

ANDREWS UNIVERSITY

HESHBON EXPEDITION

THE FIRST CAMPAIGN AT *TELL ḤESBÂN* (1968)

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Set at the edge of the rolling Moabite plain where *wadis* begin to cut down sharply to the Jordan valley to the west, *Tell Ḥesbân* (Biblical Heshbon) commands a panoramic view to the east, south and west from its topmost elevation of 895 meters above sea level. Located 26 road kilometers southwest of Amman in the Transjordan, it is some 11 kilometers north of the present administrative headquarters for the district, Madeba. Jerusalem lies about 75 kilometers straight off to the west, and on clear mornings one can see the green of Jericho and the waters of the Dead Sea some 30 kilometers west at the bottom of the valley. Access to the modern village is provided by good asphalt roads from both Amman and Madeba.¹

Since no accurate contour map of the site was available prior to the beginning of the first season's work, the conformation of the *tell* can be described only in a general way. Most striking is a rectangular shaped acropolis *ca.* 40 m. north-south by 30 m. east-west. Surrounding it on all sides is a gradually sloping shelf from *ca.* 40 to 60 m. wide from which a rapid drop to lower levels is discernible on all sides except the southwest. These two features comprise the main contours visible as one approaches the site and were the prime focus of attention in the first season's excavation (Plate X: A).

¹ For location of the site in relation to other centers of culture at various periods, cf. any standard Bible atlas, *e.g.*, H. G. May, ed., *Oxford Bible Atlas* (London, 1962), pp. 49, 57, 59, 61, 63, 65, 69, 73, 77.

Evidence of ruins continued on a long sloping ridge running southwest from the main *tell*. This included substantial walls of buildings in various states of disrepair. In addition, this ridge has become the location of the houses of most of the present villagers, built mainly along the access drive from the asphalt road which skirts the *tell* to the east.

Two other general features are noteworthy. The *Wadi Hesbân* drops rather sharply from the plain north of the site to form a deep cut on the west side of the *tell* running from north to south, subsequently turning west in its course down to the Jordan valley.

Across the *wadi* is another ridge of the limestone and chert native to the area. Pockmarked with an estimated hundred or more caves (some natural) still being used for animal pens, crop storage and winter dwellings, the ridge is sufficiently high to cut off visibility from the *tell* to the northwest at a distance approximately a mile from the acropolis. This comprised the most serious limitation to the excellent pattern of visibility range which enhanced the defense potential of the ancient city.

The weather pattern is the two-season climate characteristic of Palestine, dominated by a northwest wind which blew regularly throughout our working season with a definite cooling effect on the sun's heat even at mid-day. That this factor assists in sustaining the agriculture carried on in the surrounding plains is evident even to the casual observer.²

Conspicuous in the assessment of the total resources of the site is the lack of any ample natural sources of fresh water. That compensation in the form of cistern storage facilities should comprise a considerable proportion of ancient construction is no more surprising than the extensive use of such facilities by the modern inhabitants.

² On a few of our working days the wind was sufficiently strong to impede efficiency. It was felt primarily by the crews working on the west side of the *tell* (in dirt-moving operations) and by the architects and photographers (anchoring drawing boards and altitude photographic gear required special precautions).

*Heshbon's History From Literary Sources*³

The prominence of *Heshbân* is well attested in several historical periods from literary evidence available.

Heshbon is mentioned first in connection with the Israelite invasion of Transjordan some 40 years after the Exodus. At that time Heshbon was the capital of Sihon, king of the Amorites. However, according to Num 21:26-30, Sihon had expelled the Moabites from Heshbon, hence the Moabites must have been in possession of that city prior to the arrival of the Amorites. This is further confirmed by the fact that in the Pentateuch the area surrounding Heshbon is called "the plain of Moab" or "the land of Moab" (Num 22:1; 31:12; 33:48; 36:13; Dt 34:5, 6). However, in Moses' time the northern border of Moab was the river Arnon, some 40 kilometers south of Heshbon.

When the Israelites arrived from Egypt they requested from Sihon of Heshbon permission to travel through his land. When Sihon denied this request a war ensued, which the Amorites lost. In the course of the war, Heshbon was taken and apparently destroyed; at least the Biblical record speaks of "the children of Reuben" as having built (or rebuilt) Heshbon after the city was allotted to them (Num 21:21-26, 34; 32:37; Jos 13:15, 17).

Later, the city seems to have changed hands, for according to Jos 21:38, 39, it belonged to the tribe of Gad. The possession by Gad of the Heshbon area is confirmed by King Mesha of the 9th century who claims in the Moabite Stone inscription to have taken the territory north of the Arnon from the tribe of Gad who had occupied it (lines 10, 11). By the time of Judge Jephthah, Heshbon had been a city in which Levites dwelt (Jos 21:39; 1 Chr 6:81).

³ This brief account of the history of Heshbon as known before excavation began is based on a B.D. thesis presented by Werner Vyhmeister and deposited in the James White Library of Andrews University. A condensation appeared in *AUSS*, VI (1968), 158-177.

In Solomon's time "the country of Sihon, king of the Amorites," in which Heshbon was situated, is mentioned as belonging to one of the districts into which that king organized his realm (1 Ki 4:19). In Canticles "the fishpools of Heshbon, by the gate of Bath-rabbim" (ch. 7:4) are mentioned. Bath-rabbim seems to have been the name of a city gate.

For two centuries the Bible is silent about Heshbon, but in the time of the prophet Isaiah (*ca.* 700 B.C.) Heshbon, together with Madeba, Elealah, and other cities, which had formerly belonged to Israel, appears to have been in the hands of the Moabites (Is 15:2, 4; 16:8, 9). It is possible that the city fell to them as the result of Mesha's conquest of the Gadite territory described on the Moabite Stone, although Heshbon is not mentioned in that inscription. That conquest took place in the second half of the 9th century and preceded Isaiah's prophecy by more than 100 years.

In a prophecy of Jeremiah (ch. 48:2, 34, 45) Heshbon shares the prophet's denunciation with other Moabite cities, indicating Moabite possession in the earlier part of Jeremiah's ministry. However, in a later oracle of Jeremiah (ch. 49:2, 3), Heshbon appears to be an Ammonite city, having apparently changed hands during Jeremiah's life. How and when this happened is uncertain, but it has been suggested that Eze 25:9, 10 casts light on this event. This passage refers to an invasion of eastern tribes and of the Ammonites, in connection with which Heshbon may have fallen into their hands.

During the Hellenistic period a strong Jewish population developed in Transjordan. In order to bring this region into the Jewish state founded by the Maccabees, their rulers—Jonathan in 147 and John Hyrcanus in 129—annexed territories beyond the Jordan. The last mentioned king captured Madeba (Jos., *Ant.* xiii. 9.1). Although Heshbon is not mentioned in the records dealing with these wars, there can be little doubt that it must have come into the possession of John Hyrcanus at that time, because it is listed among the cities of Moab that were in Jewish hands soon after, namely during

the reign of Alexander Jannaeus, who ruled from 103-76 (*ibid.*, 15.4).

During the time of Herod the Great (40-4), Esbus—as Heshbon was then called—became a fortress city guarding Herod's kingdom against the Nabataeans in Transjordan. At the outbreak of the Jewish-Roman war in A.D. 66 the city was sacked by the Jews (*Jos., War*, ii. 18.1), but it does not seem to have been held by the Jewish rebels for any length of time. After Emperor Trajan dissolved the Nabataean kingdom in A.D. 106, Esbus became part of the Roman province of Arabia Petraea. In the third century it was even allowed by the Emperor Elagabalus to coin its own money.

At what time Esbus became a Christian city is not known, but that it was the seat of a Christian bishop in the 4th century is attested by the records of the Council of Nicaea in 325, which repeatedly mention Bishop Gennadius of Esbus. Again the acts of the Council of Ephesus, held in 431, mention a bishop of Esbus whose name was Zosus. At that time the bishop of Esbus seems to have been subject to the patriarch of Antioch.

Soon after the invasion of the Arabs in the 7th century, Heshbon seems to have ceased as a Christian city. The last evidence of Heshbon's Christian character consists in correspondence of the 7th century between Pope Martin I and Theodore of Esbus concerning the latter's orthodoxy. After this correspondence, the name Esbus disappears from the literary sources, reappearing only centuries later in its Arabic form *Hesbân*.

After the Arabic invasion a clear historical reference is not found until 1184, when Ed-Dîn, a biographer of Saladin, the great Moslem leader who defeated the Crusaders, referred to *Hesbân* as a village. In his history of Saladin, Ed-Dîn says that the Franks, that is, the Crusaders, had taken up positions at *el-Wâleh* (the Biblical Elealah), while Saladin encamped close to a village called *Hesbân*, before advancing toward Kerak.

Another Arab writer, Abu el-Feda, who died in 1331, said that "the capital of the Belka is Husban." Also during the 14th century several other Arabic writers mention *Ḥesbân*. But after that there is complete silence with regard to this site until the 19th century, when, during the age of Near Eastern explorations, *Ḥesbân* is frequently described by travelers and explorers. However, they know it only as a ruin site, a desolate mound, void of inhabitants.

The present population of the village of *Ḥesbân* consists of four families who until a few decades ago were Bedouins. They were settled on the eastern slopes of the mound by the Nabulsi family, wealthy landowners who had moved to the *Ḥesbân* area from western Palestine toward the end of the 19th century. It is therefore unlikely that the present villagers of *Ḥesbân* have either a historical or an ethnic connection with the people of ancient Heshbon, Roman Esbus, or even with the *Ḥesbân* of the early Arab periods.

History and Organization of the First Heshbon Expedition

In the spring of 1966 several board members of the Archaeological Research Foundation of New York pledged to support three seasons of archaeological work under the sponsorship of Andrews University at some site in Palestine. The offer was accepted by the board of trustees of the university, and Siegfried H. Horn was appointed as director of the expedition, being at the same time authorized to lay plans for excavations to begin in the summer of 1967.

In the summer of 1966 Horn spent several weeks in Jordan looking over sites which needed archaeological investigation. He also asked certain prominent scholars, among them Martin Noth and Roland de Vaux, for suggestions. Traveling through Palestine and examining prospective sites, he found the villagers at one place adamantly opposed to archaeological work. At another he discovered that the site in which he was interested was owned by several landlords and that to obtain

a lease or grant would have involved long and tiresome negotiations, probably also much money. One appealing site lay in an area restricted by the military, and another was too far from human habitation to obtain labor and water.

But there was one site to which he returned again and again, a site with which he had already been greatly impressed when he saw it for the first time in 1953—Heshbon, the capital city of Sihon, king of the Amorites. In 1966 a new asphalt road was being constructed that passed the mound of Heshbon, giving easy access to the site, which had formerly been quite inaccessible. He also learned that the mound was government-owned, so that it would not be necessary either to rent or lease the area of excavation. Furthermore, he discovered that the local villagers and the elders were extraordinarily friendly and eager to see archaeological work done.

After the decision had been made to excavate at Heshbon an application for an excavation permit was submitted to the government of the Hashemite Kingdom of Jordan. Awni Dajani, Director General of the Department of Antiquities, kindly supported this request, and a permit was granted in due time.⁴ The American Schools of Oriental Research promised cooperation, the use of its tent camp and digging equipment at Heshbon, and the use of its headquarters in Jerusalem. Several staff members of the Shechem Expedition, who had received their field training together with Horn, were willing to join the Heshbon expedition as area supervisors, and one as the expedition's chief archaeologist. Surveyors and photographers, an anthropologist, and certain college teachers and students from several countries applied for places on the

⁴ Dr. Dajani, a dear friend of all Palestinian archaeologists who have worked in recent years in Jordan, died February 1, 1968. His passing was a great loss for his country and Palestinian archaeology. Tribute is here paid to a man and friend who cannot be replaced. In 1953 he was my (Horn's) travel companion through the length and breadth of Transjordan, and he taught me, a stranger and newcomer to the land, innumerable and valuable lessons. His friendship will not be forgotten.

staff, the understanding being that each paid for his transportation and maintenance.

All plans were laid to begin work at Heshbon June 5, 1967. The Director arrived in Jerusalem several days ahead of time and found a few staff members already there. The tent camp of the ASOR was transferred to Heshbon, and all arrangements with the government and the local people were made. But ominous war clouds were hanging over the whole Near East. Eight days before the excavations were to begin all staff members who had not yet left their home countries were advised by telegram to postpone their journey. But the tensions continued to rise, so that on Sunday, June 4, telegrams were sent out canceling the expedition. The tent camp was brought back to Jerusalem on the same day. The next day, Monday, June 5, the day when the work at Heshbon should have begun, the Israeli-Arab war broke out and put an end to all plans to excavate at Heshbon during that year.

After a few weeks of indecision it was recognized that even under the new situation as created by the Six-day War, archaeological work in Jordan should and could be continued. New plans were laid. Richard Hammill, president of Andrews University, pledged his support for a renewed venture. Some who had pledged money to support the expedition indicated that they would continue to help, and many of the 1967 staff members were willing to try again in 1968. A great boost was given to the new plans when G. Ernest Wright, president of the ASOR, promised to raise money for new equipment to be used on the east bank of Jordan, and to pay for the transportation of two key staff members who were also to be engaged in excavations at Shechem that same summer. The government of Jordan graciously renewed the excavation permit.⁵

⁵ Thanks are herewith expressed to Rafiq W. Dajani, assistant director of the Department of Antiquities, who was most helpful in supporting the new application for an excavation permit and obtaining it. Not only to him, but also to Mikhael Jmei'an, Director General

Since two key members of the Heshbon staff were involved also in the Shechem excavations, the 1968 season of which was scheduled in June and July, the Heshbon expedition had to be scheduled so that it would follow the Shechem dig. This explains why it started as late as July. A special difficulty was created by Syria's remaining closed to American and British citizens, forcing staff members who drove cars, which were needed by the expedition, to make a week-long detour through eastern Turkey, western Iran and Iraq, in part over incredibly bad roads.

But in the end all difficulties were overcome. A large staff of 42 members, traveling by various means, assembled at Amman and carried out the Heshbon expedition according to plan, excavating at the site for seven weeks, from July 15 to August 30. Since the money provided by the ASOR was insufficient to purchase a complete tent camp for a major expedition and the political tension in the country seemed to make it advisable to spend the nights in a city, permission was sought from and most graciously granted by the president of the Middle East Division of Seventh-day Adventists to use the Adventist school building in Amman as headquarters.⁶ The facilities were a real godsend. The half-hour ride to and from the site each day was an inconvenience more than offset by the facilities available at the Adventist School, which made our stay pleasant and materially aided in the success of our work.

The auditorium of the school served as dormitory for our 30 men. Five classrooms provided offices for registry operations, the architects and photographers, director and anthropologist, and sleeping quarters for women; the open hall in

of the Department of Antiquities during the summer of 1968, a word of thanks is due. Without their kind co-operation and friendly support our work would have been impossible.

⁶ It is a pleasure to take this opportunity to express our own and our fellow staff members' deep-felt gratitude to F. C. Webster, president of the Middle East Division and to W. J. Clemons, president of the Jordan Section, for allowing us the use of the school.

front of the classrooms was used as a dining hall; a room underneath a stairway was converted into a darkroom for the photographers; the kitchen and storeroom were the domain of our cook and his three assistants; the back yard provided space for the seven automobiles that gave us mobility—five VW buses, one Volvo limousine, and an old Chevrolet carryall, bought for the ASOR, which served as truck.

The director was the first of the staff members to arrive in Amman. He spent several weeks purchasing equipment, setting up living and working quarters, making contacts with the government, and obtaining the necessary local working force. Several other staff members arrived early and assisted with various preparations. Some remained after the close of excavations for several days to complete records, and assist with the various activities of winding up the expedition's affairs in Amman. A "division of finds" was obtained, made by the Department of Antiquities of Jordan, and also the necessary permits to export the antiquities allotted to the expedition and those loaned for further studies, which, in the division of finds, had been retained for the national collections by the government representative.

The normal daily schedule called for a 3:45 A.M. rising in order to manage a first breakfast, the ride to the site, and a start of the work day by 5:00 A.M. A half-hour break for a second breakfast prepared and eaten on the site was scheduled from 8:30-9:00. A 15-minute break at 11:15 provided an opportunity for staff briefings of the work in each Area once each week. Even the local workmen in surprisingly large numbers took advantage of these opportunities to see what was being done in other Areas. The on-site eight hour work day ended at 1:30 P.M., followed by the drive back to Amman, lunch and a rest period. From 4:30-6:00 the entire staff was engaged in field dating the pottery (some teaching and all learning) or in the production of pottery profile drawings (most took turns learning and practicing the techniques). After the dinner hour there were lectures on special

subjects, reports on particular problems and general discussions by the staff in regard to their records and plans. Formal lectures were scheduled two or three evenings a week. The lights went out at 9:00 P.M.

Two-day weekends allowed several field trips to other antiquity sites on the east bank. Many of the staff took advantage of these opportunities regularly while some chose these days for study and rest.

The health of the group can be reported as having been quite good, although most staff members were plagued at one time or another by expected intestinal troubles that befall Europeans or Americans in the Near East before they become immune to the unaccustomed germs of that part of the world. No serious sickness or accidents interfered with our work. One Area supervisor fell from a high wall but luckily suffered no more than a wrist separation, which healed nicely in a cast; a Square supervisor sprained his ankle and was immobilized for several days, while another staff member, who was thrown out of a car when its door sprang open in a swerving movement to avoid hitting some people on the road, suffered only slight abrasions and some stiffness.

Assignment of staff duties resulted in part from the strategy adopted for the first season's work (see *infra*), and was kept flexible to some extent as the work progressed. Recognizing some shifts which are therefore ignored in this report, the basic assignments were carried out as follows:

Directing the expedition was Siegfried H. Horn. He formulated the aims to be reached and chose the Areas to be excavated. He dealt with the Jordan government and was in charge of the over-all work and all financial transactions of the expedition. Serving as Chief Archaeologist was Roger S. Boraas. He gave instructions in methods and techniques of excavation to those who had joined the expedition in order to obtain training in field archaeology. He also watched over all archaeological procedures to assure that the aims of the expedition would be reached and the best scientific methods applied.

Field excavations were carried on in four sectors of the *tell*, each called "Area" and designated by letter. The team working in each Area was headed by an Area supervisor, who had an associate to assist in the field recordings and drawings of plans and balks, so that the Area supervisor could be left free as much as possible to direct his attention to the excavation work in his Area. In each Area there were also several assistants called Square supervisors, who directed the actual operations and the workmen in each Square.

Area A, on top of the acropolis, was under the supervision of Bastiaan Van Elderen. His associate was Mervyn Maxwell, and the Square supervisors were: Barbara Bergsma, James Brashler, Marvin Hoekstra, Lois Stetler, and Peter Thorne.—Area B, on the shelf, below and south of the acropolis, was headed by Dewey Beegle, whose associate was Ed Grohman. The Square supervisors were: Andrew Bowling, Elaine Hutt and Richard Stetler.—Area C, on the western slope, was under Henry Thompson. His associate was Douglas Waterhouse, and the Square supervisors were: Paul Bergsma (half-time), Lenore Brashler, Kathy Hoekstra, Wayne Leys, Paul Meier and Siegfried Schwantes.—Area D, on the southern slope of the acropolis, was under Phyllis Bird, whose associate was Lawrence Geraty. The Square supervisors were: Keith Bulthuis, John Hutt, Norman Johnson, Chris Leys, and Arthur Spenst.

The surveying staff, frequently and ably assisted by associate Area supervisors and Square supervisors, was headed by Bert de Vries, with whom were associated Architect Paul Belton and his brother Geoffrey, and Draftsman Philip Evans. Their task was to stake out the areas to be excavated, to make top plans and elevation drawings of all architectural features, to ascertain levels in terms of altitudes in meters above sea level of all excavated features, and to make a contour map of the whole mound. Because of lack of time, only a beginning could be made with regard to the last-mentioned task. The survey of the acropolis and the surrounding shelf was com-

pleted (Figure 1), but only the base line of the whole mound was mapped when the excavations ended. The area between the shelf and the base of the mound must still be surveyed in coming seasons, as well as the surrounding areas of the mound, some of which show remains of ancient graves and tombs.

The chief photographer was Avery Dick. He was assisted by George Unger. Paul Bergsma, a Square supervisor, acted as part-time photographer for color work. The photographers made a complete photographic record of all archaeological operations and shot numerous pictures of general interest, but also photographed every architectural or other feature as uncovered and every object found. They were so efficient that complete sets of prints and publishable enlargements had been made of all photographs by the time the expedition completed its work.⁷

Robert Little served as the expedition's anthropologist. He registered and analyzed thousands of bones, unearthed two articulated skeletons, one a headless large cat, perhaps a lynx, the other a mutilated skeleton of a human female adult. After the close of the expedition more than 300 pounds of bones were shipped to America for further study.

The Department of Antiquities of the Hashemite Kingdom of Jordan assigned three of its officials as representatives: Fawzi Zayadin, an experienced archaeologist in his own right; Ghazi Besh, the curator of the Madeba regional museum; and Mohammed Odeh, a restorer of antiquities, whose skills were put to good use when we discovered mosaics in the ruins of a church on the mound. He removed these mosaics from their original beddings and restored them in new reinforced concrete beds for permanent preservation. Foreman for the 115 or more local workmen from the village of *Heshbân* and its environs was Mustafa Tawfiq, veteran of campaigns at 'Arâq el-Emîr and *Tell Balâṭah*, and now residing in Amman.

⁷ All photographs reproduced on Plates X-XXV, except where other credit is given, are the work of Avery V. Dick and George J. Unger.

Hester Thomsen was in charge of all pottery registration and pottery drawing in the headquarters. This was an exacting task, considering that about 12,000 pieces of pottery were registered during the campaign. Sarah Grohman was in charge of the washing of pottery and bones. She also typed the registry lists. She was assisted by three full-time Jordanian pottery washers.

Marion Beegle was registrar of finds. She cleaned the coins and all other objects as they were discovered, entered all data in the registry book and on cards, and drew them to scale.

Camp director was Vivolyn Van Elderen. She was in charge of the cooking and meals, the purchasing of supplies and groceries, and the cleaning of the headquarters. Veterans of west-bank excavations were pleased to see Mohammed Adawi as cook. Three assistants in the kitchen and a campboy, all refugees from *Balâṭah*, completed the headquarters staff. Anita, the daughter of the Van Eldereus, served as messenger girl between Areas on the mound and ran other errands.

Several students from the University of Jordan's Department of History and Archaeology joined the crew to obtain practical training in field excavation and recording techniques, and their assistance is gratefully acknowledged. They not only served throughout the four Areas and with the survey team, but also assisted the anthropologist.

Strategy, Methods and Techniques Used

The development of excavation strategy for the first season was governed by several fixed factors, including land availability, contour and surface evidence of the site, and resources of personnel and finances. Advance consultations between the Director and the top field staff resulted in a tentative plan including the following elements.

1. Because no accurate contour map of the site was available and because no preliminary sounding had been done on the site prior to the first season of excavation, these two

goals became primary. It was intended that preparation of the contour map might be done in advance of beginning excavation by a survey team which would arrive early for that purpose. One Area, limited in size, would comprise a "preliminary" sounding for purposes of establishing a guide to the stratigraphy to be expected on the site. The tactics intended for such an Area would be relatively rapid penetration of the strata within the limits imposed by careful identification of the layers, and establishment of a relative chronology as complete as possible. Clues to absolute chronology would assist in drawing conclusions about the historical periods represented in the debris on the site.

2. The prominence of the acropolis indicated the presence of remains of public buildings. Their excavation was therefore in order.

3. A third strategic aim was the interception of the major defense installations at some point along the defense perimeter.

4. When it became apparent that available manpower would allow a fourth Area to be opened, its precise character was kept flexible pending a close on-site inspection, but tentatively an investigation either of the main shelf construction ruins or some portion of the acropolis access routes was thought desirable.

5. Excavation would be carried out according to the principles of the Wheeler-Kenyon method, with primary attention being given to soil layers and their relationships as a means of discerning the stratigraphic history of the site. Field recording, discussed in detail below, was an adaptation from recently used procedures at *Tell-Balâṭah*, Gezer and Pella, aimed at orienting all data to the pertinent soil layer or feature therein. It had been refined by the Chief Archaeologist based on six weeks of field testing at the 1968 season of the work at *Balâṭah*.

Advanced training of the staff had begun with reading recommendations and the adoption of terminology and field recording principles which had been disseminated by the

Chief Archaeologist to the staff of the expedition planned for 1967. The same materials with minor modifications had been mailed to the 1968 expedition staff in January. General instructions were sent by the Director of the expedition concerning travel, accommodations and administrative policies in a series of three circular letters to all staff members. Training of staff inexperienced in field work was part of the overall purposes of the expedition and received major attention in the course of the season's work. Academic credit arrangements were available through Andrews University.

Terminology employed by the expedition will be of immediate relevance to understanding this as well as subsequent reports, so a summary is provided for the reader's convenience. The abbreviation "H 68" was adopted for identifying the 1968 season at Heshbon. A sector of the *tell* in which excavation was carried on was designated an "Area" and identified by a capital letter. As indicated in the staff assignments noted above, work was done in four Areas in the first season, hence the designation Areas A-D. Within each Area the portions opened for excavation, whatever their geometric shape, were each designated "Square" and identified by an Arabic number. "Plan" designates any drawing of a feature viewed from the top. "Section" refers primarily to the drawings of balk faces, both main and subsidiary balks. "Elevation" refers to the drawing of a feature from a given side view, whereas "Level" refers to the altitude above sea level based on computations in relation to the 895 m. bench mark on the highest point of the acropolis.

The fundamental unit in our recording system was the "Locus." It can be defined as any discernible soil layer or any "thing" (wall, pit, hearth) within or related to a given soil layer. Locus numbers were assigned in chronological sequence within each Square, and where helpful within the report, the simple formula of Area, Square and Locus designation has been put D. 2:13, indicating Area D, Square 2, Locus 13. A further convention for ease in reading the report is the use

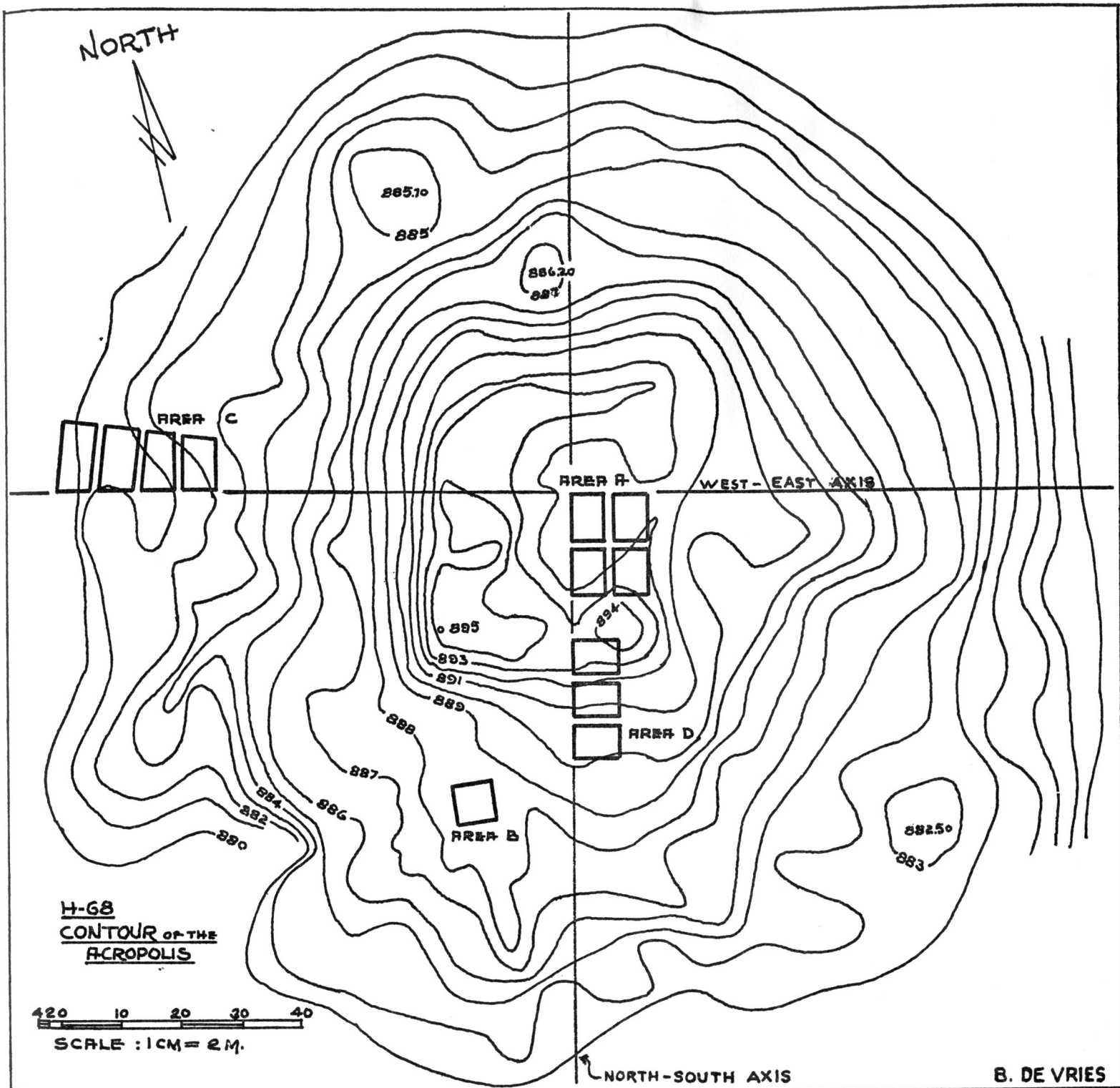


Figure 1. Counter map of acropolis of *Tell Hesbân*, showing the location of Areas A-D of the 1968 excavations

of certain symbols for particular types of loci. These include a line drawn around a locus number to form a rectangle, designating a wall, *e.g.*, D. 2:[34I]. For a layer comprising an exposed surface, a line under the locus number is used, *e.g.*, D. 2:25. For a definitely identified floor (related to architecture), a double line under the locus number is employed, *e.g.*, D. 2:4. For any of the miscellaneous domestic or industrial installations (ovens, cisterns, stairs, pits), a triangle is placed around the locus number, *e.g.*, D. 2.△19⁸. This serves only to call attention to the fact that the locus is not a normal wall or surface layer.

In the field, the center of the record keeping process was a Field Notebook kept for each Square in which all aspects pertaining to a given locus were entered on a 2-page locus sheet used for every locus identified.

Information gathered for each such locus included (1) a chronological record of its excavation and the excavation tactics employed, (2) a description of its characteristics, (3) measurements in three dimensions locating it in the Square, (4) precise measurements of its dimensions, (5) its relations to loci immediately above, around and beneath it, (6) appropriate levels for its top and bottom (or other level variations), (7) the pottery baskets associated with it (including the field dates and registered sherds for each basket), (8) the objects associated with it (including their registry numbers and a tentative identification of the objects), (9) reference to what Sections indicate its stratigraphic location (a complete set of Sections was drawn for every Square opened), (10) reference to what Plans (Square supervisors' Plans and especially the Architect's Field Sheet numbers) record its location in the

⁸ Appreciation is expressed to L. E. Toombs for this suggestion made initially by him for the excavations at Pella, 1967. These symbols were used in all field reports and locus books, but for typographical reasons they are not used in this printed report. Here locus numbers are preceded by their designation, for example: Wall A. 2:12 refers to Locus 12 in Area A, Square 2, as being a wall; in similar way Surface C. 1:11, Cistern C. 4:7, or Floor A. 1:20 should be understood.

Square, (11) all photographs in which it appears (including the photo number, date, time, subject and view direction of the shot), and finally (12) a paragraph of entries in red ink indicating the interpretations of the locus, including the initial impressions and all subsequent revisions by dated and initialed entry. This verbal record was supplemented by scale drawings and sketches of the various loci under investigation in each Square reported daily in a top Plan. Additional helpful details were afforded through subsidiary Plan and Section sketches kept by the Square supervisors with each locus sheet. Alternate sheets of graph and lined paper provided the format for such recording. The result of using such a recording system is a collection of Field Notebooks, providing full and cross referenced information on every locus excavated, comprising the basic data of the season's work. Auxiliary material, such as the photographic collection, the architect's field sheets and inked drawings, pottery profile drawings, object registry and anthropologist's comments are all linked together through references in the locus sheet, providing a ready channel for later checking on any questionable item. The reports of the four Area Supervisors included below are founded on their correlations of such records within the Area in which they worked. That constant diligent attention to the maintenance of such basic record material was necessary for every Square supervisor is obvious.

For interpretation of the results, it was agreed to use a Period, Stratum and Phase designation sequence. Period refers to the general historical divisions of cultural domination on the site. Based on literary references we adopted the general period designations of Modern, Arab, Byzantine, Roman, Hellenistic, Iron III (Persian), Iron II, Iron I and Late Bronze for the first season. Within each Period, one or more Strata may be detected. Normally, distinctions between Strata would be on stratigraphic evidence of a major cultural break supported by ceramic, architectural and object data. Periods are therefore primarily historical designations while

Strata are primarily archaeological data distinctions. Identification of Strata is by upper case Roman numerals. Within a given Stratum, several Phases may be discerned. These would recognize primarily construction phases within a given complex. Major Phases are identified by capital letter, whereas lower case Greek letters were adopted for minor subdivisions. The chief interpretive task within each Square was the correlation of loci into the features (rooms, stairs, courtyards) comprising a Phase of occupation or its subdivisions. The chief interpretive task of the Area Supervisor thus became the correlation of loci from all Squares in the Area in order to form conclusions about the Phases, Strata and Periods represented by the debris treated in the season. As the season progressed it became helpful to use one additional convention in recording. Sometimes, due to extensive erosion or robbing of stones, it was not immediately apparent whether a wall or other architectural structure had gone through several rebuilds and uses and thus may have spanned more than one Phase or even more than one Stratum. In such instances lower case letters were used to indicate stages in the wall construction when the data were not sufficiently clear to warrant changing locus numbers.

A word concerning the field dating of the pottery is in order. In advance of the first season it was recognized that the ceramic horizon of the Transjordanian sites has not been explored sufficiently to allow refined chronological identifications by ceramic typology such as in the case for West bank sites. It was further recognized that the dependability of West bank ceramic criteria for dating purposes would necessarily be open to revision. This applied most obviously to local wares in any instance, but the attempt was made during field dating to give adequate recognition to unidentifiable or undistinguishable forms in each basket, recognizing that detailed study might necessitate revision of dating conclusions based on clues normal in West bank locations. As the first season progressed these recognitions were confirmed (cf. summary matters

infra). For such dating as ceramic evidence did allow, the principle of dating by the latest known sherd forms appearing was followed.

The on-site inspection of the *tell* by the director and the top field staff in the days up to and including July 14 led to the following plan for the first season's work.

The decision was made to locate the "preliminary" sounding on part of the shelf of the *tell* just south of the acropolis (see Figure 1). This was designated Area B and, to allow maximum stratigraphic penetration in the first season, comprised only one Square. Its placement in a sector free of surface evidence of walls or other hints of major construction was intended to allow excavation as free as possible of buildings and similar major features. In these considerations we were partly successful.

Investigation of the defense perimeter was designated Area C and was located on the west edge of the shelf at a point where two features dominated the surface evidence. A rapid drop-off into the *Wadi Hesbân* indicated that major defense construction had probably been located at the edge of such a natural contour. The surface traces of two possibly tower-like structures with a depression between them gave an appearance of a possible west side gateway construction. The placement initially of two Squares, finally extended to four, laid along a major east-west axis from the very edge of the shelf and running eastward through the north half of the "gateway" toward the acropolis comprised the extent of the Area. Surprises and frustrations were greatest in this Area.

The placement of a grid of four Squares, Area A, in the southeast quadrant of the inside of the acropolis rectangle was governed by two main surface phenomena. One was a series of four column bases set in a roughly east-west line and giving the impression of being part of the roof support of a major classical structure. The second phenomenon was a depression or gap on the east in the perimeter architecture surrounding the acropolis. This gave the impression of a possible east side

access from the shelf to the acropolis. The Squares of Area A were aligned so as to bisect this "entrance" on the south half and simultaneously lay bare the presumed northeast portion of the "building" hinted at by the column bases. The placement of this Area allowed the planned integration of all Areas with reference to a main east-west axis line connecting Areas A and C, and with reference to a main north-south axis line linking the other Areas to Area A.

The placement of Area D, the intentionally flexible sector in pre-season discussion, was based on three main considerations. Examination of the acropolis and south shelf ground surface features gave some basis for suspecting a main access to the shelf from the south-southwest. This seemed to be reinforced by the suspicion of a southern access to the acropolis. Chief evidence for the latter was a pair of partially submerged column drums standing upright in a north-south line as though remnants of roof support over a stairway or access path. The third consideration was the height of architecture on the perimeter of the acropolis, indicating the most recent ruins likely to be available on the acropolis. Area D was set along the line of the main north-south axis in such a way as to test two of the three considerations simultaneously. A series of three Squares was set, starting at the top of the perimeter architecture (so as to diagnose its character and use) and running south so as to bisect the hypothetical access to the acropolis from the south. On both counts the plan was successful. In both Areas A and D the architectural finds bore out the legitimacy of the strategy.

For the details of the first season's work in the various Areas we present herewith condensations of the Area supervisors' reports and interpretations of their findings.