime adult and a last animal of indeterminate age; the presence of a ram is attested. Of the two donkeys one is younger than three years and the other is about 42 months old. The single horse is less than 42 months old. For cattle the only animal is an older adult. One of the gazelles is an older adult, while the age of the other individual could not be ascertained with precision. The single aurochs is an indeterminate adult.

Human modifications have been identified on 10.6% of the specimens; both cut marks and impact cones have been detected on ovicaprines, cattle
and donkey. Signs of light burning are present on 4.8% of the sample; while 6.7% shows traces of carnivore gnawing.

<table>
<thead>
<tr>
<th>Species</th>
<th>NISP</th>
<th>MNI</th>
<th>NISP</th>
<th>MNI</th>
<th>NISP</th>
<th>MNI</th>
<th>NISP%</th>
<th>MNI%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equus asinus</td>
<td>10</td>
<td>2</td>
<td>10</td>
<td>2</td>
<td>9.6</td>
<td>15.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equus caballus</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1.9</td>
<td>7.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equidae</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.9</td>
<td></td>
</tr>
<tr>
<td>Ovis aries</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1.9</td>
<td>7.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capra hircus</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1.0</td>
<td>7.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovis vel Capra</td>
<td>1</td>
<td>1</td>
<td>34</td>
<td>3</td>
<td>35</td>
<td>4</td>
<td>33.7</td>
<td>30.8</td>
</tr>
<tr>
<td>Gazella gazella</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1.9</td>
<td>15.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bos taurus</td>
<td>7</td>
<td>1</td>
<td>7</td>
<td>1</td>
<td>6.7</td>
<td>7.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bos primigenius</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1.9</td>
<td>7.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Ungulate</td>
<td>25</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>24.0</td>
<td></td>
</tr>
<tr>
<td>Large Ungulate</td>
<td>14</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>13.5</td>
<td></td>
</tr>
<tr>
<td>Unidentifiable</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.9</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
<td>1</td>
<td>103</td>
<td>12</td>
<td>104</td>
<td>13</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Tab. VII Early Bronze IVB Area A - Activity 3d: Number of Identified Specimens (NISP) and Minimum Number of Individuals (MNI).

Fig. 17 - Early Bronze IVB Area A - Activity 3d: proportions among the identified species (% Minimum Number of Individuals).
5.2. Area B North and Area B South - Activity 2d

In Areas B North and B South the Activity 2d is related to the early phase of the use/life of the Early Bronze IVB village. The faunal sample includes 377 remains. Most of the specimens (NISP=367) were found in two pits, F.126 and F128 located in Area B North, while only 10 fragments come from F.394 and F.395 in Area B South (tab. VIII).

Ovicaprines represent the most frequent taxon (37.4% of the total assemblage) and include both sheep and goat, but the first species is more abundant. Small livestock is followed by Equids (5.3%) among which only the donkey is surely represented. Cattle is the third species (4.5%).

Hunting of wild animals is documented by the presence of both gazelle (1.6%) and wild goat (1.6%). A radius and a cranial fragment belong to a human foetus/neonate (0.5%). A single fragment of a bivalve shell (0.3%) was found in F.394. Small ungulates (33.4%) are prevalent over large ones (10.9%) as expected from the proportions among the identified species. Unidentifiable fragments represent 4.5% of the sample (tab. VIII).

Analyzing the proportions among species using the minimum number of individuals (fig. 18) ovicaprines are 51.9% followed by the donkey with 18.5%. The third species is cattle (14.8%). Both gazelle and wild goat are 7.4%.

<table>
<thead>
<tr>
<th>Species</th>
<th>AREA B North - Activity 2d</th>
<th>AREA B South - Activity 2d</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F.126</td>
<td>F.128</td>
<td>Total</td>
</tr>
<tr>
<td>Ovicaprines</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Equidae</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Capra aegagrus</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Capra hircus</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Ovis aries</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>14</td>
<td>28</td>
</tr>
</tbody>
</table>

The age at death of the ovicaprines shows the presence of a minimum number of 14 individuals: four very young individuals, two young, two young-adults, one prime adult, four older adults, for another animal it was not possible to determine the age. There is a minimum number of four bovines: two young adults, one older adult and one senile individual. The
The donkey is represented by five individuals: two young animals, one prime adult, two senile individuals (fig. 19). Two of the gazelles identified are older adults, while the third one is an indeterminate adult. One of the wild goats is a young adult, while the age of the second individual could not be determined.

![Fig. 18 - Early Bronze IVB Areas B North & B South - Activity 2d: proportions among the identified species (% Minimum Number of Individuals).](image)

![Fig. 19 - Early Bronze IVB Areas B North & B South - Activity 2d: age at death of Ovis vel Capra, Bos taurus and Equus asinus.](image)

All the skeletal elements of ovicaprines and small ungulates have been recovered suggesting the exploitation of complete carcasses (fig. 20). The anatomy of donkey and equids is less complete and posterior limb elements are prevalent, although the head and some front limb bones are also
present (fig. 21). Mandible, radius, ulna, distal hind limb portions and phalanges were identified among the cattle remains (fig. 22). The almost complete absence of bovine and equid axial parts may be related to the fact that these portions could not be attributed with confidence to one or the other taxon and were generically assigned to the large ungulate category. Interestingly for the wild goat only humeri and femurs, the best meat bearing portions, have been identified in this sample, while for gazelle vertebrae and astragali are represented.

Almost 16% of the bones of this assemblage presents human modifications. Traces produced during butchery were detected on 41 ovicaprine and small ungulate specimens (fig. 20): skinning marks were identified on the cranium; disarticulation traces have been detected on the mandible, on cervical, thoracic and lumbar vertebrae (one of the latter was sectioned in half longitudinally), on the ribs, on the humerus, on the scapula, on the radius, on the ulna, on the femur, on the metatarsal and on the scaphocuboid; cuts related to meat removal were found on the lumbar vertebrae, on the ribs, on the humerus, on the scapula, on the radius, and on the femur; impact cones for marrow extraction have been identified on the humerus, on the radius and several unidentified long bone shaft fragments. Two of the latter type of elements display cut marks, and one is an expediency pointed tool. On donkey remains (fig. 21) disarticulation cuts are present on a calcaneum, a first and a second phalanx. Human traces, again related to disarticulation, are present on a cattle tibia and a first phalanx, while an impact cone was identified on a metatarsal (fig. 22). Within the large ungulate category there are disarticulation marks on a vertebra, defleshing cuts on two ribs and a humerus, impact cones on two humeri and a long bone shaft. The gazelle shows cut marks on cervical and thoracic vertebrae, while five out of the six wild goat specimens display traces: disarticulation and defleshing marks are present on three humeri and two femurs, one of the humeri presents also an impact cone. Signs of burning, mostly very light, are present on 10.6% of the bones. Carnivore gnaw marks have been detected on 13.3% of the bones indicating the presence of these species even in contexts where actual specimens are missing.

The study of the Early Bronze IVB assemblage of Activity 2d related to the early phases of the occupation of the village suggests that ovicaprines were the main group exploited; the age at death indicates a strong focus on secondary products rather than on meat. The use of Equids, in particular donkey, as food is not surely demonstrated in this period because the traces identified on the bones are localized only on distal limb bones and
are related to disarticulation, but are comparable to those detected on cattle remains; however, the body part representation characterized by a prevalence of hind limb elements may indicate the exploitation of meat rich portions; the age at death for this species, with the presence of young and prime adults associated to senile individuals, seems to suggest again the use of this animal both as a food source and as animal power. Cattle represented a source of meat and secondary products as well as animal power. Gazelle and wild goat remains indicate occasional hunting of wild species, although the best portions of the latter species are present and were very intensely exploited.

Fig. 20 - Early Bronze IVB Areas B North & B South - Activity 2d: anatomical representation (shaded skeletal elements) and location of butchering marks on ovicaprine and small ungulate bones.

Fig. 21 - Early Bronze IVB Areas B North & B South - Activity 2d: anatomical representation (shaded skeletal elements) and location of butchering marks on equid bones.

Fig. 22 - Early Bronze IVB Areas B North & B South - Activity 2d: anatomical representation (shaded skeletal elements) and location of butchering marks on cattle bones.
5.3. Area A - Activity 3b, Area B South and Area F - Activity 2b

The Activities 3b in Area A and 2b Areas B South and F are related to the later phases of occupation of the Early Bronze IVB village. The faunal sample includes just 42 remains.

Ovicaprids are the most abundant taxon (38.1% of the total assemblage); both sheep and goat have been identified: *Ovis* accounts for 7.1% of the sample, while *Capra* represents only 2.4%. Equids (7.1%) include both donkey and horse, but the first species is more frequent. Surprisingly the third taxon is gazelle (4.8%) while cattle represents only 2.4% of the assemblage. Small ungulates (23.8%) are more abundant than large herbivores (19%) as expected from the proportions among the identified species. Unidentifiable fragments account for 4.8% of the sample (tab. IX).

Considering the minimum number of individuals (fig. 23) ovicaprids represent 57.1%. *Equus asinus* and gazelle are 14.3% each, while both cattle and horse are 7.1%.

The analysis of age at death for the ovicaprids (fig. 24) indicates the presence of a minimum number of 8 individuals: one very young animal, one young-adult, two older adults, and four individuals of indeterminate age. The donkey is represented by one prime adult and one generic adult individual, also the age of the single individuals of horse and cattle could not be ascertained. One of the gazelles is a young adult, while the other is an indeterminate adult animal.

<table>
<thead>
<tr>
<th>Species</th>
<th>AREA B North - Activity 2d</th>
<th>AREA B South - Activity 2b</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F 135</td>
<td>F 138</td>
<td>Total</td>
</tr>
<tr>
<td>Mobula</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>ovicaprines</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Equus asinus</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Capra asinus</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Ovis capra</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Capra capra</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Gazelle gazelle</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Tab. IX - Early Bronze IVB Area A - Activity 3b, Areas B South & F - Activity 2d: Number of Identified Specimens (NISP) and Minimum Number of Individuals (MNI).

The small sample for this period did not allow a complete analysis of the anatomical representation: for the ovicaprids (fig. 25) only cranial, axial and posterior limb elements, are represented. The only equid remains are
horse tibia in addition to a cranium and a calcaneum of a donkey. The cattle was identified on the basis of a single metatarsal. For the gazelle only a calcaneum and a tibia are present.

No human modifications were detected on this small assemblage, while burned bones are 11.9%, although they evidence only slight contact with fire. Gnaw damage, even in the absence of carnivore remains, was identified on 7.1% of the sample.

The study of the Early Bronze IVB assemblage from the later phases of occupation of the village suggests that ovicaprids were still the main _taxon_ in human herding activities; the analysis of age at death may suggest a stronger focus on secondary products than on meat, although the information should be treated with caution because of the small size of the
sample. The actual use of the other domestic species, as a food source or as animal power, could not be inferred from the available data, but hunting seems to be an integral part of meat procurement strategies.

Comparisons between the two phases of life/use of the Early Bronze IVB village should be treated with caution because of the differences in sample size, however very few general comments can be made. Species composition is comparable (fig. 26); however the presence of the horse and the relatively high proportion of gazelle in the later period of occupation of the village should be mentioned. In both periods ovicaprines seem to have been employed more for secondary products than for meat. The absence of sufficient data on the age of the other species from the later phase does not allow to make comparisons about their use. No human modifications have been detected in the later assemblage, while the percentages of burning and of carnivore modifications are comparable.
6. Conclusions

The analysis of the faunal remains from the contexts assigned to specific occupation phases at Khirbet al-Batrawy allowed to attempt some inferences about possible changes through time in the exploitation of animal resources (tab. X; fig. 27). However, it should be kept in mind that the samples attributed to the Early Bronze II, IIIA and IIIB are all referred to the destruction of the towns of such periods, while the Early Bronze IVB assemblage is related to the life/use of the village; furthermore the bone and teeth collections come from different areas of the site according to the period (cf. tab. I) and some differences may be related to intra-site variation rather than to real economic changes through time2.

Tab. X - Number of Identified Specimens (NISP) and Minimum Number of Individuals (MNI) of the main taxa identified from chronologically defined contexts.

During all the periods examined ovicaprines represent the main focus of human herding activities (tab. X; fig. 27) and sheep is usually prevalent over goat as in many other contemporary sites3. During the Early Bronze II and IIIA the second species is cattle, while in the following periods Equids are more abundant reaching a peak in the Early Bronze IIIB. The relatively high percentage of these animals, even in the earliest period when they are the third taxon, is particularly interesting because at contemporary sites equids are usually represented only by few specimens; the only exceptions are Ashquelon Afridar4, Azor5, Tel Eran6, and En Shadud7; in the latter case

5  Horwitz 1999.
6  Ducos 1968.
7  Horwitz 1985.
however the total sample size is only of 97 specimens. The identification of both donkey and horse is based on morphology and dimensions\(^8\) and on the fact that the presence of these species has been attested in the southern Levant both as faunal remains and iconographic representations even in earlier periods\(^9\). However, the specimens are all very fragmented and the presence of the hemione cannot be completely ruled out although considering the general composition of the assemblage with a very low proportion of other wild species during all periods this possibility is quite remote. Hunted animals, as in many other sites of the region, always provided only a limited contribution to the diet of the population living in Batrawy, however there seems to be a slight increase through time (fig. 27). It is interesting to note that gazelle does not appear until the Early Bronze IIIB, while wild goat is present in the Early Bronze II, IIIA and IVB, however, it is not possible to say on the basis of this small assemblage if this situation is related to climatic changes or if it is just produced by chance. The other wild animal is the aurochs found in the Early Bronze IIIB, but identified also in the sample from area A related to the terracing activities for the construction of the Early Bronze IVB village. The presence of the aurochs is documented in the Southern Levant until the Iron age\(^{10}\).

---

\(^{10}\) Tsahar et al. 2009.
The dog is very rare in the faunal assemblage and was found only in the Early Bronze II, IIIA samples, however gnaw marks have been identified in all periods indicating the presence of this species even when actual bones and teeth are missing. Similar scarcity of this species has been reported in most other contemporaneous settlements of the region.

In contrast to many other coeval sites of the Southern Levant where pigs are present\textsuperscript{11}, and in particular Azor\textsuperscript{12} and Ashqelon Afridar\textsuperscript{13}, where percentages are relatively high, this species is completely absent at Batrawy, possibly because of the local environmental conditions. A similar absence of this species has been reported at Khirbet Yarmouk\textsuperscript{14}.

The analysis of the age at death of the ovicaprines suggest that this taxon was used for both meat and secondary products, but the first source seems to be the main focus during the Early Bronze II, while milk and wool play a more important role in the later periods. Cattle has been used mainly as a meat source and only secondarily as animal power as suggested also by few pathologies on phalanges; only during the first occupation phase of the Early Bronze IVB village, food and traction seem to have had the same importance. Very strangely the culling pattern for the Equids, in the samples that provided adequate data (Early Bronze IIIB and IVB), is comparable to that of cattle suggesting a similar exploitation.

Skeletal element representation shows, in the largest assemblages, the presence of complete carcasses for the ovicaprines, while anatomical composition of the larger sized species such as cattle and equids suggests a probable selection of body portions.

The taphonomic analysis indicates the presence in all periods of frequent modifications produced by humans during butchering activities ranging from 21.5\% in the Early Bronze II to 6.2\% in the Early Bronze IIIB. All stages of carcass processing, from skinning to marrow extraction, have been identified. In several cases the morphology of cut marks\textsuperscript{15} suggests the occasional use of metal tools rather than stone artifacts during butchery as indicated also at other Early Bronze Age sites in the area\textsuperscript{16}.

Very interestingly also horse and donkey remains, at least since the Early Bronze IIIA, display butchering marks that clearly indicate the use of these

\textsuperscript{12} Horwitz 1999.
\textsuperscript{13} Whitcher-Kansa 2004.
\textsuperscript{14} Davis 1988.
\textsuperscript{15} Greenfield 1999; 2002; Olsen 988; Walker - Long 1977.
\textsuperscript{16} Greenfield 2005; 2006.
species as food; the localization of the human modifications is comparable
to that found on cattle suggesting a similar treatment for these larger
species. The consumption of equid meat is very anomalous and not
evidenced, to my knowledge, in other Bronze Age sites of the Southern
Levant. Only at Ashqelon Afridar, a single cut mark was identified on a
donkey metacarpal and interpreted only as evidence for skinning; in
addition in that case mortality profiles do not support the use of equids as
food and the bones are less fragmented than those of other species in
contrast to Batrawy where fragmentation, age profiles and distribution of
butchering marks are comparable, especially to cattle.
Burned specimens range from 26% in the Early Bronze II to 5% in the
Early Bronze IIIB, however traces of combustion are always very light; in
few cases this modification could be related to cooking, but in most
instances the contact with fire was probably accidental.
As mentioned before gnaw damage is present in all periods, even when
dogs are not represented, ranging from 14.2% in the Early Bronze IIIA to
3.3% in the Early Bronze IIIB.
Although the general information about the economy at Batrawy from the
Early Bronze II to the Early Bronze IVB fits with the expectations drawn
from the available literature from coeval sites of the Southern Levant, the
exploitation of equids as food is completely different. In the activities
related to the destruction levels of the Early Bronze II to Early Bronze IIIB
towns this could be tentatively explained within a war scenario, but such
justification does fit well for the Early Bronze IVB village where these
species should have had a different use as pack animals considering also
that such exploitation at least for the donkey has been documented since
the beginning of the domestication of this species (Rossel et al. 2008).
Therefore the question remains open and further samples, especially from
the life/use of the Early Bronze towns and from the later phases of
occupation of the Early Bronze IVB village, are needed for refining the
information obtained so far.

18 Clutton-Brock 1971; 1979; Ducos 1968; Davis 1988; Hellwing 1988-1989;
2001; Horwitz - Tchernov 1989; Lernau 1978; Wapnish - Hesse 1991; Whitcher-
Kansa 2004.
References

ALHAIQUE, F.


AL-ZAWAHRA, M. - EZZUGHAYYAR, A.

BARONE, R.

BOESSNECK, J.
1969 "Osteological differences between sheep (Ovis aries L.) and goat (Capra hircus L.)", in D. BROTHWELL - E.S. HIGGS (eds), Science in Archaeology, London 1969, pp. 331-358.

BUITENHUIS, H.

BULL, G. - PAYNE, S.

CLUTTON-BROCK, J.
1971 "The primary food animals of the Jericho Tell from the Proto-Neolithic to the Byzantine Period", in Levant 3 (1971), pp. 41-55.


DAVIS, S.J.

1980 "Late Pleistocene and Holocene Equid remains from Israel", in Zoological Journal of the Linnean Society 70/3 (1980), pp. 289-312.


DUCOS, P.
1968 "L'origine des animaux domestiques en Palestine", in Publications de l'Institut de Préhistoire de l'Université de Bordeaux (Mémoire N° 6), Bordeaux 1968.
EISENMAN, V.

EPSTEIN, C.

GREENFIELD, H.J.

GRIGSON, C.

HELLWING, S.

HESSE, B. - WAPNISH, P.

HORWITZ, L.K.


HORWITZ, L.K. - TCHERNOV, E.

HORWITZ, L.K. - HELLYING, S. - TCHERNOV, E.
1996  “Patterns of animal exploitation at Early Bronze Age Tel Dalit”, in R. GOPHNA (ed.), Excavations at Tel Dalit: An Early Bronze Age Walled Town in Central Israel, Tel Aviv 1996, pp. 193-216.

HORWITZ, L.K. - TCHERNOV, E. - MIENIS, H.K.

LERNAU, H.

OLSEN, S.L.

OVDIAH, E.

PAYNE, S.


PRUMLER, W. - FRISCH, H.J.

ROSSEL, S. - MARSHALL, F. - PETERS, J. - PILGRAM, T. - ADAMS, M.D. - O’CONNOR, D.

SILVER, A.

TSAHAR, E. - IZHAKI, I. - LEV-YADUN S. - BAR-ÖZ, G.
VON DEN DRIESCH, A.

WALKER, P.L. - LONG, J.C.

WAPNISH, P. - HESSE, B.

WHITCHER-KANSA, S.
1. Premise

Within the framework of the “Pilot Project of Archaeological Excavations and Restorations at Khirbet al-Batrawy, Upper Wadi az-Zarqa”, focused on archaeological investigations on the Early Bronze Age urban origins and development in north-central Jordan, a survey was carried out in 2007 season in the Upper and Middle Wadi az-Zarqa basins, focusing on Early Bronze Age sites (figs. 1-2), in order to both outline the trends and shifting of early urban developments in the river valley in the late 4th - 3rd millennium BC (Early Bronze I-III), and to check the limits of the territory under the control of the EB II-III city of Batrawy.

Fig. 1 - Map of Wadi az-Zarqa with the main Early Bronze sites and sites visited in 2007 survey in the Upper and Middle Wadi az-Zarqa basins.

---

The survey was carried out by Rome “La Sapienza” Expedition to Khirbet al-Batrawy during season 2007, under the direction of Prof. L. Nigro and the participation of the writer, Dr. A Polcaro (GIS expert), A. Di Michele, E. Gallo, and V. Tumolo (draftsperson), thanks to the support of the General Director of the Department of Antiquities, Dr. Fawwaz al-Khraysheh, who I deeply thank. I wish also to express my gratitude to Prof. L. Nigro for allowing me to publish data collected together. Maps were elaborated by Dr. A Polcaro, who I also thank.
1.1. **Aims of the research**

The 2007 survey was mainly devoted to the registration of the settlement variations in Upper and Middle Wadi az-Zarqa throughout the Early Bronze I-III, the period during which the fortified town of Khirbet al-Batrawy flourished on a rocky hill at a strategic spot of the ancient road network. Its location allowed, in fact, the site to look over the roads coming from the desert and running along the river leading to the Jordan Valley, and, on the other hand, it assured to Batrawy an effective control on the cultivable lands of the underneath valley.

![Topographical map of Upper and Middle Wadi az-Zarqa with visited Early Bronze Age sites, dolmens and archaeological features detected during 2007 survey.](image)

---

2 A general reassessment on this topic was offered by Z. Kafafi (Kafafi *et al.* 2000), and more recently by K. Douglas (Douglas 2006). The area of the Upper Wadi az-Zarqa, which the present research focuses on, was already surveyed by a Rome "La Sapienza" Expedition in the 1990ies under the coordination of Gaetano Palumbo (Palumbo *et al.* 1996; 1997), with the main aim of identifying all the archaeological sites present in this district.

3 Nigro in press, § 3.
2. Survey of the Upper and Middle Wadi az-Zarqa

The survey proceeded from south to north, and from east to west: from the southernmost EB II-III centre of Khirbet er-Ruseifeh to the EB I settlements along the northern bank of Middle Wadi az-Zarqa; and from the eastern bank of the river itself (point of arrival of the tracks crossing east-west and north-south the Syro-Arabic Desert), up the hill-top site of et-Tell to the west.

The southernmost limit of the survey was the major settlement of Khirbet er-Ruseifeh, where a consistent EB II-III occupation was detected. North of Batrawy, the Wadi az-Zarqa becomes narrower and, around 1 km before the junction with Wadi edh-Dhuleyl, there was the site of Tell es-Sukhne North, which was a relatively big EB II rural village within the Batrawy countryside, lying on the eastern bank of the river; to the north, after a turn of the river, a larger site, Tell el-Bireh, stood up on the western bank on top of a basalt hill, possibly marking the northern limit of the Batrawy district. The district was, moreover, crossed east-west by a valley, which allowed to shortcut the road to the Jordan Valley, and which crossed the western hilly portion of the land under the control of Batrawy, where olive tree cultivation was possibly extended (in the surroundings of the sites of Massarrah and et-Tell).

Further north, the survey included also numerous EB I rural villages concentrated on the northern bank of Middle Wadi az-Zarqa (Mansub, Khirbet Mansub, Riyashi, Marajem, Tell el-'Ain)\(^4\), north of the turn of the river towards the west, and probably grouped around the major EB I religious centre of Jebel al-Mutawwaq\(^5\). As confirmed by the survey, the most of these EB I villages was definitely abandoned at the beginning of the 3\(^{rd}\) millennium BC\(^6\), without any EB II centre taking their place in the surroundings, because of the catalyzing role played by a few rising fortified centres, among which Khirbet al-Batrawy itself (see below note 16). This process induced also other groups of semi-nomads to settle both in the town itself and in the rural villages under its control, such as the EB II-III villages of Tell es-Sukhne North and Tell el-Bireh.

---

\(^4\) At the beginning of the Early Bronze Age the Wadi az-Zarqa attracted new groups of semi-nomads gradually settling in hamlets and rural villages along both of the banks of the river and on the hills surrounding it (Kafafi 2008).


\(^6\) The shrinking and abandonment of many EB IB sites all over Palestine and Transjordan is actually a general trend registered in the transition from Early Bronze I to Early Bronze II (Esse 1991, 146-152; Finkelstein 1995, 50).
Finally, to the west, the edges of Batrawy dominion were reached, up to the site of et-Tell, which probably controlled the area of a bordering reign.

2.1. The Batrawy district

The survey allowed to fix the feasible limits of the territory under the direct control of the EB II-III city of Batrawy within the turn towards the west described by az-Zarqa river (fig. 3): to the south, the hill of Batrawy overlooked the whole valley up to the southern turn towards Khirbet er-Ruseifeh, a flourishing EB II-III centre which probably controlled the southernmost stretch of Upper Wadi az-Zarqa; to the north, Batrawy controlled both the ford in the wadi next to Jneneh and the junction with Wadi edh-Dhuleyl next to Tell es-Sukhne North, and, further to the north, the land around Tell el-Bireh up to turn of the river; to the west, it apparently controlled the olive tree cultivations extended up to the sites of Massarrah and et-Tell.

Fig. 3 - Aerial view of the ancient territory under Batrawy control, inside the big turn towards west of az-Zarqa river.

Moreover, from the top of its hill towards the east, the city of Batrawy looked over the tracks arriving from south-east, east and north-east across the desert (from al-Qihati and Azraq at the western edges of the Black Basalt Desert).
2.2. Catalogue of the surveyed sites

Examined sites were all already known, and they have been selected among those of sure or possible Bronze Age occupation within a radius of 25 km from Khirbet al-Batrawy, and north of the junction with Wadi edh-Dhuleyl up to the EB I sites on the right side of the river (fig. 4).

From south to north, the visited Early Bronze Age sites were the following:

Khirbet er-Ruseifeh (JADIS n. 2415.076): the site, located on the hills (around 675 a.s.l.) 15 kilometers north-east of Amman on the left bank of Wadi az-Zarqa (fig. 5), and thoroughly excavated by Romil Ghrayib on the behalf of the Department of Antiquities, was already visited in the 1930ies by N. Glueck\(^7\), who recognized an extensive Early Bronze Age occupation in the area. Heavily threatened nowadays by modern urban expansion, Khirbet er-Ruseifeh has been drastically damaged by bulldozer cuts, which reduced its dimensions to almost one fifth of its original extension (probably up to 10 he. in the late Middle Bronze Age)\(^8\). It had substantial occupations in the Early Bronze II-III (figs. 6-7; pl. I)\(^9\) and Middle Bronze II-III/Late Bronze I: a MB III/LB I monumental building (possibly a governor’s residency; fig. 8), which provided a rich set of materials (deep bowls and jugs, painted vessels, and storage jars), hints at the role of central place for this town in the Zarqa/er-Ruseifeh district during the II millennium BC, when the city of Batrawy was definitively deserted.

\(^7\) Glueck 1939, 206-207, site 261.
\(^8\) Nigro ed. 2006, 5, note 4.
\(^9\) A 2 m thick wall was deemed by the excavator Romil Ghrayib a fortification line of the Early Bronze III.
significant EB IV occupation was, instead, detected in the nearby site of er-
Ruseifeh (fig. 4)\textsuperscript{10}, directly arisen aside the river, but nowadays completely
destroyed due to the growth of the modern village of Ruseifeh\textsuperscript{11}.

\textsuperscript{10} Glueck 1939, 205-206, site 260.
Khirbet er-Ruseifeh shows also substantial Roman\textsuperscript{12} and Byzantine occupations (fig. 9)\textsuperscript{13}, and it continued to play a central role in the region even in the later Islamic and Ottoman Periods due to its strategic position at the ford connecting to southern Amman district with the northern area. Finally, since 1902 the railway (fig. 10) built to connect Hijaz with Damascus and Istanbul (the capital of Ottoman Khalifah), passing through its land, gave an additional importance to the site, as well as the Yajouz road, the main artery of the area which, since ancient times, connected the Zarqa district with Amman through er-Ruseifeh.

\textsuperscript{12} During the Roman Period the site played an important role as a commercial center on the road from Amman (Philadelphia) to Jerash (Gerasa), one of the most important road for trading in the period of the Decapolis cities (Freeman 2001, 440-445). Numerous copper coins of this period were retrieved.

\textsuperscript{13} Only pottery sherds and scattered architectural features were, instead, ascribed to the Hellenistic and Iron Age Periods.
Fig. 9 - The monumental Late Roman/Byzantine building excavated on the top of the site.

Fig. 10 - The railway built at the beginning of the 20th century by Ottomans and Germans, connecting Amman to Damascus through the Wadi az-Zarqa Valley (2007).

Jneneh (*JADIS* n. 2516.016): the site\(^1\), located on a rocky flat terrace overlooking the western bank of the river (fig. 11), just south of a ford in the Wadi az-Zarqa banks, was a 3 he. village only 1.5 Km south-west of

\(^1\) The site of Jneneh was identified by K. Douglas south-west of Khirbet al-Batravy, on the other side of az-Zarqa river (Douglas 2006, 50-51, fig. 2.16, maps 4-5).
Khirbet al-Batrawy (fig. 12). A new examination of pottery on the surface of the site demonstrated that it was occupied not only in the Iron Age II-III (pl. II), as already known\textsuperscript{15}, but also in the Early Bronze I. The discovery of a series of “cup-marks” (fig. 13) and rock-cut mortars on the rocky spur dominating the river in correspondence of this site corroborated this hypothesis, suggesting that the EB I settlement was abandoned when the people moved to the top-hill site in the Early Bronze II, founding the fortified town of Khirbet al-Batrawy\textsuperscript{16}.

\textsuperscript{15} JADIS, p. 2.172

\textsuperscript{16} L. Nigro has analyzed this phenomenon of an early urban formation employing the paradigms of “syneccism and catalysis”. EB I hamlets and rural villages distributed in the Upper and Middle Wadi az-Zarqa Valley were abandoned at the beginning of the 3\textsuperscript{rd} millennium BC as a consequence of a synecistic process: the population from these villages, and probably other groups of semi-nomads from the surrounding landscape, grouped, in fact, in a few rising fortified centres, among which the city of Batrawy (Nigro - Sala - Polcaro 2008, § 3; Nigro in press, § 2). Since Khirbet al-Batrawy and Jneneh are in sight, and Jneneh was abandoned in the Early Bronze II, the population of Jneneh can have been reasonably one of the components settling at Batrawy.
Tell es-Sukhne North (*JADIS* n. 2517.027): the site, heavily damaged by bulldozer cuts (fig. 14), lies on the eastern bank of Wadi az-Zarqa, around 1 km far from the junction with Wadi edh-Dhuleyl (fig. 15), and it was already surveyed in the 1990ies, when a cylinder seal impression was also found\(^\text{17}\). The new visit by Rome “La Sapienza” Expedition checked the chronology of the site, which represented a substantial EBII-IIIA rural village in the Batrawy countryside (pl. III). A completely burnt polished jug\(^\text{18}\) was retrieved in the north-eastern sector of the site.

Tell es-Sukhne South (*JADIS* n. 2517.002): the site (fig. 15) has a major MB II-III occupation (around 1 he.), followed by an Iron Age I-III one and a Roman-Byzantine small farm on the eastern bank of the river (pls. IV-VI)\(^\text{19}\).

---


\(^{18}\) Sukhne North.07.S.0/6+7.

\(^{19}\) Glueck 1939, 212, site 316.
Tell el-Bireh (*JADIS* n. 2417.021): one of the main sites visited along the western bank of Wadi az-Zarqa was Tell el-I-Bireh (fig. 16)\(^{20}\), arising upon a

\(^{20}\) Glueck 1939, 213-214, site 320; Palumbo *et al.* 1996, 385-386, 388, 390-391, fig. 7; Nigro ed. 2006, 4, note 2, fig. 1.7.
basalt spur overlooking a turn of the river (figs. 17-18,a). EB II pottery sherds collected during the survey (pl. VII) hint at the presence of a rural village underneath later more massive occupations and fortifications, possibly integrated in the Batrawy territorial system, as like as Tell es-Sukhne North. The site had a continuous occupation in most recent periods, mainly Roman, Byzantine and Umayyad (also Iron Age II-III is perhaps present), hosting a fortress in Roman and Byzantine Periods (fig. 18,b).

Fig. 16 - Topographical map of Tell el-Bireh and its surroundings.

Fig. 17 - View of the lower north terrace of Tell el-Bireh and az-Zarqa river (in the left background) from the top of the site, looking north-east.
Fig. 18,a - General view of the mound of Tell el-Bireh from its surrounding countryside, from south-west.

Fig. 18,b - Late superimposed fortification lines and bastions at Tell el-Bireh.

Khirbet Mansub (JADIS n. 2318.019): the site represents one of the EB I villages arisen on the northern bank of Middle Wadi az-Zarqa (fig. 19; pl. VIII). Already visited by N. Glueck\textsuperscript{21}, it was surveyed in 1984 by J.W.

\textsuperscript{21} Glueck 1951, 87, site 265.
Hanbury-Tenison, who recognized its substantial EB I occupation\textsuperscript{22}. Some cup-marks detected in the bedrock during the recent Rome “La Sapienza” survey (fig. 20) may be ascribed to this proto-urban occupation. After the main EB I occupation, Khirbet Mansub was probably frequented in the Middle Bronze and Iron Ages, and then, more substantially, in the Late Roman and Byzantine Periods (pl. VIII).

\textbf{Mansub} (\textit{JADIS} n. 2318.018): the site represents one of the largest EB I settlements of Middle Wadi az-Zarqa, firstly visited by J.W. Hanbury-Tenison in 1984\textsuperscript{23}, with EB I sherds scattered over a surface of $300 \times 200$ m.

\textbf{Riyashi} (\textit{JADIS} n. 2318.017): another substantial EB I large occupation (around 4 he.) has been detected at Riyashi, just north of Khirbet Mansub\textsuperscript{24}. Also abandoned at the end of the 4th millennium BC, the site was

\textsuperscript{22} Hanbury-Tenison 1987, 155, site 18.  
\textsuperscript{23} Hanbury-Tenison 1987, 154-155, site 17.  
\textsuperscript{24} Hanbury-Tenison 1987, 154, site 16.
sparsely frequented in the Middle Bronze Age, Iron Age, Hellenistic, Late Roman and Byzantine Periods.

Tell el-‘Ain (JADIS n. 2418.025): the easterner EB I village surveyed in 2007 was Tell el-‘Ain (fig 22). Already visited by N. Glueck\textsuperscript{25} and surveyed by J.W. Hanbury-Tenison in 1984\textsuperscript{26}, this site shows a long-lasting occupation from the beginning of the Bronze Age, with scattered EB I-II, MB II-III and LB sherds, and later more substantial occupations in the Iron Age, Roman, Byzantine, Umayyad and Mamluk Periods (pl. IX).

\textbf{Fig. 22 - Topographical map of Tell el-‘Ain and its surroundings.}

Masarrah (JADIS n. 2317.021): this Byzantine site (fig. 23), excavated by the Department of Antiquities of Jordan under the direction of Romil Ghrayib, has provided some sparse EB remains besides the major later occupations, which suggest that it supplied, with its olive trees, oaks and pines (fig. 24), one of the basic resources (olive oil and wood) for the major urban site of Khirbet al-Batrawy. Among the Early Bronze Age finds, a limestone mace-head can be registered (fig. 25)\textsuperscript{27}.

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{25} Glueck 1951, 84, site 305.
\item \textsuperscript{26} Hanbury-Tenison 1987, 155, site 28.
\item \textsuperscript{27} Some scattered LB II, Iron and Roman sherds were also retrieved.
\end{itemize}
\end{footnotesize}
Fig. 24 - General view of the site of Masarrah, with the olive cultivations in the background (2007).

Fig. 25 - Early Bronze mace-head from Masarrah.

Et-Tell (JADIS n. 2317.032): the site occupies a panoramic hill in a unconquerable location above 700 m, in a region of oak forest and pines, suitable for wheat and olive cultivations. Its occupation dates back to the Early Bronze I (as it seems attested to by cup-marks [fig. 25] and a rock-cut circular cistern in the bedrock), followed by remains of an EB II-III
(fortified?) town, almost completely cancelled by the later Persian fortress and its annexed devices. Scattered MB, LB II and Iron Ages fragments were also present at the site (pl. X).

Fig. 25 - Cup-marks excavated in the bedrock at et-Tell.

Al-Qihati/Khaldiye (JADIS n. 2717.006): the site (the easternmost reached during the survey) arises on top of a major rocky hill dominating, on the one hand, the easternmost branches of Wadi edh-Dhuleyl, and, on the other hand, overlooking the tracks through the desert towards Azraq and Qasr Hallabat (fig. 26). Sparse EB materials hint at the presence of an outpost, while the major spur of the hill is occupied by a square Byzantine fort.

Fig. 26 - The site of Tell el-Qihati, detected at the western edge of the Black Basalt Desert at the head of Wadi edh-Dhuleyl.

CATALOGUE OF POTTERY AND SMALL FINDS

Pl. I - Pottery from Khirbet er-Ruseifeh


Pl. II - Small finds and pottery from Jneneh


WESTERN SECTOR


NORTH-EASTERN SECTOR

Pl. IV - Small finds and pottery from Tell es-Sukhne South


Sukhne South.S.0/1 (site perimeter), bowl. Class: Simple Ware. State of preservation: whole form. Technique of manufacture: wheel. Production: local. Firing: medium. Fabric colour: core 1 FOR GLEY6/N (gray)+7.5YR6/4 (light brown). Surface treatment: inner slip, inner burnish. Temper/inclusions: mineral (white, gray); dimension: small, medium-small; frequency: medium. Diameter: 18 cm; rim width: 0.75 cm; wall width: 0.7 cm, base width: 0.8 cm. Description: bowl with straight sides and ring base. Dating: MB II.


Sukhne South.S.0/10, jar (site perimeter). Class: Simple Ware. State of preservation: rim. Technique of manufacture: wheel. Production: local. Firing: medium-high. Fabric colour: 10YR7/4 (very pale brown). Temper/inclusions: mineral (white, dark gray); dimension: medium-small, medium-large; frequency: medium. Diameter: 12 cm; rim width: 0.6-0.8 cm; wall width: 0.5 cm. Dating: MB II.


Pl. VI


Pl. VII - Pottery from Tell el-Bireh


Pl. VIII - Pottery from Khirbet Mansub


Pl. IX - Pottery from Tell el-'Ain


[Pl. IX]

Pl. X - Pottery from et-Tell


References

CHESSON, M.S. et al.

DOUGLAS, K.

ESSE, D.L.

FERNÁNDEZ-TRESGUERREZ VELASCO, J.A.

FINKELESTEIN, I.

FREEMAN, P.

GLUECK, N.

GORDON, R.L. AND KNAUF, E.A.

HANBURY-TENISON, J.W.


KAFAFI, Z.

KAFAFI, Z. et al.

NIGRO, L.

NIGRO, L. (ed.)

Negro, L. - Sala, M. - Polcaro, A.

Palumbo, G. et al.
Finito di stampare nel mese di dicembre 2008
Presso la Tipografia SK7 – Roma

Per ordinare una copia – to order a copy:
www.lasapienzatojordan.it
® «La Sapienza» Expedition to Palestine & Jordan