

ACOR Newsletter

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'Ain Ghazal: Ten Seasons of Discovery Gary Rollefson and Zeidan Kafafi

Since 1982, an international team of archaeologists, co-directed by Zeidan Kafafi (Director, Institute of Archaeology and Anthropology at Yarmouk U.) and Gary Rollefson (Director, 'Ain Ghazal Research Institute), has conducted 10 seasons of excavations at 'Ain Ghazal, the largest known Neolithic site in the Near East. Founded in 7250 B.C. as a hamlet of farming hunters, the settlement grew steadily and rapidly for more than 2000 years. Over these two millennia, the residents of 'Ain Ghazal experienced unprecedented population growth, reaching more than 2000 people by 6000 B.C.

Perhaps the most stunning achievement of the people at 'Ain Ghazal was in the realm of ritual. Magic played a role in their lives, as testified by small clay figurines of animals and humans. The religion appears to have centered on ancestor veneration. The skulls of revered family members were defleshed, then the faces were recreated with plaster, painted with cosmetics, and finally put on display. Most spectacular of all, more than 30 plaster statues and busts, measuring 30 to 90 cm in height, were found in two groups in 1983 and 1985. These probably represent mythical ancestors, perhaps the founders of the settlement.

After 6000 B.C., the population declined due to the overexploitation of the local farmland. Some families took up nomadic pastoralism, at least part-time, while their relatives remained behind to tend the farms. Part of the site was set away from the town, and the town was subdivided by large courtyard walls separating land rights of one family group from the others. By 5500 B.C., a walled street, 2.5 m wide, rose up the hillside in a series of steps; the street represents one of the earliest examples of conscious town planning anywhere in the world.

Sometime after 5000 B.C., the fields around 'Ain Ghazal could no longer support a farming population, and the town was abandoned as a permanent settlement. Thereafter, it was visited only seasonally by shepherds.

Obviously 'Ain Ghazal must have been an important central settlement. Extending over ca. 38 acres, 'Ain Ghazal is nearly four times larger than the early village below biblical Jericho (10 acres) and therefore one of the largest



The statues as discovered. Photo courtesy of Gary Rollefson.

"cities" in the Neolithic Near East. There are many similarities between 'Ain Ghazal and Jericho in architecture, ritual and art. It is very likely that in the middle of the 7th millennium, when Jericho was temporarily abandoned, a part of its population emigrated to 'Ain Ghazal.

The 1996 Season

This year's work, with funding provided by Yarmouk University, the Department of Antiquities, and a grant by the A. Haury Foundation to the Friends of 'Ain Ghazal, investigated three large areas of 'Ain Ghazal—the North Field, the Central Field, and the East Field.

In the North Field another circular shrine or cult building was uncovered. It is virtually identical to the one excavated in 1993, which was probably the center of a lineage or clan cult with periodic religious rites. In the middle of that building is a large hole where four channels enter and, while their function is not clear, it is certain that they were not used for liquids. Details of the construction technique indicate that the shrine uncovered in 1996 was built somewhat later, probably at the very end of the Late PPNB period at ca. 6000 B.C., and the presence of only two superimposed floors indicates that it had a short term of use. In the same area were many large Late PPNB house walls that were badly damaged by later occupants of the PPNC period (6000-5500 B.C.).

The Central Field trenches examined Yarmoukian Pottery Neolithic (ca. 5500-4500 B.C.) houses and courtyards. More clear evidence of artificial terracing of the hillside at 'Ain Ghazal was recovered, as well as the simultaneous presence of both circular and rectangular house forms.

Two Neolithic temples were uncovered in the East Field, one dating to the LPPNB and the other possibly to the early PPNC. The descriptions below are based on field observations, and there is necessarily some degree of speculation involved in reconstructing the original buildings and their functions.

The LPPNB Temple

The LPPNB temple used dressed stone construction techniques typical of the period, including oblique-angle room corners. The temple has a long axis oriented east-west, although the exact E/W dimensions are unknown due to later slope erosion. As preserved, the building measures approximately 5 E/W x 4 m N/S. The room is dominated by five main features: 1) In the center of the room are three "standing stones" about 70 cm high, aligned N/S. 2) At the southwestern edge of the room is a floor-level platform made of two rectangular stone blocks ca. 1-meter long, oriented E/W, that partially enclose a layer of clay burned to the color and consistency of fired ceramics. 3) A circular hearth of red-painted plaster about 50 cm in diameter was placed in

the floor about midway between the standing stones and the eastern wall. The hearth was surrounded by seven flat limestone slabs, and the surface of the plaster bore evidence of burning. 4) Built into the center of the eastern wall was a large, white chalky limestone orthostat



LPPNB temple with south wall at left, the burned clay platform to its right, the three standing stones in the center, the low platform to the right, and north wall at far right. The red-painted plaster hearth is directly between the standing stones and the east wall at the bottom of the photo. Photo by Yussef Zo'bi.

tat more than 1 m high and roughly 50 cm thick. A natural knob-like projection at the center-top of the orthostat lends an anthropomorphic shape to the column, but it was not possible to determine if the roundness of the main body of the stone had been intention-



Anthropomorphic (?) orthostat built into the east wall of the LPPNB temple, view to the east. The three standing stones are in the foreground. Photo by Yussef Zo'bi.

ally shaped or if it was naturally oval in cross section. The presence of this orthostat may indicate that the walls were built only to this height, and that the structure may have been open to the sky. 5) In a later phase of the use of this temple, the space between the northernmost standing stone and the north wall was closed off with a single-leaf wall. A low (ca. 35 cm up from the floor) platform of large and small limestone slabs was erected inside the alcove formed by this later construction.

The PPNC Temple

The other temple is located about 75 m to the south. Currently there is no direct datable evidence, but the use of undressed field stones in irregular courses suggests a PPNC age for the structure. The rectangular building may at one time have been roughly square, but erosion down the steep slope of the East Field caused the destruction of its western limits. As uncovered, the building consisted of two interior rooms with a doorway connecting them. The damaged western room would have measured at least 6.5 N/S x 2 E/W m, but almost nothing remains of the floor of this area. It is the eastern room that provides the most information. It measures 6.5 N/S x 3.5 E/W m, so it has a N/S long axis in contrast to the LPPNB temple. The east wall appears to have at least three phases of construction. There was at one time an 80 cm doorway in the southern wall of this room,



PPNC temple, view to the east. The series of walls at the bottom and far left are earlier LPPNB structures. Note the three standing stones and altar in the center. Photo by Yussef Zo'bi.

providing access to the outside. The door was blocked at a later time, and entry to the eastern room was only through the doorway in the room's western wall. There are five principal features of the eastern temple room: 1) The floor is made of sterile yellowish clay, which is uncharacteristic of either the PPNC or the LPPNB. The clay floor is confined to the eastern room and did not extend into the western room, indicating that the western room was not directly associated with the ritual

activities carried out in the eastern room. Like the other temple, the floor had been kept scrupulously clean of trash and artifacts. 2) In the center of the eastern wall is an altar some 2 m long x 60 cm wide. Two large, flat limestone slabs rest on three pairs of standing stones that vary in height from 45 to 70 cm, with smaller stones filling in the spaces due to the uneven heights. 3) Directly in front of the center pair of standing stones supporting the altar was a lime plaster hearth surrounded by seven flat limestone slabs, altogether about 1 m in diameter. While this parallels the LPPNB temple hearth, this PPNC example was not painted red, although there was clear evidence of burning on the plaster surface. 4) Built adjacent to the center of the northern wall was a small, relatively square stone "cubicle" made of limestone slabs set onto the clay floor. The interior of this feature was empty of any artifacts, ash, etc., and its function remains unknown. 5) The doorway (a meter wide) between the two main rooms was a later modification of the western wall of the eastern room. When the doorway was created (possibly at the time the door in the southern wall was closed up), a narrow "screen wall" was erected that led westward from the door for about 60 cm before making a right angle turn to the north. In effect, this screen closed off any direct line-of-sight from the western room into the eastern, and prevented any view of the altar and floor hearth. This suggests a degree of secrecy and power for the activities in the eastern room, and may be our earliest evidence of the "holy of holies" or inner sanctum precinct of temple structures.

Discussion

The temples at 'Ain Ghazal are the oldest known religious structures in the southern Levant and they add a new dimension to our knowledge of the religious life of the early farming populations of the region. There appears to be no direct association between the use of these temples and the ancestor cult that dominated so much of the Near East at the time, although it is still too early in the analysis process to make any definite conclusions. While the ancestor cult is ultimately family-oriented (at least on one level of interpretation), the temples likely reflect a community-wide organization of religious belief and ritual activity that crosscut family interests, binding a society together that might have otherwise split apart due to conflicting family claims and expectations.

The Future

Donations for the project can be made through ACOR. These will be used for continued annual scientific research of the site (excavation, documentation, publication, etc.) and for the acquisition of parts of the site for an archaeological park, complete with an on-site museum, serving as an educational and touristic facility.

Statues on Exhibit at the Smithsonian

Two caches of over 30 near life-sized statues made of plaster were found at 'Ain Ghazal in 1983 and 1985. The second group was sent to the Smithsonian's Conservation Analytical Laboratory in Suitland, Maryland. Over a period of 10 years, a team of conservators led by Carol A. Grissom reassembled five statues and three funerary masks. The logo on p. 1 here is one of these statues (photo courtesy of Smithsonian Photographic Services).

These will be on exhibit at the Smithsonian's Arthur M. Sackler Gallery in Washington until April 6, 1997. Thereafter they will be returned to Jordan.

The 1996 Field Season

Teleilat Ghassul Site Survey

During March and April of 1996, a survey of the perimeter of Teleilat Ghassul, a Chalcolithic site about 4 km northeast of the Dead Sea, and of the Wadi Adjrafa seasonal drainage system, south of Ghassul, was undertaken to identify hamlets and pastoral camps associated with the site. Teleilat Ghassul has been recognized since its discovery in 1929 as the exemplary site of the Palestinian Chalcolithic Period (ca. 4500 to 3500 B.C.). The objective of the survey was to uncover evidence, if such existed, that Ghassul operated as a regional cultic, and perhaps even political, center.

The survey included a systematic surface collection from a representative sample of a 14 km² area. Although all ceramic and lithic material found in the specific areas designated for random sampling was collected, almost all of the artifacts proved to be Chalcolithic. The pottery demonstrated clear Ghassulian characteristics in both fabric and decoration. The stone tools, flakes, and cores, with the exception of some Acheulian handaxes and reworked Neolithic projectile points, were of Ghassulian manufacture. As a result of the survey, 11 satellite settlements extending along the Wadi from 0.5 km to 7 km away from Ghassul were discovered. Additionally, the abundance of surface scatters over an area extending up to 0.5 km from the currently known boundaries of the site shows a northern and eastern expansion of the town itself.

The second phase of the project involved an analysis of the material recovered from earlier excavations at Ghassul by the Pontifical Biblical Institute in Jerusalem. Based on the field reports and artifact catalogues at the Institute's museum, a collection of surface finds from those excavations was compared to the surface material from the recent survey. The surface material almost uniformly dates from the later phases of the site's occupation and there is very little variation in styles or materials. Much of the surface pottery appears, insofar as diagnosis can be made, to be from large storage jars, but an adequate number of sherds from finer vessels were found to create a representative grouping of Late Ghassulian wares.

Although Teleilat Ghassul was the first Chalcolithic site to be discovered in the Levant, it continues to stand in marked contrast to other sites from the period found subsequently. The strong evidence of craft specialization and complex ritual practices represented by the enigmatic wall paintings found at Ghassul (unique to this site) indicate that it had a special role in Chalcolithic social organization and religion. Taken together with the information about the site obtained from the earlier excavations, the survey evidence suggests that Ghassul may have been a pilgrimage destination for semi-nomadic sheep and goat herders and the Ghassulian artifacts associated with sedentary agriculture (grinding

stones, hoes, storage jars, and querns) found at a number of locations along the Wadi further suggests that Ghassul operated as central resource distribution and meeting place for farmers as well as pastoralists.

Sandra Scham

Madaba Plains Borderlands Survey

Under the auspices of the Madaba Plains Project, an archaeological survey was undertaken in the region of Iraq el-Amir and the Wadi es-Seer. The objectives were: to locate sites within a 5 km radius of Iraq el-Amir; and to understand the occupational history and settlement pattern of the Madaba Plains in a wider geographical context. Fieldwork was directed by Chang-Ho Ji.

Three different field strategies were used. They were



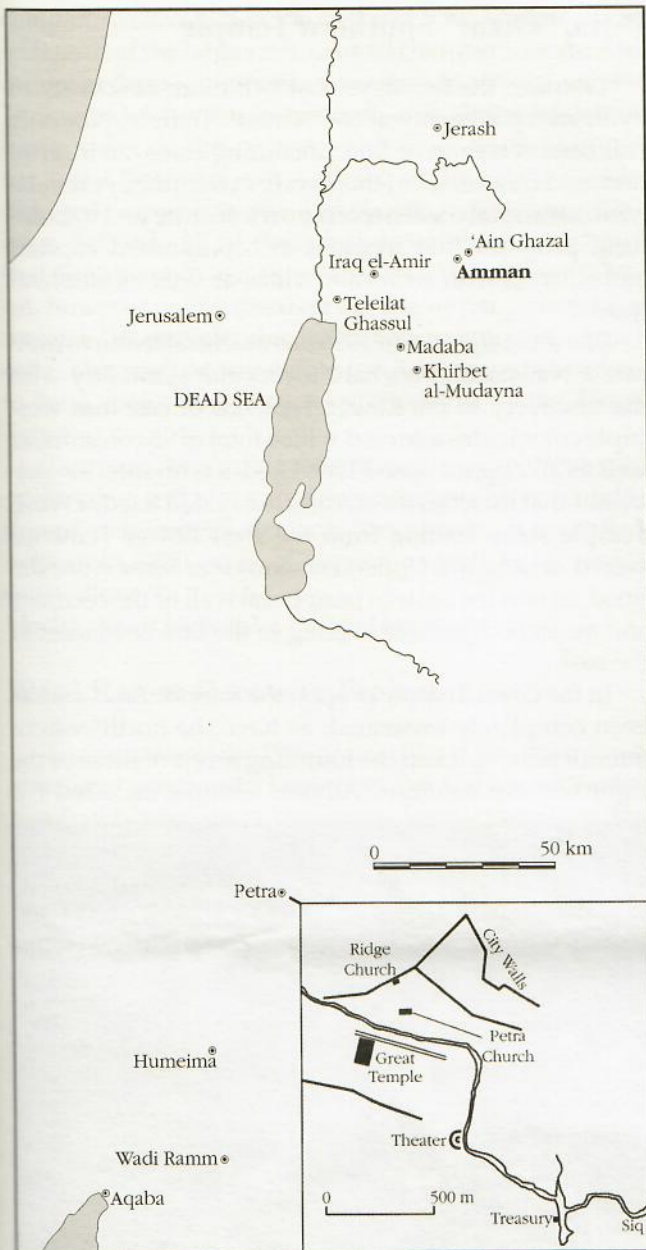
Adrian McIntyre at one of the survey sites, a cave used in the Byzantine period for religious purposes

random-square survey, site survey, and small-scale salvage excavation at an Early Bronze cemetery on the eastern slope of the Wadi es-Seer. The survey team worked in 50 randomly selected 200 x 200 m squares within a 5 km radius of Iraq el-Amir. The survey was designed specifically to search for new archae-

ological sites in the survey area, and more than 75 new sites were recorded. Among the many fortunate finds were two Early Bronze cemeteries with a large number of rock-cut chamber tombs. No less than 15 dolmens were also located. A salvage excavation was conducted at a rock-cut chamber tomb associated with a dolmen. It revealed more than 12 human skulls and a large quantity of human bones, which indicates that the tomb was a multiple, secondary burial for nomads. The cave seems to have been originally cut for inhabitation in early EB I, and was reused for burial late in EB I and possibly EB IV.

According to the preliminary study of the pottery collected in the survey, the Byzantine and Islamic periods seem to have had a substantial population in the region. Early Bronze and Iron II pottery were collected at about 10 different sites. The survey area may have witnessed high settlement intensification during the Byzantine and Islamic periods and low settlement intensification in the Early Bronze, Iron II, and possibly late Roman periods. Settlement abatement followed each of these settlement peaks.

Chang-ho C. Ji, La Sierra University



Tell Madaba

In the modern Near East, with its long history of urbanism, the consequences of urban continuity present a daunting challenge to archaeology. The city of Madaba, located amidst the fertile rolling plains of the Central Jordan Plateau, is a case in point. Continuing an urban tradition of some 5000 years, the modern town engulfs the ancient settlement, preserved in the form of a large low-lying tell and acropolis (ca. 40 acres in area at the base and 23 at the summit) that rises in the town center. Yet, Madaba's historical prominence prevents us from ignoring its role in the rich and eventful history of Highland Central Jordan.

In 1995, the author initiated the Tell Madaba Archaeological Project (TMAP). The primary goals of the 1996 field season were to establish a stratigraphic profile of the Bronze and Iron Age levels on the tell, and assess

the feasibility of conducting further, long-term excavations. Though brief, the season achieved these objectives. A computerized base map of the entire urban core of Madaba was established, enabling future discoveries to be integrated in a single data base for the site. From this, a topographic relief map was created that defined the extent of the Bronze and Iron Age tell. Excavations on the southeastern slope of the tell (Field A) resulted in an 8 m vertical profile of the existing stratigraphy of the lower tell, extending from the summit down to bedrock. The earliest occupational levels reached in Field A revealed a settlement history that began in the Early Bronze Age, with the first settlement founded as early as the late EB I/II period (ca. 3100 B.C.). Although Field A produced a lengthy occupational gap, extending for the better part of the 3d and 2d millennium B.C., there is little doubt that human activity occurred on the tell during much of this time, as was indicated by the ceramic evidence recovered from the Iron Age midden deposits that covered the Early Bronze Age levels. The Field A excavations also revealed some of the richness of the



Field A with an Early Bronze Age wall at the top of the photo. Iron Age levels at Madaba, preserved in the secondary context of rubbish (or midden) deposits. As a preliminary, exploratory effort, the 1996 field season succeeded in demonstrating some of the considerable potential at Tell Madaba, particularly in the area of the western acropolis, for further research into the Bronze and Iron Age history of the Madaba Plains region.

Timothy Harrison

Wadi eth-Themed

The Wadi eth-Themed Archaeological Project began to uncover the remains of the Iron Age site of Khirbet al-Mudayna this summer during its first season of excavations, under the direction of Michèle Daviau of Wilfrid Laurier University. The site is located along the Wadi eth-Themed, about 40 km south of Amman. The site is a large tell with Iron Age ruins at the top. A casemate wall, nearly 5 m thick, surrounds the top of the tell and, lower down, a "moat" encircles it, although the exact construction of this moat or earthen embankment cannot be determined until there is further excavation. Three areas were selected for excavation this season, Field A, situated on top of the tell, and Fields L and N, both at the foot

of the tell, chosen in order to investigate buildings whose wall lines could be seen at ground level.

In Field A, the ruins of a large Iron Age fortification system lie on the northern side of the tell. Outside of this system is a tower, roughly 4 m on a side, that probably defended the gateway. The system itself consisted of casemate walls, the gate, and the "moat." The gate, buttressed by a stone pier on the north side, consists of six chambers for a total length of 13.7 m. This is a version of a style popular during the Iron Age II period (800-600 B.C.) throughout Palestine. The walls of the gate's chambers stand, in some places, to a height of over 2 m. Within the three chambers that have been excavated, some industrial installations have been found, including a lime kiln, likely a secondary installation. Pithos sherds from storage jars over 1 m high, gaming pieces, a basalt mortar bowl, a zoomorphic figurine fragment, most likely a horse, and a massive stone basin with inscribed designs were also found within the chambers.

A large depression was clearly visible 12 m south of the gate. The mouth of the depression was too large to have been a cistern, and may have been part of a water system. Surrounding the depression many stone tools were present, most of them used for food-processing, including mortars, grinders, hammerstones, pounders (spherical stones), and loaf-shaped millstones. The most impressive find was a huge basalt grinding platform (with its millstone), the largest of its type ever found in this area—it would have required two people to use it. Other objects present were loom weights and spindle whorls, both evidence of textile manufacture.

In Field N was a Nabataean building, approximately 8 x 9 m, whose most interesting feature was a stairway which turns to the right at a 90° angle, and consists of a total of 10 stairs. A lamp found on the stairway allowed the occupation of the building to be dated to the Herodian era (1st c. B.C. to 1st c. A.D.).

The project also involved an extensive regional survey. This year's initial survey, led by J. Andrew Dearman of Austin Presbyterian Seminary, first studied aerial photographs for anomalies, and then explored a 5 x 8 km area surrounding Khirbet al-Mudayna. The local Bedouin proved very helpful in locating some of these sites as well as providing relevant information as to their histories. Fourteen previously-unknown sites were documented, including one Iron Age shrine site and three Nabataean farming communities. One of these communities, Toga, a Nabataean/Roman/Islamic site along the Wadi Za'faran, consists of caves and extensive building ruins. Another site along the Wadi Shabik, displays extensive evidence of water management in the form of cisterns and dams. Several sites prominently located on hilltops were watchtowers placed in strategic locations. Because of the presence of both hilltop sites and fortified towns so close together, it is probable that in the Iron Age this area around the Wadi eth-Themed was part of a border region between warring states.

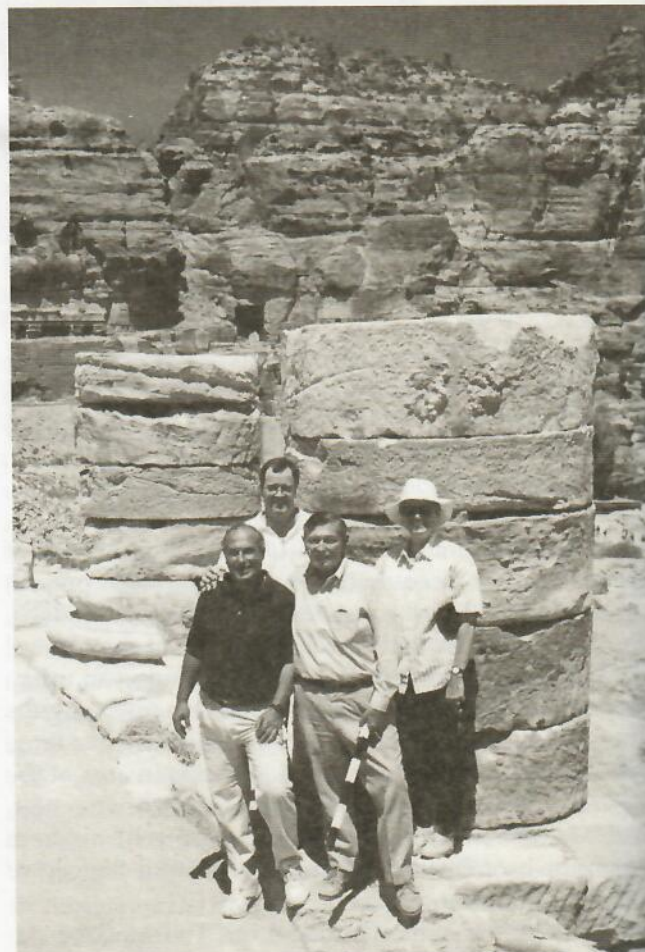
Russell Fraser

Petra, "Great" Southern Temple

1996 was the fourth year of two-month excavations by Brown University at the "Great" Temple. Not only was there a wealth of finds including coins, an inscription, and ceramics, but there were extraordinary revelations about Nabataean temple architecture and a sculptural program that includes richly adorned capitals embellished with fruits and vines as well as elephant heads.

The most significant 1996 architectural features indicate a Nabataean penchant for formal symmetry with the discovery in the Lower Temenos of east and west triple colonnades adorned with a total of 96 columns, as well as an elegant apsed East Exedra with interior buttresses that matches the already excavated Exedra West. Temple stairs leading from the west Lower Temenos sacred area to the Upper Temenos *area sacra* were defined, as was the eastern peripheral wall of the complex and an arched passage leading to the Lower Market to the east.

In the Great Temple proper, the interior Pronaos has been completely excavated, as have the northwestern interior anta wall and the founding levels of three of the eight western columns. Adyton features included the



At the entry to the Great Temple: in front, Pierre Bikai and Artemis Joukowsky; behind, U.S. Ambassador Wesley Egan and Virginia Egan. Note the size of the columns.

complete excavation of the east and west vaulted stairwells and of the large west vaulted chamber to some 4 m in depth where a fragmentary inscription was unearthed. The central Adyton was explored on both the north and south sides of the central vault, and on the temple southeast the outer east wall, the southeastern double engaged corner column, and the inner columnar wall were defined. All of these factors combine to suggest that temple south was three-storied. Of particular interest, however, is the discovery of the upper courses of a major E/W semicircular wall opening into the central cella. This may clearly define the Adyton and promises to be a major architectural component of the Great Temple.

Continued reversible reconstruction of columns was undertaken and plans are now underway for consolidation of architectural elements that have been imperiled both from 2000 years of erosion as well as by recent excavations.

Martha Sharp Joukowsky, Brown University

Wadi Ramm Recovery Project

The purpose of the 1996 season was to document two structures previously known as the Nabataean house and bathhouse; these structures were cleared by the Department of Antiquities in the 1960s, but the records have since been lost. The house and bathhouse are situated on the slope of the foothills of Jebel Ramm just east of the Nabataean Temple. In an independent but simultaneous project, the temple itself was examined by



Dennine Dudley photographing the finds from Wadi Ramm

Laurent Tholbecq (IF-APO). The design of our current project was to record the extant excavated remains of the house and bathhouse and excavate one or two probes along each structure in order to determine the stratigraphy. In essence this was a salvage archaeology project.

The bathhouse consists of several rooms, each with a specific purpose. The use of Nabataean dressed stone throughout the structure (including under the floors) indicates that this is a Nabataean bath, one of only a few such structures known. The most significant discovery, however, was that the *caldarium* (hot room) had a stone hypocaust, the first such found in Jordan. Moreover, since all other Near Eastern parallels date from the 1st c. B.C. to the 1st c. A.D., this bath is the earliest known bath in Jordan.

The villa consists of two rectangular structures separated by a corridor running between them and two paved rooms or courtyards. Thresholds and doorways indicate that the structures date from the same period and, in fact, were constructed at the same time as the bathhouse. The architecture and the finds all indicate that the villa was a luxury building, probably serving a public or official function. For example, the eastern rectilinear unit was entered by a large doorway centrally located along the southern wall. On either side of the door, the upper courses of stone are set back from the face of the lower two courses and form recessed ledges. These ledges may have carried decorative panels, or provided visual interest in themselves, thus creating a grand facade. A bronze statuette of a nude Venus was found in the room behind this facade and fragments of decorative plaster, molded and painted in red, black, and gold, were recovered from almost every room of the villa; it must have been richly decorated.

Dennine Dudley and Barbara Reeves

Roman Aqaba

The second season was conducted from May 16 to July 4, 1996. The project is directed by S. Thomas Parker and sponsored by North Carolina State University. Its goal is to reconstruct the role of the city of Aila (ancient Aqaba) in the economy of the Roman Empire. The project's research design consists of 1) a regional environmental and archaeological survey and 2) excavation of the Roman and Byzantine city to recover evidence about its economy.

The survey again focused on the hinterland of ancient Aila and southeastern Wadi Araba (one of the city's principal access routes). The survey recorded 75 new archaeological sites, bringing the total to 234 sites. Preliminary analysis suggested that the best represented periods were Chalcolithic, Early Bronze, and Early Roman/Nabataean.

Excavation continued in six areas opened in 1994. Area B is a small tell 500 m from the shoreline. The mound was originally occupied in the Early Roman/Nabataean period, when a complex of mudbrick domestic structures was constructed. The mound was reoccupied in the 2d c. A.D., when new mud brick structures were erected. This later occupation extended into the 4th c. A.D. and witnessed intensive baking activity, as evidenced by 25 ovens and two flour mills.

Area M, to the southeast, yielded mudbrick and stone structures with several ovens. Artifactual remains included imported terra sigillata and Nabataean fine ware pottery. Perhaps most important was a jar filled with natural clay. This, combined with ceramic slag and kiln wasters found elsewhere in the area and clay mining pits associated with Nabataean pottery discovered west of Area B, suggest a local pottery industry in the Early Roman/Nabataean period. Occupation of the complex ended by the 3d c. A.D.

Another 300 m farther south, in Area A, the earliest occupation included stone walls, a tabun, and a clay-built storage structure, all of Late Roman date. Nearby was a cemetery of the 4th c. A.D. Eleven simple mudbrick tombs, each with a single articulated skeleton, have been excavated to date. Many sherds of imported Egyptian amphorae were associated with the cemetery. During the 6th to early 7th c. A.D., the area south of the cemetery was reoccupied by the construction of a stone and mudbrick domestic complex. This complex was apparently abandoned for about a century, then reoccupied in the Early Islamic period.

Area J lies just south and east of Area A. Excavation revealed more of the plan and internal architectural details of a massive mudbrick structure, dated to the 4th c. A.D., and measuring at least 25 m E/W x 20 m N/S. Some walls supported arched doorways and vaults within the structure. A stone-built staircase suggests a second story. The building yielded rich remains, including some 100 coins. Some walls were decorated with painted plaster. This evidence, combined with the eastward orientation of the structure and the associated cemetery in Area A, suggest that it was a Christian basilica. A bishop of Aila is attested in documentary sources in A.D. 325. If in fact this is a church (and this suggestion is unproven), it would be the earliest known church in Jordan. In the late 4th or early 5th c. A.D., part of this structure was covered by a stone curtain wall and projecting towers. Excavation in Area J exposed another 60 m of this wall, preserved up to 3 m high; this served as the city wall of Byzantine Aila. In all, over 100 m of the city wall have been exposed. The city wall went out of

use in the Late Byzantine period and was extensively robbed in the Umayyad period.

Area K, 50 m southeast of Area J, yielded remains of the Umayyad and Abbasid periods (late 7th to 10th c. A.D.). Removal of Abbasid domestic structures revealed substantial stone and mudbrick structures of the Umayyad period laid out along both sides of a street. The northwest side of the street was demarcated by a string of irregular granite monoliths closely spaced to separate the street from the buildings. Beneath the street a large fragment of a Byzantine cross carved on a slab of marble (perhaps part of a chancel screen) and an Arabic dipinto written in black ink on both sides of a potsherd were found. The dipinto awaits full decipherment. Given its stratigraphic context in the 7th c., it may offer important evidence from the dawn of Islam. The deep Abbasid and Umayyad strata in Area K suggest that the Byzantine city experienced intensive continued occupation in the Early Islamic period.

Area L lies less than 100 m from the modern coastline. Trenches opened in 1994 uncovered a late Abbasid domestic complex (10th c. A.D.). In 1996 excavation was limited to two trenches to determine the depth of the Islamic remains. One trench reached the water table 4 m below the modern surface, revealing Abbasid and Umayyad strata.

S. Thomas Parker, North Carolina State University

Humeima

The 1996 campaign of the Humeima Excavation Project once again has made clear the archaeological richness and diversity of the site. Structures and occupation areas from the Early Nabataean period through the Abbasid period were excavated and studied, representing nomadic occupation, as well as structures serving domestic, military, religious, and hydraulic functions.

In Field C124, extensive ceramic evidence for Early Nabataean and Middle Nabataean occupation was recovered separate from any structures other than a typical Nabataean cistern for runoff water. Given the absence of habitation structures in the area, it seems likely that the ceramics were deposited by individuals living here from time to time in tents, possibly drawing their water from the adjacent cistern. This may have been a camping ground for the family that owned the cistern and from time to time participated in the events at Hawar or tended crops in adjacent fields that are relatively well watered by the outflow of the wadi that passed through the settlement.

In Field E122, we now have the plan of a house of the Middle Nabataean period, probably built of mudbrick on a stone foundation. Although the house was not richly furnished or well preserved, it provides a glimpse of what must have been a typical dwelling place for a family dependent largely on pastoral and agricultural activities. One goal of the project was reconstruction of the day-to-day activities of the people of Hawar during the Nabataean period of occupation, and the structures in which they lived. Given the presence of this house and the house below the Bath building, it seemed likely that there was significant Nabataean occupation in the area of the site and that further excavation would yield important data concerning their manner of life.



The Early Byzantine city wall and projecting tower. A 60 m extension of this wall uncovered in 1996 is visible across the street, near the top of the photo. Photo by Jonathan Tedder.

This conjecture was richly fulfilled this year by the surprising discovery in Field E125 of a Nabataean structure constructed largely of mudbrick, but with stone door jambs, some stone installations, and stone arches to support the roof. Even more surprising was the recovery of rich remains of fresco in this structure, applied both to the mudbrick walls and the arches. So far, the motifs include vines, grape clusters, and fragments of human figures. The use of this construction technique, which is difficult to discern from surface remains, suggests that a significant number of such Nabataean structures may lie hidden in the adjacent field, although there are no building stones on the surface to indicate their presence.

The Roman fort is a much more substantial structure, laid out in a very predictable and symmetrical manner. This year's excavations have revealed the plan of the *principia*, and reinforced the early 2d c. chronology of the initial occupation. The recovery of a coin minted for



The block with the Latin inscription on it

Trajan in Bostra suggests that the fort may have been constructed during his reign, immediately after the annexation of the Nabataean kingdom. Further excavation may reveal similar chronological evidence in a more reliable locus. The presence of a Latin inscription on a large block in the *principia* also reinforces the image of the fort as an outpost of western Roman culture, although the text was too worn to read. At least the focal spaces of the *principia* were decorated with brightly colored frescoes, with indications of the use of gold leaf details. The barracks area continued to provide evidence for the multifarious activities of a Roman fort, in the remains of a forge for reworking iron and bronze equipment, including traces of weapons, helmets, and scale armor. The first phase of occupation seems to have lasted from the early 2d c. into the later 3d. Perhaps as a result of the Diocletianic renovation of the *Limes Arabicus*, the fort was abandoned or reworked. In view of the character of the deposits laid down in the 4th c., it seems



Lower Church at Humeima

very likely that the fort was abandoned for several decades, then renovated for a different purpose in the 4th c., perhaps for simple domestic occupation by non-military families engaged in pastoral and agricultural occupations.

The discovery of the well-preserved remains of the apse of another Byzantine church—the fifth to be found at Humeima—was a great surprise. The apse is preserved in fine condition up to a height of two meters above the pavement of the chancel, but it was hidden by a Bedouin house built around it some time after 1936.



Ivory panels from the Abbasid *qasr*. Photo by C. Mundigler.

Although members of the expedition had entered the house on several occasions, the gloom and the presence of snakes and ticks had drawn their attention away from the ancient remains until this year. The question of why so many churches were built in such a small community becomes even more urgent with this new discovery.

The plan of the Abbasid *qasr* was further clarified, revealing in particular many walls belonging to an Ottoman renovation. The fresco room provided more fragments of fresco and ivory furniture, many with new or better preserved motifs than had been found in previous seasons, and remains of wood from the structure, the heavy door, and furniture.

John P. Oleson, Khairieh 'Amr, Robert Schick and Rebecca Foote

Petra, Petra Church

On the western side of the atrium of the Petra Church are three rooms. On the basis of remains exposed in 1994, it appeared that the central room, Room X, might have been the baptistry. Clearance completed during the third excavation phase (April-July 1996) confirmed that suggestion. A cruciform baptismal font is sunk into a large, almost square platform made of stones, which is located in the eastern half of the room. The top of the platform is paved with thin marble slabs that also form the revetment around the platform. The central basin of the font is accessible by steps located at each of the cross's arms. No traces of a drainage system have been located; water must have been brought in and removed manually. Close to the southwest corner is a large stone jar fully integrated with the platform. It might have served for extra water supply or storage. Four limestone columns are situated at the corners of the platform; these

must have supported a canopy or ciborium over the font. Fragments of capitals, as well as arches, marked with crosses, that probably connected the capitals, have been found inside the room. Reconstruction of the entire installation will require further study.

The closest parallel for the baptistry at Petra comes from the East Church in Mampsis (Kurnub) in the Negev, where a cruciform baptismal font is sunk inside an area marked by four columns and a quadrangular frame which connected them. The Mampsis baptistry is dated to the early 5th c. A.D.

The Petra baptistry room has two well-defined phases, as attested by soundings below the flagstone floor. As constructed the mid- to later-5th c. A.D., Room X was a relatively small square with the baptismal font in the center. Access was provided by doors leading to the adjacent rooms (IX and XI). This arrangement emphasized the processional rite associated with baptismal ceremonies.

In the following phase, Room X and the adjacent rooms were extended to the west, and thus the baptismal font was now in the eastern half of the room. A need to accommodate a larger number of participants in the ceremony could have been a reason for the expansion. The door leading to Room XI was expertly blocked. If so, the one-way processional rite of baptism would have



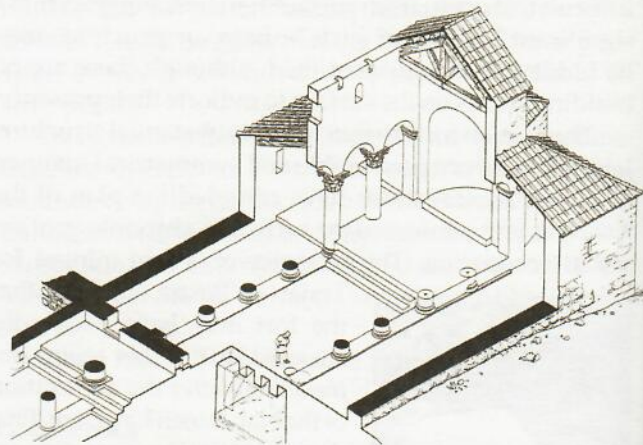
Zbig Fiema in Room X at the Petra Church

come to an end. Thus, before the blocking, the font in Room X designated a focal point in a straight-line itinerary, but afterwards it became a final point from which the procession had to retrace its steps. While the canopy over the font would have collapsed during the first earthquake-related destruction of the church, the column shafts, judging from their extant location, seemingly broke and fell only in a later seismic episode.

Zbigniew T. Fiema, ACOR

Petra, Ridge Church

The objective of the March 1996 season was to continue excavation of the interior of the church, the narthex, and the lower courtyard to the west of the main structure. A sounding was made in the chancel to determine the history of the modifications to this area. At a level slightly below that of the stone paving of the aisles, a yellow rubble subfloor was found. It may be that this



Restoration drawing by Chrysanthos Kanellopoulos of the Ridge Church with the cistern below it shown as a cutaway

once had a marble floor above it. In a subsequent stage, the area of the chancel was raised with earth fill and probably paved with mosaics, but these are now completely destroyed. Clearance of the southern portion of the narthex revealed a column base identical with the one found in the 1995 season on the northern side. Three steps lead down from the narthex to what is called the lower courtyard. Parts of this had been cleared in 1995. Most of the remaining area was cleared in this season. A door was found leading into this courtyard from the south and a second door was found in the south of the western wall of the courtyard. In the central area of the court, a column base and drum were found *in situ* to the south. On the northern side of this central area, there is a stylobate on which another column base and drum were found *in situ*. The fill in the lower courtyard continued to produce numerous architectural fragments. In all, 100 such architectural elements have been catalogued, the majority from this area.

In evidence relating to the post-ecclesiastical use of the area, the lower courtyard continued to yield water-washed stones in quantity; these may have been used for defensive purposes. A local informant stated that from the position of the northern side of the lower court where these stones were found, it would be possible to cut the route into Petra through Wadi Abu 'Ullayqa. He further stated that a site farther to the east in Wadi Abu 'Ullayqa is also a point where it can be cut and that the site also contains quantities of such stones. We may here be seeing only the faintest glimpse of an incident or series of incidents during the long dark age of Petra.

Patricia M. Bikai, ACOR

Update on the Petra Papyri

The U.S. team conducting work during the summer of 1996 consisted of Prof. Ludwig Koenen, Dr. Traianos Gagos, Mr. Robert Caldwell of the University of Michigan, and Dr. Robert Daniel of the University of Cologne.

The team's chief priority was roll no. 10 (*Papyrus Petra Khaled and Suha Shoman*) which is scheduled for prepublication in a 1997 issue of *Zeitschrift für Papyrologie und Epigraphik*. The prepublication is intended to inform the specialist public of the nature of one of the most important documents in the archive and to solicit their help on various kinds of problems (e.g., linguistic, legal, and architectural) that the text presents.

Roll 10 is a division of inherited property (chiefly landholdings, houses, apartments and slaves) among three brothers (Bassus, Epiphanius, and Sabinus). It is clear from the document that the three brothers already owned other land before the present division was made. We are obviously dealing with a wealthy family, most of whose income derived from farming or leasing land.

A detailed study of the structure of the document has shown how skillfully and professionally it was drawn up, in all likelihood by a *symbolaiographos* (i.e., a combination of legal expert and scribe). The three brothers appear in an order that might be based on age. The property being divided appears in precisely the same sequence for each of the three brothers: (a) land in the countryside; (b) land in the village of Ogbana; (c) dwellings in the village of Serila; and (d) dwellings in the metropolis of Petra itself. In the case of the first two brothers (Bassus and Epiphanius), the shares end with allotments of slaves. We lack this feature for the last (probably youngest) brother Sabinus, probably because the slaves divided were couples, and (for humanitarian reasons?) it had been decided not to separate the couples. The document seems to suggest that Sabinus received a somewhat greater share of dwellings and/or land by way of compensation.

Although roll 10 had been studied previously, a thorough revision was still necessary. The 152 lines of the main portion of the text are riddled with badly damaged areas and gaps in the text. Yet so much text is preserved that with patience and effort a large number of difficult passages could eventually be deciphered and many gaps filled with certainty. Here one example may suffice for many. Lines 56-57 deal with the portion of slaves that Epiphanius was allotted. The transcription we had before the summer read: " - - -] ... the threshing floor of Kyriake the slave and - - - [the said] wife of Kyriakos." Scrutiny of the original and consideration both of parallels and the logic of the text now allow us to read and restore: "from persons of servile status the slave Kyriakos, son of the slave-woman Kyriake, and [the slave-woman NAME, daughter of the slave-woman NAME], the wife of Kyriakos." In the course of reexamining the text, dozens of such substantial improvements were introduced. The text was also changed in scores of

ways that did not result in a change of sense, but in a more accurate transcription.

The 152 lines of the main portion of the text are accompanied by dozens of loose fragments on the sides of the text. Most of these loose fragments have been deciphered and their correct places adjoining the main portion of the text have been established. At times this resulted in a substantial addition to our knowledge of the wording of the text. Here is just a single example: Lines 29-33 deal with a description of a house inherited by Epiphanius and the rights he has in connection with this house. As to the rights we had earlier read and restored in lines 31-32: "bel[onging] to the said Epiphanius to enter upon the terrace roof of the apartment - - -." Now a fragment has been placed where we earlier had a gap, and the result is: "so that it is possible for the said Epiphanius to enter upon the terrace roof of the apartment - - -." This is obviously the correct piece of legalism that we had been looking for.

The first four plates of roll 10 preserve some 450 small fragments from the beginning of the document. These fragments have now been numbered and, to the extent possible, deciphered. Small but valuable pieces of information have emerged. We get some new house-structures, one called a *purgiskion* (diminutive form for "tower"), and another called a *klimax* ("ladder" or "ladder-like staircase").

Special attention was also paid to the readings of the numerous Arabic place-names and house-names in roll 10. On the basis of the most recent readings we have compiled a list of the non-Greek names in the roll. We are circulating this list to archaeologists of the region, to Arabists, and to historical geographers in order to solicit their comments.

We have already found a number of interesting items: e.g., line 46: "*Baith al-Akhbar* also called *Baith al-Kellar*." The former Arabic name is "the great house." The latter has puzzled those speakers of Arabic we have consulted so far, some of whom tell us that *kellar* does not sound Arabic at all. Given these difficulties, we have entertained the possibility of *kellar* being a loan-word into Arabic based on Latin *cellarius* "steward" or *cellarium* "storage room." The Latin words, after all, generated English *cellar*, German *Keller* and Greek *kellarios*. We will be consulting an Arabist familiar with Greek and Latin loan-words in pre-Islamic Arabic.

In sum, the members of the team all feel that significant progress in the transcription and general understanding of roll 10 has been made.

We are aware of the various problems that remain open, and aside from these relatively few places in the text, it is unlikely that the transcription will be changed in any substantial way before it appears early in 1997. It should be a boon to the project at large that we now have a solid understanding of one of the more important documents in the archive.

On behalf of the entire team,

Robert Daniel and Traianos Gagos

Restoration of the Ayyubid Tower

The tower formed part of the Ayyubid fortifications of the Citadel of Amman and was constructed in the late 12th to early 13th c. A.D. It is against and over the remains of the temenos wall of the Great Temple which was restored by ACOR in 1991-93. Built mainly of stones from the temple, the tower is 9.3 m long and 7.6 m wide. It was a one-room and a one-story structure. The room was entered through a doorway in the north wall. There



The front or north side of the tower before restoration

was a recess in each of the three other walls, each with an arrow slit. A staircase built within the north and east walls of the tower led to the top.

The structure is well preserved from the level of the foundation to the level of the 1st course (counted up from ground level on the northern side). From course 1 upward, the state of preservation of the four walls of the monument varies considerably, and parts of the stonework above that level were endangered. Indeed, the stonework of the south wall, west of and above the



The south (left) and east (right) walls of the tower before restoration

window slit, was in a precarious condition. There were two stones missing there and, in consequence, several stones had tilted from the horizontal. Due to the process of weathering of the tilted stones, that part of monument could have collapsed in an earthquake.

With funding from the United States Agency for International Development, ACOR undertook the restoration of this tower. The restoration project, completed

in August 1996, had two objectives. One was the conservation of the remaining masonry of the monument and the other the improvement of some features of its architecture through partial completion of missing parts of the structure. The former was necessary for the survival of the monument; the latter aimed at a visual presentation of the architecture in a manner that would allow it to be understood. In the effort to achieve both objectives, we faced serious issues in regard to the principles of restoration of ancient monuments. In general, under those principles, no restoration should be undertaken for which there is no clear evidence as to the original appearance of the parts of the monument to be restored.

In the case of the tower, the conservation of the remaining stonework of courses 3, 4, and 5 of parts of the east, south, and west facades required rebuilding the inner masonry of those courses of the walls. However,



The north side of the tower after restoration. The new stones are the same limestone as the ancient ones. They will weather from white to soft pink in about 10 years.

there were very few stones *in situ* which attested to the size of the stones in course 3, and there were none attesting to the size for courses 4 and 5. Rebuilding those courses of the masonry could be done only on the restorer's arbitrary decision concerning the size of new stones used for the rebuilding. This could be viewed as contrary to the strictest principles of restoration. However, following such an interpretation would not have



Restored arrow slit

ensured the stability of the surviving masonry above course 2 of the east, south, and west facades. The same problem was encountered regarding the rebuilding of the masonry over the three arrow slits, since there was no evidence for the length of the original stones. However, since the builders of the fortification towers of the Citadel chose haphazard lengths of the stones for the courses, the restorer could follow their example of there being no principle in this respect. After serious consideration of the issues involved, it was decided that ensuring the stability of the remaining parts of the monument was the main objective. Thus, the partial rebuilding of the tower was an example of a compromise between the requirement of ensuring the stability of the surviving masonry and the theoretical principles of restoration of ancient monuments.

Antoni Ostrasz

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April 16.

Director's Report

Pierre M. Bikai

ACOR Projects

ACOR/USAID and the Ministry of Tourism and Antiquities:

Amman Citadel, Ayyubid Tower Restoration, Antoni Ostrasz, architect

Madaba: Archaeological Park and Mosaics Shelters, Church of the Prophet Elias, Ammar Khammash, architect; Burnt Palace, Presentation Phase, Leen Fakhoury, architect

Petra: Petra Church Shelter and Conservation Project, Zbigniew T. Fiema, archaeologist; Robert Shutler, architect; and Star*Net, contractor; Roman Street and Shops Prefeasibility Study, Chrysanthos Kanellopoulos, architect; Qasr el-Bint Conservation Project, prefeasibility phase, Wiss, Janney, Elstner Associates

Petra Papyri Publication Project

University of Helsinki/Academy of Finland: Jaakko Frösén, Erja Salmenkivi, Marjo Lehtinen, Mari and Matti Mustonen, Jan Vihonen, Marjaana Vesterinen, Tiina Rankinen, Marja Vierros, Mari Mikkola, Maarit Karmo, Antti Arjava, Tiina Purola; University of Michigan: Ludwig Koenen, Bob Daniel, and Bob Caldwell; ACOR: Zbigniew T. Fiema, and Clement A. Kuehn

ACOR-Assisted Field Projects

'Ain Ghazal, Zeidan Kafafi and Gary Rollefson
Roman and Byzantine Aila (Aqaba), Tom Parker
Humeima, John Oleson

Madaba Plains Project, Larry Geraty *et al.*

Tell Madaba, Timothy Harrison

Moab Marginal Agriculture Project, Bruce Routledge

Petra, Ridge Church, Patricia Bikai

Petra, Great Temple, Martha Joukowsky

Wadi Ramm Recovery Project, Dennine Dudley and Barbara Reeves

Wadi eth-Themed, Michèle Daviau

Umm el-Jimal, Bert de Vries

Lectures

March 6. Beshara Doumani: Writing Family: Waqf, Property and Gender in Nablus and Tripoli, 1800-1860

March 6. Charles Wilkins: Notes on the Social History of Jaffa in the Mid-19th Century

March 20. Zbigniew T. Fiema: Current Research on the Petra Church

March 20. Clement Kuehn: Deciphering the Petra Papyri

March 30. Julie Hansen: Palaeoethnobotany in the Eastern Mediterranean: Problems and Possibilities

April 16. Thomas McClellan: A Royal Tomb in Syria

April 20. Peter Fischer: Excavations at Tell Abu el-Kharaz 1989-95: An Overview

May 15. Sandra Scham, Cults and Cult Centers in the Chalcolithic: A New Look at Teleilat Ghassul

Fellows in Residence

JENNIFER C. GROOT FELLOWS:

Pauline Ripat, Humeima Excavation Project

Carol Frey, Roman Aqaba Project

KENNETH W. RUSSELL FELLOW:

Edith Dunn, Umm el-Jimal Excavation Project

Near and Middle East Research and Training Act (NMERTA)

NMERTA POST-DOCTORAL FELLOWS:

Clement A. Kuehn, Estates and Proprietors in Early Byzantine Jordan and Egypt

Zbigniew T. Fiema, Petra Publication Project

Julie Hansen, The Archaeology of Plants: Palaeoethnobotany of the Mediterranean Basin

Beshara Doumani, Family and Society in Greater Syria: A History of the Merchant Families in Jerusalem and Nablus, 1750-1914

Stephen S. Infantino, Creation of an Inter-disciplinary Humanities Course on the Middle East

Richard A. Stephenson, Development of a GIS Database for the Kerak Plateau Region

Robert W. Daniel, Editing of the Carbonized Papyrus Archive from Petra

Phillip C. Posey, Music and Art in Contemporary Middle Eastern Culture

NMERTA PRE-DOCTORAL FELLOWS:

Jeffrey A. VanDenBerg, Research on the Foreign Policy-Making Process in Jordan

David M. Priess, Jordanian Alignment Decisions, 1971-91: The Role of Threat Perception in Foreign Policy

United States Information Agency Fellows:

Charles Wilkins, The Muslim Community of Jaffa, 1839-1856: History of a Muslim Community in Social and Political Transformation

Scott Greenwood, State, Business and Democratization in Egypt and Jordan

Sandra A. Scham, Pastoralism and the Emergence of Sociopolitical Complexity in the Chalcolithic Period—Teileilat Ghassul

Timothy Gianotti, The Secrets of the Soul, Death, and the Afterlife in the Thought of al-Ghazali (d. 1111)

Marjorie Kelley, A Comparative Study of Tourism in Hawaii and Jordan

Sherry Lowrance, The Jordanian Women's Movement and Democratization

G. Wesley Burnett, A Photographic Site Situation Study of Jordanian Protected Areas

Ingrid Schneider, An Administrative Study of Jordanian Protected Areas

For information about ACOR's fellowships contact: ACOR, 656 Beacon St., 5th Floor, Boston, MA 02215-2010, Tel.: 617-353-6571, Fax: 617-353-6575, e-mail: acor@bu.edu.

News and Notes

Jan. 3. Zbig Fiema prints the first draft copy of the Petra Church publication—it's about 2" thick.

Jan. 4. Rami Khouri's review of *The Great Temple of Amman* appears in the Jordan Times. He likes it!

Jan. 4. Sa'id and Jalila Adawi have their firstborn: her name is Seja ("the quiet of midnight").

Jan. 18. The Finnish Scroll Team holds one of their twice-weekly seminars on the papyri they are working on for publication. During a lengthy discussion of whether one



The papyrology seminar with Prof. Jaakko Frösén at left

letter is an omega or an omicron, Zbig declares that he prefers working with dirt.

Jan. 20. I travel to Petra to attend the formal inauguration (by H.M. Queen Noor) of the newly refurbished Nazzal's Camp. The renovation was funded by government of Switzerland through a grant to the Petra National Trust. All ACOR archaeologists who use Nazzal's Camp are very grateful.

Jan. 24. Word comes that ACOR's application to the Kress Foundation for fellowships in the history of art is successful.

Feb. 2. Jaakko Frösén discovers two lines of Latin in *Papyrus Petra Nancy and Dan Gamber!*

Feb. 9. Senators Claiborne Pell of Rhode Island and his



The Pells, Bikais, Robbs, and Inhofes

wife Nuala, Charles Robb of Virginia and his wife Linda Byrd, and James Inhofe of Oklahoma and his wife Kay come by ACOR for a tour and to see the scrolls. I then take the group off to Petra. Did I take the opportunity to speak to the senators about support for overseas research centers? You guess!

Feb. 17. Accountant Nisreen Abu al-Shaikh gets her chance to tell Treasurer Randy Old how fond she is of the new accounting software. Kathy Nimri also makes her usual request to Randy: a check for \$100,000. He claims he doesn't have his checkbook with him.

March 7. Braving a snow storm, H.R.H. Prince Ra'ad and I pay a call on the Ambassador of Canada, H.E. Mr. Michel de Salaberry, to express appreciation for a recent donation of audiovisual equipment.

March 7. Paul Scham reports the copy machine isn't working. Patricia Bikai checks the machine and comments that it usually helps to turn it on.

March 7. Malcolm Hughes and Ramzi Touchan of the Laboratory of Tree-Ring Research (U. of Arizona) arrive.

Donors to ACOR

From January through June, 1996, the following friends of ACOR contributed to the endowment: Laurie Brand, Budget Rent-a-Car, Citicorp (Paul Ostergard), Nick and Kay Clapp, Rainer Czichon, Nan Frederick, Robert J. Geniesse, Joukowsky Family Foundation, Joachim Laes, David McCreery, Patrick McGovern, Michel Marto, Bob Mittelstaedt, Dale and Marjorie Myers, Tom Parker, Susan Phillips, Jim Richerson, James and Betty Sams, Lee and Murray Seeman, Paul and Sandra Scham, and Don Wimmer.

A donation to the scrolls project was received from Ludwig Koenen. The Embassy of Canada (Ambassador Michel de Salaberry) made a contribution for the purchase of audio-video equipment, and the United States Information Agency (PAO Marcelle Wahba) contributed computers. Dan and Nancy Gamber donated various items for office operations.

Tom Parker made a donation to the Groot Endowment, and Cynthia L. Shartzter to the Kenneth W. Russell Trust.

Donations of books for library were received from: Marie Alanen, S.H. Allen, Humi Ayoubi, Pierre and Patricia Bikai, Jose Maria Blazquez-Martinez, Laurie Brand, David Burrell, Thomas Dailey, Robert Daniel, Department of Antiquities (Ghazi Bisheh), R.F. Docter, Trude Dothan, Edith Dunn, Jordan Environment Society, Joukowsky Family Foundation, Seymour Gitin, Issachar Goldrath, Joseph A. Greene, Scott Greenwood, Ma'in Haddad, Denyse Homès-Fredericq, David Hopkins, Chris and Linda Hulin, Randa Kakish, Stephen J. Kelly, Yanis Meimaris, John Meloy, Ministry of Planning (Nahla Natour), National Democratic Institute for International Affairs (Brian Katulis), Natural Resources Authority (Youssef Hamarneh), Anne Ogilvy, John Oleson, Joseph Patrich, David S. Reese, Research Center for Silk Roadology (Hirolaka Hashimoto), Gary Rollefson, Jill Schwedler, Robert Shutler, Noufan Al-Swarieh, Peter Warnock, Sa'ad Wedad, and Charles Wilkins. Cash donations for the library were received from Anne Ogilvy, Suzanne Stetkevych, and David Vila.

We stay up 'til all hours 'talkin trees.'

March 10. Jeff Zorn is surprised to see me stuffing envelopes. He says he thought a DIRECTOR didn't have to do such things. I point out that I have also been known to mop the floors and fix the plumbing!

March 11. A reception is given at ACOR by the delegation from the U. of Arizona. 100 of their alumni attend, and are welcomed by H.R.H. Prince Ra'ad and U.S. Ambassador Wesley Egan.

March 13. Patricia confirms her membership in the Imelda Marcos Fan Club by wearing a different shoe on each foot all day.

March 13. To help Julie Hansen's project, I've been collecting edible wild things—including bags and bags of wretched little thistles which Julie dutifully photographs.

March 14. Julie escapes to Syria so she won't have to eat the wretched little thistles.

March 20. The Tree Ring lab people lay out their treasures, slabs of Cypress trees, on the balcony—it's chain-saw archaeology!

March 20. Larry Herr's review of *The Mosaics of Jordan* appears in *Biblical Archaeology Review*, saying: "This is probably the most beautiful book on the archaeology of the Holy Land published to date." Thank you. In Baltimore, Carrie is immediately swamped with orders.

March 29. Patricia and I return from a week of excavations at the Ridge Church. We have worked in sleet, rain, and wind.

April 5. Zbig leaves for the third season of work at the Petra Church. He is under strict instructions to avoid uncovering any more mosaics or scrolls. [As it happens, he 'only' finds the best preserved baptistry in the region, see p. 10-ed.]

April 7. Kathy remarks that her computer is slow because it doesn't have a Penitent Chip (we think she means Pentium Chip).

April 21. Our second application to NEH for matching funds for the endowment campaign goes off to the U.S. Cross your fingers!

April 28. The rivalry between the Petra Church and the Ridge Church continues. When Patricia says that a small fragment of a huge alabaster vase she has found is equivalent to the Petra Church's elegant panther vase, Zbig doubles over in laughter. Later, when he sees the new inscription from the Ridge Church, Zbig admits that it probably is [a very small part of] the largest Roman imperial inscription ever found in Petra: "The oldest, the biggest, and the best!"

April 29. With Mohammed off for the feast, I dig out my California Cuisine cookbooks and prepare lunch.

May 8. Robert Mittelstaedt begins his photography class for Jordanian archaeology students.

May 10. Some of Tom Parker's Aila people are due in the evening. The summer dig season starts!

May 13. I give a tour of the Byzantine Church at Darat al-Funun to H.M. Queen Noor and H.M. Queen Sofia of Spain.

May 14. A consultant from the one of the development companies comes by to talk about the \$4 billion project to save the Dead Sea. Kathy: "What for? It's dead."

May 22. Assistant Director Carrie Nee arrives from the U.S. to see Jordan and ACOR for the first time.

May 26. There is a birthday party for Anat Scham who is two. Paul makes the mistake of giving her a musical cake that plays "Happy Birthday" over and over and over and over ... Dawn Posey's rendition on the violin was much prettier!

May 30. Mrs. Joan Shalikashvili, wife of the Chairman of the Joint Chiefs of Staff, tours ACOR.

May 30. There is a small reception to welcome Carrie and for the fellows—new and departing. Phillip Posey shows up in black tie (a milestone for ACOR). It turns out that he and daughter Dawn are to perform with the National Conservatory Orchestra at the Citadel.

June 2. The newest popular attraction at ACOR is the "fitness center," located in the hallway of the ground level. At the moment it consists of a Nordic Track on loan from Dan Gamber—but, heh, we have to start somewhere!

June 8. Bert de Vries arrives to begin Umm el-Jimal.

June 9. John Oleson arrives to begin Humeima.

June 10. Larry Herr arrives to begin Madaba Plains.

June 10. There is a line at Kathy's door. Everyone wants everything!

June 13. The dig crews for Petra, Umm el-Jimal, Humeima, and Wadi eth-Themed continue to stream into ACOR. Many of the planes are arriving hours and hours late, throwing everyone's schedules off.

June 15. The garage looks like a staging area for a moon landing as Bert de Vries's group and Martha Joukowsky's group load up their trucks and head out to the field. They all get off on time—there is a lull for a few hours—then the rest of Michèle Daviau's Wadi eth-Themed crew arrives.

June 20. Plans begin to go into high gear for a concert at Darat al-Funun to benefit the Russell Trust. The Posey family will be the star performers.

June 21. Bill Dever comes by to see what is actually happening at ACOR. He had said in a *Biblical Archaeology Review* article that there wasn't much. He spends a good part of the visit apologizing for being misinformed!

June 25. Joe Seger and Paul Jacobs arrive to begin ASOR's



Pierre Bikai and H.M. Queen Sofia of Spain

Committee on Archaeological Policy tour.

June 28. It must be high season—the fax machine eats a whole roll of paper during the night.

Trustees Meet in Providence

The Spring meeting of the ACOR Board of Trustees was held in Providence, R.I., on April 13. The main topics on the agenda included the endowment campaign which is now in its second year and is more successful than had been expected; by the date of the meeting over \$216,000 had been raised.

There was also a discussion concerning the move of the ACOR office from Baltimore to Boston. ACOR Board Chairman Artemis Joukowsky had arranged the move with Boston University and he and all of ACOR are very grateful to Jon Westling, the President of Boston University, for the university's very generous and kind offer, and also to Professor James Wiseman, former chair of Boston University's Department of Archaeology, for all of his work in orchestrating the move. The new ACOR office is in the same building as the Archaeological Institute of America.

The newly elected Class of 1999 includes a new board member, Dr. James Wiseman of Boston U. He replaces Dr. Doris Miller who is retiring from the board and the board expressed great appreciation for her work both as board secretary and for her hard work in helping to create the Arabic Speaking Academic Immersion Program (ASAIP) fellowships.

The board also passed a resolution of appreciation for former ACOR Assistant Director Glen L. Peterman.

As part of the luncheon program the day of the meeting, Dr. L. Carl Brown, Professor Emeritus at Princeton University, gave a lecture entitled "Jordan and Middle Eastern Studies—Some Definitions, Recollections, and Suggestions," not just for the trustees but also for a number of guests from Brown University.

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ACOR Publications

The Mosaics of Jordan by Michele Piccirillo. Large format, cloth-bound volume includes 303 pages in full color with 824 illustrations, plans and aerial photographs. \$175.00 (includes shipping).

The Great Temple of Amman by Chrysanthos Kanellopoulos. The architecture of the temple that was excavated, studied and partially restored by ACOR. \$80.00 (includes shipping).

JADIS: The Jordan Antiquities Database and Information System: A Summary of the Data, edited by Gaetano Palumbo. Basic information on nearly 9,000 archaeological sites from all periods. This 453-page, hard-bound volume is xerographically reproduced. There are 117 maps of sites by region and period, plus one fold-out map. \$40.00 (includes shipping).

Madaba: Cultural Heritage. This 113-page paper-bound volume summarizes the heritage of the 'City of Mosaics' from the Early Bronze Age through the Late Ottoman period. Available in late 1996.

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ACOR and its Newsletter

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