AREA B

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Area B was expanded in 1971 to include three new Squares adjacent to the original 7.00 x 7.00 m. Square B.1 which had been opened in 1968 on the southern shelf of the acropolis.\(^1\) Squares B.2 and B.3 were laid out to the east of B.1, and B.4 was placed immediately south of B.2.\(^2\) All four Squares were excavated simultaneously throughout the 1971 season, and the results of this work are described and interpreted here.\(^3\)

**Stratum 1\(^4\) (ca. A.D. 1918-)**

*Description:* Above Stratum 2 (ground surface) there was no further stratification in Area B, but several Modern objects were attested among the small-finds.

*Interpretation:* These objects would reflect minor activity in Area B during the Modern resettlement of Ḥesbān to the south of the acropolis proper.\(^5\) The process by which the village was created anew through bedouin sedentarization was one which Ḥesbān would have shared with many other villages in Transjordan.\(^6\)


\(^2\) Square B.3 was reduced in size to align its east balk with the main north-south axis of the excavation (cf. Figs. 1, 3A).

\(^3\) The 1968 results from B.1 have been fully integrated into the present report (cf. especially the previously published B.1 Plan and Sections), and specific features of Areas A, C, and D have been included in the overall interpretation of Area B.

\(^4\) “Stratum” (plus arabic numeral) applies throughout this report only to Area B (cf. “Heshbon 1968,” pp. 114, 115, where “Stratum” [plus roman numeral] is reserved for site-wide stratigraphic interpretations).


Post-Stratum 2 Gap (ca. A.D. 1456-1918)

**Description:** The absence of post-Stratum 2 stratification in Area B has already been noted above. The latest coin from the Area dated to 1453-1461, and the latest attested pottery was Ayyūbid/Mamlūk.

**Interpretation:** This evidence, together with the silence of the literary sources, would suggest that there was a ca. 1456-1918 occupational gap in Area B and at the site generally. The gap at Ḥesbān would probably correspond to the gradual, partial depopulation of Transjordan which occurred during the Late Mamlūk and Ottoman periods. During the time of the gap, water erosion would have removed some of the Strata 2 and 3 remains from Area B.

Stratum 2 (ca. A.D. 1260-1456)

**Description:** Despite the fact that it lay on a shelf of comparatively level ground, the Stratum 2 pre-excavation ground surface of Area B sloped away from the acropolis of the *tell*, most generally towards the south and the west. A number of uncut boulders and stones were distributed randomly throughout the Area, and a concentration of rocks (B.2:2) rested in the ground surface soil of central B.2. The loose brown-black soil (B.1:1, 2A; B.2:1, B.3:1, B.4:1, 5, 6) covered all four Squares to a depth of ca. 10-60 m. Small-finds from Stratum 2 included objects of glass, stone, bone, shell, plaster, and metal. In 1968, B.1:1 and 2A produced three dated Mamlūk coins (1257-1259, 1260-1277, and 1293-1341), and in 1971 additional dated coins came from B.2:1 (253-260 and 1250-1517) and from B.4:5 and 6 (343-350

7 Cf. W. Vyhmeister, *AUSS*, 6 (1968), 173 (henceforth referred to as "History of Heshbon").


9 With the exception of those objects which supplied absolute chronological information, especially coins, the meager small-finds from Area B rarely contributed evidence which was immediately relevant to problems of stratigraphic interpretation. Organic, mineral, and soil samples were taken, but none of these have been analyzed to date.
and 1250-1517). The 1453-1461 Mamlûk coin from B.1:4=5 should also be included here. The latest associated pottery was Ayyûbid/Mamlûk.

**Interpretation:** It would seem possible to associate the uncut boulders and the soil of Stratum 2 in Area B with a major Mamlûk occupation at Ḥeshbân that could probably be reconstructed in outline form from the relevant stratigraphic evidence in Areas D and C.

**Area D Description:** Wall D.1:4a, the latest architectural feature of Area D, was preserved as a single row of large, uncut stones which had been set on top of the remains of the earlier D.1:4b “enclosure wall.” Below that wall on the southern slopes of Area D was a rock tumble which contained similar uncut stones, as well as stones which were like those in Wall D.1:4b.

Enclosure Wall D.1:4b, with two superimposed gates, ran east-west through Area D and rested on top of earlier enclosure Wall D.1:4c. The rock tumble to the south, which covered the sloping pre-excavation ground surface of Area D, contained mostly stones like those in the preserved section of Wall D.1:4b.

That rock tumble lay on top of a thick fill (D.1:16=D.2:4), and that fill in turn covered over an earlier rock tumble (from Walls D.2:3b and 9).

The D.1:3 and 5 “vaulted room” was associated with the D.1:4b enclosure wall. The collapsed vault of that room rested on top of the two soil layers (D.1:6 and 7) which overlay the room’s plaster floor (D.1:14). From that D.1:14 floor came Ayyûbid/Mamlûk pottery, and from the associated D.1:8 plastered bench came a single coin dated to either 1191-1220 or 1244-1284. The collapse of the vault in D.5 (D.5:1, 3, 4, 6) covered over the mouth of associated Cistern D.5:5, and that cistern produced Mamlûk coins dated to 1260-1399, together with quantities of Ayyûbid/Mamlûk pottery.

**Area C Description:** The C.4:11 rock tumble from the collapse of the vaulted roof of the “North Building” in Area C rested on top of several soil layers which were above the C.4:26 huwwar surface (floor). From Locus C.4:24, possible occupation debris immediately above Surface C.4:26, came a 1363-1377 Mamlûk coin, as well as Ayyûbid/Mamlûk pottery.

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11 “Heshbon Coins 1968,” p. 156, No. 45. For the stratigraphic context of this coin, cf. below, nn. 84, 86.

12 “Heshbon 1968,” pp. 212, 213, 166, Fig. 8.

13 Ibid., pp. 193, 197-203, 212, 166, Fig. 8.

14 Ibid., pp. 206-212, Fig. 8.

15 Ibid., pp. 197, 202, 211, 212, Fig. 8; “Heshbon Coins 1968,” p. 154, No. 29.


Beneath *huwwar* Surface C.4:26 inside the North Building were four superimposed soil layers (C.4:30, 34, 37, 43), the earliest of which had an associated plastered bench (C.4:38). Ayyūbid/Mamlūk pottery came from all of these layers, and from Layer C.4:37 came a coin hoard dated primarily to 1260-1277.18

**Areas D and C Interpretation:** This evidence would suggest that a major occupation commenced at Ḥesbān in ca. 1260, marked especially by the rebuilding of the D.1:4b enclosure wall and the construction of the associated vaulted rooms.19 That occupation would probably have continued until ca. 1400, when the D.1:4b wall would have collapsed to the south and the vaulted rooms would have tumbled down onto the surfaces within. After ca. 1400, Wall D.1:4a would have been built above Wall D.1:4b, and sometime later that makeshift wall would have collapsed to the south as well.

Turning to the literary sources, it would seem quite probable that this renewed occupation at Ḥesbān followed the ca. 1260 defeat of the Mongols by the Mamlūk forces, at which time Baybars I consolidated the Mamlūk hold on Syria-Palestine.20 The site could have been rebuilt as a pilgrimage and/or postal station under the Mamlūk administration.21

The Mongol invasion under Tamerlane would probably have caused the essential abandonment of the site in ca. 1400/1401.22

The post-1400 makeshift wall, D.1:4a, could have been toppled by the 1456 earthquake, which was reported to have done severe structural damage in Kerak.23 This earthquake would have blotted out finally any remnants

18 Below, Thompson, “Area C,” pp. 76, 77; “Heshbon Coins 1971,” Nos. 96-161. Three of these coins (Nos. 96-98) predated 1260-1277 (Baybars I); the earliest dated to 1240-1249.

19 Surface contours would suggest that a series of vaulted rooms may have surrounded the acropolis on three sides (south, west, and north). For the postulated "interior-courtyard" fort, cf. below, Strata 5-14.


23 Cf. D. H. Kallner-Amiran, *IEJ*, 1 (1950-1951), 229. However, at the present time there would seem to be no evidence at Ḥesbān for the 1293
of Mamlûk occupation at the site.24

The Stratum 2 uncut boulders in Area B could thus probably be interpreted as the southern extension of the earthquake-caused rock tumble from Wall D.1:4a which partially covered the adjacent slopes in Area D. The 1453-1461 Mamlûk coin from B.1:4=5 would correlate nicely with the postulated 1456 earthquake.

The other Stratum 2 soil remains would probably have been contemporary with the 1260ff. building activities and subsequent occupation at the site. Area B itself would not have been built up, and it may have been only the untreated route of access for the two superimposed gates of enclosure Wall D.1:4b which lay immediately to the north.

Stratum 3 (ca. A.D. 1200-1260/1456)

Description: Beneath and often blending into the soil of Stratum 2 were a robber trench and a number of shallow interrelated pits. The robber trench (B.1:8A; B.2:18, 32; B.4:14, 15) was cut from the level of the post-Stratum 4 eroded ground surface, and it removed all but a few of the stones from a substantial wall (B.1:8B) which originally ran through B.1, B.2, and B.4 (Stratum 4). Throughout B.4 only crucial tatters of Strata 6-9 were left undisturbed by the many Stratum 3 pits (B.4:7, 10, 11, 13, 42, and possibly B.4:12=16, 20, 33=40),25 but the other three Squares preserved these strata in relatively undisturbed condition.26 Tatters of near ground surface architectural remains in southwestern B.4 (B.4:17A, 17B, 18) could possibly belong with Stratum 3, but they were too disturbed to allow any clear earthquake, which also damaged Kerak (ibid., p. 228). Future work at the site or additional stratigraphic analysis may provide relevant data.

24The absence of post-1400 coins in Cistern D.5:5 would seem to eliminate the possibility that the collapse of the vaulted room in Area D could have been caused by the 1456 earthquake, although there could have been a period of abandonment between 1401 and 1456. If the collapse of that vaulted room and Wall D.1:4b were attributed to the 1456 earthquake, however, then Wall D.1:4a would have to postdate 1456, and there is no other evidence to support such an occupation (for the possible Early Ottoman coin, cf. below, n. 33).

25Loci B.4:12=16, 20, and 33=40, in the southern part of B.4, attested mixed pottery with small but consistent quantities of Ayyûbid/Mamlûk sherds.

26In addition to the robber trench (B.1:8A=B.2:18 and 32), Pit B.2:11 (equaling Pit B.4:13 across the balk) and "Pits" B.1:2A and B.3:1 cut down into Strata 4ff., but they were isolated within their Squares.
Fig. 3A. Schematic and composite plan of Area B showing the major architectural features which were encountered in 1971 (cf. also "Heshbon 1968," Fig. 4). The levels are given in the text and in the Area B Sections (Fig. 3B; cf. "Heshbon 1968," Figs. 2, 3; "Heshbon Pottery 1968," Figs. 1, 2)
Fig. 3B. Simplified section of north balks of Area B, Squares 2 (left) and 3 (right)
stratigraphic association. The latest pottery from the robber trench and from the pits was Ayyūbid/Mamlūk.

**Interpretation:** The Stratum 3 remains in Area B could probably be associated with a brief Ayyūbid occupation at Ḥesbān, evidence for which could be cited from Area D.

**Area D Description:** Enclosure Wall D.1:4c lay beneath Wall D.1:4b, and it contained two superimposed gates which were separated from each other by several soil layers. Two plaster layers (D.1:11 and 23), both of which produced Ayyūbid/Mamlūk pottery, ran up to the later gate (Gate 2) from the south, thus connecting that gate with the D.2:7 stairway which descended to the south from that point.

At the southern end of the D.2:7 stairway, plaster Layer D.2:8 ran up to the lowest exposed step of that stairway, and it was contemporary with the D.1:17=D.2:10 plaster floor inside the D.2:3b and 9 courtyard. The tumble from the collapsed walls of the D.2:3b and 9 courtyard lay beneath the massive D.1:16=D.2:4 fill (cf. above), and it rested directly on the D.1:17=D.2:10 plaster floor. From the D.2:16=D.3:9 pit-fill immediately beneath the D.2:8 plaster layer and the D.2:3b wall came Ayyūbid/Mamlūk pottery as well as two Ayyūbid coins, the legible one of which dated to 1196-1218.

North of Wall D.1:4c several earth layers (D.1:12a, 22; D.5:8; D.6:49), all of which produced Ayyūbid/Mamlūk pottery, covered over the structural remains which were associated with Gate 1 of Wall D.1:4c. These layers preceded the construction of the vaulted room (cf. above), and Layer D.6:49 in particular was associated with the earliest use of Cistern D.6:33. From the earliest layers inside that cistern (D.6:33g-i) came Ayyūbid/Mamlūk pottery as well as Ayyūbid coins dated to 1186-1260.

**Area D Interpretation:** This evidence would suggest that Ḥesbān was reoccupied sometime after 1196, at which time Gate 2 would have been built into Wall D.1:4c, Cistern D.6:33 would have been cleared for reuse, and some earlier structures would have been robbed out or covered over with fill. This occupation would have continued until ca. 1260, when a major break in occupation would have occurred.

It would seem probable that the renewed building operations on the acropolis of Ḥesbān did not precede the 1187 Battle of Ḥaṭṭīn, at which time Saladin expelled the Crusaders from most of Transjordan. Present evidence does not allow for a specific dating suggestion, but it would seem possible for the site to have been rebuilt as a pilgrimage and/or trade center.

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27 “Heshbon 1968,” pp. 170-176, 184, 192-196, Fig. 8.
28 Ibid., pp. 205-211, Fig. 8; “Heshbon Coins 1968,” pp. 154, 155, Nos. 28, 35.
29 “Heshbon 1968,” pp. 184, 185, 201, Fig. 8; below, Geraty, “Area D,” p. 101; “Heshbon Coins 1971,” Nos. 68-70, 72, 75, 76, 78. Cf. below, n. 33.
station under Aybak, the 1212-1239 Ayyūbid governor of the Belqā who was an energetic builder of such stations.\textsuperscript{31} The ca. 1260 break would correlate most easily with the Mongol invasion which was turned back by the Mamlūks at ‘Ayn Jalīt in 1260.\textsuperscript{32}

Area B itself would not have been the site of new construction during this Ayyūbid occupation, and it may have served only as an access area for the rebuilt gate in Wall D.1:4c. Wall B.1:8B would have been an easy source of stones for constructional efforts elsewhere on the acropolis, and the interrelated pits of Area B could be compared with the massive D.2:16=D.3:9 pit in Area D. Some of the Area B pits could have postdated 1260.

**Post-Stratum 4 Gap (ca. A.D. 410-1200)**

*Description:* Area B attested no intermediate stratification between the pits of Stratum 3 and the structures of Stratum 4. There were no coins from the Area which dated between ca. A.D. 387 and ca. 1257, and Umayyad pottery was entirely lacking as well.

*Interpretation:* This negative evidence would suggest that there was a ca. 410-1200 occupational gap in Area B, and it would have been during the time of this post-Stratum 4 gap that much of the erosion of Strata 4-6 would have occurred. The lack of coins, pottery, and literary evidence for Hesbān as a whole would suggest that there was a ca. 750-1200 site-wide occupational gap,\textsuperscript{33} but the ca. 410-750 gap in Area B would not have corresponded to a site-wide abandonment.

*Area D Description:* Several soil layers separated Gate 1 from Gate 2 in enclosure Wall D.1:4c. Plaster Layer D.1:30, beneath plaster Layer D.1:23 (cf. above), ran up to Gate 1 from the south and produced Umayyad pottery.


\textsuperscript{33} “History of Heshbon,” p. 171; “Heshbon Coins 1968,” pp. 157-160; “Heshbon Coins 1971.” A few sherds found in mixed Ayyūbid/Mamlūk fills could date to the Early ‘Abbāsid period. The 1184 reference to Hesbān as an existing village could indicate a minor occupation already at that time (cf. “History of Heshbon,” p. 172), and the questionable “Seljuq”/“Early Ottoman” coin (“Heshbon Coins 1971,” No. 215; cf. below, Geraty, “Area D,” p. 103, n. 8) from Cistern D.6:33h could have come from such an occupation at the site. It would be difficult to have an Ottoman coin in the earliest layers of the D.6:33 cistern. Cf. above, n. 29.
From Wall D.1:10, associated with plaster Layer D.1:30, came a single Umayyad coin. To the north of Wall D.1:4c, Pavement D.1:33=34, Walls D.1:15 and 24, Layer D.1:29, and other loci were associated with Gate 1, and they all produced small quantities of Umayyad pottery. In turn, these structures were covered over by the Ayyubahid layers mentioned above.34

Area D Interpretation: It would seem from this evidence that there was an Umayyad rebuilding of the earlier (partially dismantled) “interior-courtyard” fort (cf. below), possibly in connection with the Damascus-Mecca pilgrimage route.35 It cannot be specified when this rebuilding operation began, and it could have started already in the pre-Umayyad period (for Hesban, 636-661). It would seem most likely for the abandonment to have been caused in ca. 750 by the harsh ‘Abbâsid takeover which shifted the center of culture, trade, and pilgrimage from Syria-Palestine to Iraq.36

Area A Description: There were apparently two resurfacings of the original A.3:11=14 floor of the Area A church (Mosaic A.3:3 and plaster Layer A.3:7). The latest resurfacing, Mosaic A.3:3, has been dated to the second half of the 6th cent. From the first floor (A.3:11=14) came a single coin dated 395-423. Excavated in 1968, the ceramic evidence has not been available.37

Area A Interpretation: It would thus seem clear that the Area A church, which may have been originally constructed ca. 400 ff., persisted for some time after its original construction date (cf. below, Stratum 4). How long it continued could not be specified at the present time. It would be possible for it to have been maintained down to the Persian (614) or Islamic (636) conquests, or even longer. The church could presumably have been destroyed earlier by an earthquake or for other reasons.38

Thus, while Area B would have remained untouched after ca. 410, the Area A church would have persisted for an unknown period of time, after which the partially dismantled interior-courtyard fort would have been rebuilt by the Umayyads. The entire site would have been abandoned between ca. 750 and ca. 1200.

Stratum 4 (ca. A.D. 400-410)

Description: Two major structures beneath Stratum 2 and partially removed by Stratum 3, Wall B.1:8B and Installation

38 There could have been either an earlier or a later church at the site, but not located on the acropolis (cf. the church described in Musil, Arabia Petraea [Vienna, 1907], I, 384, 388, Fig. 180. For the literary evidence of a Christian community at Esbus, cf. “History of Heshbon,” pp. 168-171).
B.1:10, cut through all associated strata and had no preserved surfaces running up against them.

Except for a small preserved section in the west balk of B.1, Wall B.1:8B was completely robbed out by Stratum 3. To judge from the very clear robber trench (B.1:8A; B.2:18, 32; B.4:14, 15), the wall originally ran along the entire south balk of B.1 and into B.2 for ca. 4.00 m., and then turned at a right angle to go south through the middle of B.4. Stratum 3 pitting obscured the original line of the wall in southern B.4. Robber Trench B.1:8A removed the upper courses of the wall in the west balk of B.1, but the preserved foundation trench (B.1:70) of the lower courses cut through B.1:6Bff. (Strata 7ff.). Four courses of large (.35-.40 m.) stones chinked with smaller ones remained untouched within the foundation trench (B.1:70). The width of the robber trench in B.4 (ca. 1.25 m.) would suggest that the wall was originally two courses wide. From a high point of ca. 886.75 m. in B.2 and B.4, the founding level of the wall sloped downward to ca. 885.25 m. in the B.1 west balk.

Locus B.1:10 was a ca. 4.00 m. circular stone-lined installation in the north balk of B.1, the foundation trench of which (B.1:57) cut through B.1:2Bff. (cf. below, Strata 5ff.). The roughly squared (ca. .35-.50 m.) stones of its preserved seven or eight course lining were mortared with a dense red clay and were often heat-cracked, but they formed no openings in the lining. The lowest course of the stone (sidewall) lining rested on an earthen floor which sloped down ca. .25 m. to the center of the installation, and immediately above this floor was a ca. .05 m. layer of compacted lime(?) and ash (B.1:59). Large rocks (B.1:3 and 58), ash (B.1:60), and small stones (B.1:61) filled the installation between B.1:59 and surface Stratum 2, except where B.1:2A (Strata 2 and 3) cut into B.1:3 and 58 on the west. The latest associated pottery was Early Byzantine.

Interpretation: Both of the Stratum 4 structures could be interpreted as foundational or sub-surface remains of structures which originally continued above a now-missing ground level.

The Stratum 5 plaster layer (B.1:71ff.) was eroded away

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39 For the 1968 discussion of this installation, cf. "Heshbon 1968," pp. 118-122, Fig. 3, Pl. XI:A.
except in the northernmost corners of B.1, B.2, and B.3, but it would seem likely that it originally extended farther south (cf. below, Strata 7ff.). It is impossible to ascertain whether that layer ran up against, was cut by, or ran over (robbed-out) Wall B.1:8B, but the fact that the founding level of that wall sloped down to the west might support the conclusion that the wall was built to retain a sloping layer like B.1:71. If that was the case, then the wall would belong with Stratum 5 and plaster Layer B.1:71 would have cornered along it to go south. Otherwise the wall could have formed the north and east sides of a major building which lay to the southwest of excavated Area B. Thus, Wall B.1:8B could probably be dated either to the early 5th cent. (Stratum 4) or to the late 4th cent. (Stratum 5).

Locus B.1:10 was considered to have been a lime kiln in 1968, and that interpretation is supported by the structure, contents, and general condition of the installation. As a shaft furnace, its total height could have exceeded its ca. 4.00 m. diameter, and its flues could possibly have been located near its original ground level. Some of its upper stone lining must have been removed when it went out of use but before it was filled with rocks and ash. Although the Stratum 5 plaster layer (B.1:71ff.) did not quite reach Kiln B.1:10, it would seem much more likely that it was originally cut by that installation than that it sealed against or over it; for the Stratum 5 soil fills (B.1:2B and 4=5A), which extended farther south into B.1, were cut by Kiln B.1:10, and so were all of the earlier (Strata 7-12) plaster layers. Thus, cutting through Stratum 5 (dated by a 387 coin) and attesting only Early Byzantine pottery, lime Kiln B.1:10 could probably be dated to the early 5th cent.

41 For brief descriptions of Modern lime kilns, cf. T. Canaan, JPOS, 12 (1932), 241-244; G. Dalman, Arbeit und Sitte in Palästina (Hildesheim, 1964), III, 22, 23, and references. Similar installations from other excavations could also be noted here, together with their suggested dates: O. Tufnell, et al., Lachish III (Oxford, 1953), p. 179:104, Pl. 125 (Roman); J. W. Crowfoot, et al., The Buildings at Samaria (London, 1942), p. 139 (Byzantine); J. B. Pritchard, Winery, Defenses, and Soundings at Gibeon (Philadelphia, 1964), pp. 10, 11, 24 (Locus 111), Fig. 2 (Byzantine); M. W. Prausnitz, Excavations at Shavei Zion (Rome, 1967), p. 17 (Locus 60/1), Fig. 6 (mid-7th cent. A.D.); Y. Aharoni, et al., Excavations at Ramat Rahel, Seasons 1961 and 1962 (Rome, 1964), p. 15:336 (Arabic).
It would seem possible to associate the construction of this lime kiln in Area B with a major site-wide stratigraphic break that could very probably be reconstructed from the evidence in Areas B and A.

Area A Description: The ca. 40.00 x 45.00 m. raised rectangular contours of the acropolis area were broken only on the east where the Area A church lay. From the first certain floor (A.3:11–14) of that church came a coin dated to 395-423. Immediately above that floor were found “large quantities of painted plaster”; and from beneath that (?) floor in 1971, associated with occupation debris, came a coin dated to 343-350.

Area A Interpretation: The church would probably have been constructed in ca. 400 ff., and its interior walls would probably have been covered with painted plaster. During the construction of the church the eastern wall(s) of the interior-courtyard fort (cf. below) would have been dismantled, both to make room for the church and to obtain reusable building stones. It would have been this “three-sided” complex which would have been rebuilt in the Umayyad, Ayyūbid, and Mamlūk periods.

Since the construction of the lime Kiln B.1:10 has been dated to the early 5th cent. on ceramic and stratigraphic grounds, we would suggest that it was built to provide lime for the interior plastering of the church. Cutting through Strata 5-12, the kiln would have marked the end of the earlier roadway resurfacing continuum in Area B (cf. below).

Thus, it would seem that the acropolis of Heshbân was radically restructured in ca. 400 ff. by the building of a church. The position of the church in Area A would indicate that the interior-courtyard fort went out of use and was partially dismantled at that time. The position of the B.1:10 lime kiln in Area B would indicate that the roadway(s) was intentionally abandoned then too. This radical restructuring of the site could probably be associated with the pro-Christian, anti-pagan edicts of Theodo-

42 Cf. “Heshbon 1968,” Fig. 1 (contour map).
43 Ibid., pp. 149, 150, Fig. 7; “Heshbon Coins 1968,” p. 152, No. 15. Beneath A.3:11-14 was “a relatively poor plaster/cement Surface A.3:15,” and under A.3:15 was “the hard-packed Surface A.3:16 of light-brown dirt” (“Heshbon 1968,” p. 150, Fig. 7). Although A.3:15 could have been an earlier floor, it could also (like soil Layer A.3:16) have been makeup for Surface A.3:11-14 (contrast ibid., pp. 160-162). Note also the 375-392, 395-423, or 423-455 coin from Wall A.1:13 (ibid., p. 161; “Heshbon Coins 1968,” p. 151, No. 13).
44 “Heshbon 1968,” p. 150.
sius I, and with the resultant "War on Paganism" which characterized the turn of the 5th cent.46

Strata 5-14 (ca. 31 B.C.-A.D. 400)

Before proceeding to Stratum 5 it might be best, anticipating the results of earlier strata, to present at this point a more synthetic description and interpretation of Strata 5-14.

Description: Strata 5, 7-12 were all essentially Area-wide, superimposed plaster layer(s) over soil layer(s), and it was through these layers that the B.1:10 lime kiln cut. Except for Strata 11 and 12, which were level, all of the layers sloped down to the west. Stratum 7 also sloped down to the south, but only in the easternmost portion of B.2 and in B.3. Stratum 9 preserved in B.4 an east-west section of sharply sloping plaster (B.4:19) which marked the southern edge of that stratum. This sloping edge replaced the partially robbed-out Wall B.4:46 which originally retained the Strata 10-12 plaster layers on the south. Stratum 12 presented a single line of rectangular (.38 x .77 m.) paving stones (B.4:72=B.3:31) which ran north-south through B.4 and B.3. Stratum 5 produced a 387 coin; and a 365/366 coin would suggest that the rock tumble and bricky red soil of Stratum 6 should be associated with a 365 earthquake. A 9-12 coin came from Stratum 10, while single coins dated to 71-106 and 138 came from the plaster layers of Stratum 12. Beneath those plaster layers, the Stratum 12 mixed soil layer produced a 9 B.C.-A.D. 40 coin. Pottery development between Stratum 12 and Stratum 5 was from Early Roman to Early Byzantine.

Beneath the Stratum 12 mixed soil layer were, in addition to Strata 15 and 16, the tattered installations of Stratum 13 and the leveled walls of Stratum 14. After an earthquake had cracked the ceiling bedrock of Cave B.4:74, it was filled with debris and its entrance was intentionally sealed. From that Stratum 13

debris came Early Roman pottery. The other partially excavated installations of Stratum 13 have not yet contributed conclusive dating evidence.

**Interpretation:** The Strata 5, 7-12 plaster layers in Area B could best be interpreted as roadway resurfacings.47

On the one hand there would seem to have been a roadway which approached from the west. Most of the plaster layers sloped down in that direction, and the preserved remains of Stratum 9 (B.4:19), Strata 10-12 (B.4:46), and possibly Stratum 4 (B.1:8B) would indicate that these layers were retained along their southern edge(s).

On the other hand there may also have been a roadway which approached from the south, and which thus merged with the east-west roadway. Stratum 7 sloped down in that direction in B.3, and the Stratum 12 paving stones (B.4:72=B.3:31) could have been one side of a parallel north-south “curbing,” the other side of which would not yet have been excavated to the east of B.3.48 Wall B.1:8B of Stratum 4 could also be cited as additional

47The white material of these layers was referred to as “huwwar” in earlier Heshbon reports, but it is apparently a lime plaster (for photographs, cf. “Heshbon 1968,” Pls. XI:A, XII:A).

The plaster layers could not be considered kiln debris because they were (intentionally) continuous over an excavated distance of 19.00 m. and were cut by lime Kiln B.1:10. That they sloped down to the west eliminates level surface interpretations (industrial area, threshing floor, courtyard), but that they were level from north to south rules out any kind of glaciş explanation as well. The interpretation which best satisfies the evidence from Strata 5, 7-12 is that of roadway resurfacings associated with the Area D stairway/gateway (cf. below). The “potholes” and erosion lines in some of the plaster layers would fully agree with this interpretation. Yet, it should be noted that there was no evidence of the composite construction technique which characterizes actual Roman roads (cf. P. Thomsen, ZDPV, 40 [1917], 12, 13; R. Beaunery, RB, 64 [1957], Figs. 1-3; R. J. Forbes, Notes on the History of Ancient Roads and Their Construction [2d ed.; Amsterdam, 1964], pp. 131ff.).

48Cf. W. F. Albright, et al., The Excavation of Bethel (AASOR, 39; Cambridge, Mass., 1968), p. 19, Pl. 120 (?). In the southeast corner of B.4, where a north-south roadway would be expected to have continued, Stratum 3 pitting disturbed the already complicated stratification. Wall B.4:46 did not reach the east balk of the Square, but the Strata 10-12 plaster layers and the Stratum 12 curbing stones stopped in the east balk at the point where that wall would have retained them if it had originally extended farther east. Yet, one Stratum 13 layer (B.4:75), immediately beneath Curbing B.4:72=B.3:31 in the east balk, continued unbroken to the south for ca. .75 m., thus
(if very tenuous) evidence supporting a north-south roadway.

The proposed Area B roadway(s) would have existed until ca. 400, at which time the B.1:10 lime kiln of Stratum 4 would have cut through Strata 5-12. The last (Stratum 5) resurfacing would have been laid down in the late 4th cent. over the rock tumble and bricky-red soil which the Stratum 6 earthquake would have spread over the Stratum 7 roadway surface in 365. Strata 7-12 would have been intermittent plaster resurfacings between ca. 365 and the time of the roadway's original construction. The numismatic evidence and the Early Roman pottery from Stratum 12 would suggest that the original (Stratum 12) construction of the roadway(s) took place in ca. 70ff.49

The Stratum 13 installations and the Stratum 14 walls would suggest that there was a pre-roadway occupation in Area B, the remains of which would have been leveled in preparation for the first Stratum 12 roadway surfacing (in ca. 70ff.). This occupation would probably have been preceded by an earthquake, and that earthquake could possibly be dated to 31 B.C. on the basis of the post-earthquake Early Roman pottery from the fill debris inside the B.4:74 cave.60 indicating that Wall B.4:46 could not have extended that far east. Further excavations to the east and/or south would hopefully clarify the stratigraphic evidence at this crucial point.

49 It would seem likely that the roadway(s) was constructed throughout Area B at one and the same time. A single leveling operation would seem to have preceded the laying of the first Stratum 12 plaster layers, and there would seem to have been only equivalent plaster layers (B.3:32 and 35) on either side of the B.4:72=B.3:31 curbing (Stratum 12).

The 9 b.c.-a.d. 40 coin from B.1:14B, the Stratum 12 mixed soil layer immediately beneath the first Stratum 12 plaster layer(s), would indicate that the roadway(s) could not have been built before 9 B.C. No coins came definitely from the very first Stratum 12 plaster layer(s) (B.3:31, 32, 35; B.4:44=45, 48). The 71-106 coin came from B.4:43, a thicker plaster layer which was several times removed from the Stratum 12 mixed soil layer (B.4:43 lay on top of plaster Layer B.4:45, which in turn lay on top of plaster Layer B.4:48). The 138 coin from 1968 came from the composite Stratum 12 plaster layer, but it cannot be known from which of the many thin sub-layers this coin came.

The Early Roman pottery from the Stratum 12 mixed soil layer and from the first Stratum 12 plaster layers could best be dated in the 1st cent. a.d. That from the Stratum 12 mixed soil layer could probably be dated up to 70; while the quantity of sherds which came from the first Stratum 12 plaster layer(s) was too small to allow for a more specific, preliminary dating judgment.

It would seem possible to associate the Strata 5-12 roadway resurfacings with the original use of Gate 1 in Wall D.1:4c, and the Strata 13 and 14 pre-roadway occupation with the Wall D.1:4d remains which predated Gate 1 of Wall D.1:4c.

Area D Description: Enclosure Wall D.1:4c ran east-west through Area D along the southern edge of the ca. 40.00 x 45.00 m. rectangular-shaped acropolis area. Plaster Layer D.1:31, beneath plaster Layer D.1:30 (cf. above), ran up to Gate 1 of that wall on the south, and from that layer came “Roman” pottery as well as a single coin of Trajan dated to 107.

The D.1:31 plaster layer was the first of several superimposed “porch” layers (D.1:11, 23, 30, 31), all of which lay at the head of the D.2:7 paved stairway which descended from that point to the south. The massive D.2:16=D.3:9 pit cut off the southernmost extension of that stairway in D.2. The paving stones of the earliest stairway (D.2:sub-7) measured ca. .45 x .70 m., and two unexcavated standing columns were visible above ground just centimeters west of the partially exposed D.2:7 stairway.

The Stratum 5 plaster layer and the Stratum 6 rock tumble and brick-red layer in Area B were both found across the B.3 balk in the southwest corner of D.3 (B.3:2=D.3:12 and B.3:3=D.3:13). But the same massive pit (D.2:16=D.3:9) which cut off the southernmost extension of the D.2:7 stairway also cut off the northernmost extension of the D.3:12 and D.3:13 layers. Other superimposed but pit-cut plaster layers, some of which sloped down to the south, were attested in the northeastern and southeastern portions of D.3 (D.3:8, 18, 19; D.3:10, 11, 13).

There was a stratigraphic break in Area D prior to the construction of the D.1:4c enclosure wall and the laying of the first plastered porch layer (D.1:31). Wall D.1:4d preceded the Gate 1 phase of the D.1:4c enclosure wall, and there seemed to have been an earlier porch build-up beneath the D.1:31 plaster layer.

Area D Interpretation: Enclosure Wall D.1:4c could best be interpreted, in light of the ca. 40.00 x 45.00 m. raised rectangular contours of the acropolis area, as the southern wall of an interior-courtyard fort. Gate 1, plaster Layer D.1:31, and Stairway D.2:7 would have constituted the southern entrance to this fort. Before the D.2:16=D.3:9 pit cut off the D.3:12 plaster layer, that layer (and the earlier ones) would probably have run across the site, and domestic occupation would have been placed on the summit of the hill (cf. above, Stratum 4).
as a roadway to the D.2:7 stairway. The pit-cut plaster layers of northeastern and southeastern D.3 could preserve an eastward roadway extension. The two columns at the D.2:7 stairway could possibly be interpreted as milestones marking the entrance to the fort.56

Wall D.1:4d, resting on top of the D.1:4 foundations, would probably have formed the southern wall of an earlier, original interior-courtyard fort. It is uncertain if this fort would have had a southern entrance.

Since the D.3:12 plaster layer was continuous with the B.3:2 plaster layer of Stratum 5 in Area B, it would seem likely that the entire roadway resurfacing continuum of Area B (Strata 5, 7-12) could be associated with the stairway/gateway of Area D. Projected north, the B.4:72-B.3:31 curbing of Stratum 12 would come out just west of the Area D stairway/gateway, and the size of those curbing stones could relate them to the paving stones of the D.2:sub-7 stairway. The numismatic (and ceramic?) evidence from the D.1:31 plaster layer would correlate nicely with that from the Stratum 12 plaster layer in Area B. And the absence of additional plastered porch layers above Layer D.1:31 could have been caused by the Umayyad rebuilding of Gate 1 (porch Layer D.1:30).

The stratigraphic break in Area D which preceded the construction of Wall D.1:4c and the first plastered porch layer (D.1:31) could correspond to the break in Area B which preceded or accompanied the construction of the first Stratum 12 plastered roadway(s). Wall D.1:4d could then probably be associated with the Strata 13 and 14 pre-roadway occupation in Area B.

If these correlations are correct, then the following general reconstruction could be offered. It would seem that an interior-courtyard fort (D.1:4d) was constructed on the acropolis of Ḥesbān, possibly following the 31 B.C. earthquake. In ca. 70 there would have been a major break, after which the D.1:4c (Gate 1) fort and the associated Stratum 12 roadway(s) would have been built. This fort-roadway complex would have functioned continuously (Strata 12-7) until the Stratum 6 earthquake would have caused structural damage in 365. Following a resurfacing of the roadway(s) (Stratum 5), the complex would have func-

56 Cf. Thomsen, ZDPV, 40 (1917), 9-12; S. Mittmann, ADAJ, 11 (1966), 66-73; O. Henke, ZDPF, 75 (1959), Pl. 3:A. The columns were ca. .55 m. wide, but of unknown height or date.
tioned briefly again until ca. 400, at which time the acropolis area would have been radically restructured by the building of the Area A church (cf. above, Stratum 4).

At this point it is necessary to consider certain historical evidence which relates to Esbus and its region.

Herod the Great garrisoned Esbus in Peraea. The most likely time for him to have done this would have been shortly after his military victory over the Nabataeans near Philadelphia, an event which followed shortly after the 31 B.C. earthquake. Facing Madeba to the south, Esbus would have served as a vital link in the defensive *limes* which Herod constructed along his borders with the Nabataean kingdom, and the site could have controlled the "King's Highway" at the point where that trade and military route passed out of Nabataean territory.

At his death in 4 B.C., Herod's kingdom was divided among three of his surviving sons, and Peraea was allotted to Antipas. The region of Esbus, however, may have been cut off from Peraea at this time, attached to the Roman province of Syria, and remained in that province until the creation of the province of Arabia in 106.

57 Josephus *Ant* 15. 294, 295.
58 Josephus *JW* 1. 365-385; *Ant* 15. 108-160. Herod fought the Nabataeans again in 10-9, but that was mainly in the north and not on such a large scale (ibid., 16. 271-285).
60 Contrary to some earlier views (cf. Avi-Yonah, *Holy Land*, p. 103, Map 7; Amiran, *et al.*, *Atlas of Israel*, IX/7; Schürer, *Geschichte*, II, 201), we would argue on archaeological and literary grounds that Esbus was not under the control of the Nabataeans in the 1st cent. A.D., but was rather probably under the control of the Roman province of Syria.

Characteristic Nabataean pottery, while present, was rare in the Early Roman material from Ḥesbān. Nabataean stone-dressing was not attested at the site at all (cf. G. and A. Horsfield, *QDAP*, 7 [1938], Pl. XVII:3; N. Glueck, *Explorations in Eastern Palestine* [henceforth referred to as EEP] [AASOR, 18, 19; New Haven, 1939], III, 16, 17; Glueck, *Deities and Dolphins* [New York, 1965], p. 57; F. Winnett and W. Reed, *Dhibān* [AASOR, 36, 37; New Haven, 1964], Pls. 9:4, 42:1, 43:1). Finally, the site produced five Nabataean coins dated between 9 B.C. and A.D. 106, as well as five Roman coins dated between A.D. 9 and 138 ("Heshbon Coins 1968," pp. 150, 151, Nos. 2, 3, 5-7; "Heshbon Coins 1971," Nos. 49-53). The numismatic evidence from Jerash (cf. C. H. Kraeling, *Gerasa* [New Haven, 1938], pp. 498, 500) would indicate that the (scarcity of and lack of Nabataean) ceramic and stone-dressing evidence from Ḥesbān should be afforded more weight than that of the five Nabataean coins. In fact, Glueck (BASOR, 68 [1937], 15, 16; EEP, III, 139, 140, 143, 144, 269; BASOR, 85 [1942], 3; BASOR, 96 [1944], 17; EEP [AASOR, 25-28; New Haven, 1951], IV, 13, 14; *The Other Side of the Jordan* [2d ed.; Cambridge, Mass., 1970], p. 211; *Deities and Dolphins*, p. 486) had long ago argued from the cessation of Nabataean pottery north of
The region of Esbus was sacked by Jews (probably from Peraea) during the early years of the First Revolt (ca. 66).  

Following the Roman annexation of the Nabataean kingdom in 106, Esbus was probably transferred (with Philadelphia) from the province of Syria to the new province of Arabia. In 111-114, Claudius Severus constructed for Trajan the major *via nova* which ran from Bostra to Aila ('Aqaba). This "new road" followed in general the already established route of the "King's Highway," and its preserved milestones indicate that it was maintained at least into the mid-4th cent. Numerous forts and caravan-posts dotted its route, and Esbus was one of the cities which lay along it.

At Esbus another road (Jericho-Livias-Esbus) joined the *via nova* from the west. Extant milestones indicate that it was maintained from at least the Madeba line that the northern boundary of the Nabataean kingdom passed through that city, just to the south of Hesbān.

Esbus was part of Peraea when it was settled by Herod the Great (Josephus *Ant* 15. 294, 295). Herod Antipas, however, fortified Livias (ibid., 18, 27; *JW* 2. 168), which would suggest that the Esbus region had been cut off from Peraea by the Romans at the division of Herod the Great's kingdom (cf. *Ant* 17. 317-323; *JW* 2. 93-100; Avi-Yonah, *Holy Land*, pp. 102-104). That Esbus was, in fact, later distinct from Peraea, Arabia, Philadelphia, and Gerasa seems to be clear from Josephus (*JW* 3. 46, 47). And, Esbus was included among those specifically Syrian cities/districts which the Jews were said to have sacked at the beginning of the First Revolt (ibid., 2. 458-460). This would indicate that Esbus was, at that time, neither Nabataean nor (Jewish) Peraean. Finally, the fact that in 106 Esbus was included in Trajan's province of Arabia could not be used as evidence that the region was formerly Nabataean (cf. Schürer, *Geschichte*, II, 201), because Philadelphia (and Gerasa?), formerly of the Decapolis, was also included in that new province (ibid., pp. 186, 192; Avi-Yonah, *Holy Land*, p. 113).

Thus, we would argue that from the death of Herod the Great in 4 B.C. to the creation of the province of Arabia in 106, Esbus was most closely associated with the Hellenistic cities of the Decapolis, and was probably under the effective control of the Roman province of Syria.

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61 Josephus *JW* 2. 458-460.
62 Cf. above, n. 60.
64 Cf. Glueck in *EEP* (*AASOR*, 14; Philadelphia, 1934), I, 4; *EEP* (*AASOR*, 15; New Haven, 1935), II, 3; *EEP*, III, 12, 13, 52, 66, 113, 127, 142, 143; *Other Side of Jordan*, pp. 15-22; *Deities and Dolphins*, p. 75.
65 Thomsen, *ZDPV*, 40 (1917), 14, 35-57, 93.
66 Glueck in *EEP*, I, 83; *EEP*, III, 138, 139; *Other Side of Jordan*, p. 209.
67 Cf. below, n. 78.
162 through the latter portion of the 4th cent., but the date of its original construction has been uncertain. While it has been suggested that the Jerusalem-Jericho section was built during or just after the First Revolt (ca. 70ff.), the Jericho-Livias-Esbus "extension" has usually been dated with or after the via nova.

We would suggest that it is in the context of this historical evidence that the above correlations between Areas B and D could be interpreted. The pre-roadway occupation in Area B and the D.1:4d interior-courtyard fort could possibly be associated with Herod's post-31 B.C. settling of veteran troops at Esbus. It could be suggested that Herod might have constructed a road between Jerusalem and Esbus for military reasons (against the Nabataeans), and his reign could have been the time when that route was established (unless it was even earlier). Yet, there would apparently be no preserved evidence of such a road or roadway associated with the D.1:4d fort.

The ca. 70 stratigraphic break, prior to the construction of the first Stratum 12 roadway(s) in Area B, and between the D.1:4d and D.1:4c wall phases in Area D, could be associated with the sacking of Esbus in 66 by the Jews, or with related events surrounding the First Revolt.

The D.1:4c reconstruction of the interior-courtyard fort, together with the Stratum 12 roadway(s) in Area B, could be attributed to the post-70 efforts of the Flavians to consolidate

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Beauvery (*RB*, 64 [1957], 100, 101) suggested that the road would have been built during 68-70 when the *Legio X Fretensis* was moved from Jericho to Jerusalem for the siege of Jerusalem. C. Kuhl (*PJB*, 24 [1928], 120, 121), however, had argued that the road would have been built shortly after 70 when the Flavians were actively consolidating their position in Palestine. On the other hand, Avi-Yonah (*Holy Land*, pp. 183, 184) dated the road's construction to 129-130.

Kuhl (*PJB*, 24 [1928], 124, 125; cf. Thomsen, *ZDPV*, 40 [1917], 35 n. 2) argued that in 111-114 the via nova would not have been left without a connection to the road network west of the Jordan. Avi-Yonah (cf. *Holy Land*, pp. 183, 184) however, assumed a gap in the road network (Jerusalem-Jericho-Esbus) which would have been filled only during the reign of Hadrian (129-130).


It is clear that the Stratum 12 roadway(s) could not be attributed to Herod because, if it was a construction of Herod, all of the Early Roman pottery from the Stratum 12 mixed soil layer would have to predate 4 B.C. In fact, however, that pottery belongs primarily to the first half of the 1st
the road network and the *limes* system of Palestine.\textsuperscript{74} Since it would seem that the Area B plaster layers could not have been actual *roads*, but rather only *roadways* (which would have connected the Area D stairway/gateway with the roads themselves),\textsuperscript{75} it cannot be certain that the original construction date of the first *roadway(s)* in Area B would have coincided with the construction dates of the two *roads* which converged on Esbus (north-south and east-west). However, since some evidence has been cited for dating the Jerusalem-Jericho road to ca. 70,\textsuperscript{76} it would not seem unlikely for the Jericho-Livias-Esbus extension to have been built at the same time.\textsuperscript{77} The north-south road, which became the *via nova*, could have been in existence before 111-114, and when the *via nova* was constructed along its lines the fort and roadway(s) of Esbus could have been incorporated into that more comprehensive *limes* system.\textsuperscript{78}

The Strata 12-7, 5 roadway(s) in Area B could be correlated generally with the milestone inscriptions of the two roads, which indicate intermittent road maintenance through the mid-late 4th cent.\textsuperscript{79} The apparent absence in Palestine of milestone inscriptions from the time when Theodosius I reigned alone cent. A.D., and it was accompanied by a 9 B.C.-A.D. 40 coin (cf. below, Stratum 12).

\textsuperscript{74} Cf. Kuhl, *PJB*, 24 (1928), 120, 121; A. Alt, ibid., 26 (1930), 44, 45; Gihon, *IEJ*, 17 (1967), 27-42.

\textsuperscript{75} Cf. above, n. 47.

\textsuperscript{76} Beauvery, *RB*, 64 (1957), 96-98, 101, *passim*.

\textsuperscript{77} This would, however, have to be associated with Kuhl's rather than with Beauvery's historical reconstruction regarding the Jerusalem-Jericho road (cf. above, n. 70). Avi-Yonah's tentative 129-130 date for the Jerusalem-Esbus road could probably be eliminated here, primarily on the basis of the Early Roman pottery from (Area B) Stratum 12 at Hesbán.

\textsuperscript{78} Cf. R. E. Brünnow and A. v. Domaszewski, *Die Provincia Arabia* (Strassburg, 1904-1909), I, vii; III, 264ff., *passim*; Alt, *PJB*, 26 (1930), 44, 45; Abel, *Histoire*, II, 54. At the present time we would favor the 70ff. date for the Stratum 12 roadway(s) and the D.1:4c interior-courtyard fort (cf. above, n. 49). It would not be impossible for that complex to date from the time of Trajan's *via nova* (111-114), however, but then it would seem that a 66-111 gap would have to be postulated to account for the lack of post-66 pottery in the Stratum 12 mixed soil layer. The D.1:31 coin of Trajan dated to 107 would correspond perfectly with the 111-114 construction date for the *via nova*, but that coin's precise stratification cannot be known (cf. above, nn. 49, 51).

\textsuperscript{79} There has been no attempt to correlate the Area B plaster resurfacings with the dated milestones, except in very broad terms.
(392ff.) would suggest that the road network was no longer maintained as before, not only in his reign but from his reign on. This policy could have been associated with the anti-pagan edicts which likewise occurred at the end of the 4th cent. and which led to the flowering of Christianity during the following cent. The ca. 400 restructuring of the acropolis at Ḥesbān (from fort/roadway to church) could reflect the results of this religiously oriented policy at one site in Transjordan.

Stratum 5 (ca. A.D. 365-400)

Description: Substantial sections of a thick (ca. .25-.40 m.) plaster layer, beneath Stratum 2, extended ca. .75-2.50 m. into the northeast portions of B.1-3 (B.1:71; B.2:3, 4; B.3:2). The layer was also found across the main north-south axis balk in the southwest corner of D.3 (D.3:12), but a massive pit (D.2:16=D.3:9) cut it off from the other remains in that Square. Sloping down from east to west in Area B, it was cut at a sharp angle in B.3 (cf. above, Stratum 3), but elsewhere it tapered out quite evenly into Stratum 2. A number of soil layers (B.1:2B, 4=5A; B.2:5-8; B.3:4) lay beneath the plaster layers and extended slightly farther south into the Squares before they too tapered out into Stratum 2. Of these, Layers B.1:2B and 4=5A were cut by Kiln B.1:10. Locus B.1:4=5A produced a coin dated to 387, and the latest pottery from all of the loci was Early Byzantine.

Interpretation: The plaster layers could be considered remnants of an originally continuous plaster layer which sloped through Area B, and the underlying soil layers could be inter-

80 Cf. Thomsen, ZDPV, 40 (1917), 93 (note the single possible inscription from the time of Arcadius).
81 Ibid., 14 (cf. above, Stratum 4, n. 46).
82 Locus B.1:71 appeared only in 1971, to the northeast of excavated lime Kiln B.1:10.
84 "Heshbon Coins 1968," p. 152, No. 14. A coin dated to 1453-1461 came from B.1:4=5 in 1968 (ibid., p. 156, No. 45), but since no Ayyūbid/Mamlūk pottery came from sub-surface loci in B.2 and B.3 in 1971 (excluding the well-defined pits of Stratum 3), this coin must be regarded as intrusive (cf. above, n. 11; below, n. 86).
interpreted as makeup fills for that layer. The post-Stratum 4 erosion would have removed everything except the tapered-off sections in the northern parts of B.1-3, and it could not be determined how far south the layer (and fill) originally extended. Like the earlier plaster layers (Strata 7-12), it could have continued into B.4; or it could have been retained by Wall B.1:8B (Stratum 4), in which case the layer would have cornered to go south. Although Pit D.2:16=D.3:9 cut off the northernmost section of this plaster layer (D.3:12), it would seem very likely that the layer originally extended north to join the stairway/gateway of Area D (cf. above, Strata 5-14).

Thus, the Stratum 5 plaster layer could probably be interpreted as a roadway which approached the north-south Area D stairway/gateway from the west. It would likely have had a boundary wall along its northern edge and, if it was retained by Wall B.1:8B on the south, it would possibly have joined another roadway which approached the Area D stairway/gateway from that direction. On the basis of the 387 coin of Valentinian II and the Early Byzantine pottery, the Stratum 5 roadway could probably be dated to the late 4th cent. (pre-392 in construction; cf. above, Strata 5-14).

Stratum 6 (ca. A.D. 365)

Description: Beneath the soil layers of Stratum 5 and resting on the uppermost plaster layer of Stratum 7 was a thick (ca. 50 m.) layer of rock tumble and soil (B.1:4=5B, 7; B.2:9, 10, 14; B.3:3; B.4:2). The rocks of the layer had numerous air pockets between them, and the ashy-red soil of B.3 and the eastern part of B.2 merged gradually into the brown-colored soil of the western part of B.2 and B.1. The layer extended across the balk into D.3 as a locus of loose rocks surrounded by ashy-red soil (D.3:13), but it was cut, like D.3:12 above it, by the massive Pit D.2:16=D.3:9 (cf. above, Stratum 5). In Area B the layer tapered out into Stratum 2 towards the south and west, and it was cut by Stratum 3 pits as well as by Stratum 4 structures.

Note the alternating plaster/soil layers of Strata 7-12. There was no evidence of any debris accumulation above the plaster layers (but, cf. below, Stratum 6), and the soil layers frequently contained mixed pottery.
Layer B.1:4=5B produced a coin dated to 365/366\textsuperscript{86} and the latest associated pottery was Early Byzantine.

**Interpretation:** The Stratum 6 rock tumble would seem to be best interpreted as a disruptive rather than a constructive phase between Strata 5 and 7. If it had been a fill it would be expected to have improved the surface contours of the Area just prior to the laying of a new plaster layer. Instead, the tumble would seem to have disrupted the already existing (Stratum 7) contours and to have necessitated the subsequent fills which were laid over it in preparation for the Stratum 5 plaster layer.

If this is correct, then a plausible (if somewhat speculative) historical correlation could be suggested. It seems to be reliably reported that the walls of Kerak were toppled by a major earthquake in 365,\textsuperscript{87} and the numismatic evidence from ‘Arâq el-Emîr allowed Lapp to associate the collapse of the Qasr walls with that same earthquake.\textsuperscript{88} Heshbân, located between these two sites, would almost certainly have been affected by that quake as well, and the 365/366 coin from Layer B.1:4=5B would suggest that the Stratum 6 rock tumble should be interpreted in that context. Structures farther up the slope, possibly including Wall D.1:4, could have collapsed in the quake onto the open Stratum 7 roadway below, thus creating the loose rock tumble of Stratum 6. An accompanying fire could have produced the ashy-red soil of B.3 and D.3.\textsuperscript{89}

**Stratum 7 (ca. A.D. -365)**

**Description:** Beneath the rock tumble of Stratum 6 and cut by both Stratum 3 pits and Stratum 4 structures were a number of

\textsuperscript{86} “Heshbon Coins 1968,” p. 151, No. 10. The 1968 field books make it clear that this coin was found in the rocks of B.1:4=5, while the 387 coin of Stratum 5 was found in the soil above those rocks. It is possible, however, that the 365/366 coin belonged to the Stratum 5 soil fill rather than to the Stratum 6 rock tumble (cf. above, nn. 11, 84).


\textsuperscript{88} P. W. Lapp in *BASOR*, 165 (1962), 25-32; ibid., 171 (1963), 32, 33, 37, 38.

\textsuperscript{89} In support of the Stratum 6 earthquake, it should be noted that several wide cracks, most clearly visible in the balk between B.1 and B.2, ran vertically through all of the Strata 7-12 plaster layers. For evidence of the earlier (pre-roadway) earthquake, cf. below, Stratum 13.
thin (ca. .01-.05 m.) alternating plaster and soil layers (B.1:6A; B.2:12, 13, 15-17; B.3:5-11, 14; B.4:3) resting on top of a mixed soil layer which was thick (ca. .50 m.) in the northeast but which thinned out towards the west and south (B.1:6B; B.2:19; B.3:12, 13, 15-21; B.4:9). In the eastern portion of Area B (B.3) the plaster layers sloped down towards both the south and the west, while in the western portion of the Area they sloped down only towards the west or were almost level. Stratum 3 pitting in B.4 left only a sliver of Stratum 7 stratification along the eastern edge of robber Trench B.4:14 and 15. The latest pottery associated with Stratum 7 was Early Byzantine.

**Interpretation:** The mixed soil layer could be interpreted as imported fill, and the thin layers on top of it could be considered roadway surfaces which were laid down prior to the rock tumble disruption of Stratum 6. The sloping contours established by the fill would suggest that the roadway approaching from the west joined another one which approached from the south, and the thick fill in the east would presumably have raised the surface level of the roadway(s) to that of a new stairway phase. The numismatic, ceramic, and historical evidence would suggest that Stratum 7 could be dated from the mid-4th cent. to 365 (cf. above, Strata 5-14).

**Stratum 8**

**Description:** Beneath the Stratum 7 soil layer and cut by the Stratum 3 pits and the Stratum 4 structures was Stratum 8, a thin (ca. .02-.07 m.) plaster layer (B.1:6C; B.2:20; B.3:22; B.4:8) over a ca. .10-.35 m. soil layer (B.1:6D; B.2:21; B.3:23; B.4:4, 22, 23). The plaster layer sloped down towards the west but was otherwise quite level, and it even rose slightly in the southern part of B.2 and B.3 to merge with the Stratum 7 plaster layer which was subsequently laid over it. Only a small portion of Stratum 8 was preserved in B.4, again along the eastern edge of robber Trench B.4:14 and 15. The latest associated pottery was Early Byzantine.

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90 Loci B.4:34-39, superimposed soil layers beneath B.4:6 (Stratum 2) and B.4:17A, 17B, and 18 (Stratum 3?) in the southwest corner of B.4, could possibly belong with Strata 7 or 8.

91 Cf. above, n. 90.
Interpretation: Stratum 8 could be interpreted as another resurfacing of the Area B roadway(s), the soil layer having been fill for the plaster layer. This resurfacing could probably be dated to the mid-4th cent. A.D. (cf. above, Strata 5-14).

Stratum 9

Description: Another (ca. .02-.15 m. thick) plaster layer (B.1:6E; B.2:22; B.3:24; B.4:19, 24) over soil (B.1:9; B.2:23; B.3:25; B.4:21=25, 26) lay beneath the Stratum 8 soil layer and was cut by the Stratum 3 pits and Stratum 4 structures. Much like Stratum 8, it sloped down to the west but was relatively level from north to south. In the southwestern part of B.4, soil Layer B.4:21=25 and 26 sealed over B.4:31, 56=57, 60, 61, and 65, the mixed soil above partially robbed-out Wall B.4:46 (Strata 10-12), and plaster Layer B.4:19 sloped down sharply (ca. 22° from horizontal) over those soil loci (and the robbed-out wall).92 The latest pottery associated with Stratum 9 was Early Byzantine.

Interpretation: Stratum 9 could, like Stratum 8, be considered a fill and plaster resurfacing of the Area B roadway(s). For the first time, however, Stratum 3 pitting left a section in the western part of B.4 of what could be considered the southern edge of the (east-west) roadway. The original Strata 10-12 retaining wall on the south (B.4:46) was removed by Stratum 9 and was replaced with the sharply sloping extension of the roadway surface itself (B.4:19).93 It could be postulated that a similar edge construction originally retained the Strata 7 and 8 roadway resurfacings as well. As the earliest stratum to attest Early Byzantine pottery, Stratum 9 could probably be dated to the early/mid-4th cent. A.D. (cf. above, Strata 5-14).

Stratum 10

Description: Beneath the soil layer of Stratum 9 was another (ca. .05-.25 m. thick) plaster layer (B.1:11; B.2:24-26, 28, 29; 63 It is not certain whether soil Loci B.4:68 and 69 and possible Wall B.4:71 partially exposed to the south of Locus B.4:46, should be attributed to Stratum 9 or to Strata 10-12. Further excavations will have to clarify the southwest part of B.4.

62 For a sloping edge construction somewhat comparable to that of Stratum 9, cf. Forbes, Ancient Roads, Figs. 24, 25, 34. Cf. below, n. 95.
B.3:26; B.4:27, 28) over a (ca. .15-.40 m. thick) soil layer (B.1:12; B.2:27, 30; B.3:27, 28; B.4:29, 30, 32), both of which were cut by the Stratum 3 pits and the Stratum 4 structures. Like Strata 8 and 9, Stratum 10 sloped down to the west but was relatively level from north to south. In the southern part of B.4 it was cut along the straight east-west line formed by partially robbed-out Wall B.4:46 (cf. Strata 9, 11, 12), and the Stratum 9 soil and plaster layers sloped down over that cut edge. A single 9-12 coin came from B.3:28,\(^{94}\) and the latest associated pottery was Late Roman.

**Interpretation:** Stratum 10 could, like Strata 8 and 9, be interpreted as a fill and plaster resurfacing of the Area B roadway(s). Before it was cut by Stratum 9, that resurfacing would have been retained on the south by Wall B.4:46 (cf. below, Stratum 12). The pottery would indicate that the stratum should be dated to the mid-late 3d cent. A.D. (cf. above, Strata 5-14).

**Stratum 11**

**Description:** Beneath the soil layer of Stratum 10 and cut by both Stratum 3 pits and Stratum 4 structures was a very thick (ca. .30-.50 m.) striated plaster layer composed of 12-14 thin alternating sub-layers of plaster and soil. Because there was a basic ceramic distinction between the upper and lower portions of this complex layer, it has been divided here into two strata (11 and 12). The upper layers of Stratum 11 (B.1:13A; B.2:31A; B.3:29A; B.4:41A) were relatively level in all directions and were cut in the southern part of B.4 along the east-west line of partially robbed-out Wall B.4:46 (cf. above, Strata 9, 10; below, Stratum 12). The latest associated pottery was Late Roman.

**Interpretation:** The thin alternating layers of Stratum 11 could be interpreted as roadway resurfacings which lacked the pronounced soil fills of Strata 5, 7-10.\(^{95}\) Before they were cut by Stratum 9, they would have sealed against Wall B.4:46 on the south (cf. below, Stratum 12). The stratum could probably be

\(^{94}\) "Heshbon Coins 1971," No. 52.

\(^{95}\) The stratigraphic position of Paving B.4:72=B.3:31 (Stratum 12) and the ceramic difference between Strata 11 and 12 would rule out the possibility that the entire plaster layer might have been a single, but multi-phased, roadway surfacing. The resurfacing fills may have been avoided at
dated from the mid-2d to the mid-3d cent. A.D. (cf. above, Strata 5-14).

Stratum 12 (ca. A.D. 70ff.)

Description: Included in Stratum 12 was the lower portion (B.1:13B, 14A, 15A, 16A; B.2:31B, 33; B.3:29B, 30, 32, 35; B.4:41B, 43, 44=45, 48) of the thick (ca. .30-.50 m.) striated plaster layer, the upper portion of which was designated as Stratum 11. The thin plaster layers, cut by Strata 3 and 4, were relatively level in all directions and were cut on the south along the east-west line of partially robbed-out Wall B.4:46 (cf. above, n. 48, Strata 9-11, and below). Paving B.4:72=B.3:31 ran through the entire length of B.3 and appeared in the east balk of B.4, but stopped with the plaster layers at the east-west line of Wall B.4:46 (cf. above, n. 48). The paving consisted of rectangular-cut (average size: .38 x .77 m.) stones which had been laid sideways in a level row (cf. Pl. V:B). The stones formed a straight line on the west, but their uneven lengths created an irregular line on the east. On the west the paving was sealed against by Loci B.3:35 and B.4:44=45 and 48, and on the east by Locus B.3:32 (the earliest plaster layers), and it was sealed over by the subsequent plaster Layers B.3:29B and 30, and B.4:41B and 43. Locus B.1:14A produced a coin dated to A.D. 138 in 1968, and an additional coin dated to 71-106 came from B.4:43 in 1971. The latest associated pottery was Early Roman.

Beneath the first (earliest) of the Stratum 12 plaster layers was Stratum 15 (cf. below) and a massive layer of rock tumble and mixed soil (B.1:14B, 16B, 20, 22; B.2:34, 35A, 43-53; B.3:33, 34, 36, 37, 39, 43, 44; B.4:47, 49-53, 55, 58, 70). This layer covered over bedrock and the bedrock installations of B.3 and north-first because of the problem which they would have created along the roadway's retaining wall. In fact, the ever-rising surface of the roadway could have necessitated the structural change from the retaining wall of Strata 10-12 to the sloping edge construction of Stratum 9.

Loci B.3:29 and 30 were cut by only a localized pit in the north balk of B.3.

86 “Heshbon Coins 1968,” p. 151, No. 7; “Heshbon Coins 1971,” No. 51. It is clear from the 1968 field books that the 138 coin came from or above the plaster layers of B.1:14 (cf. below, n. 99).
eastern B.4, as well as the other fragmentary installations which have been attributed to Stratum 13. It sealed against Wall B.1:17=B.2:62 (Stratum 14) from the south, but also sealed over the top of that wall. It was retained on the south by the unrobbed course of Wall B.4:46. This wall, of two-course width and (partially excavated) one-course height, was constructed of large (ca. .30-.50 m.) stones, and it ran east-west through the southern part of B.4 (ca. 1.40-2.05 m. from the south balk). It had been partially robbed out by Stratum 9, and the single exposed course stopped ca. 1.50 m. from the east balk. The Strata 10-12 plaster layers were cut in a straight line along the northern edge of the robbed-out wall, and the Stratum 12 paving (B.4:72=B.3:31) stopped in the east balk where it would have met that wall. Yet it would seem that the wall had not originally retained that paving on the south (cf. above, n. 48; below, Locus B.4:75 [Stratum 13]). In 1968, Locus B.1:14B produced a 9 B.C.-A.D. 40 coin and a stamped jar handle dated to 220-180. The latest associated pottery was Early Roman, but the layer also attested some of the rare Late Hellenistic sherds.

Interpretation: The Stratum 12 plaster layers could be interpreted as the first roadway surfaces associated with the Area D stairway/gateway. The resurfacings would not have included pronounced makeup fills, possibly because they would have been retained along the south by Wall B.4:46 (cf. above, Stratum 11, n. 95). Paving B.4:72=B.3:31 could have been one side of a parallel curbing which marked the approach of a north-south roadway (cf. above, Strata 5-14).

The entire roadway sector would have been leveled in preparation for the laying of the first plaster layer, and this operation would have involved the scraping off of high features and the filling in of low points. Scraped off would have been most of the occupational remains which have been attributed to Stratum 13, the upper courses of the Stratum 14 walls, and the upper soil layers of Stratum 16 (and 15?). Retaining Wall B.4:46

98 It would seem that the upper rebuilds postulated in 1968 for Walls B.1:17, 29, and 25 were only extensions of the Stratum 12 rock tumble.
would have been built along the southern edge of the projected roadway, and this scraped-off material would have served as fill in the low points behind it.

The dating of the first Stratum 12 plaster layer has been discussed above (cf. Strata 5-14). Although it is possible that the roadway could have been constructed as late as 111-114ff., at the present time a 70ff. construction date would seem more likely. The sub-plaster rock tumble and mixed soil would reflect the date of the pre-roadway occupations at the site (cf. below, Strata 13-16).

**Stratum 13 (ca. 31 B.C.-A.D. 70)**

**Description:** While there were no continuous or actually relatable occupational remains immediately beneath Stratum 12 (cf. below, Strata 14-16), there were some isolated installations which could be considered together here.

Cave (Cistern?) B.4:74, in the northeast part of B.4, had a ca. .40 m. circular opening (cut into bedrock) which was sealed over (beneath the rock tumble and mixed soil of Stratum 12) by a number of large stones (B.4:51). Debris filled the cave almost to the level of the opening, but it sloped down from that opening to reveal a fairly large (unexcavated) subterranean sector to the north, east, and south. Six superimposed soil layers (B.4:54, 59, 62-64, 67), constituting ca. 1.50 m. of debris, lay between the lower bedrock floor of the cave and the circular opening in the ceiling bedrock. Wide bedrock cracks ran through the opening to the cave. The latest pottery associated with all of these layers was Early Roman, but Late Hellenistic sherds were attested in Layers B.4:63 and 67.

There were a number of bedrock cuttings in the vicinity of the Cave B.4:74 opening, including a rectangular-cut depression (B.4:52; ca. .50 x .80 m.), a possible (water?) channel, and three circular (ca. .15-.25 m.) holes. The bedrock cracks ran through some of these installations, and they seemed to cut off this upper bedrock to the south (unexcavated). Immediately (ca. 1.50+ m.) to the west, bedrock was cut vertically and in a straight, ca. 3.00+ m. long, north-south line (into the north balk). Before excavation ceased in Stratum 12, this vertical cut was exposed to a depth of ca. .35 m.
In addition to these bedrock remains, several other isolated and tattered installations beneath Stratum 12 were exposed but not fully excavated. Circular *Tabun* B.4:66 was located next to possible Wall B.4:73 in the north-central portion of B.4, and B.4:75 was a thin plaster layer beneath B.4:72=B.3:31 which extended ca. .75 m. south of that Stratum 12 paving in the B.4 east balk. Locus B.2:54 was another fragmentary *tabun* which rested on an equally fragmentary soil surface (B.2:63) in the eastern portion of B.2.\(^\text{100}\)

**Interpretation:** The partially excavated Stratum 13 installations would indicate that there was some kind of pre-roadway occupation in Area B. This occupation would probably have followed the 31 B.C. earthquake,\(^\text{101}\) after which Cave B.4:74 (remaining open) would have served as a dump until it was almost filled with debris. Later it would have been sealed shut,\(^\text{102}\) possibly just prior to the construction of the first Stratum 12 roadway(s).

Where bedrock was not exposed (B.1, B.2, and portions of B.4) there would have been other occupational activity, presumably on top of the Stratum 16 soil layers.\(^\text{103}\) Except for the tattered installations of the eastern part of B.2 and north-central B.4, all remains of this activity would have been scraped off and utilized as fill during the Stratum 12 leveling operation.

The Early Roman pottery from Cave B.4:74 and from the Stratum 12 mixed layer, together with the sub-plaster 9 B.C.-A.D. 40 coin from B.1:14B, would suggest that the Stratum 13 pre-

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\(^{100}\) Other partially exposed and very tentative installations could also be noted here. Locus B.4:76 was a possible wall beneath Paving B.4:72 in the east balk of B.4 (associated with plaster Layer B.4:75?), and B.3:48 was a possible wall beneath rock Tumble B.3:43 along the east balk of B.3 (associated with plaster Installation? B.3:45?). Cf. B.1:23A, 34 and 35 (Stratum 14).

\(^{101}\) Cf. above, Strata 5-14.

\(^{102}\) The post-earthquake filling and the intentional sealing (B.4:51) of Cave B.4:74 would seem to eliminate the possibility that the Stratum 12 rock tumble could have been produced by the collapse of the Strata 13 and 14 walls during this earthquake. This would seem to indicate that the walls would have been built after the earthquake.

\(^{103}\) The vertical bedrock line in the northeastern part of B.4 would definitely have been exposed during Stratum 13, but it cannot yet be determined when it was originally cut (cf. below, nn. 106, 111, 114; Stratum 16).
roadway occupation could probably be dated to ca. 31 B.C.-A.D. 70 (for additional interpretation, cf. above, Strata 5-14).

Stratum 14

Description: There was also an architectural complex beneath the mixed layer of Stratum 12, the walls of which either cut into (B.1:17, 29=B.2:62; B.1:27) or rested on (B.1:21, 25, 28) the soil layers of Stratum 16.\(^{104}\)

Wall B.1:17 ran east-west through B.1, and it appeared across the balk in the southern edge of B.2 (as partially exposed Wall B.2:62) in the widened form which it had taken already near the east balk of B.1 (B.1:29). The Stratum 12 mixed layer sealed over the wall, but it also sealed against it on the south. Soil Layers B.1:23A, 34, and 35, beneath the Stratum 12 mixed layer on the south, were also said in 1968 to have sealed against Wall B.1:17. On the north, however, the wall's foundation trench (B.1:40=103; B.2:55=69) cut through all of the Stratum 16 soil layers beneath the Stratum 12 mixed layer and the Stratum 12 plaster layers.\(^{105}\) While the founding level of the wall sloped up from ca. 881.30 m. to ca. 884.15 m. between the west balk and the east balk of B.1, the uppermost preserved course of the wall was relatively level (ca. 886.00-886.30 m.) throughout B.1 and B.2. The wall was constructed without mortar, but its foundation trench produced small quantities of Late Iron II pottery in 1971, and a single, unidentifiable coin came from behind one of its (B.1:17) stones.

Interpretation: It was suggested in 1968 that the Stratum 14 wall complex might have belonged to a fortification system on the perimeter of the acropolis, and this tentative interpretation does not need to be modified in the light of the 1971 evidence.\(^{106}\)

\(^{104}\) For previous discussions of this complex, cf. "Heshbon 1968," pp. 123-126, Fig. 4, Pls. XI:B, XII:A; "Heshbon Pottery 1968," pp. 23ff. During the 1971 season, no new work was done in B.1 south of Wall B.1:17.


\(^{106}\) Because Wall B.2:62 has been only partially exposed, it is not yet possible to determine what the relationship of that wall was to the bedrock cut of B.4 and to the very tentative walls of Stratum 13 (cf. above, nn. 103, 100).
During the leveling operation of Stratum 12, the upper courses of the walls (and probably the related occupational remains) would have been scraped off and distributed as fill beneath the first Stratum 12 plaster layer.\textsuperscript{107}

Since Wall B.1:17B=B.2:62 cut down into the Stratum 16 soil layers, and since that wall was sealed against on the south by the Stratum 12 mixed layer, it would seem reasonable to associate the Stratum 14 wall complex with the isolated installations of Stratum 13. Yet, foundation Trench B.1:103 and soil Layers B.1:23A, 34, and 35 produced only late Iron II pottery, so the dating of the complex must remain uncertain.\textsuperscript{108}

Stratum 15

*Description:* Loci B.3:40 and 46, under the Stratum 12 mixed layer (B.3:39) and over a possible pocket of Stratum 16 (B.3:41), were pockets of soil between bedrock in the northwestern part of B.3. Beneath B.3:41 was a pocket of sterile soil, and B.3:38 was bedrock itself in the northeastern portion of B.3. Late Hellenistic pottery came from B.3:40 and 46.

Cistern B.3:47, exposed in the central part of B.3 but not excavated, had a circular (ca. 40 m.) opening which was cut into bedrock *beneath* some massive blocks of cracked upper bedrock. Several large stones covered the opening, and above these stones (and between the bedrock blocks) was the rock tumble and mixed soil of Stratum 12. The small, circular cistern appeared to have been unplastered on the inside (tool marks were visible), and it seemed to have contained only a layer of dry-cracked silt near the bottom.

*Interpretation:* It would seem that minor remains of a Late Hellenistic occupation in Area B could have been preserved in the two B.3 loci, although there would apparently have been no structures associated with them. Cistern B.3:47, as yet undated, would have been one of the earliest installations in the Area,

\textsuperscript{107} Cf. above, n. 102.

\textsuperscript{108} The options would seem to be ca. 6th cent. B.C., ca. 2d cent. B.C., and ca. 1st cent. A.D. (pre-A.D. 66, possibly as early as 31 B.C.).
and it likely existed inside a cave complex which was subsequently smashed by an earthquake (31 B.C.?; cf. above). If the cistern predated the earthquake, the next season could establish from it whether or not there was a pre-31 B.C. Early Roman occupation at *Hesbân*. Cave B.4:74 could also have been occupied (or used) originally in Stratum 15.

**Post-Stratum 16 Gap**

*Description:* There was no stratigraphic or ceramic evidence in Area B between the Late Iron II loci of Stratum 16 and the Late Hellenistic loci of Stratum 15.

*Interpretation:* This evidence would suggest that there was a gap in occupation in Area B (and at the site generally) between ca. 500 B.C. and ca. 200 B.C. (Persian and Early Hellenistic periods).

**Stratum 16**

*Description:* In the southern part of B.1 Stratum 16 lay beneath Loci B.1:23A, 34, and 35 (cf. above, Stratum 14), while in the northwestern part of B.1 it was covered by the mixed layer of Stratum 12. Towards the northeastern parts of B.1 and northwestern B.2 it was found directly beneath the (level) Stratum 12 plaster layers,109 but towards northeastern B.2 it seemed to be sloping down under the tattered installations of Stratum 13. Except for a possible pocket in bedrock (B.3:41) the stratum was not attested in B.3, and excavations in B.4 did not penetrate beneath Strata 12 and 13. Stratum 16 was cut into by the pits of Stratum 3 (B.1:8A), the structures of Stratum 4 (B.1:8B; B.1:10), and the walls of Stratum 14 (B.1:17, 29=B.2:62; B.1:27).

The stratum consisted of interlensing but distinct layers of soil and rock tumble (B.1:14C, 15B, 18, 19, 23B=33, 24, 26, 30-32=46, 36-39, 41-45, 47-56, 62-69, 75-102, 104-116; B.2:35B, 36-42, 56-61, 64-68, 70; B.3:41).110 The layers were only partially

109 In the northwestern part of B.2 the soil layers beneath the Stratum 12 plaster layers produced only late Iron II pottery and they were clearly shaven off level on top and were cut by B.2:69, the foundation trench of Wall B.2:62. The few late sherds from the corresponding 1968 loci in the northeastern part of B.1 have therefore been considered intrusive here (cf. above, n. 105; below, n. 110).

exposed in B.2, but in B.1 they reached a maximum excavation depth of ca. 6.50 m. All of the layers sloped down to the south, but while the upper ones also sloped down to the east, the lower ones reversed that direction and sloped down to the west. There were considerable quantities of ash and (occasionally partially-articulated) bone in some of the layers, and Locus B.1:90 produced a second ostracon. The latest associated pottery was Late Iron II (7th-6th cent. B.C.).

Interpretation: Stratum 16 could still be interpreted as a massive fill. The absence of post-Iron II pottery would argue against the earlier suggestion that the fill material was scraped from the summit of the site at a later time. The ash and bone would favor a “dump” interpretation, and the pottery from the lowest layers might agree with this as well. On the basis of that pottery and the two associated ostraca, the Stratum 16 fill could probably be dated to the 7th-6th cent. B.C. Its upper layers would have been scraped off during the Stratum 12 leveling operation.

have been attributed to Stratum 16 on the basis of balk analysis and B.2 ceramic evidence (cf. above, n. 109). B.1:72-74 were unused locus numbers, and some of the 1971 numbers had 1968 equivalents. Loci B.2:58-61 and 64, in the eastern part of B.2, could belong to the mixed layer of Stratum 12 rather than to the soil layers of Stratum 16.

111 Bedrock was not yet reached in B.1 at a level of ca. 880.00 m., while in B.3 and in the northeastern corner of B.4 it was exposed at a level of ca. 886.00 m. It is not yet known if this was a natural or an intentional change in the bedrock contours of Area B. If it was the latter, then the vertical cut in the northeastern corner of B.4 should be related to it (cf. above, n. 103; below, n. 114).


114 If the B.4 bedrock cutting was the cause of the radical change in the bedrock contours between B.3/B.4 and B.1, then that cutting would predate the Stratum 16 fill (cf. above, nn. 103, 111). A dump interpretation would presume some kind of occupation elsewhere in the vicinity, but thus far there has been very little evidence other than pottery for such an occupation at the site.
Conclusion

It has thus been possible to describe and interpret 16 strata in Area B, often in the context of remains from other Areas. Historical interpretations have been suggested on the basis of the best controlled evidence from the site, although some strata have not been so interpreted (cf. Strata 15 and 16). Further excavations and additional stratigraphic analysis of existing data may serve to check both the descriptions and the interpretations which have been outlined here.