

PRELIMINARY REPORT ON THE FOURTH SEASON OF EXCAVATION BY “LA SAPIENZA” UNIVERSITY OF ROME AT KHIRBAT AL-BATRĀWĪ IN UPPER WĀDĪ AZ-ZARQĀ’, 2008

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1. Introduction

In May - June 2008, the “La Sapienza” University of Rome expedition to Jordan¹ carried out systematic excavation and restoration at the Early Bronze Age site of Khirbat al-Batrāwī² under the auspices of the Department of Antiquities of Jordan³. Financial support was provided by “La Sapienza” University of Rome, the Italian Ministry of Foreign Affairs and the Italian Ministry of University and Scientific Research⁴.

The site of Khirbat al-Batrāwī (Fig. 1), a fortified town of the Early Bronze Age, was almost completely untouched when exploration started in 2005 (Nigro 2006a: 229-230; Nigro ed. 2006: iii-vii). It dominates the surrounding landscape, overlooking the valley below and the ford across the az-Zarqā River. Al-Batrāwī appears to have been the principal settlement of upper Wādī az-Zarqā’ during the earliest Jordanian urbanization in the third millennium BC (Nigro 2009).

During the fourth season⁵, excavation and restoration was focused on three areas (Area B North, Area B South and Area F), respectively located in the middle of the northern side of the hill, both outside and inside the main city wall, and on the easternmost terrace of the site (Fig. 2; Nigro 2008b).

2. Aims of the Fourth Season, May - June 2008

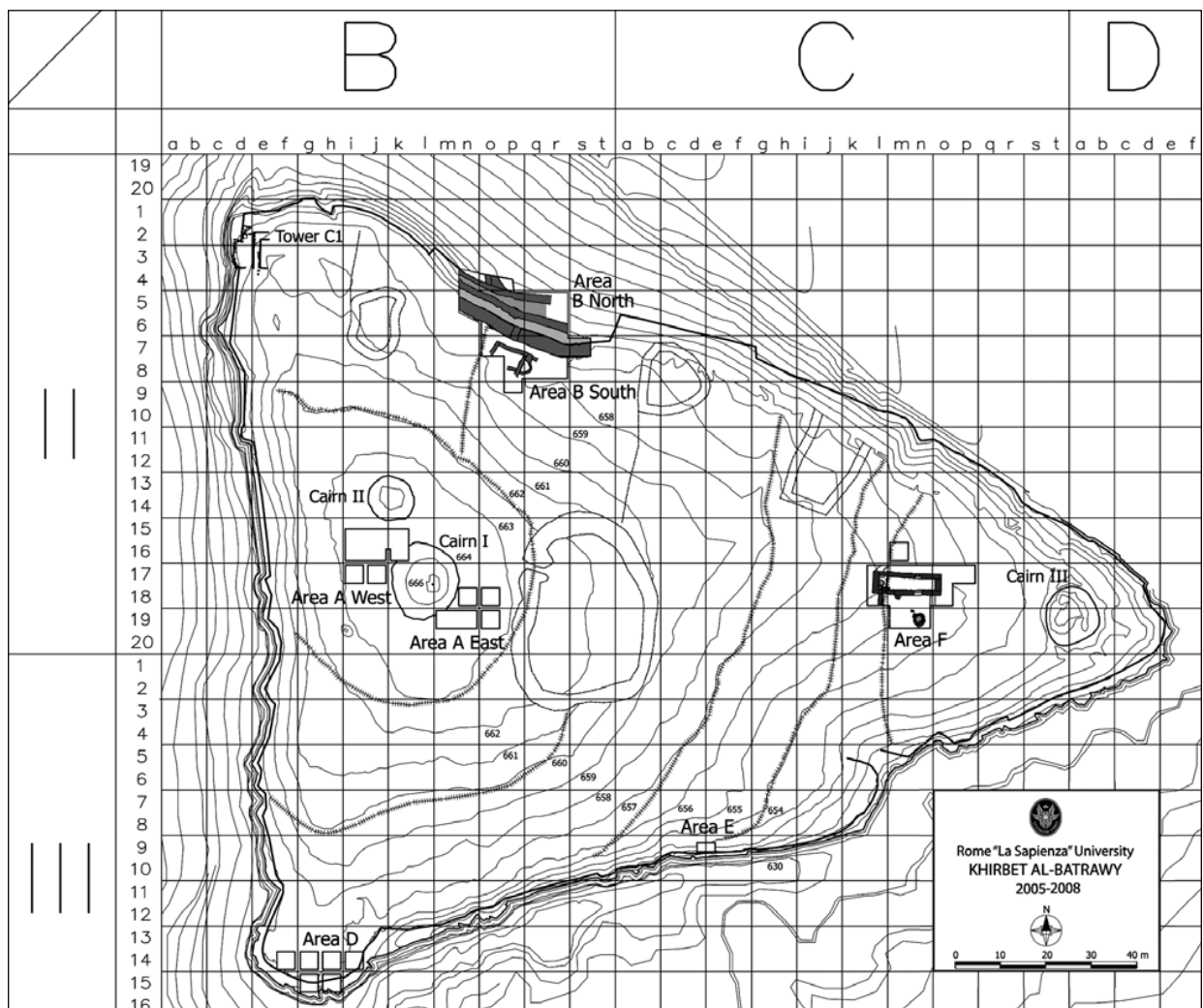
The fourth, 2008 season of excavation at Khirbat al-Batrāwī was mainly devoted to survey in the upper and middle reaches of Wādī az-Zarqā’ (Sala 2008a) and to restoration of the Early Bronze II - III (2900 - 2300BC) city walls and gate (Nigro, Sala and Polcaro 2008). These activities indicated that further investigations would be needed at the site, both to clarify the earliest phases of occupation on the hill and its transformation into a fortified town at the begin-

1. “La Sapienza” University of Rome team during the fourth season included: L. Nigro, Director; M. Sala, Supervisor of Areas B North, B South and F; A. Di Michele, V. Tumolo (Draughtsperson), P. Vitolo. The Department of Antiquities representative, whose helpful collaboration in the field was much appreciated, was Inspector Ahmed Shorma.
2. 32°05’ N 36°04’ E; JADIS site no. 2516.011, p. 2.172 (Nigro 2006a: 233-235, fig. 1; Nigro ed. 2006: 16-22, maps 1-6, plan I).
3. The expedition wishes to express its gratitude to Dr Fawwaz al-Khraysheh, Director General of the Department of Antiquities of Jordan, for his invaluable support, as well as to the academic authorities of “La Sapienza” University of Rome: the Rector, Prof. Luigi Frati; the Dean of the Faculty of Humanistic Sciences, Prof. Roberto Nicolai; and the Director of the Department of Historical, Archaeological and Anthropological Sciences of Antiquity, Prof. Gilda Bartoloni, who strongly supported the expedition.
4. The authors would like to thank the Italian Embassy at Amman; the former Ambassador, H.E. Gianfranco Giorgolo; the present Ambassador, H.E. Francesco

- Fransoni; and Dr Stefano Stucci, for their cooperation, and the Italian Ministry of Foreign Affairs - General Directorate for Cultural Promotion and Cooperation, Office V.
5. In previous seasons (Nigro 2006a, 2006b, 2006c, 2007a, 2007b, 2008a, 2008b; Nigro ed. 2006, 2008), the main chronological, topographical and architectural features of the site were established (Nigro 2006a: 233-236, 2007a: 346-347, tab. 1; Nigro ed. 2006: 9-36, fig. 1.2, 2008: 7-8), and five areas opened, respectively on the Acropolis (Area A: Nigro 2006a: 236-240, 2007a: 347-349; Nigro ed. 2006: 63-102, plan II, 2008: 9-63), the northern slope (Areas B North and South: Nigro 2006a: 240-246, 2007a: 349-354; Nigro ed. 2006: 153-196, plans III-IV, 2008: 65-240, plans I-II), at the north-western and south-western corners (respectively Area C: Nigro ed. 2006: 25-27, figs. 1.27-1.31 and Area D: Nigro 2007a: 355-357; Nigro ed. 2006: 32-33, figs. 1.38-1.41; 2008: 241-244), on the southern side (Area E: Nigro 2007a: 357-358; Nigro ed. 2008: 245-268) and on the easternmost terrace of the Khirbat (Area F: Nigro 2007a: 358-359; Nigro ed. 2006: 22, fig. 1.25, 2008: 269-316, plans III-IV).



1. General view of the site of Khirbat al-Batrawi with the EB IIIB triple line of fortifications and EB II restored city gate, from north.



2. Topographical plan of Khirbat al-Batrawi with the areas excavated in seasons 2005 - 2008.

ning of EB II, and to further our understanding of the internal layout of the city and the development of its defensive system. Restoration work was focused on the city gate and associated main

city wall in Areas B North and B South.

For this reason, archaeological activities in the fourth, 2008 season focused on:

Continued excavation of the imposing Early

Bronze II - III triple fortification line in Area B North (§ 4) to the west, north and east;

Restoration of the western stretch of the main city wall, especially staircase W.181 in Area B South (§ 4);

Completion of excavation and restoration in the Broad Room Temple in Area F (§ 5).

3. Stratigraphy and Revised Chronology of Area B North and Area F

On the one hand, in Area B North, the fourth season of excavation refined our understanding of the impressive Early Bronze Age fortifications. On the other, in Area F, it clarified the stratigraphy and phasing of the Broad Room Temple, confirming that it was founded with the city in Early Bronze II and was destroyed at the end of Early Bronze IIIB. The easternmost terrace of the Khirbat was then reoccupied during Early Bronze IVB by a cluster of farmhouses before finally being abandoned around 2000BC (**Table 1**).

4. Area B North: the Early Bronze II - III Fortification System

Excavation of the Early Bronze Age fortifications in Area B North was extended to the west⁶, north⁷ and east⁸ with the aim of exposing more of the EB IIIA and EB IIIB triple line of defences and associated structures (**Fig. 3**). In addition, a central stretch of outer wall W.155, facing city gate L.160, was restored by filling in a gap in the inner face of the structure.

4.1 Stratigraphy of Area B North

Excavations in Area B North provided a detailed insight into the occupational and architectural sequence, not only of the fortification system, but also of the city as a whole⁹:

Phase 1: Topsoil, representing natural erosion and dust accumulation following the final abandonment of the site around 2000BC.

Phase 2: Consisting of stone embankment W.199, which stabilised the collapsed defensive

Table 1: Chronology, stratigraphy and structures at Khirbat al-Batrāwī.

Archaeological Period	Absolute Chronology	Site Period	Area B North		Area F	
			Phases	Structures	Phases	Structures
EB I	3400-3000 BC	Batrawy I	-	-	-	-
EB II	3000-2700 BC	Batrawy II	Phase 5b-a	City-Wall W.103c+W.163c + W.104c + W.105c+W.161c; City-Gate L.160; street L.144b	Phase 4	Temple F1; platform S.510
EB IIIA	2700-2500 BC	Batrawy IIIa	Phase 4b-a	City-Wall W.103b+W.163b + W.104b + W.105b+W.161b; blocking wall W.157; street L.144a; Outer Wall W.155; Round Outwork W.185	Phase 3	Temple F2; platform S.510
EB IIIB	2500-2300 BC	Batrawy IIIb	Phase 3c-b	City-Wall W.103a+W.163a + W.104a + W.105a+W.161a; Outer Wall W.155; Scarp-Wall W.165		
EB IVA	2300-2200 BC	Batrawy IVa	Phase 3a	-	-	-
EB IVB	2200-2000 BC	Batrawy IVb	Phase 2d-a	Embankment W.199	Phase 2c-a	Rural village
Later Periods	2000 BC-1950 AD	Batrawy V	-	-	-	-
Contemporary frequentation	1900-2005 AD	Batrawy VI	Phase 1	-	Phase 1	-

6. Including squares BnII4 and BnII5.

7. Including squares BpII4 (southern half), BpII5, BqII4 (southern half), BqII5 and BrII5.

8. Including squares BrII6 and BrII7, and the excavation

of the baulk between squares BqII6 and BrII6.

9. For the stratigraphy of Area B North up to and including the third, 2007 season see Nigro ed. 2008: 66-76.



3. General view of the EB IIIB triple line of fortifications on the northern side of the site, and EB IIIB Building B1 excavated inside the EB II - III main city wall, from east.

structures of the Early Bronze IIIB city in order to support and protect the Early Bronze IVB dwellings erected within the main city wall in Area B South.

Phase 3: The most recent, Early Bronze IIIB urban phase which includes:

Event 3a: the abandonment and progressive collapse of destroyed defensive structures;

Event 3b: violent destruction, with burned layers of dark grey ash, charcoal and reddish-yellow mudbrick fragments, which marks the end of the third millennium BC city; excavated between the main city wall and outer wall W.155, between outer wall W.155 and scarp wall W.165 and to the north of the latter;

Event 3c, the final rebuild of the Batrawy IIIb fortification system, in which the main city wall and outer wall W.155 were retained from the previous phase, with the addition of new scarp wall W.165.

Phase 4: The Early Bronze IIIA reconstruction of the defensive system, which includes:

Event 4a: again represented by a violent destruction layer excavated between the main city wall and outer wall W.155;

Event 4b: blocking of the collapsed Phase 5 city gate with wall W.157 and the erection of outer wall W.155 with associated curvilinear outwork W.185.

Phase 5: Earliest phase of the city, including:

Event 5a: collapse of the main city wall and gate, attested to by a thick layer of compact yellowish-grey soil with limestone chippings, and fragments of greyish mudbricks found outside

the main city wall on the plastered floor of street L.144b, which lies directly over bedrock;

Event 5b: erection of the main city wall and gate, marking the foundation of the city.

4.2. Early Bronze IV Outer Embankment (Batrawy Period IV)

The structure, which stabilised the collapsed walls of the Early Bronze II - III defensive system, was stone embankment W.199. It filled in gaps between the original structures and prevented the slope from collapsing further (Fig. 4); its base it was supported by a heap of stones leaning on Early Bronze IIIB scarp wall W.165. The function of the embankment was to provide a stable footing for contemporary dwellings erected within the main city wall, in Area B South, and to prevent erosion of the northern slope of the hill.

4.3. Early Bronze IIIB Triple Fortification Line (Batrawy Period IIIb)

In Area B North, on the northern slope of the hill, the final urban fortification was a triple line of defence with several associated outworks, demonstrating that the city reached its most heavily defended state towards the end of the Batrawy III period (Nigro 2007a: 351-352; Nigro ed. 2008: 100-102, plan III). A further structure, scarp wall W.165, was added to the outer side of the original main city wall, now reinforced by outer wall W.155. Scarp wall W.165 was characterized by the placement of large, irregular stones on a foundation of medium-sized stones. It had already been exposed to the west, in square BoII4, during 2006. In 2008, it was followed eastwards through three more squares, BpII5, BqII5 and BrII5, where its five courses of



4. The EB IV embankment, from north-east.

stone attained a height of 1.2m, and westwards into BnII4, where its eleven courses attained 1.8m. Between scarp wall W.165 and outer wall W.155, was a rubble fill¹⁰ which was fully excavated in BnII4 (**Fig. 5**). Scarp wall W.165 strengthened the outer line of fortification and incorporated dismantled EB IIIA curvilinear outwork W.185 (see below).

The EB IIIB triple fortification line underwent a violent destruction. Several burned strata of ash and charcoal were identified:

F.802 in BnII5 (**Fig. 6**) and F.194 in BrII6, BrII7 and in the baulk between squares BqII6 and BrII6, that is to say between the main city wall and the outer wall; F.807 between the outer wall and scarp wall; F.804 on the outer slope, north of the scarp wall.

4.4. Doubling the Line of Fortification: The Early Bronze IIIA Reconstruction of the Main City Wall and Addition of Outer Wall W.155 (Batrawy Period IIIa)

At the beginning of Early Bronze IIIA, after the dramatic destruction of the EB II city in a violent earthquake (Nigro ed. 2008: 87, 255), the main city wall was reconstructed by blocking the collapsed city gate and rebuilding the superstructure of the wall, as clearly illustrated during the 2008 season by excavations in square BnII5 and



5. The EB IIIB triple line of fortifications, from west: in left foreground, EB IIIB scarp wall W.165; in middle, EB IIIA - B outer wall W.155; to right, EB II - III main city wall W.103 and W.163; in left background, EB IIIA curvilinear defensive outwork W.185.

in the baulk between squares BqII6 and BrII6. This baulk was at the intersection of two separate stretches of the original city wall, which were incorporated into the EB IIIA reconstruction.

In addition to this reconstruction of the main city wall, an outer wall, W.155, was constructed using boulders on its outer face and large stones on its inner face. The stretch excavated so far (**Fig. 7**), runs parallel to and 1.7m in front of the main city wall.

In square BnII5, the space between the main city wall and the outer wall was filled with a destruction layer of ash and charcoal, designated F.805 (**Figs. 8 and 9**). In squares BrII6 and BrII7, a further section of outer wall W.155 was exposed in 2008, which showed how a fill of limestone pebbles and chippings, F.803, had been deliberately deposited in order to regularize a step in the bedrock (**Fig. 10**). Just above it was a fill of loose brown soil and rubble, F.196.

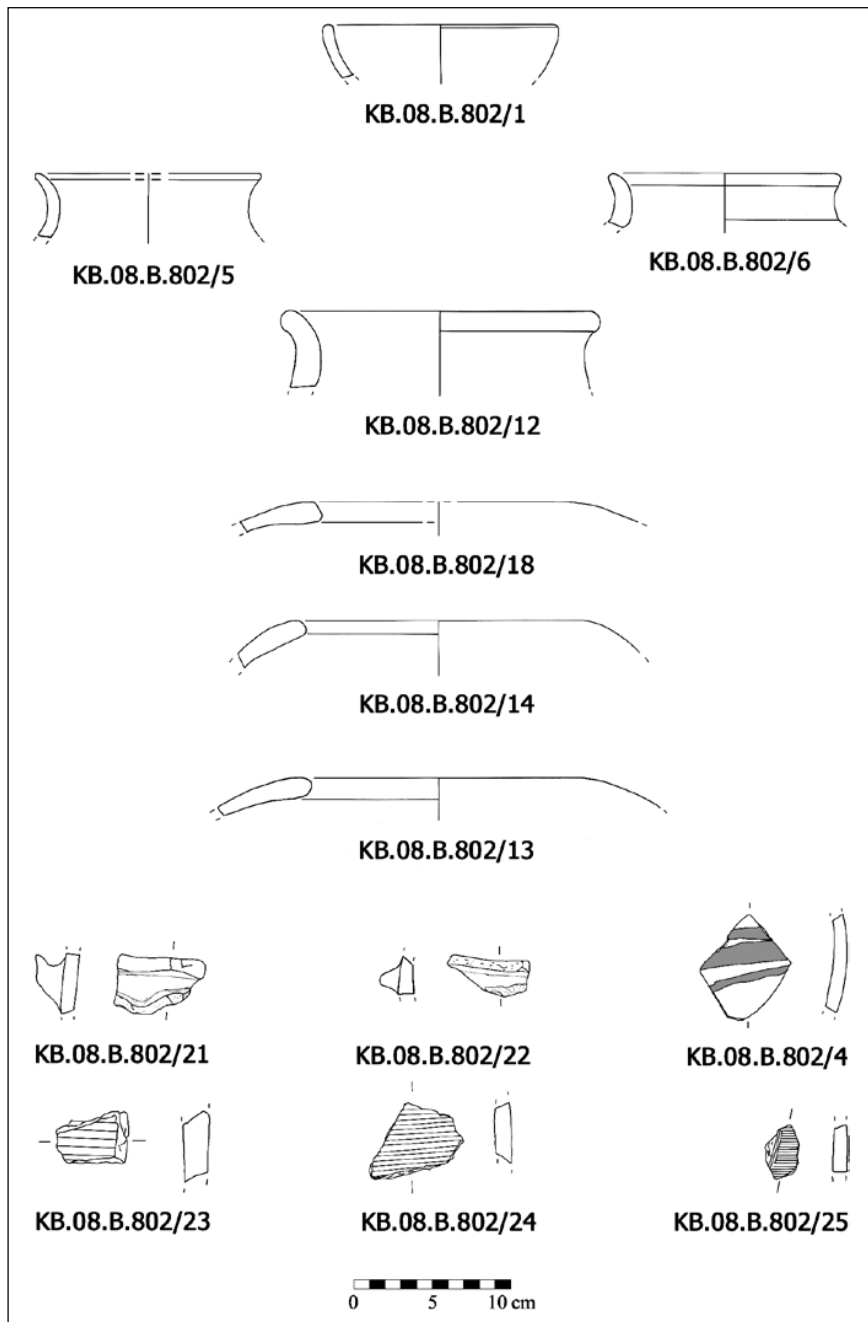
A major curvilinear outwork, W.185, abutted the outer wall, strengthening and protecting the north side of the city, the direction from which it was most easily approached.

4.5. The Early Bronze II Main City Wall and City Gate (Batrawy Period II)

The 2008 season allowed us to expose more of the Early Bronze II main city wall that was erected at the time of the city's foundation. To the west, in square BnII5, a monumental structure was preserved to a height of 3.2m in its later Early Bronze III incarnation, with the lower, original Early Bronze II courses of large boulders and protruding foot of the wall still clearly visible (**Fig. 11**). A collapse layer of broken greyish mudbricks, with small limestone grits, chips and pebbles (F.809), representing the destruction of the city wall superstructure was then removed, exposing the surface of street L.144. To the east, in square BrII7, the excavation reached the Early Bronze II street, L.144, which flanked the main city wall (**Fig. 12**), after removing destruction layer F.198 that covered it. In the lowest course of the outer face of the city wall, a pierced stone block was found which has been interpreted as a tethering ring (**Fig. 13**). It is notable that the animal remains from al-Batrāwī (Alhaique 2008) contain a high

10. This rubble fill was designated F.808 to the west, in

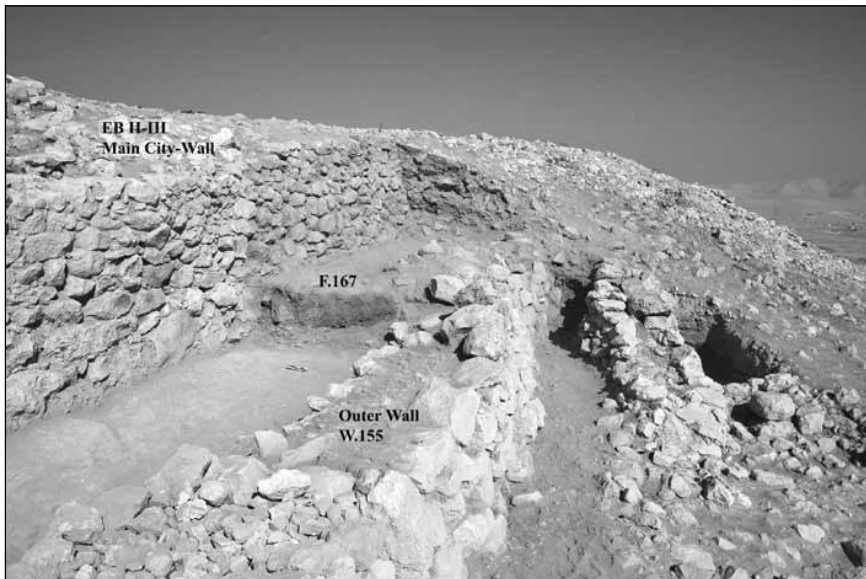
BnII4, and F.193 to the east, in BpII5 and BqII5.



6. EB IIIB pottery sherds from destruction layer F.802.



7. The EB IIIA double line of fortifications, with EB II - III main city wall to left and parallel outer wall W.155 to right, from north-east.



8. EB IIIA destruction layer F.167 between main city wall W.163 and outer wall W.155, from east.

frequency of donkey, interpreted as caravan animals working the important track between the Jordan Valley and Syro-Arabian desert that was controlled by the city.

4.6. Restoration of Staircase W.181

One of the most remarkable features of al-Batrāwī main city wall was a flight of stone steps, or supports for a wooden staircase, uncovered on the inner side of monumental structure W.181 (Nigro ed. 2008: 96-98). This so far unique architectural feature enabled us to calculate the height of the city wall as having been approximately 6.5m, and showed that the superstructure of the fortification line could be accessed for defence. This structure was restored with a modern approximation of the ancient mortar, preserving the burning visible on the protruding slabs used as steps and bringing the threshold of the staircase at the top of the stone section of the city wall to light (Fig. 14).

5. Area F: the Early Bronze II - III Broad Room Temple

During 2008, archaeological activities in Area F were focused on completing the excavation of the Early Bronze II - III broad room temple discovered in 2006, roughly in the middle of Terrace V (Nigro 2007a: 359). This monumental structure, though badly eroded and truncated at its north-eastern corner by later Early Bronze IVB

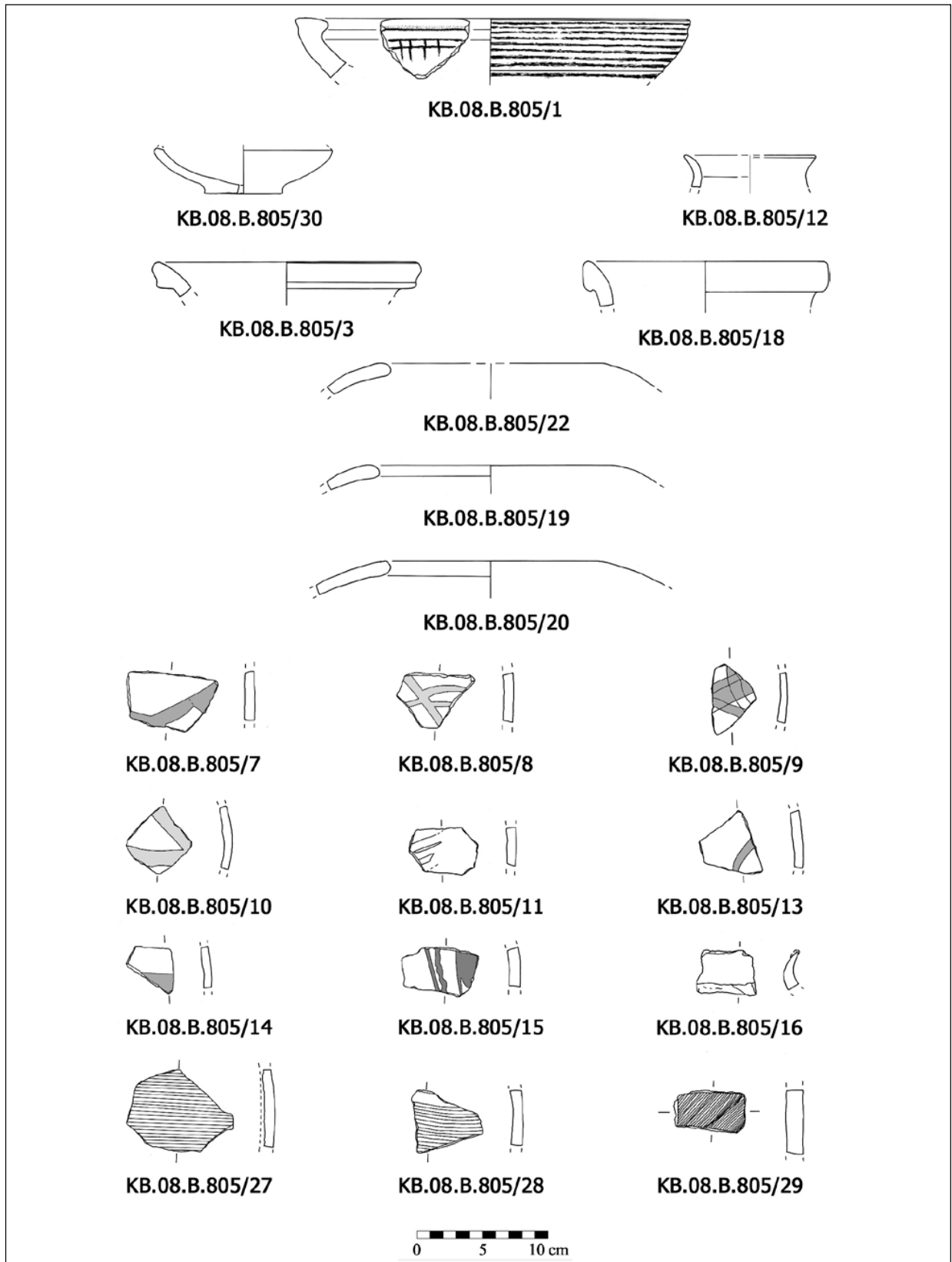
dwellings, could still be understood in terms of its two major constructive phases, attributed to Early Bronze II and III respectively (Fig. 15)¹¹. Three soundings dug within the temple cella and complete excavation of its western side clarified the transformation this religious building underwent when it was reconstructed at the beginning of Early Bronze III, around 2700BC.

5.1. The Early Bronze II Broad Room Temple F1

The original temple was erected directly over the bedrock, by filling in a shallow depression under the approximate centre of the building with virgin soil and small rock fragments (Nigro ed. 2008: 276-282, plan III). The presence of this depression weakened the central part of the structure, which in fact collapsed during the tremendous earthquake, which brought about the end of the Early Bronze II city.

The original walls of the temple were preserved along its southern, main façade (W.563E and W.563W) and its western (W.586) and northern (W.521) sides. The eastern wall was completely truncated by an Early Bronze IVB domestic building, which obliterated all previous structures. Only the south-eastern corner of the cella was preserved, but this allowed us to reconstruct the eastern wall (W.561) of the temple. The width of these walls varies from 1.0 to 1.2m, being wider on the western side where the temple abuts the bedrock step between terraces

11. For a comprehensive illustration of stratigraphy, Nigro ed. 2008: 269-275.



9. EB IIIA pottery sherds from destruction layer F.805.



10. Eastern stretch of outer wall W.155 and, to south, rubble fill F.803 levelling a natural step in the bedrock.



11. Western stretch of EB II - III main city wall W.163: west of city gate L.160 and up to 3.2m high, from east.



12. EB II street L.144 flanking the main city wall east of city gate L.160, from north-west.



13. The pierced block interpreted as a tethering ring, set into the lowest course of the outer face of the main city wall, from east.



14. EB III restored staircase W.181 abutting city wall W.161, from west.

IV and V. The rear wall of the temple was excavated all the way to its western end, which led to the discovery of a curvilinear structure (W.587) connected with the north-western corner of the building. This may represent a boundary wall, similar to the one known from the Early Bronze II temple at at-Tall / 'Ayy (Sala 2008b: 135-140, fig. 40).

The cella itself was a broad room measuring 2.7m in width and 12.5m in length, with the entrance (L.592) two thirds of the way along its length. The entrance was in the form of a passage 1.4m wide. Four stone bases were aligned along the main axis of the cella, as supports for the wooden pillars, which would have held up the roof. Facing the entrance, which opened out on to a forecourt, and in the rear wall of the temple was a niche (L.562), 1.3m wide, 0.8m deep and with an internal bench 0.2m high. A small slab, with two circular depressions, at the north-west corner of the bench suggests that the niche



15. General view of the EB II - III broad room temple and round platform S.510 in Area F, from east-south-east.

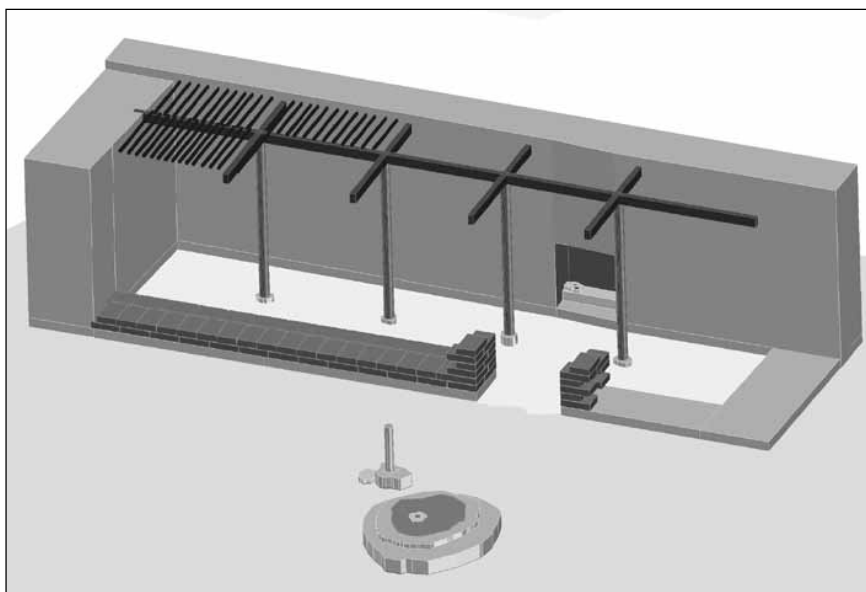
was the cult focus of the temple.

In the forecourt, facing the entrance, was a circular altar (S.510) with a central slab with a small cup mark in the middle, and a flight of three steps made of stone slabs by which to approach the altar from east. About 1m west of the altar, some stones set vertically into the ground (S.503) probably served as the base for a betyl (Fig. 16; Nigro ed. 2008: 283-284).

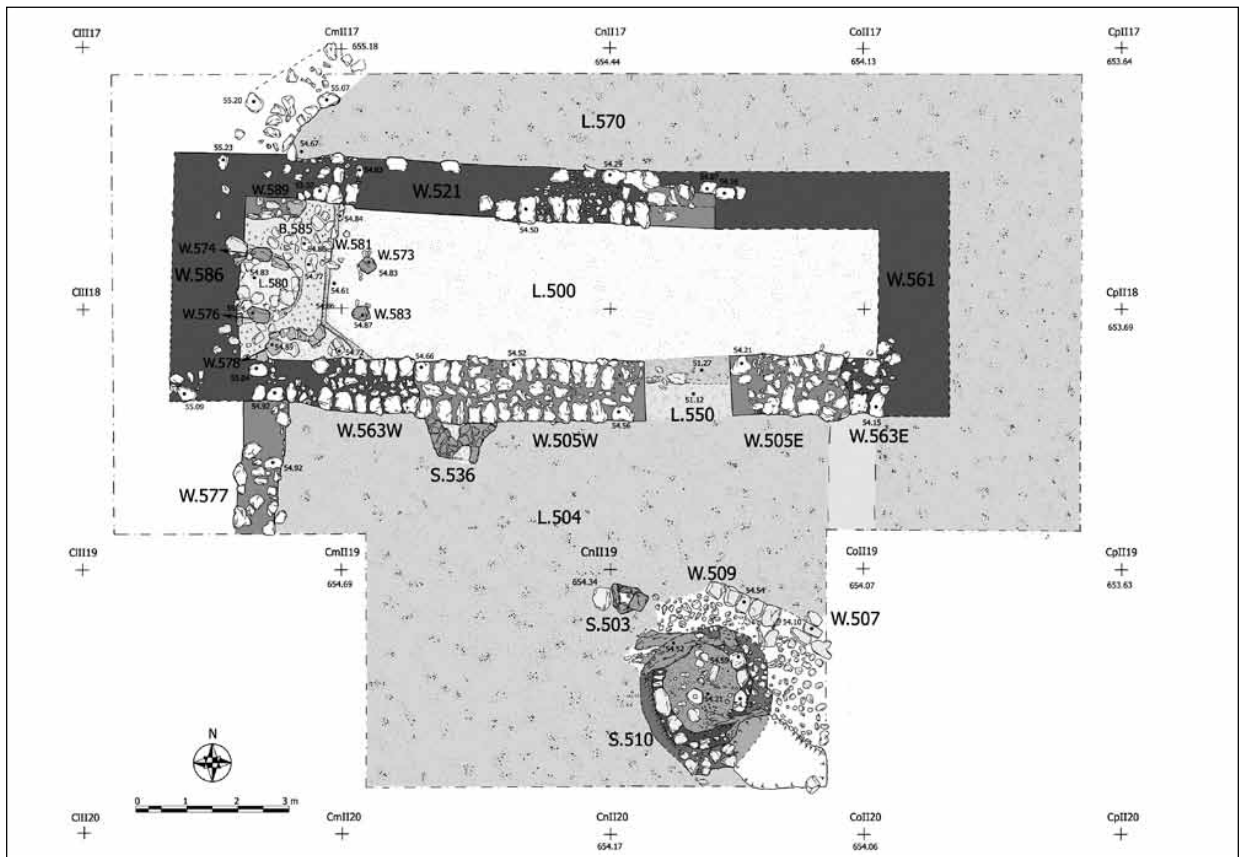
5.2. The Early Bronze III Bent Axis Temple F2

At the end of Early Bronze II, the earthquake, which destroyed the city of al-Batrāwī badly, damaged the temple in Area F. The collapse of the central part of the façade led to the reconstruction of the temple entrance at the beginning of Early Bronze III (Fig. 17; Nigro ed. 2008: 285-290, plan IV). The new front wall was wid-

er and more carefully built than its predecessor. The reconstructed part of the wall (W.505) was offset from the previous line by about 0.2m, and the entrance (L.550) included a small step 0.1m high. The rear wall was partly rebuilt and the niche facing the entrance closed off. The ceiling of the cella consisted of wooden beams spanning its entire width, as the pillar bases of the previous phase had been buried under the new floor of the room. The cult focus was shifted to the western side of the cella, which was reoriented (Fig. 18). A platform (B.585) 0.2m high was provided with a new style of raised niche (L.580), flanked by two vertical slabs and located in the middle of the western side. Against the southern wall of the cella was a stone-lined basin, delineated by stones set vertically into the platform, paved with flagstones and ending in a large slab. In front of



16. Reconstruction of Temple F1 with its forecourt (Phase 4, Early Bronze II).



17. Plan of Temple F2 (Phase 3, Early Bronze III).



18. General view of Temple F2 (Phase 3, Early Bronze III), from west: in foreground, raised platform B.585 with niche L.580.

the niche and its two antae, two round bases may indicate the location of two betyls (**Fig. 19**). A bench was placed against the northern side of the cella.

The transformation of this structure from a

classic broad room temple into a bent axis cult place, where the religious symbols were grouped at the end of the short side to the left of the entrance, perhaps reflects the same gradual transformation of the deeply rooted tradition of south-



19. Raised platform B.585 with niche L.580 erected at western end of Temple F2, from east.

ern Levantine religious architecture attested to at the contemporary sanctuary of Bāb adh-Dhrā¹².

6. Conclusions

The fourth season of excavation and restoration at Khirbat al-Batrāwī has provided important new insights into the history of the site, which appears to have been the major urban centre in upper Wādī az-Zarqā' during the Early Bronze II-III, and a rural village in the latter part of Early Bronze IV.

Excavations in Area B North identified a complex series of defensive works, starting with the original Early Bronze II city gate and city wall set on bedrock, and followed by successive developments of the fortification system, viz. the addition of an outer wall in Early Bronze IIIA and of a further scarp wall in Early Bronze IIIB, which remained in use until the final destruction of the city at around 2300BC. In Area B South, where a major rectangular building (Building B1) dating to Early Bronze IIIB was exposed, the eastwards continuation of the street inside the main city wall demonstrates that it runs all the way along the wall.

Restoration of staircase W.181 provided a unique perspective on the defensive architecture of the period, which allowed us to reconstruct the elevation and structure of the city wall.

Finally, excavation of the broad room temple allowed us to clarify the transformation of this sacred building between its first and second

phases, i.e. between Early Bronze II and Early Bronze III, when the cult focus was moved to the short western side of the cella and two antae were added to the front wall of the temple.

Bibliography

- Alhaique, F.
2008 Appendix A. Faunal Remains. Pp. 327-358 in L. Nigro (ed.), *The EB II city-gate, the EB II-III fortifications, the EB II-III temple. Preliminary report of the second (2006) and third (2007) seasons of excavations* (Rome «La Sapienza» Studies on the Archaeology of Palestine & Transjordan, 6). Rome.
- JADIS The Jordan Antiquities Database and Information System: a Summary of the Data, G. Palumbo (ed.), Amman.
- Nigro, L.
2006a Preliminary Report of the First Season of Excavations by the University of Rome «La Sapienza» at Khirbat al-Batrāwī (Upper Wadi ez-Zarqa). *ADAJ* 50: 229-248.
2006b Khirbat al-Batrāwī. *Munjazat* 7: 57-59.
2006c Khirbat al-Batrāwī: una città del Bronzo Antico tra il deserto basaltico e la Valle del Giordano. *Scienze dell'Antichità* 13: 663-688.
2007a Preliminary Report of the Second Season of Excavations by the University of Rome «La Sapienza» at Khirbat al-Batrāwī (Upper Wadi az-Zarqa'). *ADAJ* 51: 345-360.
2007b Khirbat al-Batrāwī. *Munjazat* 8: 63-65.
2008a Preliminary Report of the First Season of Excavations of Rome «La Sapienza» University at Khirbat al-Batrāwī (Upper Wadi az-Zarqa, Jor-

12. Rast - Schaub 2003: 157-166, 321-335. For a general appraisal on the Early Bronze Age sacred architecture

in the Southern Levant see Sala 2008b.

- dan). Pp. 663-682, Volume II, in J.M. Córdoba *et al.* (eds.), *Proceedings of the 5th International Congress on the Archaeology of the Ancient Near East (5-8 April 2006)*, Madrid 2008.
- 2008b Khirbat al-Batrawi. *Munjazat* 9: in press.
- 2009 Khirbet al-Batrawy: a Case Study of 3rd millennium BC Urbanism in North-Central Jordan. *SHAJ* 10: 657-678. Amman.
- Nigro, L. (ed.)
- 2006 *Khirbat al-Batrawi. An Early Bronze Age Fortified Town in North-Central Jordan. Preliminary Report of the First Season of Excavations (2005)* (Rome «La Sapienza» Studies on the Archaeology of Palestine & Transjordan, 3), Rome.
- 2008 *The EB II City-Gate, the EB II-III Fortifications, the EB II-III Temple. Preliminary Report of the Second (2006) and Third (2007) Seasons of Excavations* (Rome «La Sapienza». Studies on the Archaeology of Palestine & Transjordan, 6), Rome.
- Nigro, L., Sala, M. and Polcaro, A.
- 2008 Preliminary Report of the Third Season of Excavations by the University of Rome “La Sapienza” at Khirbat al-Batrawi (Upper Wadi az-Zarqa’). *ADAJ* 52: 209-230.
- Rast, W.E. and Schaub, R.T.
- 2003 *Bab edh-Dhra’: Excavations at the Town Site (1975-1981). Part 1: Text, Part 2: Plates and Appendices* (Reports of the Expedition to the Dead Sea Plain, Jordan, Volume II). Winona Lake.
- Sala, M.
- 2008a *L’architettura sacra della Palestina nell’età del Bronzo Antico I-III* (Contributi e Materiali di Archeologia Orientale 13). Roma.
- 2008b Appendix B. Along the river: 2007 Survey of the Upper and Middle Wadi az-Zarqa. Pp. 359-397 in L. Nigro (ed.), *The EB II city-gate, the EB II-III fortifications, the EB II-III temple. Preliminary report of the second (2006) and third (2007) seasons of excavations* (Rome «La Sapienza» Studies on the Archaeology of Palestine & Transjordan, 6), Rome.