

The 1971 Season of Excavations at Tell Ḥesban

by
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The first season of excavations at *Tell Ḥesbân* was carried out in the summer of 1968 and was briefly reported in *ADAJ* (XII-XIII [1967-1968], 51, 52).¹ The second campaign took place from July 5 to August 20, 1971. The staff consisted of 40 overseas members — of whom about 20 were graduate students — and 11 Jordanians. Two of them, Mohammad Murshed Khadija and Hussein Qandil, both officials of the Department of Antiquities, served the expedition respectively as foreman and representative of the department.² One instructor of the University of Jordan, Nabil Khairy, and seven archaeology majors of that university also joined the expedition. Approximately 130 other Jordanians were hired as laborers, the majority of them from the village of *Ḥesbân*.

The expedition was chiefly sponsored by Andrews University, Berrien Springs, Michigan, but enjoyed the cooperation and financial support of the American Center for Oriental Research in Amman (ACOR) and of several other American institutions. As in 1968, the writer, who had been director of ACOR during the previous six months, served as director of the expedition. Roger S. Boraas of Upsala College

East Orange, New Jersey, was chief archaeologist. Some of the staff members had been on the 1968 staff, but most joined the expedition for the first time in 1971.

Work on the *tell* was continued and expanded in all four Areas where excavations had been carried out during the previous season. In addition to the excavations on the *tell*, salvage operations were conducted in two recently discovered Roman-Byzantine cemeteries. The following brief report of the 1971 excavations is described Area by Area and is based on the various reports written by the Area supervisors for the official full preliminary report published in the *Andrews University Seminary Studies*, XI (1973). See No. 1, a contour map of the *tell*, and No. 2 an aerial photo of *Tell Ḥesbân*.

AREA A

Area A is located on the summit of the *tell*, where in 1968 the remains of a Christian church were found. During that season the apse in the east of this building, the northern outer wall, and a row of three column bases with their underlying support wall were excavated. A wall in the south, corresponding to the northern

¹ A full preliminary report of the first season was published in the *Andrews University Seminary Studies* (AUSS), VII (1969), 97-239. Other reports of that season have appeared in *The Biblical Archaeologist*, XXXII (1969), 25-41, and the *Revue Biblique*, LXVI (1969), 395-398. The coins found during the 1968 season were published by A. Terian in AUSS, IX (1971), 147-160; and the 7th-6th century B.C.

pottery from Area B by E. N. Lugenbeal and J. A. Sauer in AUSS, X (1972), 21-69.

² Thanks is herewith expressed to Mr. Mansour Bataineh, Director-General of the Department of Antiquities, for having granted the excavation permit, as well as for having loaned Mohammad Murshed Khadija to the expedition.

inner wall was excavated, but no column bases were found on this wall. These discoveries made it clear that the church had been a basilica-type structure consisting of a central nave separated by rows of columns from two side aisles. Within the apse and in the central nave fragments of colorful mosaic floors were discovered. The mosaic fragment in the apse carried an arc-shaped border of a garland and a design of trees and a large animal. The other fragment showed a geometric design. Both mosaic fragments were lifted from their bed of cement, restored, and transported to the museum in Madaba for preservation.

The 1968 excavations also revealed that after the destruction of the church, probably carried out by the Persians during their invasion of A.D. 612, the ruins were leveled and the site was converted to a paved open plaza. Water channels were put in the pavement to carry rain water to several cisterns, three of which were dug where the church had stood. The evidence showed furthermore that during the early Arab period this plaza was surrounded by domestic buildings on the north, west, and south. The east side was left open so as to protect the plaza from the disagreeable strong west winds and to allow it to be warmed up by the rising sun.

During the 1971 season Area A was under the supervision of Dorothea Harvey of Urbana College, Urbana, Ohio. The work in all four Squares opened in 1968 was continued and new excavations were begun in two more Squares to the west. A portion of the southern outside wall was discovered for the first time, and it was found that the two side aisles were not of the same width. The northern aisle was 2.00-2.20 meters wide while the southern one had a width of only 1.50-1.60 meters. Had the two aisles been of the same width, the southern wall of the church would have been built over a large cistern. By the end of the 1971 season it was certain that

the church had had at least six columns per aisle. Six of them were found in their original locations, four in the northern row and two in the southern row. Five other, displaced, column bases of the same size came to light in various places within the church area. The western end of the church has not yet been uncovered, and it is therefore not known how long it originally was. Further excavations are needed to ascertain the length of the church as well as its entrance, which must have been in the west.

It is reasonable to believe that in pre-Christian times the summit of the *tell* had borne some other monumental structure, be it a Roman temple or any other public building. This assumption became more certain when the 1968 operations uncovered a Corinthian capital incorporated into the foundation of the church's apse. This capital must have been reused from some pre-Byzantine monumental building. During the 1971 excavations it was furthermore discovered that one of the four principal east-west walls of the church predated the construction of that building. Pottery obtained from foundation trenches, from fill between the walls, and from the walls themselves made it clear that the northern and southern outside walls were of Byzantine origin as well as the wall which carried the northern row of columns. But the wall which carried the southern columns was of Roman workmanship and differed from the other three in appearance and method of construction. This wall was simply reused by the church builders, and may constitute the only major remains of the pre-Byzantine public building which once must have crowned *Tell Hesbân* during Roman times.

In Square A. 2 there was evidence both outside and inside the northern wall of extensive quarrying activity in the Roman period. Here also was discovered a cave divided into two large rooms by an east-west separating wall. The southern half

had been in use during the whole Roman period, while the northern half seems to have been used only during late Roman times. The entrance to the northern cave was made through a well-constructed doorway. Its eastern face had an inverted V-shaped lintel of two stones placed on two side posts of heavy blocks of cut stone (No. 3). On the west face a heavy horizontal stone lintel was set across these side posts. The use of the cave could not be determined. Directly opposite the door was an anvil-like round stone set in a circle of stones (No. 4), and a firepit was in the northwest corner of the cave. It is probable that the cave had served as a workshop of sorts. The Area supervisor suggests that the anvil and firepit may have been used for the sharpening or working of tools needed for stone cutting, for the cutting of tesserae, or other related activities.

No building remains earlier than the Roman period were discovered in Area A. A few Hellenistic sherds were found during the excavations, and also some 7th-6th century B.C. pottery in pockets of fill, but no architectural remains. It became apparent that if the summit of *Tell Ḥesbân* was occupied in pre-Roman times, all vestiges of such an occupation had been thoroughly destroyed by the quarrying or building operations of the Roman and succeeding periods.

AREA B

Area B is located on a comparatively flat shelf below and to the south of the acropolis. In 1968 one 7.00 x 7.00 meter Square was opened here with the aim to ascertain how many occupational layers we could expect to find on the *tell*. This aim was not fully reached, because instead of encountering occupation layers that corresponded to those of other parts of the *tell*, a large debris-filled lime kiln and a thick layer of white crushed limestone material were discovered. Under-

neath this layer was a large east-west wall dividing the Square into almost equal halves. North of that wall were many layers of fill which contained sherds no later than the 7th-6th centuries B.C. as well as an ostrakon dated by paleography to ca. 500 B.C. It seemed that the massive wall, of which the foundations were not reached in the 1968 season, must have been constructed ca. 500 B.C.

Inasmuch as Area B contained few remains of later structures and gave the hope of providing pre-Roman occupation levels, three new Squares were opened in 1971, while work was continued in Square B.1. James A. Sauer, at that time newly appointed Albright Fellow of the ACOR, was the Area B supervisor.

The rains of three winters had washed into Square B.1 much of the debris from the lime kiln, and all stones of a protective wall, built around the Square after the 1968 campaign, had been pushed into the deep hole — probably by village children. Two weeks of intensive work were required to remove the stones and debris which almost filled the Square and to restore it to the condition in which it had been left at the end of the 1968 season.

Fourteen archaeological strata were distinguished in Area B. Stratum I represents the present topsoil. Underneath it lay Stratum II from Mamlūk times as dated by pottery and coins. In this stratum were several pits. An L-shaped robber trench provided evidence that an earlier wall had been removed in Mamlūk times.

Stratum III contained the circular lime kiln, 4.00 meters in diameter, which had already been discovered in 1968. Its bottom lay about 4.00 meters below the ground level of Area B. Its circular wall consisted of fairly well-cut stones bearing the marks of the intensive heat to which they had been subjected when the kiln was in use, most probably during the early

5th century A.D. It is possible that it had been built and operated in connection with the construction of the Christian church on the summit of the *tell*. That no remains of any kind from the time between the 5th century A.D. and the commencement of the Mamlūk period in the 12th century were found makes it reasonable to conclude that the space of Area B was left unoccupied during the intervening centuries.

In 1968 it was discovered that the builders of the lime kiln had cut through a mass of whitish material, seemingly decomposed limestone, called *huwwar* at that time. This mass, 1.00 meter thick, consisted of alternating thicker layers of limestone and thinner layers of brown dirt. The same layered material was also encountered in the south-west corner of Area D in 1968, and in 1971 in both new Squares (B.2 and 3) connecting Areas B and D. These may probably be plaster resurfacings of an east-west roadway leading to the stepped street in Area D, the southern access to the acropolis. It seems that the original roadway surface and resurfacings, labeled Strata IV and VI-XI, (No. 5) were laid down between the 2nd and 4th centuries A.D. In Stratum XI, the lowest of these strata, a north-south row of well-cut paving stones came to light in Square B.3. (No. 6) According to the Area supervisor's interpretation, they seem to have been curbstones on the roadway's west side after it junctioned with a proposed north-south roadway leading to the acropolis gateway by means of the above-mentioned stepped street. Both the street and the gateway were excavated in 1968.

It is well known that the Roman road, the *via nova*, built under the Emperor Trajan after the conquest of Petra in A.D. 106, passed Esbus (= *Hesbân*). It originated in Bostra, the capital of Syria in late Roman times, and traversed Transjordan to 'Aqaba in the south, going through Philadelphia (= Amman), Esbus, and Petra. A branch road running from Esbus to Jericho

via Livias is usually attributed to the Emperor Hadrian, but its date of origin is not certain, and may have been earlier. Whether the roadway with its several resurfacings, found in Squares B.1-3, was actually part of the Esbus-Livias branch or only led to it from the *tell* is not known, but it seems that it existed until the 4th century. It is also possible that Esbus during those centuries served as a fortress on the Roman eastern *limes*, or frontier.

Stratum V is a rock tumble connected with some red ashy soil which the Area supervisor interprets in his reports as possible destruction evidence of a severe earthquake that hit Transjordan in A.D. 365. If this earthquake caused the destruction of the walls of Kerak and of the qasr at 'Arâq el-Emîr, as seems probable, one could expect to find evidence of it at Hesbân, a mid-point between these two sites.

Stratum XII represents a pre-roadway occupation level of early Roman times. An unexcavated cistern in Square B.3 and a partly excavated cave or cistern in Square B.4 belong to this period.

The massive Wall B.1:17—already mentioned—and its extension found in Square B.2 belongs to Stratum XIII. Its origin is still not clear. Some evidence points to its construction in the 1st century A.D., but a clearly visible trench on its north face in Square B.1 contained no pottery later than the 7th-6th centuries B.C. It will be one of next season's tasks to obtain a date for the origin of this wall as well as its purpose, which has not yet been ascertained. At the present time it seems that it may have been built as part of a defensive system to protect the acropolis.

Stratum XIV consists of a massive fill in Square B.1, 6.50 meters deep, which contains only 7th-6th century B.C. pottery (including a ca. 525 B.C. ostrakon found in 1971) and no later material remains. Thus far this massive fill has been encountered only in Square B.1; in the adjacent Square

B.4 bedrock was reached less than 2.00 meters below ground surface. It is not yet known whether the deep depression in B.1 is man-made or of natural origin, nor is it clear when and for what purpose it was filled. Solutions to these problems must be sought during the next season.

AREA C

Area C consists of a series of Squares on the western slope of the *tell* along the east-west axis. Originally designed to intercept an expected city wall, the four Squares worked in 1968 showed that the western slope of the acropolis is covered by a thick layer of debris. In the 1971 season work in Squares C. 1 and 4, the westernmost and easternmost of the four Squares, was continued and two new Squares were opened, one (Square C. 5) adjacent to and further down the slope from Square C. 1 and the second one (Square C. 6) at the eastern end. The work in Area C was supervised by Henry O. Thompson, the 1971-1972 director of the ACOR.

In Squares C.4 and 6 parts of a frequently rebuilt Arab structure (labeled «North Building») were uncovered. Along its inside walls was a plastered stone bench, part of which was made of a column drum (No. 7). Underneath the pre-Arab (probably Byzantine) floor of this house was found the burial of a possibly fetal or still-born child covered by a large sherd of a storage jar. The child must have been wrapped in a cloth since the fibers were still noticeable on a bronze buckle lying in the shoulder area. Numerous tiny beads in the pelvic region had probably been sewn to the cloth. Another find made in this house was a clay lamp containing 66 Mamluk coins, made of a bronze core covered with silver. (No. 15)

Outside the North Building and south of it lay a domestic court with a *tabun* and a large cistern, which had already been

cleaned in 1968. Rock-cut channels ran between the cistern and other installations lying outside the limits of excavation, one from the cistern toward the west where it was lost in the west balk and another connecting with a cavern in the south (No. 8). This cavern was ca. 1.50 meters wide and was roofed with limestone slabs. Despite the fact that it was not excavated because most of it lay outside the Square, it was evident that the cavern extended south more than 2.00 meters. Pottery evidence coming from the soil layers connected with the channels point to a Roman date for these installations. Although the cistern contained mainly Arab pottery, this may only have been evidence of reuse of a much earlier structure.

Byzantine evidence in Square C. 4 was quite complicated. It consisted of several disconnected wall stumps and soil layers underneath the Arab *tabun* and around the cistern. One north-south wall, of which 5.00 meters were preserved to a height of three and four courses, was 1.30 meters wide and seemed to have served a defensive function for the western perimeter of the city, or at least for the house and cistern, since it seemed too heavy for a simple courtyard wall.

In Square C. 1 excavations were continued where they had ended in 1968. Here several Byzantine walls and a water channel were uncovered. Two rows of semi-flat field stones set on edge formed the trough of the channel, and a row of capstones covered its top. In the southwest corner of the Square was an impressive 5.25 meter long wall (C. 1:8) consisting of large field stones, dated to the early Byzantine period. In removing this wall a small unbroken glass vase was retrieved. Somehow it had escaped being crushed by the heavy stones lying over the layer of soil in which it was embedded.

Since this wall (C. 1:8) ran into the west balk at an oblique angle, we expected to find its continuation in Square C. 5. In this

we were not successful. It evidently stopped in the west balk which has not yet been removed. The apparently corresponding wall (C. 5:7) found in Square C. 5 ran at a slightly different angle and level from Wall C. 1:8 and was of probable late Byzantine origin.

The early and late Roman periods are represented in Square C.1 by several walls and surfaces, probably the slim remains of domestic buildings destroyed beyond connecting recognition by later building activities.

Of the pre-Roman periods, a few Hellenistic sherds, but not structural remains, were found in Area C. However, one wall (C. 1:30) could be dated to the 7th-6th centuries B.C., making it thus far the earliest architectural feature discovered at *Tell Hesbân*.

AREA D

Area D is located on the southern slope of the acropolis. In 1968 three Squares were opened there along the north-south axis in the hope of discovering the ascent to the acropolis area. This hope materialized when a stepped roadway along the western balks of Squares D. 1 and 2 was discovered which led to a gate built into a strong perimeter wall (D.1:4) that seemed to have been in use during the Byzantine and Arab periods of *Tell Hesbân's* occupational history. North of this wall a fine pavement of large flat stones was discovered and a collapsed vaulted room built in late Arab times, of which the southern part was excavated.

In the southernmost Square of Area D (D.3) several pits of Roman and later times were found . There also was a thick layer of whitish plaster in the western part of Square D.3 , interpreted now as part of the roadway surface that led from the west to the stepped ascending street which ended at the gateway of the perimeter Wall D.1:4 on the acropolis.

In 1971 the work in Area D was supervised by Lawrence T. Geraty of Harvard University. Excavations were continued in Square D.1 and completed when bedrock was reached in the uncovered portion. Since the Department of Antiquities deemed it advisable to preserve the fine pavement (D.1:33-34) north of the perimeter Wall D.1:4, only a limited area east of the pavement, where it had been robbed out, was available for a deep probe. The excavations revealed that the pavement was of Byzantine origin (No. 9), probably built contemporaneously with the church in Area A. It overlay another and earlier pavement of greenish clayey limestone (which had the feel of soapstone and was popularly labeled as such during the excavations) of Roman times. Underneath the makeup for this Roman pavement were layers of fill containing Roman and some 7th-6th century B.C. pottery. It became now clear that the 1.50 meter-thick perimeter wall had been laid on bedrock, probably in Roman times, and that it had remained in use from that time throughout the city's history . During the following centuries, however, its upper portions experienced several rebuilds.

Two new squares (D.5 and 6) were opened in 1971 north of Square D.1 in order to connect that Area with Area A and its Byzantine church ruins. Square D.5 reached from the west balk to the western wall of the vaulted Arab room. Here a further section of the Byzantine pavement (D.1 : 33-34) was uncovered reaching as far north as the southern outside wall of the church. However, its eastern part was ripped out , probably by the builders of the vaulted room

Incorporated in this pavement was the mouth of a huge cistern. Its neck, built into a vaulted ceiling, was 4.00 meters deep, while the cistern underneath the neck had a depth of another 6.00 meters. Its horizontal dimensions were 8.50 x 4.50 meters, so that it could hold an estimated 229,000

liters of water. Its floor and walls were plastered while the ceiling consisted of an artificial vault with two square mouths, one lying outside the excavation area (No. 10). It looked as if it had originally been a cave with an east entrance. Upon decision to convert it into a cistern, this cave seems to have been enlarged and deepened, its eastern entrance walled up, and a vaulted ceiling built to cover it. The ceramic evidence obtained from a careful and stratigraphic excavation of the silt layers at the bottom of the cistern revealed that it had been in use during the late Arab period, although it is possible that it was constructed much earlier.

In Area D the collapsed vaulted room, built in late Arab times, was almost completely excavated. As its eastern wall it had used an extant north-south wall, existing at least since the Byzantine period. The entrance to the vaulted building has not yet been found, but it must have been in the as yet not fully excavated north wall as the walls on the other three sides contained no breaks. The floor of this building had covered over a ca. 79,200 liter capacity cistern. When the cistern itself was dug from bedrock, its 3.50 meter long neck was artificially built above the bedrock. The mass of debris in it, stratigraphically excavated, furnished a large number of domestic objects, coins, and pottery. A blocked-up channel in the eastern wall of this cistern connected it in a carefully engineered system with two smaller cisterns in the eastern part of Square D.6. These cisterns could hold approximately 3,100 and 3,400 liters, respectively.

East of the vaulted room ran an east-west wall, founded on bedrock in Roman times and used until late Arab times, although its function remained uncertain. In the Byzantine period the space between this wall and the church was covered by a tessellated floor of which only patches were preserved. Its geometric pattern of diagonal rows contained 40-centimeter-wide

red-bordered squares set in a white background with a multicolored diamond-shaped cluster of 41 tesserae in the center. The whole pattern was surrounded by a double band of blue tesserae. Whether this mosaic floor lay inside a room adjacent to the church or in an open small courtyard could not be ascertained.

AREA E AND F

Prior to the 1971 season of excavations the villagers of *Ḥesbân* had accidentally discovered and robbed a number of tombs. Since two of these tombs, the entrance of one having been closed by a rolling stone and the other by a swinging stone door, were rather rare discoveries for Transjordan, a full excavation and study of them was desirable. In the course of this work, directed by S. Douglas Waterhouse of Andrews University, a search was also made for some additional unspoiled tombs. Consequently, a few tombs were found which had not been opened in recent times. They had all, however, been entered and robbed of valuables in ancient times. Sometimes, probably during the Byzantine period, these open and robbed out tombs seem to have been filled with dirt and resealed.

On *Gourmeyet Ḥesbân*, the hill lying west of *Tell Hesbân*, an ancient cemetery, probably dating to Roman and Byzantine times, is recognizable from the many open tombs. Many of these are now used for animal pens or storage. This cemetery was labeled Area E, but no new tombs were discovered during our 1971 search. Area F was the Roman-Byzantine cemetery located on the western slope of the southern extension of *Tell Hesbân*, where most of the recently opened tombs were located.

Tomb F. 1, called the «Rolling Stone Tomb», was the first tomb of this architectural design found east of the Jordan River, although several tombs of this nature are known on the West Bank. All of the tombs constructed in this way can be

dated to the first half of the 1st century A.D., and most belonged to noble families. The complex of *Hesbân's* Rolling Stone Tomb included an open forecourt and a relatively elaborate façade. Two walls parallel to the actual tomb face formed a track in which the disc-shaped stone door, ca. 1.26 meters in diameter and .36 m. thick, could be rolled to either side of the low entrance. (No. 11) The interior was a rock-cut main chamber from which radiated — four each on the north, east, and south sides — 12 burial tunnels, generally called loculi. Although the tomb had already been spoiled before our season of excavations began, the existing human bones showed that it had once contained at least 76 bodies. Some pottery (all broken), glass bracelets, and a few other small objects were found in the debris of this tomb.

Tomb F. 4 was a Roman tomb of a construction frequently found at *Hesbân*. These tombs consist of a vertical rectangular shaft at the bottom of which are four burial recesses, the long sides of the shaft having two trough-like graves and the narrow sides two loculi. In one case a burial trough was found directly at the bottom of the shaft and seems to have been a later addition. Tomb F. 4, which was excavated stratigraphically, contained bodies in all the graves, but no pottery was found with them. Among the objects found in this tomb were two brooch-like fibulae (No. 16) and a bronze incense shovel (No. 13) of a type known from Pompeii and other parts of the Roman world. Three such shovels were found in one of the caves at *Naḥel Hever*, west of the Dead Sea, which had sheltered refugees during the Bar Kokhba revolt in the 2nd century A.D.

Together with Tomb F. 1, Tomb F. 5, the «Swinging Door Tomb» was also unique for *Hesbân*. On the sides of a central rock-cut chamber lay three arcosolia, each consisting of two trough-like caskets covered with large, flat, square, terracotta tiles. The outstanding feature of this tomb, however,

was that hinged within a stone frame surrounding the low entrance was a still-operable, solid stone door. (No. 12) Although this tomb had already been robbed of its contents before our expedition arrived, we were able to retrieve from it a cache of undamaged pottery vessels, fortuitously covered by rock fall from the ceiling and hence hidden from the recent tomb robbers.

Tomb F. 6, also stratigraphically excavated, was an early Roman tomb consisting of a central rock-cut main chamber with nine loculi cut into three walls. While this tomb had been entered in antiquity, it had not been opened in recent times. The ancient tomb robbers seem to have been interested in such valuables as gold and silver, but had left behind glass and pottery vessels as well as bronze and other metal objects. We found that the bones had been scattered throughout the tomb before it had been filled with dirt and resealed, probably in Byzantine times. The most artistic find was a swan-shaped cosmetic container. The shell box itself formed the swan's body, and into the ivory lid fit the neck, wings, and tail — all carved of ivory. (No. 14)

Tomb F. 8/10 is a double tomb of formidable size. Upon discovery it was almost completely filled with dirt. In ancient times it had been robbed of practically all contents and subsequently resealed. Tomb F. 8 was the earlier tomb, consisting of an unusually long central chamber with 18 loculi, all of which were empty of objects and bones at the time of discovery. Tomb F. 10, constructed at a later time, had a large central chamber and three arcosolia. The southern and eastern arcosolia each contained three trough graves. During construction of the northern arcosolium, however, the tomb builders had accidentally cut into the rear of Tomb F. 8, thus creating of the two one large tomb as well as spoiling the symmetry of Tomb F. 10. In addition to the trough graves found in Tomb F. 10 were a loculus and a vertical recess cut into the eastern arcosolium.