PRELIMINARY REPORT ON A SECOND SEASON OF EXCAVATION AT PELLA, JORDAN

Spring, 1980
by
Robert Houston Smith

The 1980 spring session of The Sydney/ Wooster Joint Expedition to Pella began a few weeks after the conclusion of the winter session conducted by the Sydney team; it lasted nine weeks, from March 22 through May 22. Excavation was undertaken during the first eight weeks; the final week was devoted to the completion of recording, mapping, photography and cataloguing of finds.

The staff consisted of Robert H. Smith as director; Omar Reshaidat and Heikmat Taani, representatives of the Department of Antiquities; Leslie P. Day, Peter Scales, and Barbara Hamann, senior supervisors of excavation; Jack Moyer and Marilyn Saul, physical anthropologists; Brian Cannon, surveyor; Douglas Kuylenstierna, photographer; Ilse Koehler, zoologist; Ewan Campbell, geologist and sometime excavator; Alistair Marshall, conservator and equipment supervisor; Adelaide Fenaille-Kamir, registrar; and excavators Ann Aber, Judith Anilosky, Julie Billingsley, Lynne Bauer, Douglas Byrd, Nate Miller, Niall Slater and Margaret Wehrly. Badri Madi (Abu Issa) served as foreman and Mohammed Karain as cook. Seventy-five to eighty local workmen were employed, of whom an average of about a dozen were paid by the Department of Antiquities, chiefly for work related to the clearing of debris from excavated areas.

As in the previous year, the spring session was funded largely by grants from the National Geographic Society and the National Endowment for the Humanities; additional funds were provided through private gifts, as well as by funds of The College of Wooster. The Department of Antiquities, through the good offices of its Director General, Dr. Adnan Hadidi, provided many helpful services as well as financial assistance in the construction of two additional rooms to the field headquarters.[1] The spring session was carried out in affiliation with the American Schools of Oriental Research and with the cooperation of the American Center of Oriental Research in Amman. Although the Expedition largely owns all needed field equipment, some items were made available for use during the season by The British Institute in Amman for Archaeology and History and the American Center of Oriental Research.

Whereas the winter session had been marked by heavy rains and chilly temperatures, the spring session was characterized by seasonably moderate weather. Initially there were some chilly days and later a few hot ones, but otherwise the temperature remained pleasant. During the first part of the spring session Pella was covered with verdant plant growth,

1. The field headquarters will, when the Expedition finally completes its work, become a local museum at the site, administered by the Department of Antiquities.

and it was possible for staff geoligist Campbell to collect a number of new botanical specimens while exploring the countryside around Pella on foot; Campbell also began the first record of bird species local to the site.

Excavation was undertaken by the Wooster team in four areas: the West Church, the Civic Complex, the West Cut, and one part of Pella's sprawling cemeteries (See Fig. 1 of the preceding report for plan). In the first three of these, the field work continued archaeological investigations which had commenced in 1979.[2] Human and animal remains were studied in the field as they were excavated, and in many cases specimens were retained for possible future analysis. The material that follows is based in part on reports prepared by excavators, field specialists, and consultants of the Expedition.

AREA I : THE WEST CHURCH

Supervisors E. Campbell and O. Reshaidat

Portions of the West Church were excavated by The Wooster Expedition to Pella in 1967, at which time the phases of the church's history were broadly established.[3] Work was resumed in this large 6th-century structure in 1979 and continued in 1980. The goal of these resumed operations was twofold: to uncover more features of the building and its dependencies, and to conduct soundings in selected locations that might help not only to answer questions about the specific aspects of the church and its phases of use, but also to clarify the history of the area prior to the construction of the building.

To continue to achieve these aims, a crew of workmen was set to two tasks in 1980. The first was the continued clearing of the atrium, where during the 1979 season three columns had been reset and a sounding had produced a fill containing sherds and other artifacts ranging in date from late Neolithic through Late Bronze. The second was the exploration of a large rectangular depression located a few meters north of the church, first noted nearly a century ago by Schumacher in his surface exploration of Pella.[4] It was the latter task which occupied most of the crew's time and produced the most notable results.

A sounding was made northward from the massive north wall of the church toward the center of the depression. A previously unrecorded sealed doorway was discovered in the wall, and just north of its threshold a paving of silt-stone largely robbed out-that had once extended outward from the wall approximately 5 m. At the northern end of the paving, parallel to the north wall of the church and in alignment with the northern wall of the dependency that had been discovered during the 1967 excavations, was the northern wall that enclosed the paved floor, of much poorer quality than the church wall itself. Various evidences showed that the dependency had been constructed later than the church. A wall was found

2. See Hennessy, Smith and McNicoll in *ADAJ*, XXIV (1980). and a forthcoming report in the *Bulletin of the American Schools of Oriental Research.*

3. See Robert Houston Smith, *Pella of the Decapolis, Volume I: The 1967 Season of the College of Wooster Expedition to Pella* (Wooster, Ohio, 1973), Chapter IV.

4. Gottlieb Schumacher, *Pella* (London, 1888), pp. 46-49; Smith, pp. *op. cit.*, pp. 7-8.

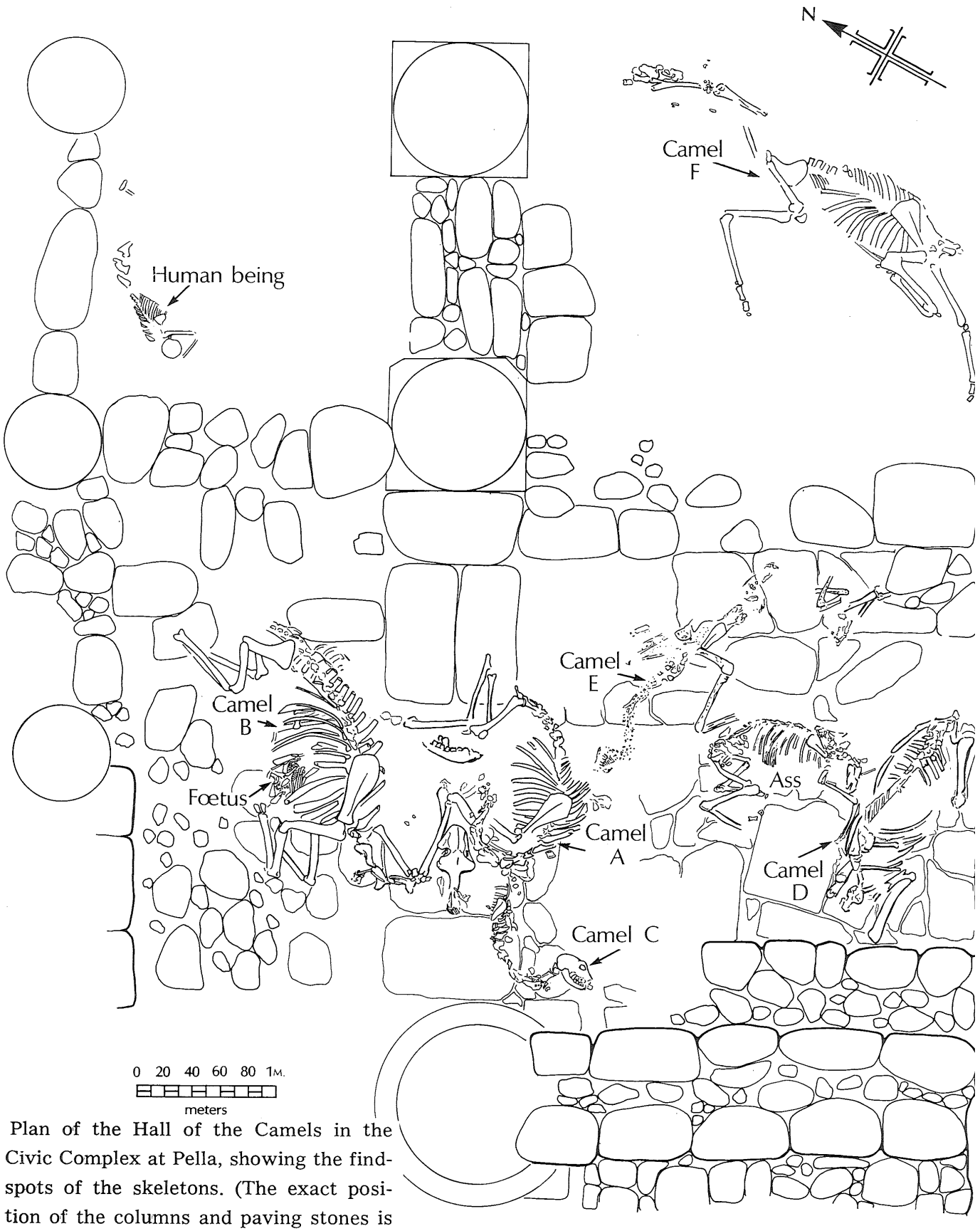


Fig. 1 Plan of the Hall of the Camels in the Civic Complex at Pella, showing the find-spots of the skeletons. (The exact position of the columns and paving stones is subject to revision upon further eurveying of the chamber).

running at right angles to these walls, dividing the paved area into two chambers. The western end of these chambers was formed by the wall of the atrium of the church; their eastern end was not excavated (Pl. LXXX, 1).

In the southwest corner of the western chamber's floor, where the north wall of the church intersects the atrium wall, the paving had been repaired by the utilization of a panel of a marble ecclesiastical screen in place of the original pavers. The screen, which had been broken before its reuse, may well originally have stood in the West Church, and have been relegated to this inferior purpose at a time when the West Church was under repair. One side depicts a Latin cross with splayed extremities and rosettes in each of the angles formed by its arms. The other side displays a phoenix surrounded by ecclesiastical symbols and enclosed within a stylized wreath, from the bottom of which tendrils extend bisymmetrically in either direction. The motifs are presently under study.

In due course the cause of the depression was discovered. Not surprisingly, it was a cistern[5] that had subsequently collapsed and then largely filled in. Constructed just beside the north dependency, it was approximately 11 m. long and 5 m. wide (Pl. LXXX, 2). Its 1.10—m.—thick walls, which in plan formed a rhomboid, were constructed of rough-hewn nummilitic limestone The structure had been covered with a barrel vault of somewhat smaller dressed stones, the purpose of the better masonry having been basically to make the stones fit securely together. When still intact, the exterior of the cistern must have extended about 1.8 m. above the level of the ground, and was entered through a doorway at the southeast corner, at the top of the stairway.

Amid the fill in the cistern were discarded stones, fragments of pottery and other signs that the cistern had been used as a dump after its original function had ceased. The potsherds remained typologically homogeneous throughout meter after meter of this debris, and had a relatively narrow range, that of Late Byzantine into the beginnings of the Islamic period, with very few strays from earlier periods.

A stairway of rough-hewn stones, found much-deteriorated, led eastward alongside the south wall of the cistern; upon reaching the east wall of the cistern, the steps turned sharply back to the west and continued downward until they reached a stone ledge approximately 5 m. below the ground level. A lower stairway led northward from the ledge along the west wall of the cistern to the floor.

Just above the ledge, and continuing across the entire cistern, was a soil layer heavily laced with the bones of tiny animals. A sample of this skeletal material was examined by Dr. Michael Carleton, Assistant Curator of Mammals at the Smithsonian Institution in Washington, who reported that they are predominantly gerbil bones. Dr. Carleton suggested that they represent the remnants of pellets of fur, skin and bones regurgitated by owls resident in the cistern.

Lying directly on the ledge was an articulated male skeleton. The position of the limbs suggested that the body had been shrouded, but there were no funerary objects. The corpse had been interred on its right side, facing south, a dispositon suggesting that the person was Muslim and had been buried facing Mecca. A similar, though probably later, burial had been

5. As anticipated in Smith, *op. cit.*, pp. 149-151, 157.

found in Area IX in the spring of 1979 and the Sydney team had found a number of Islamic burials in their excavations on the eastern side of the tell.

Although it had been hoped that the bottom of the cistern might yield stratified deposits of vessels that had accidentally fallen into the water, the floor held no such accumulation. The lower portions of the walls retained a rough coat of cement into which bodysherds from Late Byzantine water jars had been affixed—a common device intended to provide better adherance of plaster on the walls. Plaster was found partly intact on the walls at lower depths, and the floor proved to be very well plastered. A probe into the floor revealed, some 15-20 cm. beneath the plaster, an earlier floor, also plastered. Why the cistern ceased to be used prior to the time of the earthquake that destroyed it remains at present unexplained.

A small setting tank was discovered at the northeastern exterior corner of the atrium, just outside the dependency (Pl. LXXXI, 1). Constructed of thin fired bricks and almost square in shape, the sump was fed by rectangular drainage channels coming south and west; from the sump a somewhat larger conduit led toward the cistern. Originally the sump had been covered by a custom-fitted slab of some sort, but when found it was sealed in makeshift fashion with the massive marble base of a high pulpit. Holes and slots cut into the stone show that it had rested on eight narrow pillars with slabs (all probably of marble) fitted between them, as elevated pulpits in both churches and mosques often were, and that its upper side had been fitted with a protective railing, probably of metal. It is plausible to suppose that this pulpit once stood in the West Church, and that the base pressed into service after the church had ceased to be used for ecclesiastical purposes. Its reuse must, of course, antedate the last use of the cistern itself in the 7th century A.D.

The archaeological evidence of the chambers of the dependency and the cistern provide clues to the history of the West Church Complex. The church itself, the 1967 excavations had suggested, was probably constructed in the early 6th century, and it is possible that the cistern was also installed at that time. The need for a cistern when there had always been a large flow of spring water a few hundred meters from the church raises important questions about conditions at Pella at this time. In view of the tradition that the water of Pella and nearby Beth Shan were bad during at least part of the Byzantine period, it is possible that Pella's spring had temporarily gone dry or was regarded as unnfit to drink. The cistern stayed in use perhaps until the end of the Byzantine period. Not long afterward it began to be inhabited by owls, whose occupation ended abruptly with an earthquake—most likely that of A.D. 660 or 717—which destroyed the vaulted roof. The debris that gradually filled the cistern antedated the complete abandonment of the complex by 717.

AREA VIII: THE WEST CUT

(Supervisors P. Scales and B. Hamann)

The West Cut was designed to be the major stratigraphic probe that the Expedition will make on the western side of the tell. Its function is to give a profile of the city's history from the earliest settlement to the final occupa-

tion. It was laid out in 1979 as a long trench, in order that as many archaeological features as possible of that part of the city—including streets—might be encountered. By the end of the 1979 season a street had been found at the southern end of the trench, and the excavation had produced remains of occupation from the Hellenistic era through early Islamic times. Not all periods were, however, equally well represented; particularly scanty was evidence for the Late Roman and Early Byzantine phases.

The excavators faced a practical problem of considerable dimensions at the beginning of the 1980 season, for the heavy winter rains had severely damaged the east balk of the 39-m.-long excavation, requiring the removal of an additional meter of overburden along its entire length. The need for this extensive recutting afforded, however, an opportunity for the refinement of the stratigraphy obtained the previous season, and served to widen the area by twenty percent, with the result that the architectural remains were more fully exposed. Even with this extension, no buildings were exposed in their entirety; but the desirability of recovering a profile of Pella's history was regarded as outweighing this disadvantage.

The recutting of the east balk did not result in any modification of the history of occupation of the three large Late Byzantine-Early Umayyad houses that were partially exposed in 1979, but the excavators were able to identify an earlier Byzantine phase, evidenced almost solely by a few architectural remains underlying these houses. It was evident that most of the earlier Byzantine architecture had been removed during the construction of the Byzantine-Umayyad houses. The small quantity of potsherds recovered as the earlier Byzantine walls were being dismantled during excavation was not narrowly diagnostic, and can be dated only to the Byzantine period.

The Early Roman stratum in the West Cut was also more sharply defined in 1980, and the ceramic materials found in 1979 and 1980 were able to be linked with some surviving portions of walls. Because so little had survived Byzantine construction, potsherds were few; to the extent that they were diagnostic, however, they fell within the Early Roman horizon (Pl. LXXXI, 2), and occasionally included Late Hellenistic strays. The most useful corpus of Early Roman pottery from the West Cut was excavated in 1979 at the extreme ends of the trench. The 1980 season showed, however, that the levels containing Late Hellenistic and Early Roman sherds found at the northern end of the trench were not in natural superposition, as had seemed at the time, but were the accidental result of dump formation in ancient times.

The street of the Byzantine and early Umayyad periods at the southern end of the West Cut was found to have had its origin in the Early Roman period. This fact indicates clearly the continuity of the city's occupation over six or seven centuries, even when Byzantine construction swept away most of the buildings erected during the Roman period. The street disappeared, however, when excavation probed into the Late Hellenistic stratum; several Hellenistic walls were found under the spot that the Roman street later occupied. This fact, considered in light of a clear distinction between the ceramic corpus of the Late Hellenistic and Early Roman strata in the West Cut, shows that a considerable amount of time lapsed bet-

ween the destruction of Pella in 83/82 B. C. (see next paragraph) and the reconstruction of the Roman period. It would not be unreasonable to suggest that the part of the city where the West Cut is located was unoccupied from the time of the destruction through the rest of the 1st century B. C.

By the end of the 1979 season extensive Late Hellenistic remains had begun to appear throughout the West Cut, with associated architectural structures. Everywhere there was evidence of burning, not only of pottery but of the soil itself. These phenomena, interpreted in light of numismatic and ceramic evidence, led to the conclusion that this stratum reflected the destruction wrought at Pella by Alexander Jannaeus in 83/82 B.C., of which Josephus tells.[6] It was hoped that in 1980 the excavators would encounter the floors of the houses that had been destroyed by the Hasmonean ruler, and perhaps find much *in situ*. Although more Hellenistic walls (Pl. LXXXII, 1) and large quantities of potsherds were found in 1980, that expectation was not fulfilled. Instead, the debris went homogeneously and almost imperceptibly from Late Hellenistic to earlier occupation in almost every locus. Only one plastered floor was found relatively intact, and it had no objects resting on it.

These conditions do not alter the conclusion that this stratum reflects Alexander Jannaeus' destruction of Pella in 83/82 B.C., for the evidence of coins, stamped jar handles (recently identified and dated by Virginia Grace) and ceramics generally agree with Josephus' account and suggest a *terminus ante quem* of 83/82 B.C. for this stratum. What must be recognized is that the detritus of the Hellenistic levels was much disturbed subsequent to the Hasmonean onslaught, and that when the builders of the Early Roman period came on the scene they further homogenized the stratum by moving soil and leveling the ground in preparation for their constructions. It is because of this disturbance that scarcely a single vessel in this stratum was found intact, and relatively few were complete enough that they could be restored. Still, the stratum was so thick that it yielded a very useful corpus of ceramic forms, one that has particular importance because of its firm terminal date (see (Pl. LXXXII, 2).

Just how far into the Hellenistic period this stratum extends remains somewhat uncertain. Excavation supervisors Scales and Hamann identified two architectural phases within the Hellenistic stratum, but there was no reason to suppose that these phases represented any building prior to about the middle of the 2nd century B.C. Although a very few of the Hellenistic sherds found in the Late Hellenistic debris may antedate the 2nd century, these were found intermingled as strays with the much larger group of Late Hellenistic sherds. The numismatic evidence from the 1980 season is consistent with that found in the previous season; although only a small number of the Hellenistic coins were well enough preserved to permit precise identification, those which could be dated fell within the period of 150 B.C. to the early part of the 1st century B.C.[7] The jar handles fall

6. Josephus, *Antiquities*, 13.392-397 and *War*, 1.103-104. See also Smith, op. cit., pp. 37-38.

7. The Expedition acknowledges its appreciation to Drs. Nancy Waggoner and William Metcalf, curators of Greek and Roman coins, respectively, at the American Numismatic Society, for their assistance in the identification of some of the coins excavated at Pella in the spring sessions of 1979 and 1980.

mainly within groups IV and V of Virginia Grace's classification, which according to Grace's revised dating fall within the years 175-108 B.C. Since Eastern Sigillata A pottery is very frequent throughout the Hellenistic corpus of the West Cut, a *terminus post quem* for the stratum would seem to have to be around 150 B.C., unless one is prepared to give a much earlier date to that ware than most excavators are presently prepared to venture.[8]

The excavators in 1980 discovered that, only a short distance--sometimes a matter of centimeters--below the levels at which they would have expected to find Hellenistic floors, they began to encounter Iron Age sherds intermingled with the Hellenistic ones; then the Hellenistic pottery disappeared entirely and the sherds became exclusively Iron Age. Mixed with the Iron Age sherds, sometimes in transitional levels that also contained Hellenistic sherds, were ocasionally a few Persian period pothsherds. It is not yet known whether or not these represent an occupation of this part of the city during that time or were amid debris brought in for the leveling of the ground preparatory to construction during the Hellenistic period.

By the end of the 1980 spring session the excavation of the Late Hellenistic stratum in the West Cut was well advanced (Pl. LXXXIII, 1). Some walls remained in place, particularly ones that might possibly be of Iron Age date. In each locus where pure Iron Age sherds were encountered, work was halted until 1981, when full attention will be given to the Iron Age stratum. Preliminary examination of the Iron Age sherds found in 1980 shows a generally homogeneous corpus that has affinities with the ceramics of Palestine and Transjordan in the 8th-7th centuries B.C. Thus far few specifically Transjordanian forms and wares have appeared.

AREA IX: THE CIVIC COMPLEX

(Supervisor L. Day)

This important and interesting area was the focus of considerable attention during the 1980 spring session. In the previous year a colonnaded atrium had been found, as well as the remains of large buildings that flanked the atrium on three sides (Pl. LXXXIV, 2). It is by now clear that the atrium was the forecourt of a yet unexcavated Temple, the remains of which are situated to the east. The Temple and its atrium were constructed, as both architectural style and pottery found in soundings made during the excavation of the courtyard in 1979 show, in the 1st century A.D. They were executed in a good provincial Roman style. This Temple will be one of the archaeological objectives of the 1981 spring session. From the atrium a broad flight of steps led approximately westward, down to a paved terrace or landing, and beyond that to an even wider flight of steps that descended into what is today the Wadi Jirm, but what may have been a vast public plaza which perhaps served as a forum for the city during the Roman period.

The excavation of the courtyard was completed in 1980 (Pl. LXXXIV, 1), except for a portion left unexcavated so as to provide a place for the Department of Antiquities to posi-

8. On this matter the archaeological evidence from Tel Anafa in Galilee is of considerable importance, though only preliminary reports have appear thus far. See, *inter alia*, S. S. Weinberg, "Tell Anafa: The Hellenistic Town," *IEJ* 21 (1971), especially pages 101-02.

tion its large crane for the anticipated restoration of the columns of the atrium to their original positions. Most of the columns and capitals of the atrium were extant, in contrast to the ordinary wall stones of the structure, which had been badly robbed out as early as Byzantine times. The paving of the courtyard was largely intact, though how much is original to the building is uncertain. There is ample evidence that the courtyard underwent extensive reconstruction during Byzantine times, almost certainly following a destructive earthquake of yet undetermined date.

The original intervals of the columniation of the atrium were determined with considerable confidence for the north, east and south sides; only the much damaged and poorly rebuilt leaves uncertainty as to the position of columns. Whether or not the columns, bases and Corinthian capitals in the atrium are the original ones, and whether or not they were carved specifically for this structure, cannot easily be said. Although the columns and bases on the north, east and south are relatively uniform, there are some differences of dimensions and design, and the capitals differ widely in their design and execution. Fragments of a 13-stone arch in Roman style that once surmounted the columns on the western front of the atrium have been gathered on the paving of the courtyard, awaiting the time when they can once more be restored to their position above the grand approach staircase to the Temple.

Among the most interesting discoveries in the Temple courtyard were three iron torches, found lying on the paving of the south colonnade (Pl. LXXXVIII, 1). Made of hand-forged iron and attached to the wall with an iron strap at the top, each torch had a 5 mm. coating of plaster on the front and had remnants of wood still clinging to the interior. It would seem likely that the torches had once illuminated the atrium. From their relative positions when found, it is possible that when they fell from the wall they were attached to a horizontal support beam that later disintegrated, leaving the torches in their curious alignment.

The Temple and atrium were constructed of a red and yellow mottled brecciated limestone which the staff geologist, in consultation with Dr. Salameh of the Department of Geology of the University of Jordan, found to be of local origin, having been taken from veins that may be seen even today a few kilometers from Pella, though the actual quarry is still undiscovered. Interestingly, the two columns of the courtyard that flank the large stone doorway that led into the Temple proper are made of a dark greenish-gray chloritic marble of more distant origin, possibly more valued by Pella's builders.

North of the Temple, and relating to it in some way as yet undetermined, is a long columnated hall. The chamber has suffered greatly, first from being constructed of a local limestone that did not weather well, second from earthquakes that severely damaged the structure, and third from extremely poor repairs and alterations made during the final phases of the structure's use. The capitals of the columns of this hall are Ionic, unlike those of the temple, the question of the date of the construction of this chamber cannot yet be answered, since excavation began only in the spring of 1981, and a considerable part of the hall remains to be exposed. Late in the 1981

spring session a probe into debris on the north side of this chamber showed no surviving northern enclosure wall, but only crudely piled up rubble stone, as if the original chamber--whatever its original function--had come be used for very modest purposes, perhaps that of stabling domestic animals upon occasion.

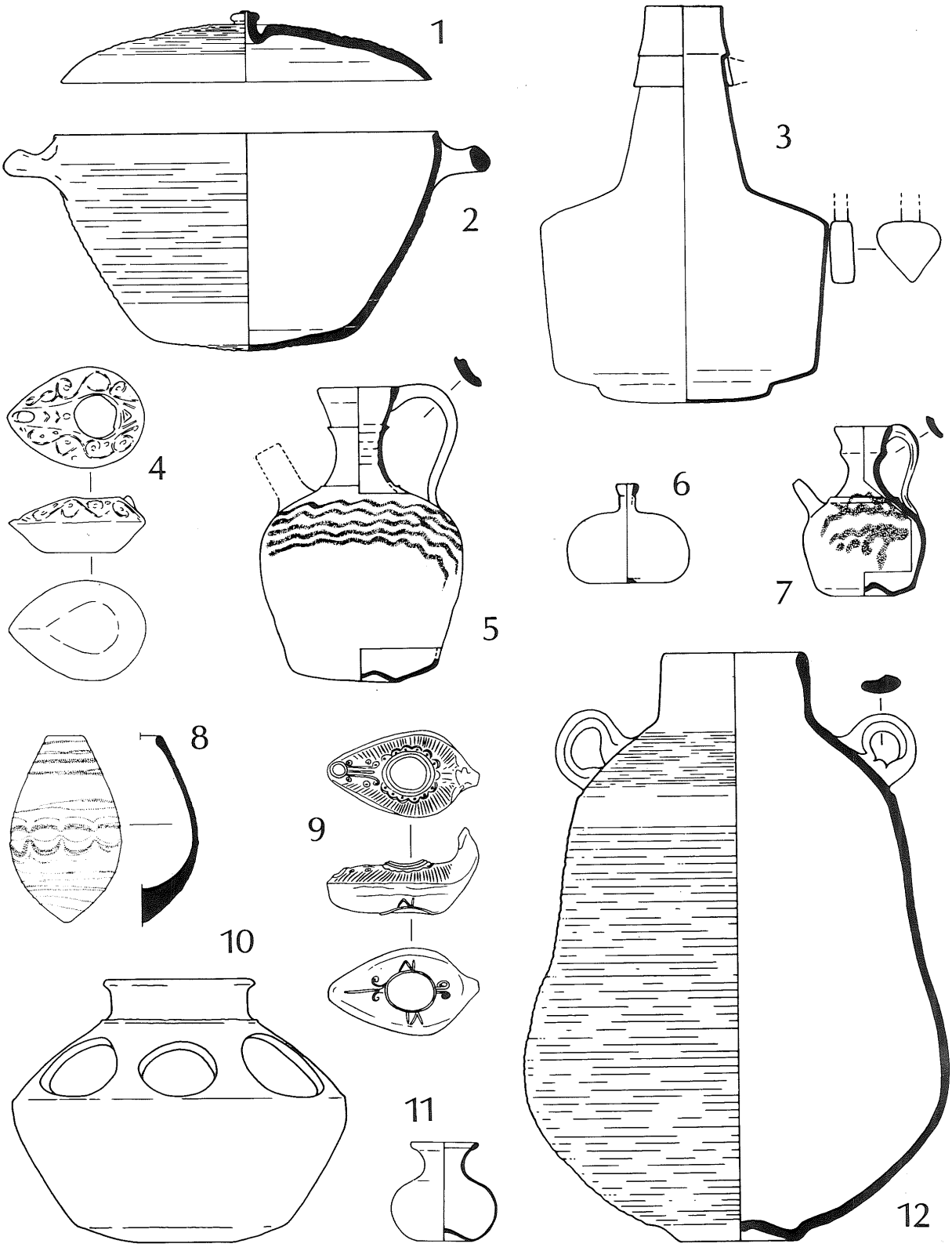
Of great interest was the discovery of a number of articulated skeletons lying on the floor of this hall, where they had been killed by the earthquake that devastated the building. The skeletons of a person, an ass, and six camels were discovered (Fig. 1), and more camels probably lie in the portion of the chamber yet unexcavated. Although most parts of the skeletons were found lying on the paving, some parts were lying contorted amid the tumbled architectural stones, a mute testimony to the violence of their destruction as the chamber tumbled down upon them. One of the female camel skeletons contained a foetus, a fact that may help to identify the month of the earthquake, since camels tend to gestate at fixed times of the year. The camel skeletons are of considerable importance, since this represents perhaps the largest concentration of ancient *camelus* specimens ever reported from this region of the eastern Mediterranean. Operations will continue in this hall in the spring of 1981.

In the debris that filled the colonnaded hall, here was a somewhat higher percentage of transitional Byzantine-Umayyad and Early Umayyad artifacts and sherds than in most places in the Civic Complex. Finds included a bronze jug that had originally had a metal strap handle, two pieces of glassware, and various ceramic vessels, such as small spouted jugs with white decoration painted in wavy lines around the shoulder, an occacional "slipper" lamp, and a vessel with six curious holes cut around its shoulder (Fig. 2). This and the potsherds found in the lowest levels of debris in two rooms in the Late Byzantine-Early Umayyad houses in the West Cut contitute the fullest corpus of 7th-century artifacts discovered during the spring sessions of the past two seasons at Pella.

Of importance for dating the earthquake that shook down the hall and destroyed the creatures in it was a small cache of Umayyad dirhams that had subsequently been hidden amid the fallen stones in the chamber. Although fragile and found in partly fragmentary condition, these coins were successfully cleaned and their mints and dates were read. They range in date from A.D. 700/01 to 730/31. The earthquake may therefore have been that of A.D. 717 rather than 746, and very likely was the same tremor that destroyed the West Church and effectively ended the habitation of Pella as a city.

Of uncertain original provenance are two large stone artifacts found in the debris in the hall. One is a sundial of limestone that lack its bronze vane (Pl. LXXXV, 1); the other is a bowl of simple form fashioned of gabbro (Pl. LXXXV, 2); it may have had some ceremonial use in one of the buildings of the Civic Complex. From fill in a neaby plot in the same area is a third interesting stone object, a small altar of native limectone that was meant to stand against a wall or in a niche. It is decorated on three sides with cult symbols: a patera, an oinochoe, and a stalk of grain (Pl. LXXXVI, 1).

The building that lies to the south of the Temple and its atrium was exposed that it is



F.g. 2 Transitional Late Byzantine-Early Umayyad artifacts from Pella, chiefly from the debris in the Hall of the Camels in the Civic Complex.

now known that it was indeed a theater, as had long been suspected. There was evidence everywhere of extensive Byzantine alteration to the structure, and the kinds of alterations that were made demonstrate that prior to that time the building had suffered earthquake damage so massive that much of its upper fabric had been destroyed, and the use of the seating area was no longer feasible. The surviving Byzantine walls, all of varying degrees of poor workmanship, do not permit identification of the function for which the modifications were made, but they seem to have borne no relationship to the building's original functions.

The Byzantines who drastically altered the Theater's form and function filled the building almost to the top row of seats with debris; during the clearing of the building, this fill produced many tens of thousand of potsherds, virtually none of them more than single sherds, ranging in date throughout the Byzantine period. These will be studied for the information that they may reveal about Pella's patterns of trade and perhaps other matters of significance.

In spite of the extensive Byzantine alterations to the building, enough of the Roman-period structure has survived for the original form to be recovered (Fig. 3). Two of the uppermost row of freestanding seats and a small fragment of the paving behind that row of seats have survived and were found in 1979 (Pl. LXXXVI, 2); in the 1980 excavations rows of stone bench seats appeared as more of the debris was removed from the interior of the structure. Although the western side of the building, facing the Wadi Jirm, long ago collapsed, a 9-m.-long vaulted public entrance on the east and the eastern stage entrance were both discovered in 1980. Thus far only the upper portions of these entrances have been excavated.

An estimated 2 m. of debris must be excavated before the paving of the orchestra will be reached, and the stage has not yet begun to appear. Further excavation will be extremely difficult because at the level where operations ceased at the end of the 1981 season the water table in the Wadi Jirm had begun to be encountered; indeed, the lowest row of seats shown on the reconstruction drawing was determined only by the excavator's feeling about in muddy water that continuously flowed into the small trial excavation made at that spot. The water table was not so high, of course, at the time the Theater was constructed or in active use. There were undoubtedly channels of some sort laid in the Wadi Jirm to carry off both the winter rain water coming down the creekbed from the Transjordanian hills and the powerful flow of water from the spring. These conduits fell into disrepair during Byzantine times or later, with a resultant gradual rise in the debris in the creekbed and a corresponding rise in the water table.

Inside the eastern Theater entrance, at a level almost parallel to the spring of the vaulting, a burial was discovered. The bones lay in a muddy pool that was fed by a constant flow of ground water atop the soil that had accumulated in the entrance, and hence could not be excavated with the precision that was possible in tombs. Anthropologists Moyer and Saul were able to determine, however, that the skeleton was that of a young woman. The pottery found in the silt that accompanied the burial was of the same kind as found in the Byzantine

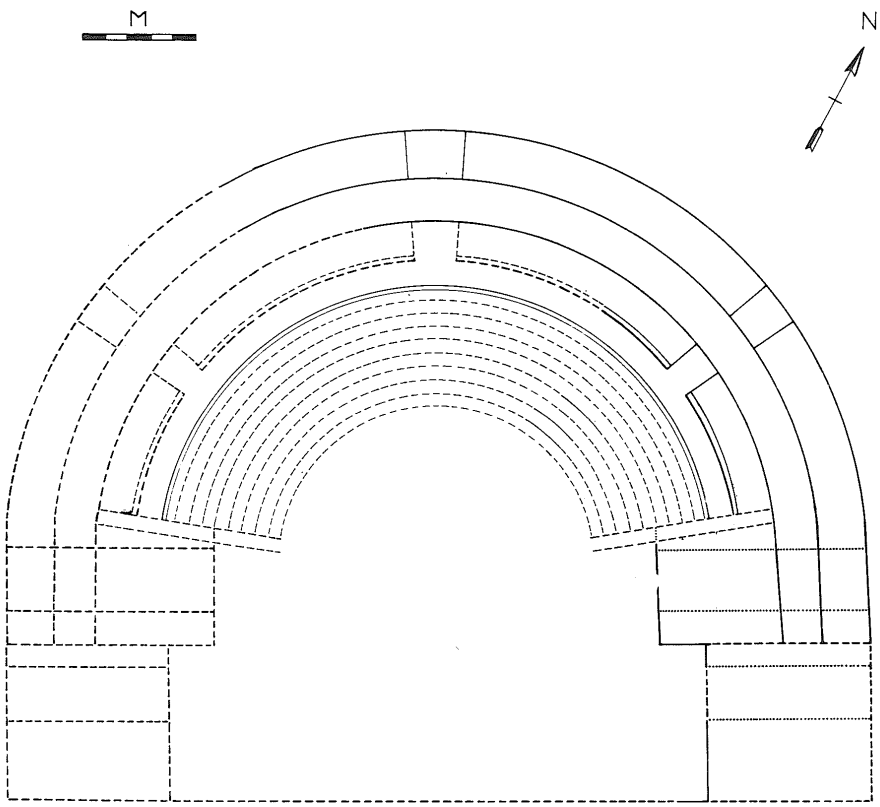


Fig. 3 Measured reconstruction drawing of the Theater in the Civic Complex at Pella. Surviving architectural features are represented by solid lines, reconstruction by broken lines.

fill in the Theater generally. No funerary objects were found with the burial, and the woman wore no jewelry except for a few tiny glass beads. It seems evident that the body was interred in the filled Theater entrance because the passageway seemed to the users to have some of the characteristics of a vaulted tomb, and those who made the interment were too poor or disinterested to undertake to provide a more traditional grave. The burial may have been made in the 7th or possibly 8th century A.D.

In spite of the obvious difficulties, excavation must continue to the floor of the building, and perhaps beneath, if full information is to be gleaned from the Theater's ruins. Even at the end of the season the excavators were still removing the fill deposited by the Late Byzantine builders in their attempt to salvage some usable space within the earthquake-shattered building. One can only hope that at the bottom of the fill may be significant architectural or decorative elements of the original building that were discarded by the Byzantines. Other significant aspects of the building may be revealed by continuing excavation to deeper levels, such as the form and decoration of the stage. Also interesting is the possibility that the Theater's proximity to Pella's spring is not coincidental. Although the structure's form is clearly theatral, the small size of the Theater and the position of its stage so close to Pella's major spring suggest the possibility that it may have had aquatic features, or perhaps was a combination of theater and nymphaeum.[9] Only further excavation will tell.

AREA XI: TOMBS ON THE NORTHERN SLOPE OF TELL EL HUSN

(Supervisors M. Saul and J. Moyer)

In the spring session of 1981 tombs were sought on the steep northern slope of Tell el Husn, where in February the University of Sydney team had found several tombs of approximately the 16th century B.C. In a number of places the hillside was probed to bedrock, which was sometimes not easily distinguished from reconcreted rock debris. Much of this probing was unproductive, but two tombs, numbered 15 (Fig. 4) and 16, yielded artifacts dating from the latter part of MB II (Pl. LXXXVII, 1). The hillside has suffered the erosion of several meters of soil and rock during the past 3,500 years, and as a consequence both of the tomb chambers were half eroded away, and debris from the hillside above had silted up and reconcreted at some time in the past. Some dozens of objects were found in these two tombs, including small alabaster vessels of Egyptian manufacture, scarabs (Pl. LXXXVII, 2), bone inlays from wooden boxes, a bronze dagger with limestone pommel (Pl. LXXXVII, 4), wine jars and a corpus of vessels of the familiar Canaanite type of their time (Pl. LXXXVII, 3). Perhaps the most unusual phemo- from the fragmentary bottoms of household bowls. Only three true lamps were found, in contrast to eleven improvised ones. In addition there was evidence that some poorly made or repaired vessels had been brought into the tombs as funerary offerings. Another interesting feature, though far from unique in Palestine, was the burial of a neonate in a wine jar

9. A nymphaeum is shown on some of Pella's coins of the early 3rd century A.D.; see Smith, *op. cit.*, pp. 55-56. See also A. Spikerman, *The Coins of the Decapolis and Provincia Arabia* (Jerusalem, 1978), pp. 214-217.

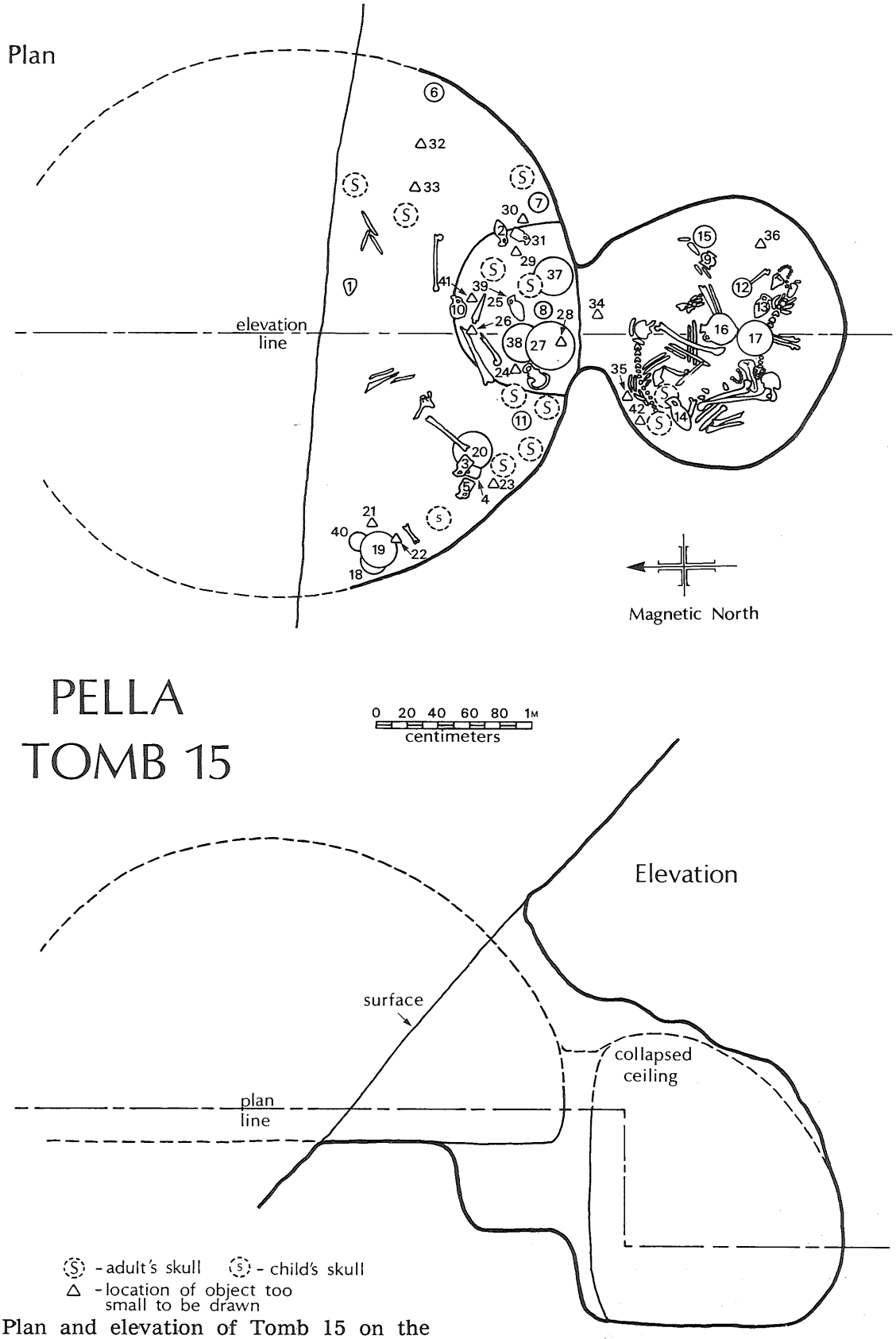


Fig. 4 Plan and elevation of Tomb 15 on the northern slope of Tell el Husn at Pella, dating from the MBII period. More than half of the central chamber has eroded down the steep northern slope of the hill.

that had its rim, neck and shoulder broken away.

Probes were conducted elsewhere on the northern slope of Tell el Husn, but without the discovery of other tombs. There were various indications in the debris that either tombs or occupation, or both, had existed farther up the slope at certain periods in Pella's history. One of the most notable discoveries was a hansome molded and painted fragment of stucco (Pl. LXXXVIII, 2), which might have come either from an elegant house or an ornately decorated Late Hellenistic or Early Roman tomb farther up the slope. Two probes made between the two immense boulders that rest near the top of the northern face of the hill yielded only soil and wash, a rather surprising result if one considers the seeming attactiveness of this spot, with its slightly less steep slope and its magnificent view of the city mound of Pella some 60 m. below. There is no question but that productive tombs on this large natural hill are not easily located, and we now know of a number of places on the hill where there was neither occupation nor cemetery at any time in the past. The nature of the utilization of Tell el Husn by the people of Pella over the centuries must for the present remain a largely unknown factor, but will someday warrant careful archaeological attention.

CONCLUSION

The spring session of the 1981 season of The Sydney/Wooster Joint Expedition to Pella was highly satisfying, and saw significant archaeological discoveries that will contribute toward the Expedition's goal of recovering the history of the city. Particularly significant is the evidence that is gradually accumulating which may eventually help to clarify Pella's decline.

The Sydney and Wooster teams will be back in the field at Pella in 1981 to continue work in the areas already opened. In addition there may be further surveys of the vicinity of that may date from the Iron Age, and traces of Pella, and it is hoped that the Wooster group will have will the opportunity to carry out excavations some to the east of Pella, high in the hill country where during the spring session of 1980 the staff geologist Campbell discovered a long V-shaped stone wall that possibly dates from the Neolithic period, a very large fortress a road that may have been paved in Roman times. Although much has been achieved in the sessions that have been conducted in the past two years, much remains to be done.

Robert Houston Smith