EXCAVATIONS AT TELL JAWA, JORDAN (1993) PRELIMINARY REPORT

by P. M. Michèle Daviau

The fourth season of excavation in the Iron Age town and the Umayyad period building at Tell Jawa took place from May 20 to July 1, 1993 under the auspices of the Department of Antiquities of Jordan. The assistance of Dr. Safwan Tell, Director-General of Antiquities, is sincerely appreciated. Ms. Nazmieh Rida Tawfiq Darwish, sharing her expertise with our staff and facilitating our work, served as Department representative. Excavation and research was sponsored by Wilfrid Laurier University and funded by a grant from the Social Sciences and Humanities Research Council of Canada.1 During the 1993 season, 30 staff and volunteers were assisted by 22 local workers.2 As in previous seasons, the team had its headquarters at ACOR in Amman. On behalf of the team, I would like to express our appreciation to its director, Dr. Pierre Bikai, and all the staff at ACOR for their gracious assistance and support.

Research Strategy

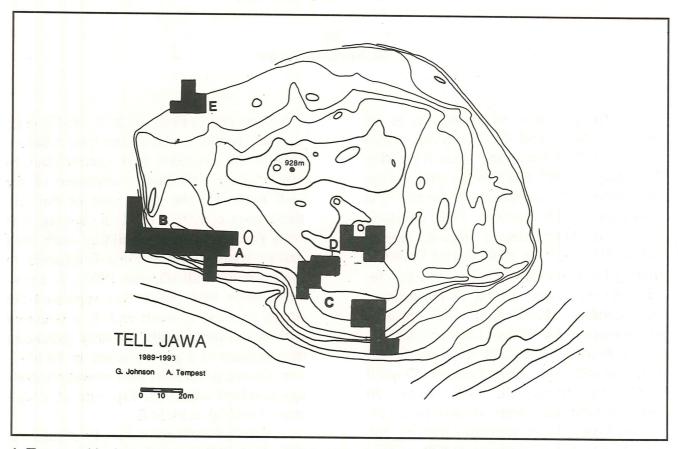
The goals for this season were first, to delineate and identify the major Iron Age architectural units, partially exposed in pre-

vious seasons in Fields A-B, C, and E (Fig. 1), and second, to determine their relationship to the casemate wall system (Daviau 1993) along with further exposure of the wall itself. On the south side of the tell, these units consisted of: 1) a cooking area with five ovens; 2) a building with long narrow rooms, both in Field B adjacent to the casemate wall (Daviau 1992); 3) a possible house with pillars that separated the rooms in Field C-west; and 4) a structure with monumental walls, possibly indicating the presence of a gate structure in Field Ceast. On the north side, the excavation strategy involved additional exposure of a high status building in Field E.

A detailed architectural study of the Iron Age II buildings and their construction techniques is underway.³ To date it appears that many of the buildings, some with walls standing to the second storey, were constructed almost entirely of stone, as no mudbrick walls have been found *in situ* with the exception of an interior wall separating Rooms 2 and 3 (Daviau 1992: fig. 3).⁴

Three areas chosen for functional and quantitative analysis during the 1993 field

- 1. Grant #410-92-0134 was awarded for three years to investigate the architectural traditions of a walled Iron Age town in the Ammonite region of central Transjordan.
- 2. The excavation and research strategy were directed by the author. M. Judd, A. Tempest and M. Wood served as field supervisors. They were assisted by square supervisors L. Cowell, R. Defonzo, D. Foran, S. Force, R. Hutson, K. Kane, S. Khalileh, S. Klassen, H. Mansur, L. Shnoudeh, B. Silver, S. Thompson, and J. Witmer. D. Beal was a supervisor in training. R. Hutson served as administrative assistant and architect, P. Warnock acted as palaeoethnobotanist, and T. Cowell was camp administrator. Ceramic registration was under the direction of B. Silver, ob-
- ject registrar was M. Judd, L. Cowell was ceramic technologist, and S. Thompson was samples registrar and lithic analyst. P. E. Dion served as epigrapher for the project.
- 3. A detailed map of the site including the building units excavated in each field is currently being prepared by A. Tempest. The plan will consist of the topographical map prepared by Glenn Johnson in 1989 for the Madaba Plains Project and the field drawings from the 1993 season. A course remission grant from Wilfred Laurier University for research concerning the Iron Age architectural traditions employed at Tell Jawa is greatly appreciated.
- 4. Renumbered after the 1993 season, Room 2=102 and Room 3=103.



1. Topographical map of excavation areas (Fields A-B, C-west, C-east, D, and E).

season were the extension of the cooking area (B54), the four-room style house (C17-27), and the high status building (E44-54). On all surfaces in these areas, the distribution of artifacts was plotted and all ceramic ware form types were quantified with special attention to red-slipped, black burnished, and painted wares. These wares were selected because the association of red-slipped vessels with black burnished wares, primarily bowl forms, had been documented in the house in C-west during the 1992 season, although black burnished ware seemed to be lacking in other Iron Age II structures.

Additional excavation was carried out in the Late Byzantine-Early Islamic building in Field D (Figs. 1, 14) with the specific goal of identifying original floor levels and the overall building plan. Priorities for the season included the complete exposure of Room 605, previously identified as a kitchen, and of Room 606 in the northeast corner where a pair of arch springers had been exposed against the southern wall (Daviau 1993). In order to identify the construction style of various rooms within the building, we undertook careful documentation and labelling of all architectural elements and decorative materials, such as stucco and painted plaster, and the quantification of all mosaic tesserae and floor fragments.

Stratigraphic Excavation—The Fortification System

Field B

Excavation in Field B continued to focus on the Iron Age fortification system and the structures that abutted the inner wall during its various use phases. Investigation during 1992 in B53-43 showed that no additional casemate rooms were located immediately

^{5.} Research assistants for this study were M. Judd (Field E), B. Silver (Field B), and M. Wood (Field C-west).

west of Room 201. Instead, the space between the inner and outer walls was completely filled with limestone boulders (Fig. 2), suggesting the foundation of a tower. Beyond this heavily defended section of the wall system, inner Wall 2007 and outer Wall 2009 extended west where they appeared to exceed the preserved area of the tell and to have been lost due to recent bull-dozer activity that cut through the upper courses (see below). At the end of the 1992 season, the relationship of the outer casemate Wall (2009) to West Wall 2002=2023 and flanking Tower 2024 was unclear.

Three excavation squares (B24, 34, and 44) opened this season added significant information concerning construction techniques and configuration of the wall system now exposed for over 50 m (Fig. 2). West Wall 2023 was constructed of three to four rows of semi-hewn limestone boulders and, at its widest, measured 2.5 m thick. The outer face was sealed with lime plaster comparable to that observed further north in B26 and on Tower 2024 (Pavlish and Hancock, forthcoming). With the removal of a rockfall layer (L. B25:11) along this outer face of West Wall 2023, it became apparent that there was a clear 0.50 m deep recess⁶ similar to those previously documented along North Wall 3006 (Fig. 3; Daviau 1993: 329).

This well-built wall (W2023) continued south into B24 where its upper courses were cut by a modern path. Under the surface of the path, the presence of several very large boulders demonstrates that Wall 2023 continued south (as W2002) to meet with both faces of the casemate wall system (W2001 and W2009) running east in B23-63. The exact nature of this join is not completely understood although it appears that

the wall system formed a 90° angle.

A stone-lined drain (L. B24:24) ran through the wall system (Fig. 4) parallel to and immediately north of the east-west inner wall face (W2001). In fact, the drain had two parallel walls (W2001 and W2003) that were sealed with plaster, especially north Wall 2003 which ran through Wall 2023 at a 30° angle that reduced the width of the drain from 0.75 to 0.15 m at its mouth.

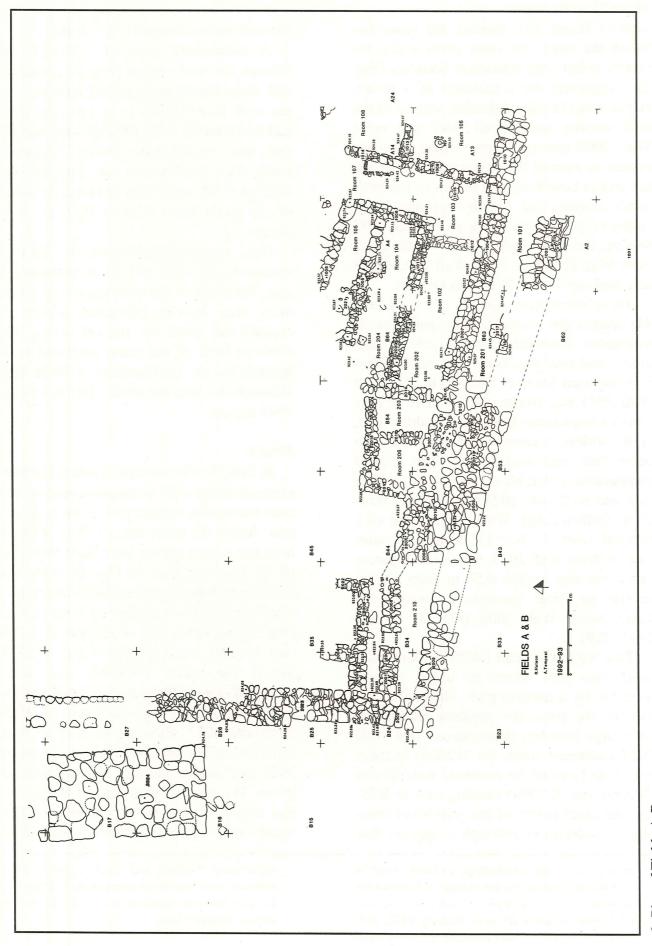
Only one covering stone (L. B24:12) measuring ca. 0.50 x 1.40 m remained *in situ*. The floor of the east, upper end of the drain was heavily plastered, which increased the slope for run-off water. The northern limit of the drain appeared to be blocked by the continuation of Wall 2022 although this was not made clear during the 1993 season.

Field E

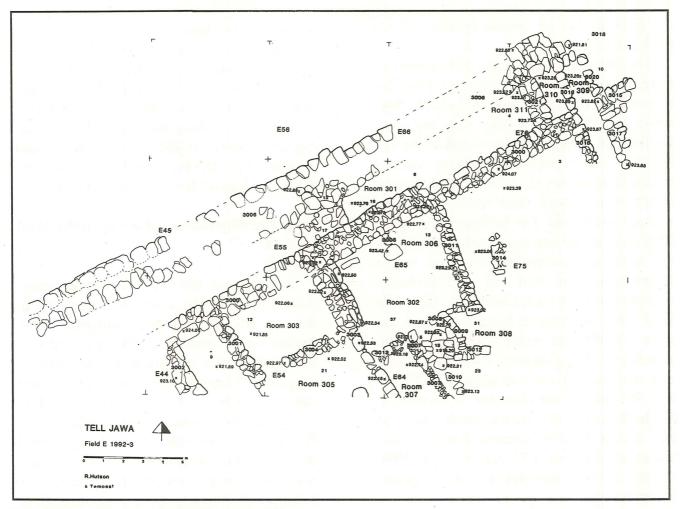
In Field E, the casemate system has been exposed along a 36 m length revealing distinct rooms that formed part of the wall system. Along the outer face of Wall 3006, at least three inset-offsets have been identified (E 23 [west of plan in Fig. 3], E56, and E76). In E76 the inset was associated with a clear break in the wall line ca. 0.80 m wide (Fig. 3). On either side of Entryway(?) 309, two parallel walls (W3019 and W3020) joined the inner (W3000) and outer (W3006) faces of the casemate wall and extended ca. 1.5 m into the town as Walls 3016 and 3017. Running parallel to Wall 3019 and ca. 1.0 m west of it was Crosswall 3021 that formed the east end of casemate Room 311 and the west end of Room 310 that measures only 0.95 m in length. This small room was paved with a plaster floor

^{6.} Inset/offset is the terminology currently used in several publications for the change of location for segments of wall sections in both casemate and solid style curtain walls (e.g., Herzog 1992: 265; Dever 1993: 43). Wright employs the more tech-

nical terms "salient and recess" (1985: 182), which is probably more appropriate for the Tell Jawa curtain wall since the recess or salient only affects the outer face.



2. Plan of Fields A-B.



3. Field E casemate wall and adjacent building.



4. Field B24, Drain 24 through Wall 2002=2023, showing plaster lining (photo by Timothy Hellum).

(L. E76:22) but its precise function is not yet known.

The function of Entryway 309 appears to have been a postern, the only exit from the town on the northwest side. A possible flagstone floor (L. E76:25) may have served as the original floor at the north end of the entryway. If so, it was subsequently covered by blocking stones (L. E76:23) that may be indicative of a later phase when the postern was put out of use. The building techniques employed in the entryway and in the flanking walls are comparable to those in the casemate system itself and were probably contemporary. In fact, Crosswall 3021, like Wall 3019, appears to bond with both the inner (3000) and outer (3006) casemate wall faces.⁷ The complete construction history and subsequent use phases of Entryway 309 are not yet clear due to erosion on the north side of the tell and limited excavation during the 1993 season. Further excavation of Squares E75 and E77 in 1994 should complete the exposure of this possible entryway.

Field C-East

Along the southeastern side of the tell, a 15 m long wall (9007) strengthened by a buttress (9008) served as the eastern perimeter of a terrace area (Field C; Fig. 5) somewhat outside the line of the casemate wall (Daviau 1993: 333). Expansion of Square C71 at the base of Buttress 9008 allowed for greater exposure of the foundation of this structure and, ultimately, of the underlying bedrock (L. C71:20). At present, there is no incontrovertible evidence that Buttress 9008 or Wall 9007, further upslope, was founded on bedrock.

Somewhat south of Buttress 9008 and immediately above Bedrock 20 was Wall 9015 built of medium to large boulders ca. 0.40-0.80 m. Above this wall was a col-

lapse of enormous limestone and chert boulders, each ca. 1.5 x 1.0 m (L. C71:15), that was covered with 0.02-0.03 m of ash. This debris suggests that Wall 9015 went out of use during the Iron Age and that a new wall or flanking tower (9007) was built higher upslope, possibly on bedrock, and supported by Buttress 9008. The latest ceramic finds in all loci were Iron Age II.

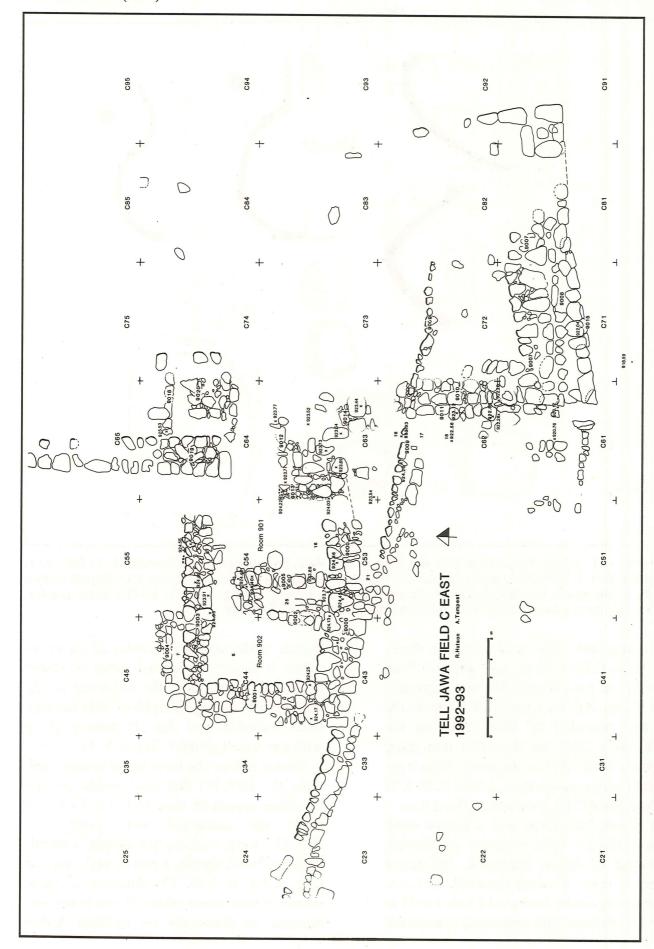
Iron Age Structures Adjacent to the Wall System

Field B

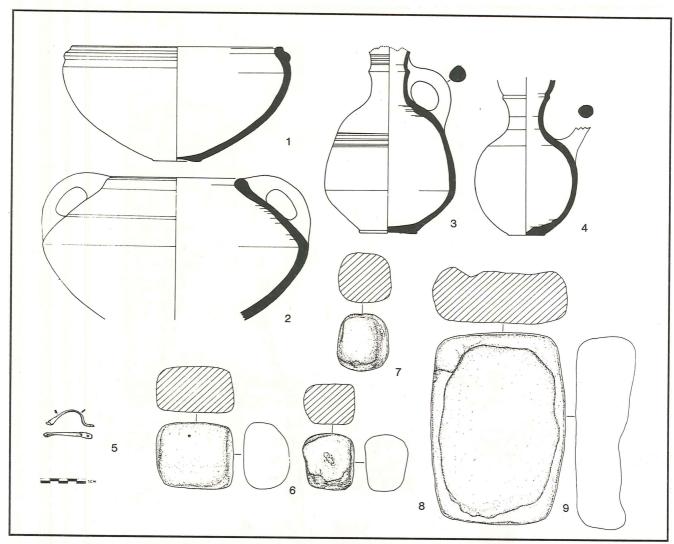
Extension of the excavation area immediately north of the inner casemate wall in Squares B54-44 provided additional information on the phasing of the casemate system and on the construction and plan of long room Building 101 (A4-B64) exposed during the 1989 and 1991 seasons (see Fig. 2). Wall 2014 which was plastered (L. B53:12) along its outer (west) face, formed the west end of Room 202. This major north-south wall (0.85-0.90 m thick) was constructed of two to three rows of medium size semi-hewn boulders (0.50-0.75 m) with chink stones. Like almost all other Iron Age II walls at Tell Jawa, it was dry laid. Most surprising was the discovery that Wall 2014 did not bond to inner Casemate Wall face 2007, rather it extended further south to form the west wall (L. B53:22) of casemate Room 201. Wall 2007, the inner wall face, running east in B63, was clearly built at a later time above the debris that covered the floors and ovens in Room 202 (Daviau 1992: pl. I.1). The original inner wall that ran east has not yet been identified due to the superimposition of the later phase wall (2007=L. B63:3=A2:4) at a somewhat different alignment.

To the west of long-room Building 101 was east-west Wall 2015 that formed the north side of two small rooms, 203 and 206

^{7.} A comparable technique was utilized in the construction of Room 801, the easternmost casemate room in Field C-west (Daviau 1993).



5. C-east outer wall and adjacent rooms.



6. Pottery and objects from rooms 203 and 206; 1) B54.44.2, red-slipped bowl, burnished; 2) B54.50.1, cooking pot; 3) B54.50.2, juglet, white and dark-brown paint; 4) B54.31.5, juglet, red-slipped, drawn by B. Silver and L. Cowell; 5) TJ 995, bronze fibula; 6) TJ 943, hand grinder; 7) TJ 810, hand grinder; 8) TJ 885, hand grinder; 9) TJ 833, basalt mortar, drawn by A. Tempest.

(=Building 200). This wall ranged in thickness from 0.75-1.00 m and abutted Wall 2014 on the east. Room 206 was separated from Room 203 by Crosswall 2016 on the east and bounded by Wall 2015 on the north, Wall 2011 on the west and inner casemate Wall 2007 on the south. This trapezoidal room measured ca. 2.03 x 2.50-3.75 m while Room 203 measured 2.0 x 2.5 m.

In Room 203, there was a beaten earth surface B54:13 with evidence of burning consisting of fallen mudbrick, blackened pottery, pieces of wood charcoal, and ash. Immediately under Surface 13 was a 0.03 m layer of plaster that appeared somewhat

thicker in the southwest corner of the room where it sealed up against inner casemate Wall 2007 confirming the existence of the wall system during this phase. The ceramic finds included Iron Age II pottery along with one basalt grinder (Fig. 6:1, 7).

Room 206 on the west had a beaten earth floor (L. B54:14) that also sealed against the inner casemate wall face. On Floor 14 under the collapsed wall stones (L. B54:11), were cooking pot sherds, a mendable jug, bowl sherds, a pestle, and a mortar (Fig. 6:2-4, 6, 8-9). The function of these rooms in their latest phase of use is unclear because no doorways are evident. Either

they were entered from above or were abandoned because of their proximity to the drain in B24. West of Room 206, no architecture was preserved, suggesting an open courtyard inside the corner of the casemate walls nearby. However, no concrete evidence for the connection of this area with the drainage system has been established thus far.

West of Room 206, the casemate system extended to the southwest corner where it turned north. Immediately before the corner there was a casemate room (210) with a doorway (B34:9) framed by hewn boulders. This doorway measured 0.97 m while the thickness of inner Wall 2006 was 2.00 m. A plaster floor (L. B34:14) inside the doorway may continue into Room 210 between the inner (2006) and outer (2009) casemate wall faces.

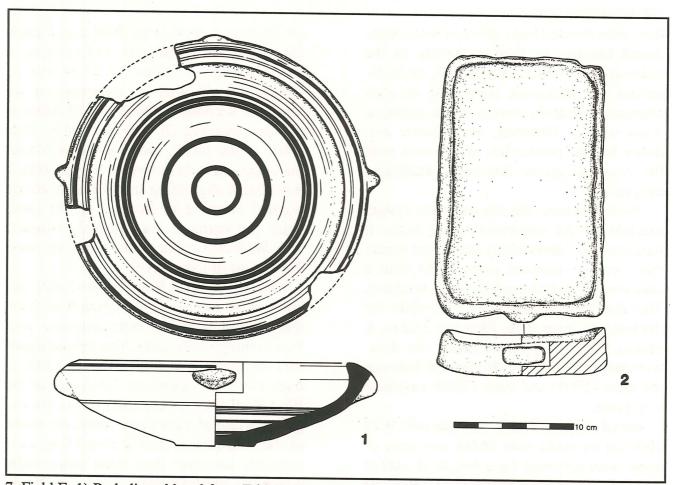
Burial 3 (L. B34:10) was cut into Wall 2006 on its south side where two rows of stone were removed for a length of 1.00 m east-west and 0.50 m north-south. Only one row of stones remained along the north edge of Wall 2006. The grave was originally covered with three rows of six cobblestones that were three courses deep. When found, the space under the cobbles did not contain the complete burial which extended south somewhat beyond the wall line, although this may not have been its original position. The complete contour of the grave could not be recovered due to erosion of the topsoil immediately above the bones and the construction of the modern field wall (B34:2). The majority of the artifacts associated with the burial were found in the grave below the cobbles, although several small beads were in disturbed soil layers nearby. These artifacts consisted of 30 beads, a fibula (Fig. 6:5), a possible cylinder seal (severely worn), a basalt mortar and millstone fragment, possibly from earlier debris layers.

At the west end of casemate Room 210, the inner face of the Casemate Wall (W2001) met West Wall 2002 and formed the south side of Drain 24. A clear break in this inner wall is visible ca. 1.5 m west of Doorway 9 although the alignment of the two wall sections (W2001 and W2000) is the same (see Fig. 2). The east end of Wall 2001, at the break, had well-hewn blocks that appeared to have formed a well-dressed door frame suggesting that it had been the original entrance to Room 210. At some point the entrance was partially blocked with Wall 2000, which now forms the west door frame of Doorway 9.

Parallel to West Wall 2023(=2002) and north of the line of the drain was Wall 2004 that appears to be the inner casemate wall face running north-south. The limited exposure of this wall to date revealed a two to three row wall located ca. 2.0 m east of the West Wall (2023). Although this is the expected width of a casemate room, the width of the wall ranges from 0.50-0.75 m, considerably narrower than other inner walls which are approximately 1.5-1.7 m thick. Further excavation in this area in 1994 should expose the full wall system along with the adjoining structures and, possibly, the origin of the drain.

Field E

Further exposure of a domestic area adjacent to the casemate wall system in Field E, initially begun in 1992, was extended to the south and west (see Fig. 3). Excavation revealed a second room (303) immediately west of Room 302 (Daviau 1993: fig. 4) that was also built up against casemate Wall 3000. Room 303 measured 4.2 x 3.0 m and probably functioned as a storeroom and food preparation area. Artifacts in this room included basalt millstones, both complete and as large fragments still apparently in use, pestles, grinders, a rectangular basalt tray, chert pounders, mortars, querns, lithics, an iron point, an iron knife, 35 animal bones, and ceramic spindle whorls. The rectangular tray (Fig. 7:2) is



7. Field E. 1) Red-slipped bowl from E65.13.1, burnished, black and white bands of paint; 2) TJ 786 basalt tray, drawn by A. Tempest.

sometimes identified as a basalt offering or libation tray (see Yadin et al. 1961: pl. CCLXXXIV:7 for a somewhat more elaborate example). Evidence for other high status artifacts consists of an alabaster jug handle comparable to that from Deir 'Alla (in the Jordan Archaeological Museum, Amman). Ceramic finds included storage jars, pithoi, jugs, juglets, tripod cups, flat saucers, and bowls all typical of Iron Age II vessel types. A layer of ash and cooking pot sherds indicate cooking areas within the room.

Outside Room 303 to the west (Room? 304) was a deep midden (L.9) that contained sherds from both Iron Age II and Iron Age I, along with bones, pockets of ash, and charcoal. A similar debris layer (L. E44:12) continued under Floor 7 inside Room 303 although here it contained three layers of rocks (L. E44:11), pebbles, small

cobbles and medium cobbles. In this debris layer the ceramic evidence was also mixed Iron I and Iron II.

A doorway (L. E54:33) formed by two large boulders, one of them abutting Wall 3001, marked the southwest entrance to Room 303. Wall 3001 was a boulder-and-chink wall two rows thick. However, the south wall (3004) of Room 303, on the east side of Doorway 33, had a different construction technique that consisted of boulders connected by units of cobbles suggesting an interior wall. Wall 3004 extended 3.6 m to the east until it abutted Wall 3003 which separated Room 303 from 302.

Room 302, initially exposed in 1992, had a plastered floor (L. E54:26 and 27) divided by partition Wall 28, which consisted of a large quern (0.57 m long) set into the floor on its long side. Running along the east face of Wall 3003, immediately north

of the partition wall, was a bench (L. E54:24) that cornered against the inner casemate Wall (3000=L. 55:2; see Daviau 1993: fig. 4). Adjacent to and on Bench 24 there was evidence of food preparation consisting of one cooking pot, a grinder, a saddle quern, pithos sherds, and a perforated basalt stone. The full size of Room 302 was 3.7 x 5.5 m and it appeared to be associated with Room 306 to the east where a collection of high status red-slipped vessels were in use (Fig. 7:1).

South of Rooms 302 and 306 were several small rooms that surrounded Cistern 13 (see Fig. 3). Four stone walls (L. E64:9, 14, 11) lined the north, east and south sides respectively of the cistern mouth and were bonded to the east face of Wall 10. Traces of plaster (L. 16), somewhat different from that on the sides of the cistern, were preserved in the corners between the walls and on their outer surfaces. The uppermost course of each wall formed a paved stone floor around the cistern's mouth (Fig. 8). A perimeter formed of four walls (3007, 3013, 3008, 3009) with a single entrance from

Room 302 separated the cistern from the surrounding rooms.

The mouth of Cistern 13 measured ca. 0.55 x 1.00 m. Below the mouth, the cistern was cut into bedrock. The sides of the cistern were lined with plaster (L. E64:17) ca. 0.03 m thick. Along the south side at floor level was a ledge, completely plastered like the rest of the cistern. It is unclear at present whether this was the result of natural stone formation or the deliberate choice of the builders of the cistern for some specific reason or function. Additional drain holes visible from within the cistern were located in the southeast, southwest, and northwest. The width of these drains, ca. 0.36-0.14 m suggests that they functioned to channel water into the cistern rather than to draw water out. The maximum size of Cistern 13 was ca. 6.00 x 6.00 m with a height of 2.4 m; it was round in plan and bell-shaped in section.

The presence of cisterns on the tell and in the surrounding bedrock areas, for example, Cistern M28 (Battenfield, forthcoming), is characteristic of the settlement at



8. Field E64, Cistern 13 at the beginning of excavation (photo by Timothy Hellum).

Tell Jawa in all periods due to the lack of a natural spring in the immediate area (Daviau 1993: 338). Numerous cisterns with their covers are still visible in the modern village to the north and east of the tell and in the fields to the west (Field S). The largest cistern (S1) in immediate proximity to the tell was documented and excavated in several small probes during the 1992 season (Battenfield, forthcoming). Investigation of modern water supply strategies by Nazmieh Rida Tawfiq Darwish (personal communication) revealed that cisterns had been in use in Jawa village until the introduction of piped water from Amman.

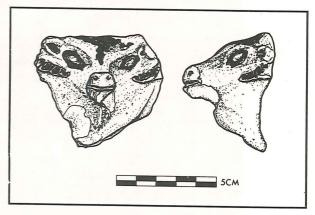
Field C

On the southeastern terrace, overlooking Wall 9007 and its associated Buttress (W9008), was Wall 9000. This wall, running east-west, was formed of large boulders, ca. 0.80-1.00 m in size, and measured 1.8-2.2 m thick. One inset/recess was identified on the outer face of Wall 9000, although no matching inset appeared on the inner face. The outer face of the wall was plastered to cover the boulders themselves and the chink stones between them. This construction technique has also been found on the western, outer face of Wall 9007 (in C61) and of Buttress 9008 at the base of the terrace.8 The presence of the plaster on Wall 9000 and of the offset-inset along its outer face strongly suggest that this was an outer city wall. To date, no inner casemate wall has been found in this area; instead, Rooms 901 and 902 run perpendicular to Wall 9000 rather than parallel to it and form a series of small, square rooms whose precise relationship to a larger building cannot yet be determined.

Artifacts and ceramic finds recovered from Rooms 901 and 902 suggest domestic activities. For example, there was a clay oven, *tabun* style, lined with pottery sherds, and protected by a partition wall formed of one large stone quern set on edge (L. C54:19). Associated artifacts included cooking pots, a limestone mortar and a basalt footed bowl, probably used as a mortar. This three-footed style mortar has close parallels at Ḥama (Riis and Buhl 1990: fig. 35:77, 78) and at Hazor (Yadin *et al.* 1961: pl. CCXXXIII: 9). In addition, there were numerous pestles, rectangular mortars, pounders, millstones, querns, animal bones, an iron knife blade, and various ceramic vessels.

The repertoire of ceramic ware forms includes forms recovered in previous seasons, such as inverted rim bowls, straight necked bowls—usually red-slipped and burnished, bar-handle bowls, bases of small juglets, a carrot-shaped bottle (ca. 0.12 m in height) and pithoi. The most unusual find from these rooms was a ceramic head depicting a ram (Fig. 9). The head was red-slipped and the eyes, horns and forelock were painted black. The back of the head forms a corner, suggesting that the head was part of a larger artifact.

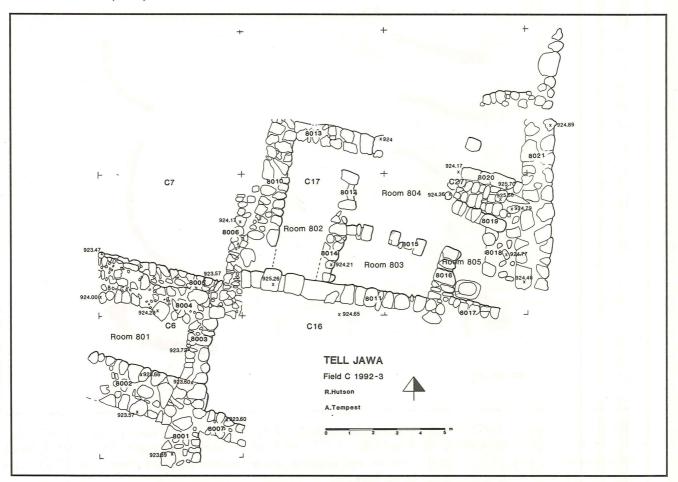
Upslope from this complex where the casemate system appears to end (C7), excavation continued in Pillared Building 800



9. Field C, ceramic ram's head, red-slipped with black paint, TJ 961 (drawn by A. Tempest).

^{8.} Plaster from the outer surface of West Wall 2002 in Field B has been analyzed by R. Hancock at

the University of Toronto Slowpoke Reactor (Pavlish and Hancock, forthcoming).

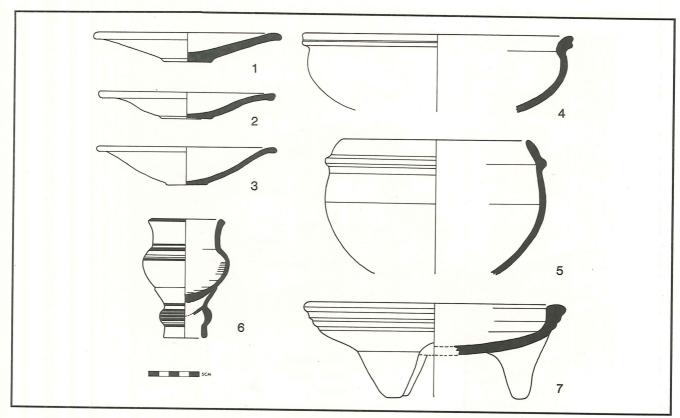


10. Pillared Building 800 in Field C-west.

(Fig. 10), previously identified as a fourroom style house (Daviau 1993: 332). This season, there were several important discoveries both in the realm of architecture and outstanding finds. The broad room at the rear of the house (Room 802) contained a large assortment of storage vessels smashed in situ along with a cooking area. The cooking area (L. C17:46) was bounded on the east by a large saddle quern (L. C17:50) set on edge just west of the doorway to form a partition wall or wind-break. The artifacts from this food preparation area and the adjoining debris layers (L. C17:44-45) included basalt mortars, pestles, upper loaf-shaped millstones, querns, and basalt bowls, unbaked clay loom weights, an ivory pendant, fragments of a ceramic cult stand(?), metal points, ceramic lamps, storejars, red-slipped and burnished saucers, black burnished bowls, a ceramic three-footed mortar (Fig. 11),

cooking pots, four-handled pithoi, and innumerable sherds of various vessels, including one partially legible ostracon. These artifacts were surrounded by accumulated soil layers (L. C17:44, 45, 46, 49) and collapsed stones from the upper part of the surrounding walls suggesting that some items had originally been in use in an upper storey room.

The clarification of the architecture of this room was also an important result of our excavation. The east wall (8012) of Room 802 was formed of stacked piers (L. C17:7, 33, 35) set at intervals and connected by partition walls (L. C17:56, 34), sometimes only one cobble thick, that did not fill the entire width of the piers (see Fig. 10). This style of construction formed niches between the piers that served as small storage areas. One such niche (L. C17:49) contained 12 unbaked clay loom weights, a basalt mortar with a ring base, smashed ce-



11. Field C pottery; 1=C17.82.5, saucer, burnished, slip; 2=C17.46.3, saucer, burnished, slip; 3=C17.84.5, saucer, burnished, light red slip; 4=C17.86.1, black burnished ware; 5=C17.91.5, black burnished ware; 6=C17.71.9, cultic vessel, red-slipped, white, brown and red paint; 7=C17.71, clay mortar bowl with white slip (drawn by L. Cowell).

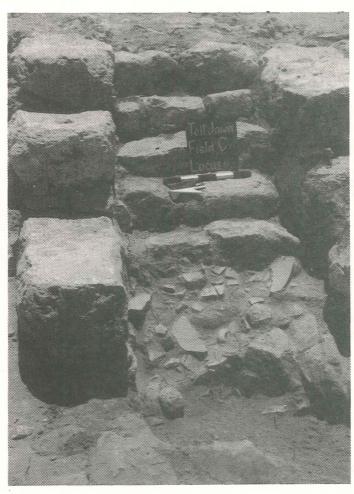
ramic vessels, a cooking pot, and animal bones. At the north end of the row of piers, a finely constructed doorway located between Pier 35 and north Wall 8013 connected Room 802 to Room 804 immediately to the east. Wall 8013 was a heavy, 1.1 m thick, two-row wall of boulder and chink construction that was thought in previous seasons to form the outer wall of the house. With continued excavation in Room 804 it became apparent that the house extended beyond Wall 8013 to the north, although this was not confirmed for the west or back end of the house this season.

The central room (804) was bounded on the south by a row of pillars (walls 8014 and 8015) and Wall 8012 on the west (see the east wall of Room 802 above; Fig. 10). In the middle of the room, Walls 8019 and 8020 formed the south and north sides of Staircase 43. Wall 8020 consisted of one row of very large (1.0 m or more) boulders

standing three to four courses high (Fig. 12). Staircase 43 was formed of at least eight stone steps that were covered with broken pottery and artifacts (Fig. 13). Although it is possible that many of these finds had been in use on the upper floor and had fallen onto the steps, another possible explanation is that the jars were in position on the stairs in order to cool their contents (Petherbridge 1978: 194). Some of these finds were high status, for example one storage jar was red-slipped and burnished, a very unusual treatment for this vessel form. The associated artifacts include basalt querns. millstones. and large weights(?) ca. 2.6 kgs. Little evidence for the full width of Room 804 remains since only one pillar, 1.9 m tall (L. C27:46), was found north of the west end of stairway Wall 8020. Before excavation, the stairs and Room 804 were covered with collapsed stones (L. C27:40, 39, 38, 37) from the sur-



12. Pillared Building 800, Staircase 43 in Room 804 (photo by P. M. M. Daviau).



13. Staircase 43 in Building 800, during excavation (photo by P. M. M. Daviau).

rounding walls suggesting that the upper storey walls were also constructed of stone with little if any mudbrick superstructure.

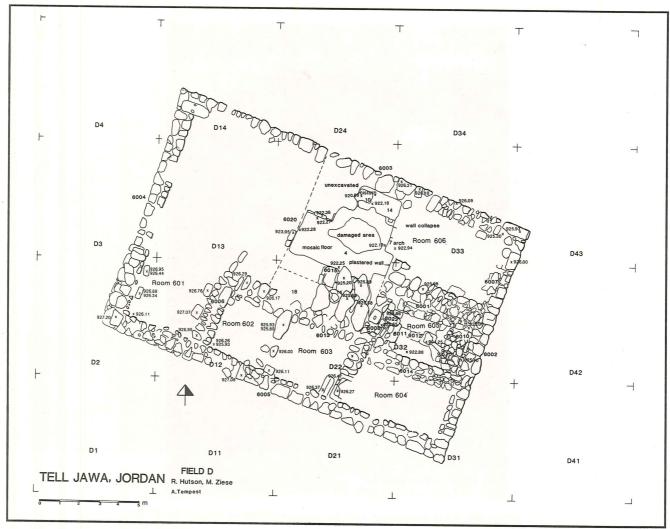
Although the full size of Building 800 is still unknown, an attempt was made to identify the northernmost wall. What became clear as a result of excavation was that this was not a traditional four-room style house even though all ceramic finds can be dated to the Iron Age II, probably during the seventh century B.C. Further excavation in 1994 is needed to identify its overall plan.

The Early Islamic Building Field D

Continued excavation of the Late Byzantine-Early Islamic building in Field D (Fig. 14) focused on Rooms 605 (D32) and 606 (D33) on the east in order to completely expose those rooms (Daviau 1993: 335). Architectural elements, such as vaulting stones, thresholds, reused column drums, and worked stones, identified during the 1992 season, were labelled and preserved.

Three important tasks were accomplished this season: 1) the definition of the north outer wall and possible central entrance; 2) the clarification of the construction techniques employed; and 3) the exposure of the ground floor surfaces in Squares 32 and 23. This final task, subsequent to our recognition that the rooms previously excavated were on an upper storey, resulted in the discovery of a mosaic floor in the atrium on the lower level.

The building is orientated northwestsoutheast with only one possible entrance



14. Field D, Building 600.

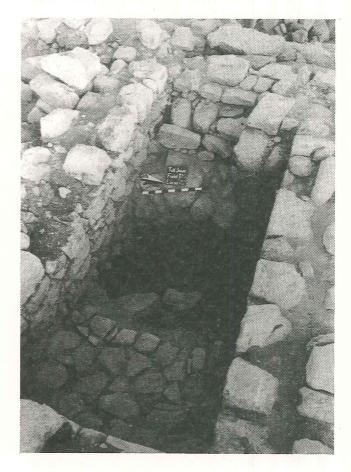
located in north Wall 6003 (Fig. 14). Clearance outside of Building 600 to clarify the entryway is projected for 1994. Excavation resumed in D33 to complete the work in Room 606 inside the northeast corner of Building 600. Here two springers formed the southern supports of arches that spanned the room from south to north. Due to the limits of excavation, the rock collapse from the upper walls that filled the northwest half of the room covering the matching (northern) pair of springers remained in place.

The outer walls (as observed in Room 605) were formed of hewn, semi-hewn, and unhewn stones in a boulder-and-chink style with courses of fill consisting of soil and small stones at irregular intervals. Similar techniques are seen in the Islamic structures at Pella and elsewhere (Lewcock 1984: 135). The southern exterior wall (6005) contained one column drum on its side built into the wall. Reuse of architectural elements from earlier periods (especially the Byzantine period) was common in Umayyad buildings. Until the ground floor of Building 600 is fully exposed, it will be impossible to determine whether there was in fact an earlier building from the Byzantine period that was remodelled and used during the Umayyad period. Within the area of our current excavations, all internal walls on the upper storey abut the outer walls (north=6003, south=6005, east=6002, and west=6004). While this suggests the prior construction of the outer walls, no evidence currently exists to date their original construction.

The entrance into Room 605 was from the west by means of a stone staircase (D22:21) with three preserved steps (Fig. 15). At the top of the stairs was a stone threshold in Wall 6008 that marked the position of the door. Ceramic vessels broken on the stairs leading down into Room 605 appear to mend with those recovered from the cooking area (L. D32:32) and associat-

ed Floor 33 excavated in 1992 (Daviau 1993: 336). The painted ceramic vessels along with a glass lamp base confirm the dating of the latest use of the building to the Umayyad period (eighth century A.D.). The presence of several large nails in the debris above the second step (L. 19) suggests the use of wood in the construction of the upper storey. Access to the lower room(s) is not yet clear due to the limits of excavation under the ceiling slabs over the corridor on the south side of the central courtyard (Room 607).

In the fill below earthen Surface D32:33 (Room 605) were several unique finds, including a small hoard of 35 copper coins, datable to the Umayyad period. The coins had been in four small stacks which were wrapped in a fabric container whose threads still adhere to some of the coins. Several

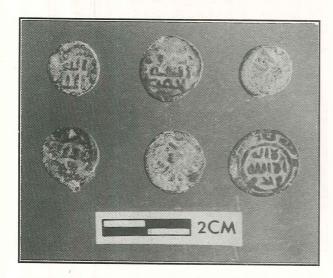


15. Building 600, Field D, showing floor of upper storey Room 605 (photo by Timothy Hellum).

coins bear simple inscriptions that read "there is no god but Allah" and "Moḥammad is the prophet of Allah" (Fig. 16). The inscriptions also indicate that several coins were minted in Damascus and one in Ramla, probably between A.D. 708 and 720 since the coins appear to be otherwise undated (Bates 1989: 226). Other finds from the same area include fragments of a glass lamp and two pieces of parchment(?).

Immediately under the earthen floor in Room 605 was a large ceiling slab (L. 32:48) that was part of the system of supports for the upper storey rooms. The ceiling slab was supported by Walls 6012 and possibly 6014 at 1.76 m above the floor of the lower room. No doorway has been found connecting the lower storey room with the central courtyard. In its place, Wall 6011 blocks any possible entrance.

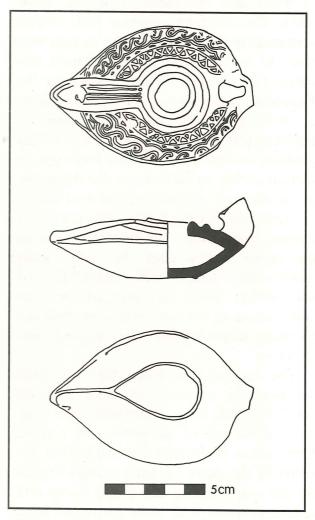
To the west of Staircase 21 leading out of Room 605 on the upper level, were six mammoth ceiling slabs (D21:14) supported by stone wall sections (see Fig. 14). These ceiling slabs measured ca. 3.6 x 2.6 m and were 0.30 m thick. While one thinks immediately of Umm el-Jimal with its corbel roofing system (De Vries 1982: fig. 2), the construction at Tell Jawa has certain differ-



16. Umayyad copper fils from Building 600, Room 605. Top row, left to right: 1069, 1035, 1036: bottom row, left to right: 1037, 1038, 1041.

ences, probably due to the fact that these slabs were of limestone rather than basalt. The western end of this ceiling was badly damaged and several slabs had collapsed into the lower storey whose floor level was as much as 2.0 m or more lower. Within the debris that accumulated in the central court area, 14 complete or partially reconstructed lamps (Fig. 17) and over 100 lamp fragments were recovered.

Under ceiling Slabs D22:14 were several fill layers (L. D22:16, 17, 18) that consisted of soil with small cobbles and pebbles that had settled into gravel lenses at intervals. Within these layers and resting below the stone ceiling slabs were the remains of five humans, the head of a quadruped, possibly a donkey, and a group of sheep/goat bones. The bones of these skeletons were mostly



17. Lamp from courtyard area (D23) of Building 600 (drawn by M. Beckmann).

disarticulated and found at various levels, with two human skulls being located ca. 0.10 m above a pelvic bone. One skull, intact except for the lower mandible, was found approximately 0.45 m below the ceiling slabs. The position and condition of the bones suggests that the bodies had been trapped by the collapse of several ceiling slabs. Further analysis will be necessary to fully identify the skeletons and the manner of their demise although it is tempting to think that they were trapped during one of the earthquakes that rocked the region during the eighth century A.D.

Access to the rooms on the lower level of the building was apparently through the central courtyard or room that had been paved with a plain mosaic floor (Fig. 18). The central courtyard is bound on the north by the outer wall (L. 6003), on the west by an interior wall (6006), on the south by the supporting wall (W6015) for ceiling slabs

D22:14, and, on the east, by another interior wall (6008). The northern edge of the mosaic floor that paved the courtyard sealed up against Bedrock D23:14 (Fig. 18). The bedrock served as a floor surface on the east side of a small cistern (L. D23:10) that was carved out of rock just inside the north wall. The cistern is plaster-lined, circular in shape, and measures 1.30 m deep with a diameter of 1.27 m, while the mouth was square in shape. The mosaic pavement consisted of large (3.0 cm) and small (1.0-2.0 cm) tesserae in several colours, predominantly pale yellow, but also red, black, and blue.

While the courtyard may represent the first occupation phase of the building, possibly between A.D. 650 and 717, the painted pottery from Room 605 on the upper storey, presents evidence for eighth century occupation (personal communication, P. M. Watson). These dates are chosen because of



18. Building 600, central atrium with mosaic floor (photo by Timothy Hellum).

the evidence of reconstruction in Room 605, possibly after the earthquake of A.D. 717. The walls of this small room (605) were repaired and then covered with painted plaster and decorated stucco. However, further excavation is required in adjoining rooms to discern their construction history and establish a complete and detailed phasing of the building. The final destruction of Building 600 may have been caused by the A.D. 747 earthquake. No conclusive evidence for occupation after that date has been recovered.

Several other buildings, standing above

ground at Tell Jawa, strongly suggest additional Umayyad period structures awaiting excavation. Because there is little evidence for the distribution of early Islamic settlements in the immediate area, continued excavation at Tell Jawa may add a significant body of evidence for the Umayyad period in Central Jordan.

P. M. M. Daviau Wilfrid Laurier University Waterloo, ON N2L 3C5 Canada

Bibliography

Battenfield, J. R.

f.c. The Rock Cut Installations in Field M: Survey and Documentation. In Excavations at Tell Jawa in Central Jordan: The Byzantine and Umayyad Periods.

Bates, M.

The Coinage of Syria Under the Umayyads, 692-750 A.D. Pp. 195-228 in M. A. Bakhit and R. Schick (eds), *The Fourth International Conference on the History of Bilad al-Sham During the Umayyad Period*. Proceedings of the Third Symposium. English Section, Volume Two. Amman: University of Jordan.

Daviau, P. M. M.

Preliminary Report of the Excavations at Tell Jawa in the Madaba Plains (1991). *ADAJ* 36: 145-159.

Preliminary Report of the Third Season of Excavations at Tell Jawa, Jordan (1992). *ADAJ* 37: 325-338.

Dever, W. G.

Further Evidence on the Date of the Outer Wall at Gezer. BASOR 289: 33-54.

De Vries, B.

The Umm el-Jimal Project 1972-1977. ADAJ 26: 97-115.

Herzog, Z.

Settlement and Fortification Planning in the Iron Age. Pp. 231-274 in A. Kempinski and R. Reich (eds), *The Architecture of Ancient Israel from the Prehistoric to the Persian Periods*. Jerusalem: Israel Exploration Society.

Lewcock, R.

Architects, Craftsmen and Builders: Materials and Techniques. Pp. 112-143 in G. T. Petheridge (ed), *Architecture of the Islamic World*. London: Thames and Hudson.

Pavlish, L. and Hancock, R.

f.c Analysis of Plaster Samples from Tell Jawa, Jordan. In Excavations at Tell Jawa in Central Jordan: The Iron Age.

Petheridge, G. T.

The House and Society. Pp. 193-208 in G. Michell (ed), Architecture of the Islamic World: Its History and Social Meaning. London: Thames and Hudson.

Riis, P. J. and Buhl, M.-L.

1990 Hama. Fouilles et récherches 1931-1938. II.2. Les objets de la période dite

Syro-Hittite (Age du fer). Copenhagen: Nationalmuseet.

al-Tell, S.

Development of Coinage in Jordan throughout History. Amman: Central Bank

of Jordan.

Wright, G. R. H.

1985 Ancient Buildings in South Syria and Palestine. 2 vols. Leiden: E. J. Brill.

Yadin, Y., Aharoni, Y., Amiran, R., Dothan, T., Dothan, M., Dunayevsky, I. and Perrot, J. 1961 *Hazor III-IV*. Jerusalem: Hebrew University.

w 7.42