Prof. Lorenzo Nigro Sapienza University of Rome lorenzo.nigro@uniroma1.it

Mr. Roumel Gharib Department of Antiquities of Jordan besan\_g@yahoo.com Lorenzo Nigro and Roumel Gharib

The Iron Age IIB-C Ammonite Strongholds of Jam'ān and Rujm al-Jāmūs, North-Central Jordan

#### Introduction

In the last decades an unprecedented urban development in the districts of 'Ammān, as-Salţ, al-Balqā', and az-Zarqā' has deeply impacted archaeological sites, many of which lay beneath modern buildings. Most recent surveys and excavations-mainly focused on small prehistoric sites, dolmens, cairns, and other multi-period installations for the sake of their preservation and recording their correct location on official maps—achieved the highly commendable task of saving invaluable information and produced fresh archaeological data now incorporated into the MEGA-Jordan database (www.megajordan.org).

In 2015–2017, the Department of Antiquities of Jordan (DoA) carried out rescue interventions and salvage excavations at the Iron Age IIB–C sites of Jam'ān and Rujm al-Jāmūs, in the area of the Governorate of Zarqa, under the direction of Mr. Roumel Gharib, and with

the participation of the surveyor Taufik al-Huniti. Two seasons of excavations took place at Jam'ān in 2015 and 2016, and at the end of the rescue archaeological work the main feature of the site, a monumental square tower, was dismantled and rebuilt on the nearby site of Khirbat Zūbyā by the DoA Zarqa Directorate (Nigro and Gharib 2016). In spring 2017, a salvage intervention at the site of Rujm al-Jāmūs was then conducted, and in the following year the state-owned portion of the archaeological area was encircled by an iron fence.

A small team from La Sapienza University of Rome together with personnel of the DoA office of Zarqa studied the architecture and finds (basically pottery and small finds). The two sites have been mapped, carefully surveyed, thoroughly explored, and all related materials have been analyzed with the aim of reconstructing the stratigraphy and architecture of these monuments. Jordanian and Italian

personnel worked as a team, and this preliminary report is the fruit of their joint work.

## **Geographical Setting**

The site of Jam'ān (32° 05'26.33" N, 35° 57'41.54" E) is located in the subdistrict of Bīrīn, part of the Governorate of Zarqa in the Hashemite Kingdom of Jordan, about 16 km north of 'Ammān. The site lies 0.72 km south of the ancient ruins of Khirbat Zūbyā and 0.5 km east of the village and small tall of Bīrīn (modern dialect corruption of Bīrīn, "the two cisterns", which is actually a distinguishing feature of Jam'ān), just south of the main road running from Wādī Shūmar, a left (western) tributary of the Zarqa River, over the pass into Wādī al-Faṭāyir, and in the underlying Sahl al-

Buqayʻah. In antiquity, Wādī Shūmar was a useful shortcut directly connecting the ford across the Zarqa by Junaynah (Sala 2008: 366–7) and al-Batrāwī with the Pass of Bīrīn, 10 km to the east. Jamʻān lays exactly along the pass (elevation 825 m above the sea level) at a clear bend in the ancient road, which leads to the site of Umm ar-Rummānah, 3 km to the west.

The site of Rujm al-Jāmūs (32° 07'53.21" N, 36° 02'45.06" E) is located in the same region of the Upper Wādī az-Zarqā' Valley, immediately west of the site of Jabal ar-Ruḥayl and 5 km to the south-west of Tall al-Bīrah (Sala 2008: 369–71). Rujm al-Jāmūs also lays in a particularly favorable position, exactly along a wide bend of the Zarqa River where a pass dominated the access to the Upper Wādī az-Zarqā' Valley and connected



 Map of the southern Levant with major sites of the Iron Age II period and the strongholds of Jam'ān and Rujm al-Jāmūs in the Ammon territory. the latter with the Wādī aḍ-Ḍulayl.

Both passes, overlooked from the fortresses of Jamʿān and Rujm al-Jāmūs, allowed fast and direct access to the southern Jordan Valley and a firm control over the western and southern borders of the Ammonite Kingdom (Fig. 1).

# Historical Setting: The Borders of the Ammonite Kingdom

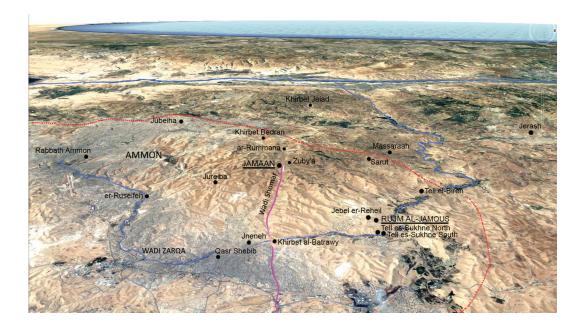
During the Iron Age II (960–586 BC; Nigro 2014), Upper and Middle Wādī az-Zarqā' (Biblical Jabbok) and its tributaries were the core of the Kingdom of Ammon, known in Neo-Assyrian texts as Bît-Ammani, whose king Ba'asa took part in the coalition of forces gathered by the king of Soba/Damascus against the invading Neo-Assyrian army at the battle of Qarqar on the Orontes in 853 BC (Lawson Younger 2003).

The earliest document on the Ammonite Kingdom was found in Jabal al-Qal'ah, i.e., the 'Amman Citadel (Horn 1969; Albright 1970), ancient Rabbath Ammon (2 Sam. 12:26, 29). The list of kings of Ammon is known from a series of inscriptions (Puech 1985; Aufrecht 1989; Kletter 1991: n. 12; Stern 2001: 238-40) and statues (Bienkowski 1991: 38-51; Zayadine 1991), from the second half of the 8th c. BC (Nigro and Gharib 2016: table 1), when Ammonite kings Šanibu paid tribute to Tiglath-pileser III (744–727 BC), Zakir and his son Yerahazar to Sargon II (721-705 BC), Puduilu to Sennacherib (704–681 BC) and Esarhaddon (680-669 BC), and 'Amminadab I to Ashurbanipal (668-631 BC), who also campaigned in the country during his war against the Arabs. Ammon remained a vassal kingdom of Assyria also during the reigns of Ashurbanipal's successors between ca. 630 and 610 BC, with the king Hissal'el, and successively Ammi-nadab II, both known from the inscription on the Tall as-Sīrān bottle (Thompson and Zayadine 1974; Bienkowski 1991: 141). With the definitive Assyrian defeat at Harran in 610

BC, and after the accession to the throne of Nebuchadnezzar II (604–562 BC), Ammon also fell under Neo-Babylonian sovereignty (Lipschits 2004: 43–6). The dynasty of 'Ammi-nadab I apparently held power, with his grandson 'Ammi-nadab II, who reigned between *ca.* 610–590 BC, and his successors Ḥanan'el and Ba'alys, who were possibly contemporaries of Gedaliah of Judah (van der Veen 2007; Burnett 2016b: 320).

During this long period, Jam'ān and Rujm al-Jāmūs were part of the defensive strongholds of the Ammonite Kingdom. Towards the mid-6<sup>th</sup> c. BC, the fortresses were destroyed and their towers abandoned, likely when the Persians replaced the Babylonians as rulers over the country, transforming Ammon into a province of their empire (Stern 2001: 369).

During the Iron Age IIB-C (ca. 840-586 BC), which is the approximate date indicated by ceramic finds at Jam'an and Rujm al-Jāmūs, the area of the Upper Wādī az-Zarqā' was under the control of the king of Ammon, ruling from the capital city of Rabbath Ammon, identified with Jabal al-Qal'ah, the Citadel of present-day 'Ammān (Zayadine et al. 1989; Mansour 2002). The "House of Ammon" was protected by means of forts and strongholds erected by crossroads or on hilltops overlooking vast portions of territory, as well as in strategic geomorphological locations like passes and fords, especially on its western and southern boundaries (Gese 1958: 57, 63; Kletter 1991: 43-4 fig. 10; Hübner 1992: 141-50; Stern 2001: 246–7). The orographic step dividing the district within the bend of the Zarga River, from the valleys of as-Salt and al-Balqa and the mountain range between them and the Jordan, became a natural boundary in antiquity. This boundary was marked by multiple lines (a network or chain) of fortresses and strongholds located in the al-Buqay'ah itself and on the most prominent positions over the highest hill range west of the Zarqa River. A line of fortresses and



2. View of the territory of Kingdom of Ammon with the strategic location of the sites of Jam'ān and Rujm al-Jāmūs.

towers NNW of 'Ammān (Glueck 1939: 246–7) has been interpreted as the western border of the Iron Age IIB–C (840–586 BC) Kingdom of Ammon. The innermost line, in respect to Rabbath Ammon, runs NNE from Khaldā to al-Jubayhah, Khirbat Badrān, continuing further north up to the definitive bend westwards of the Zarqa River. Here it seems plausible that the northern border of Ammon on the Zarqa River was protected by a major fortress on the site of Tall al-Bīrah, which lies 5 km north-east of Rujm al-Jāmūs and 9.5 km north of Jam'ān (Fig. 2).

The network of fortresses surrounding 'Ammān, in which Jam'ān and Rujm al-Jāmūs were included, has been regarded as the north-western border of Ammon during the times of the confrontation with the Israelites (Gese 1958: 57; Fohrer 1961: 66; Landes 1961: 73; Graf-Revcmlow 1963: 136–7), or more convincingly, as the *limes* of the Neo-Assyrian vassal state of *Bît-Ammani* (Kletter 1991: 42–4; Lipschits 2004: 41). This second interpretation appears to be

corroborated by finds at these sites.

## The Strongholds of Jam'ān and Rujm al-Jāmūs

Scholars traditionally labeled a series of monumental structures made of large limestone boulders punctuating the region south, west, and north of 'Ammān as "Ammonite fortresses".¹ These structures exhibit different features (Glueck 1939: 155), some of them being square (qaṣrs) and other round (rujm), and they often have diverse chronologies.²

<sup>&</sup>lt;sup>1</sup>These structures are also called "Malfūf buildings", like "cabbage towers" (Kletter 1991; see also MacDonald 1999: 41–2).

<sup>&</sup>lt;sup>2</sup> Actually, the date of such watchtowers varies considerably from the Iron Age to the Ottoman period, with many possible reuses (Najjar 1999: 103–4). The fortresses that were likely in use during the Iron Age II are: Rujm al-Malfūf North (Yassine 1988: 17), Rujm al-Malfūf South (Thompson 1973: 47–50; Najjar 1999: 105), Rujm al-Ḥinū and Rujm al-Ḥāwī (Clark 1983; McGovern 1983: 136; 1986: 9; 1989: 40-42), Rujm al-Mukhayzin (Thompson 1984, 38), Khaldā (Najjar 1992: 14–20), al-Jubayhah (Muheisen

Similar in form, the strongholds of Jam'ān and Rujm al-Jāmūs consisted of a rectangular enclosure including a raised podium. The fortresses were defended by a double perimeter wall with casemates in between. Structures were built with roughly cut limestone and quartz boulders of average dimensions (0.7–0.8×0.4–0.5 m), usually laid in two rows of superimposed courses set in a conglomerate of mortar tempered with pebbles and small stone chips. The interior portions of the walls were filled with rubble consisting of medium sized irregular stones.

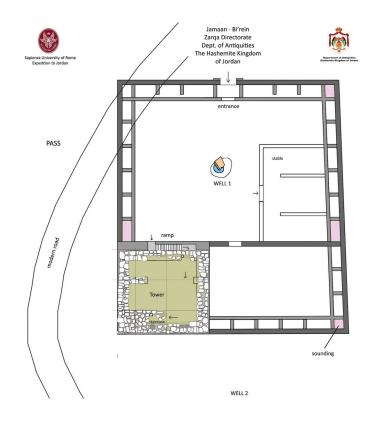
The typology of the buildings is well known in the Iron Age II southern Levant, and it has been called a "citadel"

1976), Khirbat Salāmah (Lenzen and McQuitty 1987: 203; 1989: 544), and Khirbat al-Ḥajjār (Thompson 1972: 62; 1977: 29).

even though this term typically describes palatial complexes and fortresses, which often exhibit strong dimensional variations (Nigro 1994: 203–91, 436–52; Bonfil and Zarzecki-Peleg 2007: 32–3; Lehmann and Killebrew 2010; Ripepi 2012). Jam'ān and Rujm al-Jāmūs may be reasonably included among the list of fortified sites overlooking the "House of Ammon".

#### The Architecture

The strongholds of Jam'ān and Rujm al-Jāmūs are characterized by the presence of specific features: a rectangular enclosure, a podium, a tower, and a water reservoir. The enclosure of Jam'ān measured 41.56 m on the north-south axis and 37.8 m on the east-west, where almost half of the length was occupied by the square podium located in the corner of the precinct that overlooked the pass (Fig. 3). The enclosure wall



3. Plan of the stronghold of Jam'ān.



4. View of the eastern side of the enclosure at Jam'ān, seen from the south.

consisted of an exterior structure, around 1.45-1.55 m thick, and a parallel thinner wall (0.8-1.0 m thick) inside, creating two delimiting rectangular rooms that ran around the perimeter of the stronghold. The north-western corner of the enclosure has been destroyed by the modern road that cuts through the site, and the northern side suffered major looting. Nevertheless, it is clear that the gate of the fort was located on the northern side, with an outer passage that was 2.7 m wide and an inner one measuring 2.1 m wide. The eastern side of the enclosure is the best preserved (Fig. 4), and two soundings were excavated inside the casemates down to the earliest floor of the chamber which was built on bedrock. Ten meters inside the entrance, the circular mouth of a cistern is carefully hewn into the bedrock. A drain possibly connected it to

a drinking trough for caravans. In the latest stratigraphic phase (Neo-Babylonian period), the eastern part of the entrance courtyard contained a stable. An inner courtyard flanked the tower and occupied the southeastern quadrant of the fortress. The podium occupied the southwestern corner of the enclosure, overlooking the underlying pass and the track climbing it. It was preserved with 6 to 10 superimposed courses of stones, with some remnants of the walls of the tower standing over it, reaching an overall elevation of 4 m (Fig. 5). The podium measured 14.42×14.56 m, with a base slightly larger than the podium itself, so that a small step jutted off the face of the structure at its bottom. The monumental

side-walls of the podium, 1.6-1.8 m thick, were made of large limestone blocks that had slightly battered faces and reached the height of 3.12 m (6 cubits). The outer face of the podium was surprisingly well plastered with a thick layer of mortar and fine clayish light brown lime. Three very regular courses of blocks were standing on the crepidoma, roughly 0.46 m high, and followed by two other courses of roughly intermingled blocks and stones. This detail is possibly the vestige of a reconstruction undertaken at some phase of the building's life. Big boulders reinforced its corners, and on the eastern side, a ramp abutted its corner to give access to the tower on top. The square basement was subdivided inside by three structures, and the inner blind chambers were filled with small stones. Upon this raised podium, a square tower was erected, measuring 12.48×12.48 m (24 cubits). The walls of the tower were made of blocks smaller than those of the podium, laid in three rows, suggesting that this structure



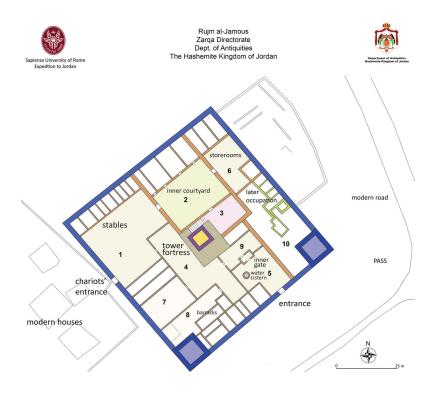
5. View of the north-eastern corner (a), the south-western corner (b), and the eastern side (c) of the podium of Jam'ān, respectively seen from the north-east, the west, and the east.

#### LORENZO NIGRO AND ROUMEL GHARIB



6. Neo-Assyrian stone door-socket found at the entrance of the tower of Jam'ān.

could reach a height of at least of 9.4 m. The overall height of the building, podium plus tower, was around 12.5 m. The collapsed remains of the tower were quickly excavated, and the inner layout of this structure was partially reconstructed. The entrance was located on the eastern side, where a staircase and a ramp flanked the podium leading to the tower upon it. The entrance was marked by the presence of a door-socket of distinguished Neo-Assyrian cylindrical elongated type (Fig. 6); a second one, of the same shape and dimensions, was found by the door leading to the staircase made of wood. This allowed access to the upper floor and the roof from the room in the south-western



 Plan of the stronghold of Rujm al-Jāmūs and sketch drawing of the stronghold (by author Lorenzo Nigro).



 General view of Rujm al-Jāmūs from the north-western corner of the enclosure; in the background, the monumental podium of the tower fortress and the site of Jabal ar-Ruḥayyil can be seen from the north-west.

corner of the ground floor. The tower had two storeys: the ground floor was possibly a vaulted hall, while the upper floor had a flat ceiling, which also served as a lookout platform.

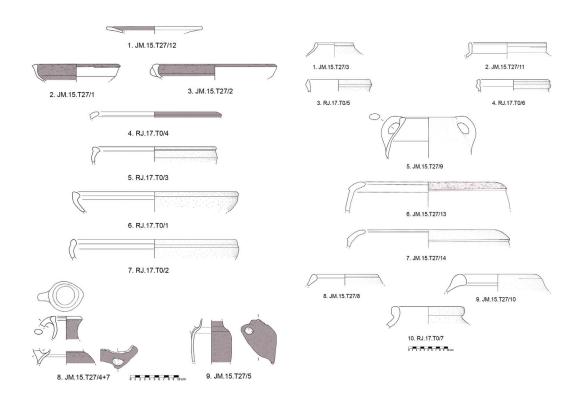
The stronghold of Rujm al-Jāmūs has been carefully mapped and surveyed, and the main features of its architecture can be outlined (Fig. 7). The rectangular enclosures measured 100 m on the northsouth axis and about 80 m on the east-west axis. As in the case of Jam'an, the enclosure wall consisted of an exterior structure 1 m thick and a parallel thinner wall (0.5 m thick), delimiting rectangular rooms or casemates, some of them large and divided by courtyards (Fig. 8). The main entrance was located on the southern side facing the road towards Rabbath Ammon, and a well or cistern was located just inside the entrance. The podium occupied the center of the stronghold and supported an overlying square tower (Fig. 9). The perimeter walls and the side-walls of the podium were made of roughly squared large limestone blocks,

some of them reaching the dimension of 2.1 m (4 cubits).

The inner space of the fortress was subdivided into 10 open spaces of different sizes and shapes. The main courtyard (1) was accessible from the west, and was devoted to chariots and horses, as the long rooms on the NE perimeter wall can be interpreted as stables. The second courtyard (2), north of the central tower, is flanked by larger structures possibly hosting chariots, while a further court (6) to the west featured a smith's workshop and was likely devoted to the repair of these military devices (hearths were detected on the ground and in bedrock cavities). From court 2, a passage led to forecourt 3, which was the entrance to the central tower. It was not accessible from the main entrance of the fortress, but from a side entrance. From courtyard 1, one could also access an elongated space (4) leading to court 7, with further storerooms to the side, and court 8, connected to barracks for troops, and one of the two corner towers of the main enclosure. The main entrance



9. View of the south-western side (a), the south-eastern side (b), and the north-eastern side (c) of the podium of Rujm al-Jāmūs, respectively seen from the south, the south-east, and the east.



 Iron Age IIB-C table ware from Jam'ān (JM) and Rujm al-Jāmūs (RJ).

11. Iron Age IIB-C cooking and storage ware from Jam'ān (JM) and Rujm al-Jāmūs (RJ).

on the SE side gave access to a relatively small court, with the cistern in a corner and a guardhouse leading to court 9, and from this to court 4. This complexity of the interior spaces protected the central tower and underscore the military function of the fortress.

## Pottery and Other Finds

A great amount of pottery fragments and meaningful finds have been recovered from the excavation of the destruction layers inside the tower of Jamāʻn and on the surface of Rujm al-Jāmūs during survey activities. All these materials date to the latest phases of use of both strongholds, from the mid-7th to the beginning of the 6th c. BC. A brief description of the pottery assemblages from both sites is presented here, together with

an analysis of the most remarkable finds retrieved during the salvage excavations in the stronghold of Jam'an.

## Pottery Shapes

Table ware (Fig. 10) includes vessels coated with a dark brownish red slip, sometimes roughly burnished with a wooden tool. A plate (saucer) of coastal tradition (Fig. 10:1), carinated bowls with emboldened or expanded rim (Fig. 10:2–3), a krater with rounded inverted rim (Fig. 10:4) and coated with a highly burnished red slip (Bienkowski 2015: pl. 3.6.1: 11) were found; similar to simple ware carinated bowls with thickened inverted rims (Fig. 10:5–7). These are among the most common open shapes in Late Iron IIC (*ca.* 680–580 BC) Ammonite contexts (Bienkowski 2015: 420 pl. 3.6.1:



12. Duck-shaped red quartzite weight from Jam'ān.

7). Dipper jugs and juglets (Fig. 10:8–9) are also coated with a thick brownish slip (Collins *et al.* 2015: 236; Herr 2015: 285 pl. 2.6.11: 8). Cooking jugs (Fig. 11:1), pots (Fig. 11:2–5), kraters (Fig. 11:6–7), storage jars, and pithoi (Fig. 11:8–10) fit well in the Late Iron IIC ceramic horizon of Ammon (Bienkowski 2015: pl. 3.6.2: 5–6; Herr 2015: 263 pl. 2.6.6: 1), and may reflect some Neo-Assyrian influence, depending on the style of so-called Palace Ware (Bienkowski 2015: 421; Hunt 2015: 146–81).

Finds: Stone Tools, the Duck-Weight, and the Male Statuette from Jam'ān

Excavations at Jam'ān brought to light a rich collection of interesting finds. Among a distinguished set of stone tools of counter weights, grinding tools, and door sockets (Nigro and Gharib 2016: figs. 15–17), two objects are particularly noteworthy finds. A balance weight made of red quartzite, in the shape of a duck with an eroded head (Fig. 12), and the head of a male statuette (Fig. 13).

Duck-weights are common in Neo-Assyrian and Neo-Babylonian contexts, especially palaces, residences, and admin-





13. The head of a fine limestone statuette of a male personage, probably a high official or a military officer, found at Jamʿān.



14. Lateral and rear views of the male statuette found at Jam'an with its hairstyle clearly visible.

istrative buildings, and are the size of light mina (about 480 g) or heavy or double mina (about 1 kg), while they are usually of reduced size in tombs, transformed into beads (Peyronel 2015: 100–1). The weight from Jam'ān is 345 g, and, with the integrated missing part, it should correspond to 1 light mina (MA.NA) of the Neo-Assyrian weighing system.

The head of a fine limestone statuette portraying a male personage was found in the destruction layer near the approaching ramp of the tower. The sculpture is 13 cm high, roughly carved (partially incised), and its surface also shows some graffiti. It is of quite reduced size and lower stylistic quality with respect to other extant Ammonite sculptures found in 'Ammān or in its surroundings (Abou Assaf 1980; Ornan 1986: 36–9; 'Amr 1990; Burnett 2016a, 2016c). The iconography of the individual is consistent with that of a high official or a military officer (Fig. 14).<sup>3</sup> His eyes and ears

are schematically carved, and the eyebrows are disharmonically unified. The individual is beadless and exhibits a distinguished hairstyle that is a neat separation of radial braids. This iconography may recall some Arab of Madianite hairstyle, as it is similar to the Arabs riding camels visible on the reliefs from Room L in Assurbanipal's North Palace at Niniveh which depict the war against the Arab Queen Adiâ (Dolce 1995: 36–7 fig. 6; Nigro 1995: fig. 126; Matthiae 1996: 186 fig. 9.6).

### **Conclusions**

Thanks to the commitment of the DoA Zarqa Directorate, the sites of Jam'ān and Rujm al-Jāmūs, previously (and almost completely) neglected by archaeologists, were documented and their historical-archaeological roles in the Iron Age have come to light. After the rescue interventions between 2015 and 2017, it became clear

<sup>&</sup>lt;sup>3</sup> The statue from Jam'ān can hardly be associated with royal statuary or cult statues. In Ammonite statuary, the element characterizing the gods is the atef crown (Mallowan and Herrmann 1974: 106; Negbi 1976:

<sup>31;</sup> Abou Assaf 1980: 78; Daviau and Dion 1994; Burnett 2009, 2016a: 58–65, 2016c: 30–1). Ammonite kings' statues are characterized by the presence of a headband or diadem, as shown by the statue of Yerahazar (Abou Assaf 1980: pl. VI; Burnett 2016c: 64–5).

that Jamʻān and Rujm al-Jāmūs were two strongholds along the northern border of the great Ammonite Kingdom during the 9<sup>th</sup> to 6<sup>th</sup> c. BC.

The chronological setting of these sites has been confirmed by the analysis of material culture conducted in cooperation with the La Sapienza University team of the Expedition to Palestine and Jordan. Ceramic fragments going back to a century or more before Iron IIB were found, but the majority of the pottery belongs to the socalled "Ammonite" Late Iron IIC horizon, where Neo-Assyrian, and also Neo-Babylonian, influences are noticeable, both in shapes and in the dark red-brownish burnished surface treatment of vessels (Gilboa and Sharon 2016: fig. 4:2). The Neo-Assyrian influences are also evident in the male statuette and the duck-weight, which further support the interpretation of the strongholds being devoted not only to territorial control and defensive purposes, but also to administrative functions. All of these elements fit well with the historical interpretation of these buildings as strongholds erected in the 9th c. BC to protect the northern border of Ammon, and part of the defensive and administrative system of the Kingdom of Ammon that was still in place during the Neo-Assyrian and Neo-Babylonian occupations.

## Bibliography

- Abou Assaf, A. 1980. "Untersuchungen zur ammonitischen Rundbildkunst." *UgaritF* 12:7–102.
- Albright, W.F. 1970. "Some Comments on the 'Ammân Citadel Inscription." *BASOR* 198:38–40.
- 'Amr, A.J. 1990. "Four Ammonite Sculptures from Jordan." *ZDPV* 106:114–8.
- Aufrecht, W.E. 1989. A Corpus of Ammonite Inscriptions. New York: Edwin Mellen Press.
- Bienkowski, P. 1991. The Art of Jordan. Treasures from an Ancient Land. Phoenix:

- Alan Suttone.
- 2015. "Iron Age IIC Transjordan." In The Ancient Pottery of Israel and its Neighbors. From the Iron Age through the Hellenistic Period, edited by S. Gitin, 419–34. Jerusalem: Israel Exploration Society.
- Bonfil, R., and A. Zarzecki-Peleg. 2007. "The Palace in the Upper City of Hazor as an Expression of a Syrian Architectural Paradigm." *BASOR* 348:25–47.
- Burnett, J.S. 2009. "Iron Age Deities in Word, Image, and Name: Correlating Epigraphic, Iconographic, and Onomastic Evidence for the Ammonite God." SHAJ 10:153–64.
- ——. 2016a. "Egyptianizing Elements in Ammonite Stone Statuary: The Atef Crown and Lotus." In Proceedings of the 9<sup>th</sup> International Congress on the Archaeology of the Ancient Near East (9–13 June 2014, Basel), Vol. 1, edited by R.A. Stucky, O. Kaelin, and H.P. Mathys, 57–69. Wiesbaden: Harrassowitz.
- —. 2016b. "Transjordan: The Ammonites, Moabites, and Edomites." In The World around the Old Testament: The Peoples and Places of the Ancient Near East, edited by B.T. Arnold and B.A. Strawn, 309–52. Grand Rapids: Baker Academic.
- ——. 2016c. "Ammon, Moab and Edom. Gods and Kingdoms East of the Jordan." *Biblical Archaeology Review* November/ December 2016:26–67.
- Clark, V.A. 1983. "The Iron IIC/Persian Pottery from Rujm al.Henu." *ADAJ* 27:143–63.
- Collins, S., C.M. Kobs, and M.C. Luddeni. 2015. The Tall al-Hammam Excavations. Vol. 1, An Introduction to Tall al-Hammam with Seven Seasons (2005–2011) of Ceramics and Eight Seasons (2005–2012) of Artifacts. Winona Lake: Eisenbrauns.
- Daviau, P.M.M., and P.E. Dion. 1994. "El, the God of the Ammonites? The Atef-Crowned Head from Tell Jawa, Jordan."

## ZDPV 110:158-67.

- Dolce, R. 1995. "Concezioni e rappresentazioni del potere: la Maestà, il Dominio, il Prestigio." In Dai Palazzi Assiri: Immagini di Potere da Assurnasirpal II ad Assurbanipal (IX-VII sec. a.C.). Studia Archaeologica 76, edited by R. Dolce and M. Nota Santi, 25–43. Rome: L'Erma di Bretschneider.
- Fohrer, G. 1961. "Eisenzeitliehe Anlagen im Raume sudlieh von Naur und die sudwestgrezen von Ammon." ZDPV 77:56-71.
- Gese, H. 1958. "Ammonitische Grenzfestungen zwischen wadi es-Sir und Naur." ZDPV 74:55–64.
- Gilboa, A., and I. Sharon. 2016. "The Assyrian Kāru at Dor (ancient Du'ru)." In *The Provincial Archaeology of the Assyrian Empire*, edited by J. MacGinnis, D. Wicke, and T. Greenfield, 241–52. Cambridge: McDonald Institute for Archaeological Research.
- Glueck, N. 1939. Explorations in Eastern Palestine. Vol. 3, (1937–1939). AASOR 18–19. New Haven: American Schools of Oriental Research.
- Graf-Revcmlow, H. 1963. "Grenzbesfestigungskette." *ZDPV* 79:127–37.
- Herr, L.G. 2015. "Iron Age IIA-B: Transjordan." In *The Ancient Pottery of Israel and its Neighbors. From the Iron Age through the Hellenistic Period*, edited by S. Gitin, 281–99. Jerusalem: Israel Exploration Society.
- Horn, S.H. 1969. "The Ammān Citadel Inscription." *BASOR* 193:2–13.
- Hübner, U. 1992. Die Ammoniter: Untersuchungen zur Geschichte, Kultur und Religion eines Transjordanischen Volkes im I. Fahrtausend V. Ch. Abhandlungen des Deutschen Palästina Vereins Band 16. Wiesbaden: Harrassowitz.
- Hunt, A.M.W. 2015. Palace Ware Across the Neo-Assyrian Imperial Landscape. Social Value and Semiotic Meaning. Culture and History of the Ancient Near East 78.

- Leiden: Brill.
- Kletter, R. 1991. "The Rujm el-Malfuf Buildings and the Assyrian Vassal State of Ammon." BASOR 284:33–50.
- Landes, G.M. 1961. "The Material Civilization of the Ammonites." BA 24:66–86.
- Lawson Younger, K. Jr. 2003. "Kurkh Monolith." In *The Context of Scripture: Monumental Inscriptions from the Biblical World.* Vol. 2, edited by W.W. Hallo and K. Lawson Younger Jr., 261–4. Leiden: Brill.
- Lehmann, G., and A.E. Killebrew. 2010. "Palace 6000 at Megiddo in Context: Iron Age Central Hall Tetra-Partite Residencies and the *Bīt-Ḥilāni* Building Tradition in the Levant." *BASOR* 359:13–33.
- Lenzen, C.J., and A.M. McQuitty. 1987. "The Site of Khirbet Salameh." *ADAJ* 33:201–4.
- ——. 1989. "Salameh (Khirbet)." In Archaeology of Jordan. Vol. II-2, Field Reports: Sites L-Z. Akkadica Supplementum 8, edited by D. Homès-Fredericq and J.B. Hennessy, 543–6. Leuven: Peeters.
- Lipschits, O. 2004. "Ammon in Transition from Vassal Kingdom to Babylonian Province." BASOR 335: 37–52.
- MacDonald, B. 1999. "Ammonite Territory and Sites." In Ancient Ammon. Studies in the History and Archaeology of the Ancient Near East 17, edited by B. MacDonald and R.W. Younker, 30–56. Leiden: Brill.
- Mallowan, M., and G. Herrmann. 1974. Furniture from SW.7 Fort Shalmaneser. Ivories from Nimrud (1949–1963), Fascicle III. London: British School of Archaeology in Iraq.
- Mansour, S. 2002. "Preliminary Report of the Excavations at Jebel al-Qal'a (Lower Terrace): The Iron Age Walls." *ADAJ* 46:141–50.
- Matthiae, P. 1996. *L'arte degli Assiri*. Bari: Laterza.
- McGovern, P.E. 1983. "Test Soundings of

- Archaeological and Resistivity Surveys Results at Rujm al-Henu." ADAJ 27:1 05–41.
- 1986. The Late Bronze Age and Early Iron Ages of Central Transjordan: The Baq'ah Valley Project, 1977–1981.
   Philadelphia: University of Pennsylvania Museum of Archaeology and Anthropology.
- ——. 1989. "Baq'ah Valley Project Survey and Excavation." In Archaeology of Jordan. Vol. II–1, Field Reports: Surveys and Sites A–K. Akkadica Supplementum 7, edited by D. Homès-Fredericq and J.B. Hennessy, 25–44. Leuven: Peeters Publishers.
- Muheisen, M. 1976. "Jbeyha Church 1976 [Arabic]." *ADAJ* 21:9–10.
- Najjar, M. 1992. "Rescue Excavations at Kilda/Amman." *ADAJ* 36:12–20.
- ——. 1999. "'Ammonite' Monumental Architecture." In Ancient Ammon. Studies in the History and Archaeology of the Ancient Near East 17, edited by B. MacDonald and R.W. Younker, 103–12. Leiden: Brill.
- Negbi, O. 1976. Canaanite Gods in Metal: An Archaeological Study of Ancient Syro-Palestinian Figurines. Publications of the Institute of Archaeology 5. Tel Aviv: Tel Aviv University.
- Nigro, L. 1994. Ricerche sull'architettura palaziale della Palestina nelle età del Bronzo e del Ferro. Contesto archeologico e sviluppo storico. Contributi e Materiali di Archeologia Orientale 5. Rome: Università degli Studi di Roma La Sapienza.
- ——. 1995. "Il Palazzo Nord di Assurbanipal a Ninive." In Dai Palazzi Assiri: Immagini di Potere da Assurnasirpal II ad Assurbanipal (IX–VII sec. a.C.). Studia Archaeologica 76, edited by R. Dolce and M. Nota Santi, 264–71. Roma: L'Erma di Bretschneider.
- —. 2014. "An Absolute Iron Age Chronology of the Levant and the

- Mediterranean." In Overcoming Catastrophes. Essays on Disastrous Agents Characterization and Resilience Strategies in Pre-Classical Southern Levant. Rome La Sapienza Studies on The Archaeology of Palestine and Transjordan 11, edited by L. Nigro, 261–9. Rome: La Sapienza Expedition to Palestine and Jordan.
- Nigro, L., and R. Gharib. 2016. "Jamaan at the Pass of Bi'rein. An Iron Age B–C Ammonite Stronghold in Central Jordan." *Vicino oriente* 20:59–84.
- Ornan, T. 1986. A Man and His Land: Highlights from the Moshe Dayan Collection. Jerusalem: The Israel Museum.
- Peyronel, L. 2015. "The Lion, the Duck and the Scorpion. Royal Assyrian Weights from the North-West Palace at Nimrud." *Mesopotamia* 50:93–112.
- Puech, E. 1985. "L'inscription de la statue d'Amman et la paléographie Ammonite." *RBibl* 92:5–24.
- Ripepi, G. 2012. "Gli edifici su podio in Palestina durante l'Età del Ferro II." Vicino oriente 26:55-70.
- Sala, M. 2008. "Along the River: 2007 Survey of Upper and Middle Wadi az-Zarqa." In 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 and Transjordan 6, edited by L. Nigro, 359–97. Rome: La Sapienza Expedition to Palestine and Jordan.
- Stern, E. 2001. Archaeology of the Land of the Bible. Vol. II, The Assyrian, Babylonian and Persian Periods (732–332 BCE). New York: Yale University Press.
- Thompson, H.O. 1972. "The 1972 Excavations of Khirbet al-Hajjar." *ADAJ* 17:47–72.
- ——. 1973. "Rujm Al-Malfuf South." *ADAJ* 18:47–51.
- ——. 1977. "The Ammonite Remains at Khirbet al-Hajjar." *BASOR* 227:27–34.

- ——. 1984. "The Excavation of Rujm el-Mekheizin." *ADAJ* 28:31–8.
- Thompson, H.O., and F. Zayadine. 1974. "The Works of Amminadab." *BA* 37:13–9.
- van der Veen, P.G. 2007. "Gedaliah ben Aḥiqam in the Light of Epigraphic Evidence (A Response to Bob Beeking)." In New Seals and Inscription, Hebrew, Idumean, and Cuneiform. Hebrew Bible Monograph 8, edited by M. Lubetski, 55– 70. Sheffield: Sheffield Phoenix Press Yassine, K. 1988. "Ammonite Fortresses,
- Date, and Function." In *Archaeology of Jordan: Essays and Reports*, edited by K. Yassine, 11–31. Amman: University of Jordan.
- Zayadine, F. 1991. "Sculpture in Ancient Jordan." In *The Art of Jordan. Treasures* from an Ancient Land, edited by P. Bienkowski, 31–61. Phoenix: Alan Suttone.
- Zayadine, F., J.B. Humbert, and M. Najjar. 1989. "The 1988 Excavations on the Citadel of Amman. Lower Terrace, Area A." *ADAJ* 33:357–63.