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DOMINATING THE RIVER: KHIRBET AL-BATRAWY, AN EB II-III CITY IN NORTH-CENTRAL JORDAN

Lorenzo Nigro [1]

Résumé – Les fouilles conduites par l'Université La Sapienza à Khirbet al-Batrawy ont mis au jour, sur le haut Wadi az-Zarqa (au centre/nord de la Jordanie), un site urbain du Bronze ancien. Un système de défense important, élaboré entre les années 2900-2300 av. J.-C., a notamment été révélé. Ainsi la prospection l'a démontré, le secteur du Wadi az-Zarqa a connu, au début du Bronze ancien II, un phénomène de synœcisme qui a conduit au développement de Khirbet al-Batrawy, devenue une cité fortifiée et un centre caravanier, et à son contrôle sur le passage à gué du wadi, vers les pistes du désert syro-arabe et vers la vallée. Les éléments de culture matérielle démontrent des échanges intenses, à la fois avec les abords immédiats du wadi et l'intérieur des terres, et avec les axes commerciaux. Des bâtiments publics, le temple (Broad Room) et, surtout, le palais daté du Bronze ancien IIIB (2700-2200 av. J.-C.), trouvé dans un état de conservation étonnant, donnent un éclairage intéressant sur l'urbanisme du III^e^ millénaire av. J.-C. en Syrie du Sud et en Jordanie.

Abstract – Excavations by Rome 'La Sapienza' University at Khirbet al-Batrawy brought to light an Early Bronze Age urban centre in Upper Wadi az-Zarqa (north-central Jordan) with an imposing defensive system, growing from EB II to EB IIIB (2900-2300 BC). As a cantonal survey demonstrated, at the beginning of EB II, the Zarqa district witnessed a synecistic process which led Batrawy to become a strongly fortified city and a caravans centre, which controlled the ford through the wadi, as well as the tracks crossing the Syro-Arabian Desert and leading into the Jordan Valley. Its material culture points to intense exchanges with both the surrounding river and countryside, and long-trade routes. Public buildings, such as the Broad-Room Temple and especially the Palace of the EB IIIB city, found in an extraordinary preservation state, provide interesting insights into early urbanism of 3rd millennium BC South Syria and Jordan.

خلاصة – كشفت الحفريات التي أجرتها جامعة لاسابينزا (روما) في خربة البتراوي أعلى وادي الزرقاء (وسط/شمال الأردن)، مركزا حضريا يعود إلى العصر البرونزي القديم. وتم الكشف على وجه الخصوص عن نظام دفاعي هام تم انجازه بين سنة ٢٩٠٠ و٢٣٠٠ قبل الميلاد. وأظهر المسح الأثري، كذلك، أن منطقة وادي الزرقاء قد شهدت في بداية العصر البرونزي القديم ٢، ظاهرة « سينوسيسمية » (تأسيس منطقة معمارية) قادت إلى إنماء خربة البتراوي، التي أصبحت مدينة محصنة ومركزا للقافلات ونقطة مراقبة عبور الوادي باتجاه طرف الصحراء السورية العربية والوادي. وتظهر عناصر الحضارة المادية تبادلات كثيفة مع المناطق المجاورة للوادي وداخل الأراضي على حد سواء، ومع الطرق التجارية. تبين المباني العمومية والمعبد (ذات الغرفة الضيقة) وخاصة القصر الذي يعود تاريخه إلى العصر البرونزي القديم (٢٧٠٠ – ٢٢٠٠ قبل الميلاد)، الذي وُجد في حالة هائلة من المحافظة، أهمية التخطيط المدني خلال الألفية الثالثة قبل الميلاد في سوريا الجنوبية والأردن.

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Exploring landscape varieties in north-central Jordan

Surveys and landscape studies which followed the discovery of Jawa in the Jordanian Black Desert [2], and Khirbet al-Umbashi on the eastern piedmont of Syrian Jebel al-'Arab during the last quarter of the 20th c. [3], followed by recent renewed archaeological research in the Hauran region in Syria [4] and in Northern Jordan (in the provinces of al-Mafraq and Zarqa) [5], indicated that this area played a relevant role also during the rise of early urbanization in the Southern Levant, in the 3rd millennium BC, when, however, the main streams of secondary urbanization developed in the Jordan Valley, on the Lebanese coast, and in inner Syria. New discoveries in the same region, for example at the Syrian sites of Labwe [6] and Qarassa [7], have, moreover, suggested the necessity of a complete re-evaluation of the human settlement and achievements in these "marginal" areas during Chalcolithic and EBA, with special attention to the semi-nomadic component of the ancient societies [8].

In this perspective, the discovery of the previously almost completely unknown site of Khirbet el-Batrawy near Zarqa (**fig. 1**), set as a central place in the environment and ancient road network of Upper Wadi az-Zarqa (in the highlands east of the Jordan Valley) [9], shed new light on this specific and peripheral early "urban" phenomenon [10] flourished in North-Central Jordan, at the border between the Jordanian highlands and the Syro-Arabian Desert crossed by its huge and long *wadis*, and represents an almost unique chance for a cantonal study of settlement dynamics, for an evaluation of what was the relationship between a landscape and its human settlement, and for the definition of what was a "city" in this area of the Levant during the EBA.

Upper Wadi az-Zarqa: from EB I rural settlements to the rise of the city

Khirbet al-Batrawy arose as a major centre controlling Upper Wadi az-Zarqa, a river which —from its sources in Amman, down to the junction with Wadi edh-Dhuleyl [11]— offered a series of geo-ecological niches extremely favourable to human occupationtable and stable agriculture already in the Early Bronze

2. In the 1990's systematic surveys were carried out along the Wadi Rajil and Wadi al-'Ajib in the area of the western Basalt Desert between southern Syria and northern Jordan, producing a preliminary map of the Chalcolithic and Early Bronze Age sites in the region between the al-Mafraq district and the EB I site of Jawa, as well as further to the north in southern Syria. Some of these Early Bronze Age Jordanian sites in the western fringes of the Syro-Arabian Desert are, from west to east, Tell el-Qihati, Qasr el-Hallabat, Rukeis, Salatin, Karyat Khisha al-Sletin, Tell Umm el-Quttein, Hawshiyan (Betts *et al* 1995; 1996).

3. Braemer, Échallier & Taraqji éd. 2004. Further discoveries and investigations in the steppe and the desert both in Jordan and in Syria in the first years of this century, such as al-Rawda (Gondet & Castel 2004; Castel & Peltenburg 2007) and Tell Sh'airat (Al-Maqdissi 1995), have further enhanced archaeological research in these margin areas (Barge & Moulin 2008).

4. Braemer 1984; 1988; 1993.

5. Bartl, Al-Khraysheh & Eichmann 2001. See also Sala 2006, p. 233-250 for a reassessment of previous researches activities and updated surveys results in this area.

6. Al-Maqdissi & Braemer 2006.

7. Braemer *et al.* in press.

8. Braemer & Sapin 2001; LaBianca & Witzel 2007; Barge & Moulin 2008.

9. Lat. 32°05' N, Long. 36°04', Nigro 2006a; 2007; 2008; 2009a; 2010; Nigro éd. 2006; 2008.

10. 'Urbanism' in this region of the ancient Near East is a local experience with its own characteristics (Esse 1989; Liverani 1999, p. 227-231; Rast 2001; Greenberg 2002). The use of terms 'urbanisation' and 'city' to define the Palestinian and Transjordanian phenomenon is up to now a matter of discussion (firstly, Schaub 1982, p. 67; Seger 1989, n. 1), because of its restricted and local character in comparison with the Mesopotamian and Egyptian urban experiences (Liverani 1986); on this issue see also: Philip 2001, p. 163-168; Chesson & Philip 2003; Savage, Falconer & Harrison 2007; Schaub & Chesson 2007, suggesting caution in employing such a terminology in the Southern Levantine context. *Contra* Nigro 2009a, p. 657-658, where the rise of urbanization in Transjordan during the 3rd millennium BC, as a local development of the EBA culture already appeared in the region during the last centuries of the 4th millennium BC (Esse 1989, p. 82-85; Nigro 2005, p. 1-6, 109-110, 197-202), is considered as a distinct historic-archaeological phenomenon, whit its own characters and cantonal features.

11. Nigro éd. 2006, p. 4-8.

Figure 1. General view of the Early Bronze Age site of Khirbet al-Batrawy from north, with the restored EB II-III Main City-Wall and EB II city-gate.

(hence EB) I, attracting new groups of semi-nomads gradually settling in encampments, hamlets and villages [12], then serving as solid economic basis for the rising urbanization.

During Early Bronze I a series of rural hamlets and villages was scattered along the river banks [13], while some major centres, usually flanked by dolmen fields [14], grew on hill-top sites, dominating the valley, such as Jebel al-Mutawwaq, which hosted a central sanctuary [15].

In this period the main site in Upper Wadi az-Zarqa was Jneneh, a 3 ha. village located on a flat terrace overlooking the western bank of the river, only 1.5 Km south-west of Khirbet al-Batrawy [16].

Jneneh and Batrawy are in a central point of the Upper Wadi az-Zarqa, a strategic location controlling a ford and a relatively wide area of cultivable land. Some cup-marks identified on the Acropolis of Batrawy, near a cave, may indicate a religious frequentation of the site before the foundation of the fortified town in Early Bronze II, at the time when Jneneh was the central place in the valley. It seems, thus, plausible that the inhabitants of Jneneh were basically responsible for the foundation of Batrawy on top of the hill facing the ford through the river [17], and the possible presence of a sanctuary at Khirbet al-Batrawy may partly explain why the population living in the valley concentrated on the hill-top site in Early Bronze II [18].

12. Kafafi 2008.
13. Douglas 2006, p. 50-52.
14. Nigro, Sala & Polcaro 2008, p. 220-228.
15. Fernández-Tresguerrez Velasco 2008.
16. Douglas 2006, p. 50-51, fig. 1.4, 2.16, maps 4-5.
17. Nigro 2009a, p. 658-660.
18. Khirbet al-Batrawy and Jneneh are in sight: it has been suggested that the population of Jneneh was one of the components settling at Batrawy; a relationship similar to that suggested for Tell el-Fukhar and Khirbet ez-Zeraqon (Douglas 2006, p. 51).

Such a phenomenon was probably determined also by other factors, first of all the need of security and protection at least judging by the location of the new born town and looking at its powerful fortifications. It seems probable that the accumulation of goods and a certain degree of social instability along the main road network made necessary to protect the community by settling the hill-top site, defending it with strong fortification works, and re-organizing the social group according to a more powerful and effective hierarchy.

Spatial analyses show that there was a sharp increase in population shifting from Jneneh to Batrawy, thus indicating that presumably the synecistic process (i.e. the unification of people arriving from several rural villages along the river), which led to the foundation of the city, was also accompanied by a catalytic process (i.e. the attraction of other components of the social body into the city), inducing groups of semi-nomads previously living along the routes to the desert to settle in the town itself or in the rural villages under its control, such as Tell el-Bireh, Tell es-Sukhne North and Khirbet er-Ruseifeh, thus shifting from a semi-nomadic to a sedentary life style [19]. When the two processes —synecism and catalysis— reached their apex during Early Bronze II, the birth of the fortified town of Khirbet al-Batrawy was definitely accomplished, and the new born city apparently extended its territorial control over the whole Upper Wadi az-Zarqa from Amman to Tell el-Bireh (**fig. 2**).

Controlling the landscape: a ford, a crossroad and a gate towards the Jordan Valley

Wadi az-Zarqa is the second main tributary of the Jordan River, and the easternmost permanent river at western border of the Syro-Arabian Desert, in direct connection with the major wadis of the Black Basalt Desert of southern Syria and northern Jordan. The location of the EB II-III town of Khirbet al-

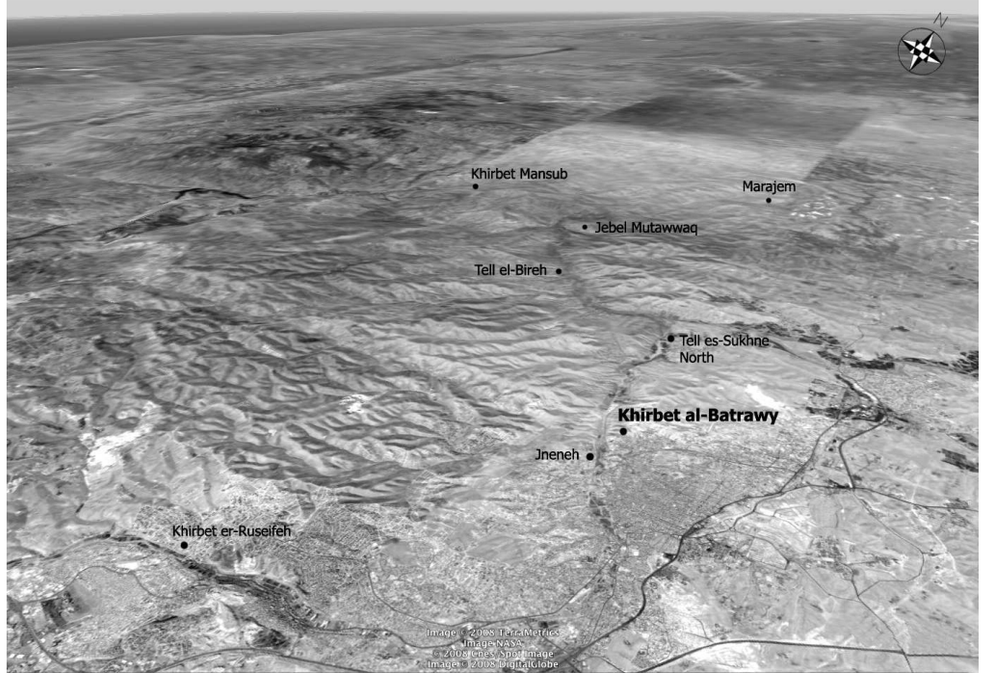

Figure 2. The ancient territory under Batrawy control within the westwards turn of the Zarqa River.

19. Nigro 2009a, p. 664-665.

Figure 3. The site of Khirbet al-Batrawy on the eastern side of the Upper Wadi az-Zarqa Valley, from north-east.

Batrawy was highly strategic: erected on top of a hill dominating the upper course of the Wadi az-Zarqa (**fig. 3**), Batrawy at the same time controlled the ford through the river and the shortcut crossing the hills and connecting directly the Upper Wadi az-Zarqa with the Jordan Valley. Towards the east, Batrawy looked over the tracks arriving from south-east, east and north-east (from al-Qihati and al-Azraq), being the arrival in a valley with a perennial river (the easternmost at the border of the Syro-Arabian Desert) of the east-west routes crossing the desert; in other words, a gate controlling the access not only to the Wadi az-Zarqa, but to the Jordan Valley itself (**fig. 4**). The role of crossroad and gate was strongly linked to two specificities of the Batrawy early urban model: the strict relationships with semi-nomadic people living between the desert and the steppe, and its inclusion within the network of long-distance trade which several finds seem to indicate [20].

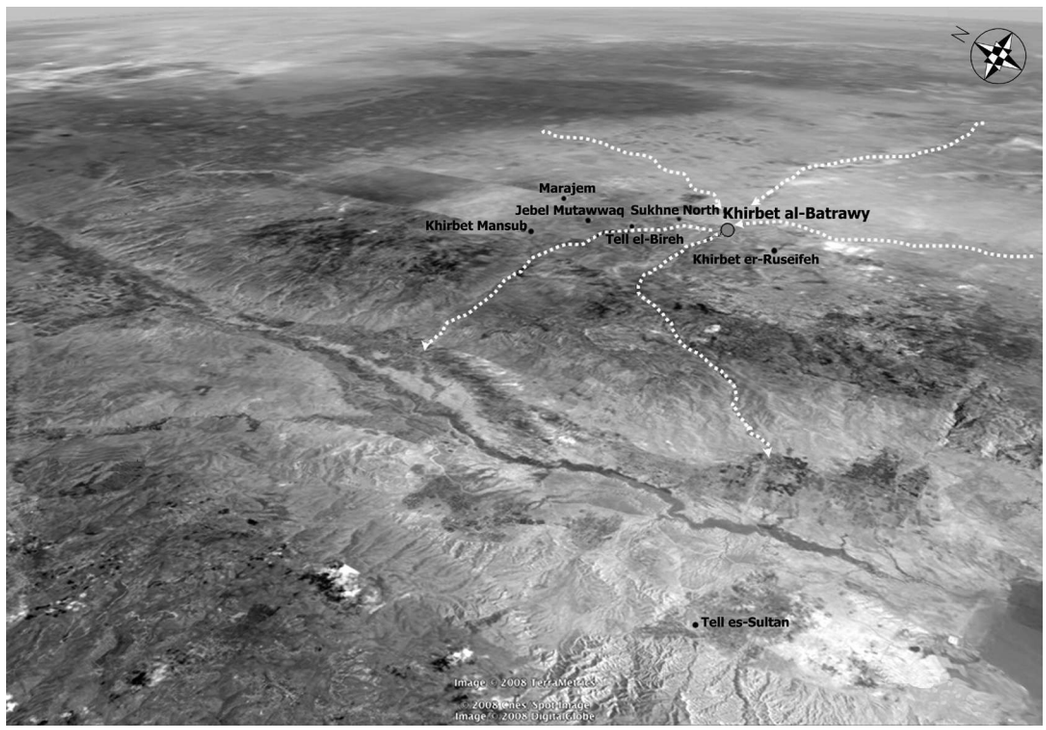

Figure 4. Early Bronze Age tracks across the ancient Near East, enlightening the crucial position of Khirbet al-Batrawy at the crossroad of the ancient network.

20. Nigro 2009a, p. 660-662.

On the top of a hill: topography and defensive vocation

The topography of the hill of Batrawy was particularly favourable to defensive purposes, and altogether functional to territorial control due to its dominant position in respect of the underlying valley. The khirbet has a roughly triangular shape, with the base along its western side, where it looks towards the Wadi az-Zarqa (**fig. 3**). Steep rocky cliffs protected it all around its perimeter, except at the mid of the northern side, where a shallow saddle connected it to a facing hill [21]. With the foundation of the town in Early Bronze II, natural defences were reinforced and completed by a massive fortification system, which transformed the hill in an almost unassailable citadel.

Building the city-wall: fortifications making the city in the Early Bronze II

The construction of the city-wall was apparently the major enterprise carried out by the Batrawy community definitely stating the urban status of the settlement and the inner hierarchy of the social group achieving such a complex task. An articulated fortification was built all around the edge of the hill by exploiting any cliff and spur during Early Bronze II, around 2900 BC. The main defensive work was a solid stone and mud-brick wall, from which at irregular intervals bastions and towers projected [22]. This structure was repaired several times and occurred at least two major reconstructions in the Early Bronze IIIA and Early Bronze IIIB, with the addition of an outer wall and a further scarp-wall.

Territorial control and centralized agriculture production

Together with the city of Batrawy only a few sites were occupied in the EB II-III along the river. They were huge rural villages, such as Tell el-Bireh, Tell es-Sukhne North, and Khirbet er-Ruseifeh [23], all of them showing a material cultural virtually identical to that of Batrawy. Such rural villages produced amounts of grain, barley and horticultural products, which were piled up in the city storerooms. Olive tree cultivation, which reached its peak in EB III, was instead implanted in the hilly area west of the Zarqa River, where sites like Masarrat hosted the farms [24], which supplied the city with olive oil (as it is indicated by metallic pattern combed jars).

The earliest Batrawy II (Early Bronze II) city-wall and main city-gate in Area B

The main fortification erected in EB II (2900-2700 BC) was a solid stone and mud-brick wall (2.8-3.2 m wide), from which at irregular intervals bastions and towers projected, exploiting natural cliffs and spurs (the overall layout of the fortifications was surveyed all around the entire site [25]). The city-wall was erected over a massive foundation made of huge limestone blocks and boulders (some exceeding 1.5 m in length), carefully set into the bedrock, with a battering outer foot making it firmer [26]. The proper stone basement was 1.5-2 m high, and, as like as the mudbrick superstructure, was built in separated stretches of 6-8 m length, according to a technique already known from many EBA fortified sites in Palestine

21. Nigro 2006a, p. 233-235, fig. 1; Nigro éd. 2006, p. 16-22.
22. Nigro éd. 2006, p. 175-177.
23. Nigro éd. 2006, p. 4-8; Sala 2008a, p. 363-370.
24. Sala 2008a, p. 373-374.
25. Nigro 2006a, p. 235-236; Nigro éd. 2006, p. 25-37.
26. Nigro éd. 2006, p. 175-176, fig. 4.32.

and Transjordan [27], in order to prevent dangerous effects of earthquakes [28].

In spite of the monumentality of the city-wall, the gate was a simple opening, 1.6 m wide (**fig. 5**), since the town was approachable only by pedestrians and possibly donkeys (onagers) through a street (**fig. 6**) which flanked the wall [29]. The outer jambs of the gate were reinforced with big blocks, and a step marked the entrance itself. The gate capstone was a monolith on the outer side and a wooden beam on the inner side of the passage. There is no evidence for the presence of towers adjoined to this early gate, even though the area was completely reconstructed when the gate was blocked at the beginning of the Early Bronze IIIA [30]. Two earthquake cracks on both jambs witness to the event which caused the collapse of the capstone and the end of use of the gate itself [31]. The simple layout of the gate, nonetheless, finds several comparison in contemporary EB II defensive architecture of the region, such as at Khirbet Kerak [32], et-Tell/'Ai [33],

Figure 5. Khirbet al-Batrawy: EB II (3000-2700 BC) city-gate L.160, from north-east; note the step marking the entrance, the plastered floor over the bedrock inside the passage and the battering boulders at the foot of the city-wall.

Figure 6. Khirbet al-Batrawy: EB II (3000-2700 BC) street L.144 running outside the EB II Main City-Wall, from east.

27. Such as at Tell el-Mutesellim (Loud 1948, p. 66, fig. 152-154, 391), Tell Ta'annek (Lapp 1969, p. 9, fig. 2), Khirbet Kerak (Maisler, Stekelis & Avi-Yonah 1952, p. 170-172, pl. 9), et-Tell (Callaway 1980, p. 113-114, fig. 75, 85), Tell es-Sultan (Kenyon 1957, p. 174-175, pl. 36; 1981, p. 100, 213, 262, 374, pl. 83a, 201; Nigro 2006b, p. 370-371), Bab edh-Dhra' (Rast & Schaub 2003, p. 280-283) and Numeira (Rast & Schaub 1980, p. 42, fig. 15).

28. Nigro 2009a, p. 663-664; Nigro éd. 2006, p. 175-177; 2008, p. 77-82.

29. Nigro 2007, p. 349-352; 2009a, p. 663-664; Nigro éd. 2008, p. 83-88.

30. Nigro 2007, p. 349-350, fig. 8; Nigro éd. 2008, p. 89-90, fig. 3.38, 3.40.

31. Nigro éd. 2008, p. 87, fig. 3.37.

32. The south-east gate in Wall A, possibly also blocked at the beginning of the Early Bronze III (Greenberg & Paz 2005, p. 84, 86-89, fig. 8, 10-14; Greenberg *et al.* 2006, p. 239-244, pl. 6.2, 6.4.

33. The Citadel Gate at Site A (Callaway 1980,p. 63-65, figs. 38, 41); the Postern Gate (Callaway 1980, p. 72-73, fig. 48-49, 51) and the Lower City Gate (Callaway 1980, p. 114-115, fig. 74-75) at Site L.

Arad [34], Khirbet ez-Zeraqon [35], and, later on in EB III, also at Bab edh-Dhra‘ [36]. Some meters east of the gate, in the lower stone courses of the wall itself, there was a block pierced to bind animals (**fig. 7**). It has to be stressed that faunal remains from Batrawy show a strikingly notable presence of donkeys [37], to be explained as transport animals. One can imagine to see a caravan of donkeys waiting there to be downloaded.

Figure 7. Khirbet al-Batrawy: the pierced block interpreted as an animal lock, set in the lower course of the outer face of the EB II (3000-2700 BC) Main City-Wall, from east.

Socio-economic implications of the earliest city-wall

The overall length of the city-wall, its width and elevation, allowed to approximately calculate the volume of stones and mud-bricks necessary for its construction and to infer the number of worker involved in its erection in a hypothetical time span of one season (summer/4 months). At least 400 workers took part into the building of the earliest Batrawy defence, which were able to extract and move more than 11,000 tons of limestone blocks, and to produce around 1 million mud-bricks (with an enormous employ of water for mud-mortar). This work was a tremendous enterprise for a community of no more than 2,000 people, in which surely non-urban groups were involved, with the aid of specialized workers and animals. The complexity of the work, and food supplies for workers, as well as raw materials (straw, wood, clay, *huwwara* were largely employed), do imply the existence of a central ruling institution, which planned and executed the construction of the city-wall. Some structural details, such as the partition in between the various stretches of the wall, the regular displacement of block of similar size at the same elevation, the cutting of regular squared blocks testify to the strong central direction of the authority responsible for the work, and are an indirect proof of an established social hierarchy.

This, however, does not necessarily mean that the city-walls were mainly erected to show with their skyline dominating on the surrounding landscape (and road-network) the power of this ruling institution, and to identify the city as the emerging social institution ruling over the whole valley. This, of course, was one of the basic outcomes of their erection, but perhaps their major social impact was not the ideological, but the economic one, implying a long and continuous involvement of a large part of the district population

34. The Western Gate in Area T, the Gate in Area N, and the Postern Gate in Area K: Amiran & Ilan 1996, p. 20-22, pl. 68-70, 78, 85-86, 90-93.

35. The City-Gate in the Lower City fortifications (Douglas 2007, p. 9, fig. 3, 6-12, pl. 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, p. 10). According to excavators, it was closed after a little while already during the Early Bronze II (Douglas 2007, p. 14; phase 4d).

36. The EB III West Gate in Fields IV and XIII, also blocked during the Early Bronze III (Rast & Schaub 2003, p. 272-280).

37. Alhaique 2008.

into their erection. Moreover, they testify to the urgency of a protection for the material and symbolic values accumulated by the agricultural communities of Upper Wadi az-Zarqa into the new town.

The sudden and dramatic end of the EB II town: earthquake in Jordan

The EB II gate and the whole city were badly damaged by a strong earthquake which brought to a sudden end the earliest city [38], as it was the case of other centres of the North-central Jordan Valley: Pella/Tell el-Husn, Tell Abu Kharaz and Tell es-Saʿidiyeh, which were apparently destroyed in the same period and by a similar agency [39].

Two earthquake cracks on both jambs caused the collapse of the gate capstone (the same event was evident in the Broad-Room Temple of Area F), while the greyish mud-bricks of the city-wall superstructure were split over the stone foundations and left a thick layer of ashy dump all around the defences, especially visible on the southern side of the khirbet [40].

Figure 8. Khirbet al-Batrawy: general view of restored EB II-III Broad-Room Temple in Area F, from west.

At the hearth of the city: the Broad-Room Temple in the Early Bronze II

If the main act stating the urban status of Batrawy was the erection of the city-wall, this wall encircled an area where at least a major building was present, i.e. a 12.5 m long by 2.7 m wide Broad-Room Temple (**fig. 8**), delimited by a 1.2 m-wide wall, with the entrance located at two thirds of its length, and a niche inside the rear-wall facing the entrance [41], which is fully coherent with the Chalcolithic and EBA tradition of religious architecture [42]. In the court, facing the temple, there was a round platform (S.510), 0.35 m high, erected around an emergence of the bedrock, with a diameter of 2.5 m, a cult installation that was a typical one in Early Bronze II-III Levantine sacred areas [43]. In the centre of the platform, there was a slab with a small circular hollow in the middle, similar to those visible on the steps of the Round Altar 4017 at Megiddo [44].

38. Nigro 2007, p. 349, 352; 2009a, p. 666-667; Nigro éd. 2008, p. 87, fig. 3.37.

39. Bourke 2000, p. 233-235 ; Fischer 2008, p. 31, 34, 71, 181, 383-385. Such a conflagration apparently caused by an earthquake is attested to also at Megiddo (Finkelstein, Ussishkin & Peersmann 2006, p. 49-50), ʻAi (Callaway 1980, p. 147; 1993, p. 42), Jericho/Tell es-Sultan (Kenyon 1957, p. 175-176, pl. 37a; 1981, p. 373; pl. 200-201, 343a; Nigro 2006b, p. 359-361, 372-373, 2010b, p. 326-327), and Khirbet Kerak (Greenberg *et al.* 2006, p, 247).

40. Nigro éd. 2008, p. 250, 255.

41. Nigro 2009a, p. 665-666; Nigro & Sala 2009, p. 377, 380-381; Nigro éd. 2008, p. 276-284.

42. Sala 2008b.

43. See for instance: Altar 4017 at Tell el-Mutesellim/Megiddo (Loud 1948, p. 70, 73-76, fig. 164-165; Sala 2008b, p. 214-219); circular platform i0.1 in the sacred area of Khirbet ez-Zeraqon (Genz 2002, p. 94-96, fig. 2; Sala 2008b, p. 243-244), and the semicircular platform (*locus* 13) in Field XII at Bab edh-Dhraʻ (Rast & Schaub 2003, p. 321-332; Sala 2008b, p. 288).

44. Finkelstein & Ussishkin 2000, p. 71, fig. 3.50.

The Temple was erected on the easternmost terrace of the site, in a very panoramic spot overlooking the tracks to/from the east [45]. Its dominant position and its monumental architecture acted as a major reference point in the landscape of the underlying valley.

Figure 9. Khirbet al-Batrawy: EB IIIA (2700-2500 BC) Outer Wall W.155 and Curvilinear Outwork W.185, in front of EB II city-gate L.160, from east.

The EB IIIA reconfiguration of the fortification system: the growth of the city

The violent destruction which interrupted the life of Batrawy at the end of Early Bronze II was immediately followed by an overall reconstruction of the site defences [46], which marks the passage to the Early Bronze III, the period which witnessed the major flourishing of the town.

The main inner city-wall was reconstructed in elevation using stones instead of mud-bricks (previously separated wall sectors were joint at the varying elevation 1 to 2 m) [47], apparently with mudbrick as a wooden coronation, up to a height of around 6 m. The EB II gate was blocked [48], and a new one was opened presumably further to the west, still approached by the street [49] now running in between the inner city-wall and the newly added outer wall W.155, a 1.6 m wide massive wall erected around 1.5 m off of the main wall, thus doubling the line of fortification, which had an outer battering face made up of polygonal boulders and an inner face made of medium size stones regularly displaced, with a filling of stones and limestone chops [50]. Moreover, a Curvilinear Outwork (with a diameter of around 12 m; W.185) protruded from the Outer Wall just in front of the blocked gate (**fig. 9**), similar to those known from coeval Khirbet Kerak [51].

The EB IIIA destruction: structural crisis and the biunique relationship between urbanism and war

As far as excavated contexts may illustrate, EB IIIA (2700-2500 BC) was a flourishing period for the city of Batrawy: the Broad-Room Temple was reconstructed according to a new architectural and religious conception, the city defenses were rebuilt in a very monumental fashion, and material culture exhibits variety and richness. However, also the EB IIIA town underwent a dramatic destruction, which testifies to the structural character of crisis of Southern Levantine Early Bronze Age "urban culture". A

45. The location of the temple quarter on the easternmost terrace is also known in the contemporary site of Labwe in southern Syria, where a couple of monumental buildings has been identified (Al-Maqdissi & Braemer 2006, p. 121-122, fig. 3, 10-11).

46. Nigro 2007, p. 349-351; Nigro éd. 2008, p. 89-99.

47. The original stretches in which the wall was subdivided (Nigro éd. 2006, p. 176-177) were linked one to the other (and this indicates in several spots the height upon which the wall was reconstructed).

48. Nigro 2007, p. 349-350, fig. 8; Nigro éd. 2008, p. 89-90, fig. 3.38, 3.40.

49. The street running along the city-wall became a corridor in between the outer (W.155) and the main city-wall (W.103) leading to a new gate located further west; its floor (L.144; Nigro éd. 2006, p. 191, fig. 4.53-4.54) was re-plastered and was in use until a new violent destruction.

50. Nigro 2007, p. 349-351; Nigro éd. 2008, p. 92-99.

51. Greenberg & Paz 2005, fig. 84, 94-96.

certain degree of political turbulence was provoked by goods centralization, especially in centres like Batrawy located at the border between different (sometimes antagonist) social groups/landscapes. Such an observation, i.e. the occurrence of violent destructions during the Early Bronze III [52], as well as the progressive enlargement of the EB III defensive systems, which is repeated in other contemporary urban sites [53], suggest that urbanism was in some way linked to war, as a more direct mean to obtain territorial control and to gather goods, which had been concentrated within the walls of a town [54].

EB IIIB reconstruction: multiple fortifications and Building B1

After the violent destruction which marked the end of the EB IIIA town, the fortifications were rebuilt and strengthened, with the addition of a scarp-wall (W.165) to the Outer Wall, which brought up to 15 m the overall width of the defensive works in Area B (**fig. 10**) [55]. A new street was paved by razing the collapse layer in between Main City-Wall and Outer Wall W.155. The Main City-Wall was also reconstructed in its upper section in several spots [56], and on the inner side of the Main City-Wall, a couple of staircases were built in an inset of the structure. The two symmetric flights of steps (or supports for wooden posts) allow to calculate the wall height around 6-7 m (**fig. 11**).

Figure 10. Khirbet al-Batrawy: the EB IIIB (2500-2300 BC) triple line of fortifications, from west: to the left, EB IIIB Scarp-Wall W.165 with protruding wall W.177; in the middle, EB IIIA-B Outer Wall W.155, gradually turning northwards; to the right, the EB II-III Main City-Wall.

The Scarp-Wall obliterated the Curvilinear Outwork, ending against the face of the Outer Wall with a Round Bastion (W.825; **fig. 12**). Moreover a transversal wall (W.177), protruding from the fortification line northwards, suggests that the EB III gate was further to the west.

52. Seger 1989, p. 117-119. A series of destructions may be attributed to the end of Early Bronze IIIA: a 3.5 m deep layer of ash marks the end of the EB II-IIIA occupation at Tell el-Khuweilfeh (stratum XV; Seger 1989, p. 125); similarly, at Tel el-Hesi the end of EB IIIA occupation (phase 4b) was marked by heavy deposits of ash and mixed debris (Seger 1989, p. 127-129); at ʻAi signs of destruction were detected in the EB IIIA fortification walls (Callaway 1993, p. 43); and at Jericho/Tell es-Sultan the EB IIIA city came at a sudden end, being drastically destroyed around 2500 BC (it is not clear if again an earthquake was the cause of such destruction, or it was due to a military attack, since at some spots fierce fire is documented; Nigro 2000, p. 16-17; 2006c, p. 18, fig. 24).

53. Nigro 2009a, p. 667-668. The emblematic cases of ʻAi (Callaway 1980, p. 147-158, 185-189), Tell Taʻannek (Lapp 1969, p. 9-14) and Khirbet Yarmouk (Miroschedji 1990), just to mention a few better known instances.

54. Nigro 2009b.

55. Such a battering wall W.165 was constructed with irregular boulders leaning on a rubble filling lying against the northern face of the Outer Wall W.155 (Nigro éd. 2008, p. 100-102).

56. Nigro & Sala 2009, p. 374-375; Nigro éd. 2008, p. 100-101.

EB IIIB Buildings in Area B South

Inside the Main City-Wall, in Area B South, a dwelling quarter with houses and buildings dating back from EB IIIB was excavated (**fig. 13**). To the east, a rectangular domestic unit (House B2) was brought to light (**fig. 14**), with a circular pillar base in the middle and the entrance opened in the western side, to which a semicircular device was also adjoined (inside this device a fragmentary copper spike was retrieved). Such a house, thus, communicated with the small yard, where a big oven (T.413) with a corbelled vault was built, protruding from the eastern side of Building B1 [57], presumably devoted to extra-familiar food production (**fig. 15**). The latter consisted of two rectangular rooms and a staircase leading to an upper storey [58]. Ceramic finds from the building include jars and painted jugs and bowls, and the so-called stoppers, perhaps to be considered counter units (of a proto-bureaucratic —illiterate— system). West of Building B1 a lane (L.1050) was uncovered connecting it to another large structure, of which only the northern and western side-walls were brought to light, called Building B3. Inside this building (B3), aligned along its northern wall, a row of *pithoi* was found *in situ*, still completely preserved in the 1 m thick collapse layer

Figure 11. Khirbet al-Batrawy: general view of the row of EB IIIB (2500-2300 BC) buildings and street L.1060 parallel to the EB II-III Main City-Wall, from west; note the two facing staircases (W.181 and W.1067) in the inner side of the Main City-Wall.

Figure 12. Khirbet al-Batrawy: EB IIIB (2500-2300 BC) protruding wall W.177 and Scarp-Wall W.165, ending against the outer face of the of EB IIIA-B Outer Wall W.155 with semicircular Bastion W.825, from north-west.

57. Nigro 2007, p. 352-353, fig. 14; Nigro éd. 2008, p. 148-162.
58. Nigro & Sala 2010, p. § 5.3.

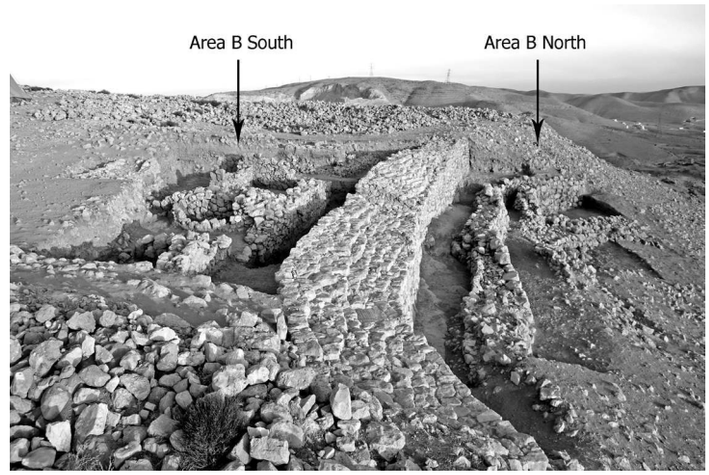

Figure 13. Khirbet al-Batrawy: general view of the EB II-III lines of fortifications (Area B North); in the left background, the EB IIIB (2500-2300 BC) quarter of dwellings and public buildings erected inside the EB II-III Main City-Wall (Area B South), from east.

Figure 14. Khirbet al-Batrawy: EB IIIB (2500-2300 BC) House B2, from south-west.

Figure 15. Khirbet al-Batrawy: EB IIIB (2500-2300 BC) Building B1 (to the right) and passage L.1050 (to the left), from south-west.

(**fig. 16**). It seems plausible that Building B1 and Building B3, which show the same building technique markedly different from that of House B2, were actually pavilions of a unique building, i.e. a palace[59]. Further excavations are, however, needed to confirm this hypothesis.

Figure 16. Khirbet al-Batrawy: EB IIIB (2500-2300 BC) *pithoi* retrieved in Building B3, west of passage L.1050.

EB III B economic flourishing

The massive fortification works as well as public buildings and finds from various areas in the site testify to the flourishing of Batrawy during the EB III. A preliminary study of material culture also provides interesting insights into the organization of the Batrawy economy. EB IIIB (2500-2300 BC) material horizon shows a strong standardization of ceramic productions both in terms of shapes, fabric and functions, but also a raise in number and variety of pattern-combed and other metallic wares, pointing to an increased income of agricultural and husbandry products (mainly olive oil, goat fat, lentils, beans, and other stuff) from farms in the Batrawy countryside. Also specialized wares (red-burnished or polished wares) become more widespread, indicating a horizontal diffusion of items, which initially had a more limited (and socially symbolic) distribution.

As regards the inner organization of the Batrawy subsistence system, an exemplary case study is that of Pattern-combed Ware storage containers; a few of these pattern-combed storage jars belong to a Metallic Ware production of a high fired quite depurated fabric. The comparison of pattern-combed fragments found at the site with those from the survey in the Upper Wadi az-Zarqa demonstrated that the vast majority of Metallic and Pattern-combed jars found in Batrawy came from the countryside, especially from the hilly area west of the Zarqa River, where olive tree was largely cultivated, thus suggesting that these storage vessels contained olive oil and were sent to Batrawy from the surrounding farms (under the central site administration?). Moreover, the large amount of pattern-combed jars, in a figure of almost 30% of Preservation Ware, possibly suggest that olive oil, usually stored and shipped in this kind of containers, was not mainly locally produced but was received from the district to the north and the west.

Moreover, faunal remains, from the one hand, demonstrate an integrated diet, a variety of tamed animals being part of the life of the inhabitants, from the other hand, show a large percentage of Equids[60], surely the main mean of transportation at the time, thus confirming the role of the town as caravans station. In fact, the retrieval of foreign imports, such as sea-shells and mother of pearl from both the Mediterranean and the Red Sea, carnelian, obsidian, and copper fragments (from the Arabah/ Wadi Feinan) [61], as well as stone balance weights for metals, shed rays of light on the economic links and exchanges focusing on the site through an extended network of tracks crossing the desert and the steppe.

The EB III Broad-Room Temple

Also the Broad-Room Temple was reconstructed at the beginning of EB III, emboldening its façade wall, reconstructing the entrance, and re-orienting the religious focus by moving the cult niche on the western short side of the *cella* [62]. A raised platform with two betyls in front of it preceded the niche.

59. This hypothesis has been, in fact, confirmed by excavations of season 2010, the results of which preliminarily illustrated in Nigro 2010.

60. Alhaique 2008.

61. Wadi Feinan was the main source of copper in Jordan during the Early Bronze Age: Levy & Garrett 2007, p. 83-88.

62. Nigro & Sala 2009, p. 381-383; Nigro éd. 2008, p. 285-293.

This change is the same exhibited by the nearest parallel to this sacred building, i.e. the temple of Bab edh-Dhra‘ in the Ghôr [63]. Both belong to a deeply rooted tradition of sacred architecture of Southern Levant, the most eminent representative of which is the Temple of et-Tell/‘Ai in Palestine [64] (**fig. 17**). In the forecourt, the circular platform was repaired and remained in use. In 2008 and 2009 the temple was restored according to its later reconstruction (**fig. 8**).

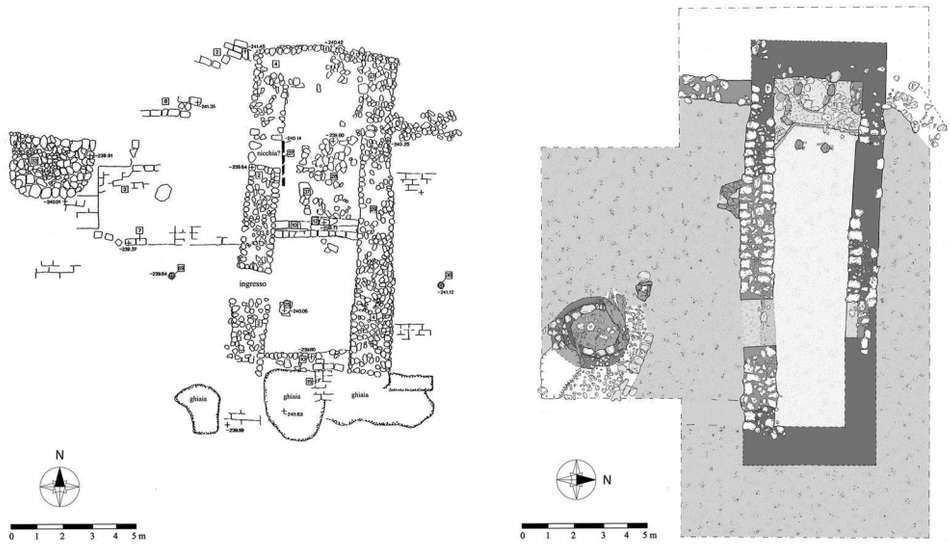

Figure 17. Plans of the EB III temples and related installations at Bab edh-Dhra‘ (to the left; after Rast & Schaub 2003, fig. 10.57) and Khirbet al-Batrawy (to the right).

The final destruction of Batrawy

The reinforced fortifications of EB IIIB did not prevent Khirbet al-Batrawy from its last dramatic destruction, which occurred around the end of the 24th c. BC. The town was set on fire, and the relics of such a dramatic event were clearly visible on structures, finds and in stratigraphy [65]. There is no evidence available for investigating who was the responsible for such a dramatic destruction, even if a natural event apparently has to be ruled out; the attack from a foreign enemy seems a possible explanation, which should also imply the deportation of the population, since the site was deserted. The khirbet remained, in fact, abandoned and was resettled only after a certain while by sparse EB IVB (2200-2000 BC) dwellings at the end of the 3rd millennium BC.

63. Rast & Schaub 2003, p. 157-166, 321-335, fig. 8.2, 10.57.
64. Sala 2008b, p. 125-139, 250-257.
65. Nigro éd. 2008, p. 18, 69, 141.

Conclusions

Five seasons (2005-2009) at Khirbet al-Batrawy confirmed that this site was the major EBA centre of the Upper Wadi az-Zarqa, occupied by a fortified city in the EB II-III (2900-2300 BC) and re-occupied by a rural village in the EB IVB (2200-2000 BC), with almost no successive superimpositions [66]. The presence of a temple within the fortified town strengthens the interpretation of this site as an EBA Southern Levantine city.

As the regional survey demonstrated [67], at the beginning of Early Bronze II the Zarqa district witnessed a synecistic process which led Batrawy to become a major fortified town at crossroad of Early Bronze Age main tracks of Southern Levant. Territorial control at a crucial crossroad of the trade network, as indicated by several finds, was, thus, a specificity of the Batrawy early urban experience. Nonetheless, further and deeper investigation is needed to clarify the city plan and history, as well as, to

66. Nigro éd. 2006, p. 37-40.
67. Nigro, Sala & Polcaro 2008, p. 214-220; Sala 2008a.