## PRELIMINARY REPORT OF EXCAVATIONS AT KHIRBAT AL-MUDAYNA ON WĀDĪ ATH-THAMAD (1996-1999) THE NABATAEAN BUILDINGS

by

P. M. Michèle Daviau, Noor Mulder-Hymans and Laura Foley with a contribution by Christopher J. Simpson

#### Introduction

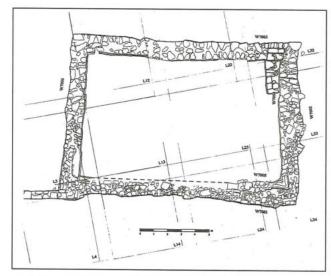
During a four day surface survey1 and subsequent regional survey in Wādī ath-Thamad and Wādī Shabik basins, it became apparent that there was a heavy Nabataean/ early Roman period occupation in the area, with a major settlement located at the foot of the Iron Age site of Khirbat al-Mudayna. With this information, an excavation and survey project was designed to investigate these settlement sites and situate them in their regional context.<sup>2</sup> This report presents the results of four seasons of excavation of two Nabataean period buildings at Khirbat al-Mudayna, and of epigraphic finds in the region, with a special contribution by C. J. Simpson.

### Field L — Building 700

Field L is located adjacent to Field A on the eastern slope of the tall, below the surrounding embankment. Located in excavation Squares L3-L33 is a large building (700; Fig. 1) whose wall lines, visible on the surface prior to excavation, were obscured in places by soil eroded from the northeast "dump" identified by Glueck (1934; 1939). In 1995, Surface Survey Square S-3 was opened inside the wall perimeter, and 416 sherds were collected. The pottery readings dated the material to Iron I, Iron II, Roman and Byzantine periods. Because of the pres-

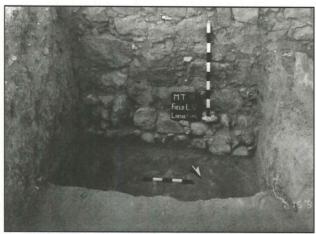
ence of pottery dating to a period later than the Iron Age occupation on the mound, Field L was included in the research design of the excavation proposed for the 1996 season.

Excavation began along the east side of Building 700.<sup>3</sup> Evidence for the original construction phase was recovered in Square L32, outside the northeast corner, where the north face of north Wall 7003 was exposed to its founding level (Fig. 2). Apparently, the builders had cut into the lower slope of the mound and created a vertical baulk (L32:8+10+11), against which the north wall was constructed. The foundation stones for Wall 7003 were packed against virgin soil with only a narrow foundation trench (L32:13) beside the wall face which was in-



1. Plan of Building 700 in Field L; first phase.

- Funding for the surface survey was provided by a short term grant by Wilfrid Laurier University and from SSHRC funds awarded to WLU.
- Preliminary studies of the settlement patterns in Wādī ath-Thamad were presented at the 1st International Congress on the Archaeology of the Ancient Near East, Rome (May 19-22, 1998; Daviau, in press/b) and at the First International Confer-
- ence of Studies on the Nabataeans, Petra (June 21-23, 1999; Daviau, in press/a).
- Celeste Barlow (Toronto, ON) was field supervisor during the 1996 and 1997 seasons; in 1998, Michael Malloy (Toronto, ON) was senior square supervisor and in 1999, Noor Mulder-Hymans (Maastricht, the Netherlands) was field supervisor.



Outer north face of Wall 7003; showing foundation stones L32:12

set. The foundation stones (L32:12) consisted of 2-3 courses of rough cobbles (0.41 m deep) at a level of 0.67-0.90 m below the earliest interior surface (L33:31). Wall 7003, preserved 6 courses in height, was inset approximately 0.25 m south of the outer edge of the foundation stones. In contrast to the cobble sized stones of the foundation, the wall itself was built of small to large sized stones in boulder-and-chink construction (1.22-1.28 m thick), with evidence for a rubble core between the semi-hewn boulders that formed the outer rows. No exterior surface plaster was present, although there was evidence of mud mortar between the wall stones.

Only in the 1999 season were all four walls exposed sufficiently to determine the building's full size (ca. 11.00 x 16.50 m), and to identify its major features. Building 700 had at least two phases; in the initial phase, this structure consisted of a single room surrounded by its outer walls which were coated with 3-4 layers of fine plaster. In similar fashion, the floor surface consisted of laminated layers of plaster sealing a cobblestone sub-floor which sloped gently from south to northwest. The surface plaster ran up to and covered the base of the walls.

An additional curb of plaster, containing small stones, sealed the join between wall and floor. This curb had one plastered drain hole (L12:19) near the northwest corner (see Fig. 1), probably for use when cleaning the reservoir. From this corner, the curb was clearly visible on the south, west and north sides, with only the northeast corner covered by a set of stairs (L32:14).

The presence of plastered water channels through the upper courses of the east and north walls appear to have funnelled water out of the reservoir. Drain L32:15 extends through North Wall 7003 and is plastered on the bottom and both sides.4 A second drain (L33:20), also plaster lined, was built into the upper courses of East Wall 7002, at a higher level than Drain L32:15. This drain was built in a section of wall which was poorly constructed, consisting of cobble sized stones and large amounts of mud mortar (L33:45). Outside east Wall 7002 was a plaster and pebble surface (L33:42) associated with the mouth of the drain. What is unclear is the drain's function; was it designed to bring water into the reservoir or to funnel water out to irrigate agricultural fields, especially those that were down slope and to the north of Building 700.

In the southeast corner there was a stonecut drain channel (L34:13) that was plastered into the lower courses of south Wall 7005 and east Wall W7004 (Fig. 3).<sup>5</sup> Due to severe erosion along the south wall, it is not possible to connect this channel with a second unit located in the southwest corner of the building. Here a stone-carved channel (L3:13) was fitted into the top course of West Wall 7006 and south Wall 7001. In overall plan and function, Building 700 appears similar to reservoirs at Mampsis (Negev 1988: Photo 192) and at Umm al-Jimal (de Vries 1998: Fig. 67).

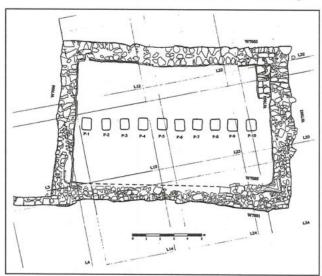
<sup>4.</sup> This drain is visible in the upper, right hand corner of Fig. 2, where a thin vertical edge of plaster can be seen.

These walls appear to be a thickening, or secondary phase of the major walls (7001, 7002) which support the drain units.

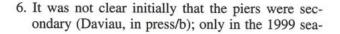


Stone-carved drain channel L34:13, in southeast corner of Building 700.

Following this use phase, a row of 10 piers, each about 0.65 m from its neighbour, was constructed down the centre of Building 700, on top of the layers of laminated floor plaster (L23:28). These piers were built in header-stretcher style and seem to be part of a large arch support system for a stone ceiling (Figs. 4, 5 and 6). The piers are preserved 2-3 courses high (ca. 1.00 m). The fact that there was no plaster preserved on any of these piers indicates that the reservoir was no longer used as such.<sup>6</sup> In certain instances, the spaces between several piers were blocked to further separate the northern room from the southern half of the building.



Plan of Building 700 with central piers; second phase.





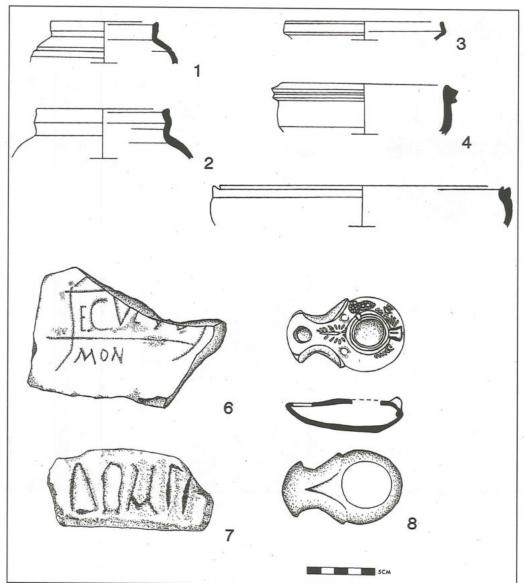
5. South face of the line of piers running down the length of Building 700.



6. Detail showing piers L13:20 and L13:21 in position on Plaster Floor L13:23.

A superimposed plaster surface, associated with an oven and Roman period cooking pots (Fig. 7:1, 2), was constructed in the northeast corner adjacent to the stairs (Fig. 8). Here ash lenses (L23:27) are spread across the plaster floor. This final phase of occupation can also be detected in the wall repairs, as well as in the ceramic repertoire, especially in the presence of cooking pots and lamps which suggest a domestic use for Building 700. In Drain L32:15, now used as a niche(?), were some early Roman period ceramic sherds, the base of a glass vessel, and a moulded 1st century style lamp with a splayed spout (Fig. 7:8). Other ceramic finds include terra sigillata, early-Roman coarse wares (Fig. 7:4 and 5), and thin, undecorated Nabataean style pottery (Fig. 7:3). Of special

son were piers exposed on both sides revealing the total lack of surface plaster.



7. Pottery from Building 700; 1-2: cooking pots; 3: unpainted Nabataean shallow bow1; 4-5: early-Roman coarse ware bowls; 6: limestone slab with Latin inscription; 7: limestone slab with Greek inscription; 8: early-Roman period lamp.

note among these finds are a number of coins - one of Antoninus Pius - and two limestone slabs, each broken at the upper right hand corner. One slab is incised with shallow letters in Latin (see Simpson, below); the second slab contains a deeply incised text in Greek script ( $\Delta$ OMII[?]). It may be part of a larger text or serves as an abbreviation for the name of Domitian (Fig. 7:7).

When the building went out of use, it was filled with a series of debris layers that contained collapsed voussoirs and ceiling slabs. The ceiling slabs<sup>7</sup> were formed of limestone and were on average 0.70 x 1.25 m in size, and 0.15-0.20 m thick. The position of

roughly carved voussoirs indicate that the ceiling was supported on pairs of opposing arches that sprang from the central piers and rested on the tops of the perimeter walls. There were no matching piers along the inner face of either the north or south walls, nor was there any evidence that support the idea that piers were integrated into the walls, even in the southwest corner, where the walls are preserved to a height of 1.64-1.96 m above the floor.

The latest finds from Building 700 appear to date to the early second century. The small number of finds suggests an abandonment rather than destruction. That the build-

voussoirs, ceiling slabs, and pieces of the drain channel.

A separate registration system was developed to catalogue and draw architectural stones, including



8. Superimposed plaster layer L33:28 along the east side of Building 700.

ing continued to stand and was gradually filled with wind-blown soil after it was abandoned is apparent in the position of the voussoirs that fell onto a thick layer of soil, rather than on the floor surface. In one case, it appears that a person was trapped and died under the voussoirs (Burial 8). Unfortunately, the date of this death is unknown, because there were no grave goods.

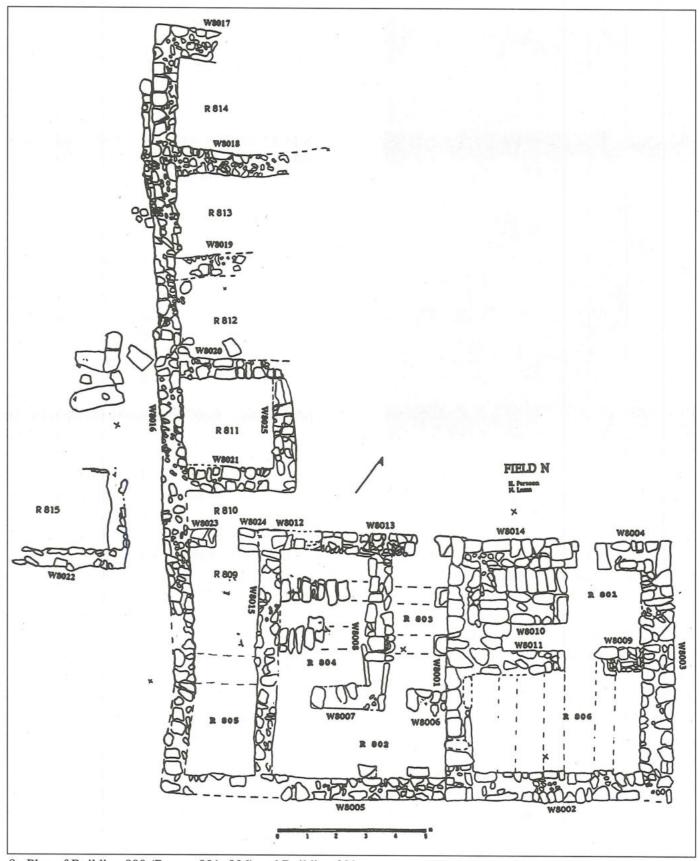
# Field N—Building 800

The excavations in Field N revealed a complex consisting of two adjoining structures, Building 800 on the east, and Building 802, on the west (Fig. 9).8 Building 800 was almost a square with a doorway (A) on the north side that led into Room 801 at the foot of a stairway. The doorway had a cut stone frame which consisted of a pair of vertical doorjambs (N74:26, N74:27; Fig. 10). West

 Walter McCall (Kingston, ON) was field supervisor in 1996 and 1997; Gregory Braun (Toronto, ON) was senior square supervisor in 1998, and frame N74:26 measured 0.99 m in height, 0.32 m in width, and 0.20 m in thickness, with a deep vertical groove forming a 10 cm lip which supported the door on the west side. Frame N74:27, on the east, currently consists of two pieces, the upper of which appears to have been carved into one of the major stones of the wall itself (W8004). The actual jamb measured 0.94 m in height, 0.32m in width, and 0.25 m in thickness with a similar vertical groove forming a matching 10 cm stop on the east side. The key feature on the east side was a small depression (9 x 16 cm) to the south of this groove, which was a component of the locking mechanism for the door. For this reason, it was important that the upper portion of the frame be hewn into one of the massive wall stones, thus making it more difficult to force the door open from the outside once the bolt had been put in place. Both doorjambs sat directly on top of the original threshold (N74:21) stone that measures 0.96 x 0.37 x 0.27 m. Outside Doorway A was a semi-circular threshold stone (N63:20) which was sealed with three layers of plaster. To the west of the doorway was a large pivot stone (N63:24) that was broken but probably still in situ.

Inside Room 801, the stairway consisted of a total of 11 steps with a landing and change of direction at step 5. The presence of two parallel walls (W8010, 8011) indicates that the stairs continued up to a second storey. To the south, Room 806 was spanned by 3 integrated arches and paved with a flagstone floor (N74:34; Fig. 11). The floor was formed of finely dressed rectangular slabs (on average 6.00-13.00 cm thick and 41-57 cm wide x 48-81 cm long), some of which appeared to extend under the north walls (W8009, W8011), suggesting that the pavement was put in place at the time the interior walls were built. The floor was probably laid first at the eastern end of

Laura Foley (Saskatoon, SK) was field supervisor in 1999.



9. Plan of Building 800 (Rooms 801+806) and Building 802.

the room, since the paving stones near the western end were narrower, measuring only 25 cm wide x 35-100 cm long.

Additional rooms (R802-R804) were built along the west and north sides of Building 800 (Fig. 12). These rooms had



Doorway A, facing north, with threshold and doorframes in place.



11. Stone paved floor (N74:34) in Room 806.

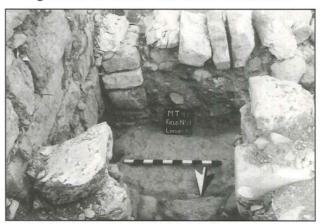


12. Building 802, looking south, Rooms 803 (left), Room 804 (right), and Doorway E into Room 802 (background).

plaster floors and were spanned by arches that supported the ceilings (Fig. 13). The voussoirs were collapsed in place adjacent to the piers from which they sprang (Fig. 14). Stone-carved jambs framed the doorways (C, D) leading into rooms further north. Room 804 measured 3.08 x 4.61 m, while



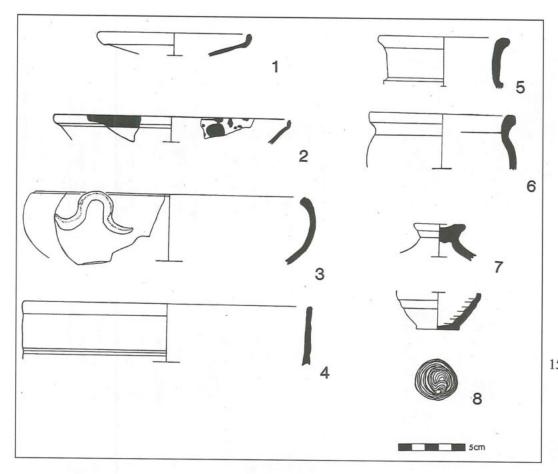
13. Detail of piers N54:37 (left) and N54:39 (right), against west face of Wall 8001 in Room 803.



Collapsed arch in Room 803, with fallen voussoirs.

the distance between the fallen voussoirs was ca. 1.08-1.17 m. The voussoir stones themselves measured 0.60-0.85 m in length and were linked by ceiling slabs (N55:22) that were each ca. 1.33-1.49 m in length and 0.44-0.50 m wide. Within the rooms themselves, only small amounts of pottery were recovered (Fig.15:3,5-8), including painted Nabataean sherds. Characteristic of the 1st and 2nd centuries AD are a terra sigillata bowl (Fig. 15:4) and Nabataean bowl rims (Fig. 15:1-2). A Roman coin found in the debris may help to date the final occupation phase to the late 3rd century AD, the time of Valerianus (Z. Fiema, personal communication), although this may be a random find.

Present in the debris of these buildings were several Bedouin burials. The burial of a child (Burial 6) was the only one that yielded grave goods, including beads, a bronze pendant and a bell wrapped in cotton



15. Pottery from Building 800; 1-2: Nabataean shallow bowls; 3: bowl; 4: terra sigillata; 5: storejar; 6: small jar; 7: lid knob; 8: juglet.

cloth.<sup>9</sup> The closest parallel for such artifacts are the Bedouin graves at Tall el-Hesi that are dated to 1400-1800 AD (Toombs 1985: Pl. 69d; 116).

In the 1999 season, excavation continued in Building 802 on the west and north in order to locate the perimeter of the building complex. The principal west Wall (W8016) runs north for a total length of 16.25 m. At the northwest corner, W8016 turned east as Wall 8017. The corner stone (0.60 x 0.70 m) for Walls 8016 and 8017 was well hewn. North Wall 8017 measures 0.95-1.00 m thick, slightly thicker than Wall 8016 which is 0.75-0.88 m wide. Because the plan of comparable domestic complexes is well known from Petra (Stucky 1991; 1995), ad-

ditional rooms are probably located inside the perimeter along the north wall.

Against the west, the exterior face of Wall 8016 was a single row of rectangular stones (N33:6) that appears to serve as a foundation for the wall. These foundation stones were 0.50-0.60 m long at the north end and only 0.20-0.30 m at the south end, where these smaller stones were faced in turn by stone slabs standing on edge. To the west was a hard-packed beaten earth surface (N33:8), made irregular by falling wall stones suggesting an exterior surface, although this can only be confirmed by further excavation. This surface did not touch the foundation stones along its entire length, possibly due to water damage along the face

wear a headdress with such a heavy ornament. Toombs accounts for the presence of fabric on the bell from Tall al-Ḥasa by suggesting that it was part of the garments or burial shroud. The fabric on bell MT 243 suggests a small bag or pouch, rather than a garment, because it alone survived while all other fabric deteriorated.

<sup>9.</sup> The identification of the fiber content of the cloth bag was made by Judith Logan at the Canadian Conservation Institute, Ottawa. Toombs (1985:101, 106) suggests that the bell was a weight on the headdress of the woman in whose grave it was located. While this may be true for an adult, it seems unlikely that a young child would

of the wall.

series of Α perpendicular walls (W8018=N33:12, W8019=N33:14) divide the interior space into discrete rooms, each approximately 3.00 m in width. Only one room (R811), east of West Wall 8016, was completely excavated. The three principal walls were all of boulder-and-chink construction, formed of small and medium boulders with cobble size chink stones. All these walls appeared to be footed on a soil layer which was visible where the beaten earth surface (N44:12) was damaged. The east wall of Room 811 consists of the remains of a two-row wall with small boulders and cobbles. This wall (W8021) connects with a low, round topped door jamb (N44:13) and a two-stepped, finely carved threshold (N44:11) in Doorway F (Fig. 16). The threshold was a single block of limestone (1.05 m in length; 0.40-0.50 m in width) with each step being 0.07 m high. The lower step was 0.25 m deep and had a rectangular socket at its north end. The upper step was 0.20 m deep. At the south end of each step, there was a 2.00 cm deep groove that appears to be the result of running water.

One surface (N44:12) covered the entire room and ran up to the west face of the line of chink stones in front of Threshold N44:11, where there was a scatter of 4 bronze coins. The room was filled with a series of deep debris layers that consisted of fallen wall stones. Within this debris were



16. Threshold N44 11 in Room 811.

several basalt grinding stones. Since these artifacts were throughout the accumulated debris layers, some at least 0.20 m above the surface, their original position is unknown, although they suggest an upper storey room or roof terrace.

To the west of Wall 8016 was a narrow space that separated Building 802 from a room (R815) with two superimposed plaster floors. Plaster surface (N45:8) covered an area 2.25 x 3.25 m and sealed up against the north face of south Wall 8022 and continued upward, covering two large stones incised with tool marks designed to stabilize the plaster. The east wall (N45:11), which runs parallel to Wall 8016, was only preserved on its eastern face; apparently it was robbed out, leaving a soil layer (N45:14) in its place. It marked the western perimeter of an alley or corridor, which opened out into Doorway H. The most unusual feature (N45:7) on plaster Surface N45:8 was a single stone, carved in a U-shape and closed at one end where a long, key-hole shaped hole extended from the upper edge to the floor of the installation. The shape of this stone is comparable to stone-carved drain sections found in Building 700 in Field L and at Site 47, but its function in this housing complex remains unknown.

#### **Thamudic Inscriptions**

During four seasons of excavation and survey, the Wādī ath-Thamad Project has located 11 Thamudic inscriptions, only one of which (TT-1) was previously known (Bisheh 1986). This text from Ureinibah West (WT-16), currently being studied by D. Graf, is the first continuous text on an architectural stone to be discovered in Jordan. At the time of its re-discovery by the Wādī ath-Thamad Project, it was the largest known Thamudic text. That honour now goes to Text TT-5, a monumental inscription of 21 lines pounded into bedrock at Survey Site WT-48. Sub-

sequently, two additional texts, each one only partially preserved, were recovered from Building WT-16/100 at Ureinibah West, and two poorly preserved graffiti were found at Site WT-61, the site of two Nabataean tombs that were recently disturbed.

The fact that four Thamudic graffiti were identified on doorframe stones in Building 800 makes it possible to associate these sites with one another and study the settlement patterns of Nabataen period sites in the Wādī ath-Thamad region. In view of the similarity between ceramic forms in Buildings 800 and 700, we can also assume that they were contemporary, at least in their founding period. The presence of Greek and Latin inscriptions in the final phase of Building 700 suggests the transition from Nabataean control to Roman rule.

## The Latin Graffito from Khirbat al-Mudayna (Christopher J. Simpson)

The graffito from Khirbat al-Mudayna is a sub-rectangular slab of limestone; L 13.90, W 9.70 cm, 3.30 cm thick (Fig. 7:6, above). Diagonal Nabataean tools marks are present on the left edge, and one face is inscribed. The text consists of two lines, with the letters in the top line measuring 1.80-2.20 cm in height, whereas the letters in the second line are considerably smaller, ca. 1.00 cm in height. A horizontal line runs above the inscription and a second line separates the upper word from the lower line of text.

#### The Text

Line 1: SECV[N..]S. Line 2: MON. The

graffito is composed in what Thompson (1966:206) refers to as "formal cursive, the normal shapes of the old letters being fairly maintained." Indeed, the graffito sits securely in the first/early second century AD (See in particular, the letters S. V. M. O. N.13 Only the lowest parts of the N and lower half of the second S survive in line 1. Both the first and last S are elongated, rising above and descending below the interior letters. They are connected by upper and lower horizontal lines to form a frame for those letters. The line may be deciphered as SECU[NDU]S, a widely met cognomen or surname.14 Line 2, MON, is a "common abbreviation" for monumentum, tomb (Keppie 1991:138).

What may legitimately be inferred about the writer from the graffito? Secundus, if indeed he was the scribbler, was male, had at least a rudimentary level of literacy in Latin, and was aware of epigraphic style and abbreviations. Further, given the lack of tria nomina, we may speculate that he was a 'romanized' non-citizen. As such, it is probable (but not demonstrable) that he was an auxiliary soldier in one of the units associated with the Roman expansion in the Near East between AD 74 and AD 114 - earlier rather than later in that period given the "old letters."15 The graffito with its apparent frame may best be understood as being scratched by one Secundus while pondering his mortality. Such musings about personal mortality were not unknown in the ancient world.16 It could also be that he considered where he was to be a 'living death' - hence the ab-

This text, as well as the inscribed stones from Building 800, are being studied by M. Macdonald of Oxford University.

<sup>12.</sup> For a discussion of the issues involved in understanding Nabataean settlement, see Bowersock 1983 and Macdonald 1991. Settlement in central Jordan was not discussed in earlier syntheses, cf. Glueck 1938; Hammond 1973.

<sup>13.</sup> Cf. The wall graffito from Pompeii (*CIL* 4.1893, 1894, tab xxv.7). Thompson (1966:206); cf. also the letter shapes facing p. 218. Even the letter E,

with its vestigial cross bar, is quite at home in the first century AD.

<sup>14.</sup> Secundus is a particularly common name in, but by no means exclusively, the 1st and 2nd centuries AD. See Keune 1921: RE II.3, s.v. Secundus, col. 1990-1000.

<sup>15.</sup> See, generally Millar (1993:80-99; also Russell 1995:67-133, especially 111 f.).

<sup>16.</sup> For example, in the mid first century AD, the musings of the rich freedman, Trimalchio (Petronius *Sat.* 71).

breviation MON.

#### Acknowledgments

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P. M. Michèle Daviau Archaeology and Classical Studies Wilfrid Laurier University Waterloo, ON N2L 3C5 Canada

Noor Mulder-Hymans Maastricht, Holland

Laura Foley Saskatoon, SK, Canada

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<sup>17.</sup> During the 1996-1998 seasons, the Project was affiliated with ASOR.

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