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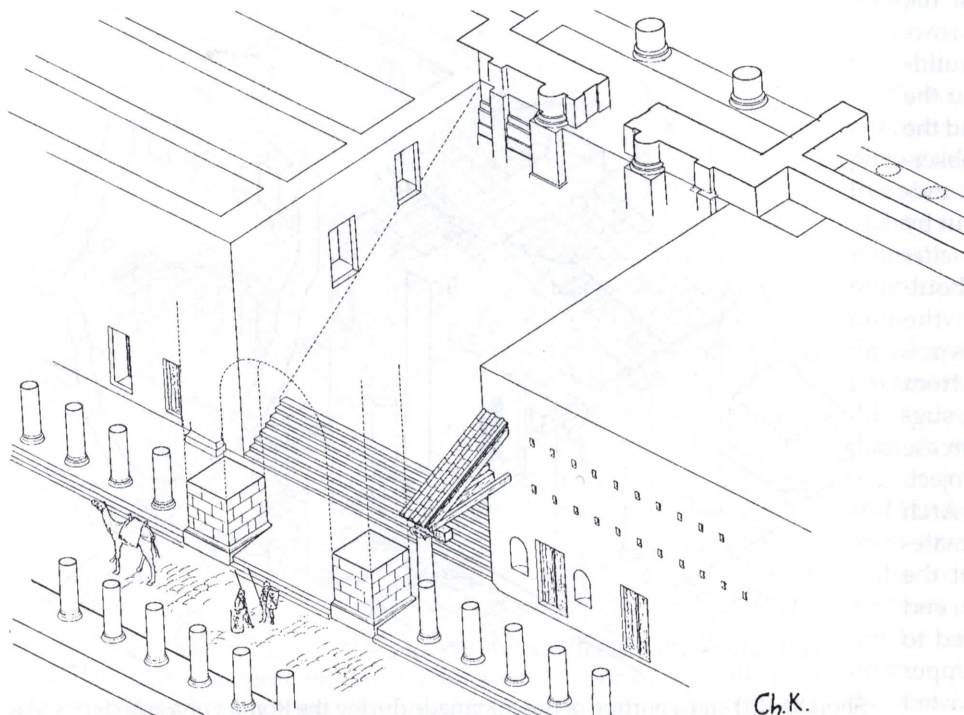


Petra: Colonnaded Street and Shops

*Chrysanthos
Kanellopoulos*

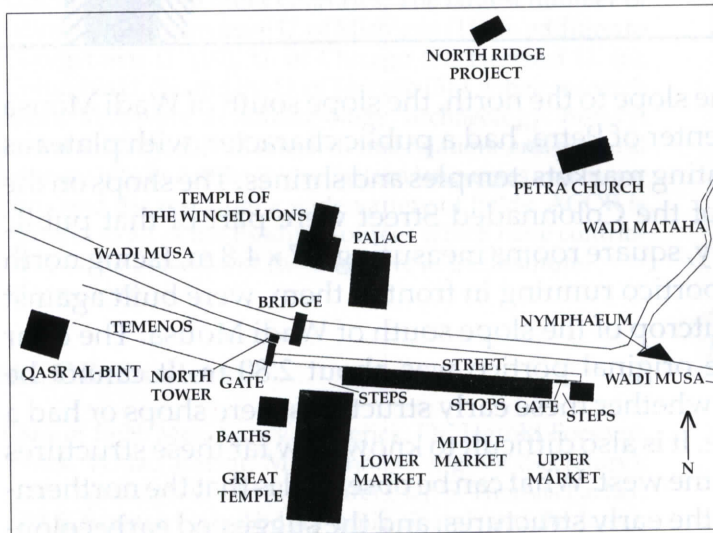
Unlike the slope to the north, the slope south of Wadi Mousa in the city center of Petra, had a public character, with plateaus accommodating markets, temples and shrines. The shops on the south side of the Colonnaded Street were part of that public area. Initially, square rooms measuring 4.7 x 4.8 m, facing north and with a portico running in front of them, were built against the rocky outcrop of the slope south of Wadi Mousa. The clear space of the original portico was about 2.80 m. It cannot be ascertained whether these early structures were shops or had a different use. It is also difficult to know how far these structures extended to the west. What can be observed is that the northernmost line of the early structures, and the suggested early colonnade in front of them, corresponds to the corners of the Temenos Gate. The early (Nabataean) street, associated with these early buildings and the colonnade, was at least 11 m wider than it would be later; it was almost 18 m wide, corresponding to the full width of the Temenos Gate, or to an earlier structure or structures which the gate replaced, between the so-called Roman Bath Complex and the North Tower (traditional designa-

tions are used here for such structures). In the Nabataean period, the street itself was a sand and gravel track (as suggested by previous excavators); during Z.T. Fiema's excavations in 1997, two hard packed surfaces partially paved with small irregular cobbles were discovered. The narrow and oblong temenos of Qasr el-Bint seems to be an extension of the early wide street. In view of the this, the name Street Gate, given to it by W. Bachmann (*Das Strassentor*), is not entirely inappropriate.



Restoration drawing of the shops and steps

The subsequent expansion of the shops and the colonnade narrowed the clear width of the early street (from 18 m to 6.20 m), such that the side entrances of the 18 m wide Temenos Gate would have to correspond to the colonnaded sidewalks. There are parallels, such as the Triumphal Arch at Timgad and the three-way Arch of Palmyra. During this remodelling, the originally square shops were expanded to the north and became



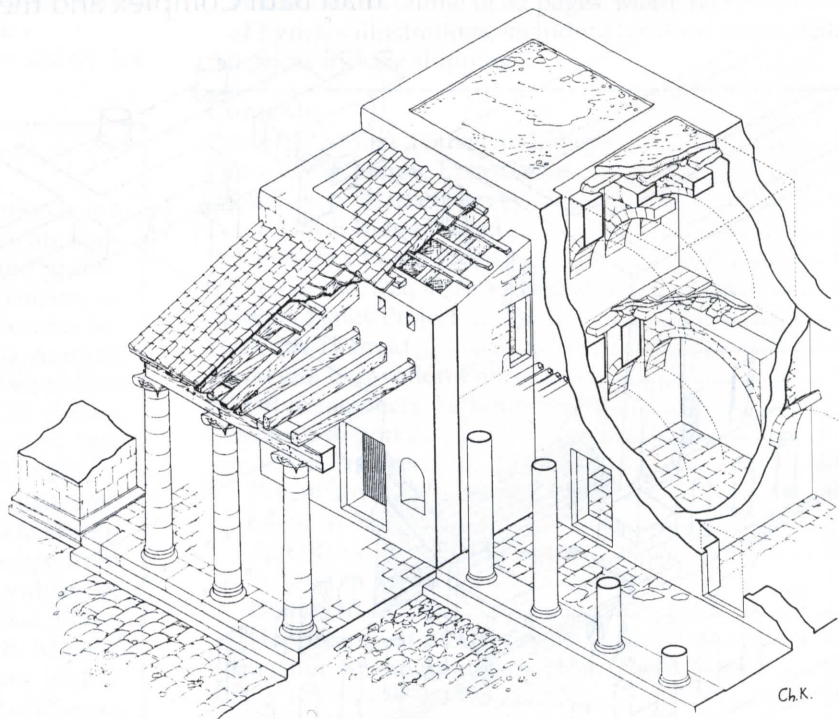
Schematic plan of the city center, using the traditional names

oblong. Just like the other old structures (Roman Baths, North Tower) of the slope south of Wadi Mousa, the shops, too, were incorporated into a uniform scheme against the series of retaining walls of the Markets and the Great Temple. The new front wall was erected on top of the stylobate of the earlier colonnade, and a new sidewalk and a colonnade at a distance 5.45 m from the shops' facades were built, thus narrowing the street. During the same building phase, the staircase leading to the Upper Market was constructed and the street was paved. Architectural observations support archaeological evidence from excavations carried out by Z.T. Fiema in 1997 [ACOR Newsletter 9.1]. A large number of limestone boulders are incorporated into the underlayment of the staircase. This material can be interpreted as scrap from the pavement stones of the street, suggesting that the street and the staircase were built as parts of the same project.

At the same time, the Trajanic Arch was built (partially from re-used material) on the sidewalk in front of the staircase, interrupting the eastern end of the colonnade. The staircase led to the Propylaea of the so-called Upper Market. Although no colonnade existed in front of the staircase, the width of the

staircase corresponds to the rhythm of the colonnade; it equals the distance between seven columns spaced according to the average interaxial column spacing of the colonnade. The first and seventh column bases correspond precisely to the corners of the staircase. Additionally, the overall width of the piers of the Trajanic Arch is equal to the average interaxial column spacing of the Colonnade; this indicates that the dimensions of the pedestals conformed to and respected the rhythm of the colonnade. Had the arch been symmetrically situated relative to the staircase, it would have been one of the largest such arches in Jordan, with an opening measuring approximately 6.20 m. It should be noted that the staircase to the Propylaea and the Upper Market is too steep to have been used for camels or horses.

The pseudo-Corinthian (or horned) Nabataean capitals found scattered along the street are very similar; the dimensions, height, and diameter of the necking are nearly the same. It is very tempting to attribute more than one of them, although they are not exactly identical down to cm range, or nearly all of them, to the square colonnade which ran along all four sides of the Upper Market. This hypothesis is strengthened by the fact that the colonnade inside the Upper Market was, in the middle of its northern wing, interrupted by the larger pseudo-Corinthian columns of the Upper Propylaea. The pseudo-Ionic (of the so-called cushioned type) capital which is restored on top of the reconstructed shaft of the Street Colonnade most probably did not originally belong there. Its diameter does not match the usual minimal or non-existent



Shop XXVIII and a portion of the colonnade during the Roman phase juxtaposed to adjacent Shop XXVII as it could have looked during the early phase.

tapering of columns in Petra. Either one of two other pseudo-Ionic capitals which are scattered in the area may be restored on top of the Colonnade shafts. The diameters of the two examples are identical. One wonders if the Colonnade had more than one type of capital. The gradual narrowing of intercolumnar distances towards the Temenos Gate is consistent; it is difficult to say whether this was accidental or an intentional refinement in order to increase the perspective effect.

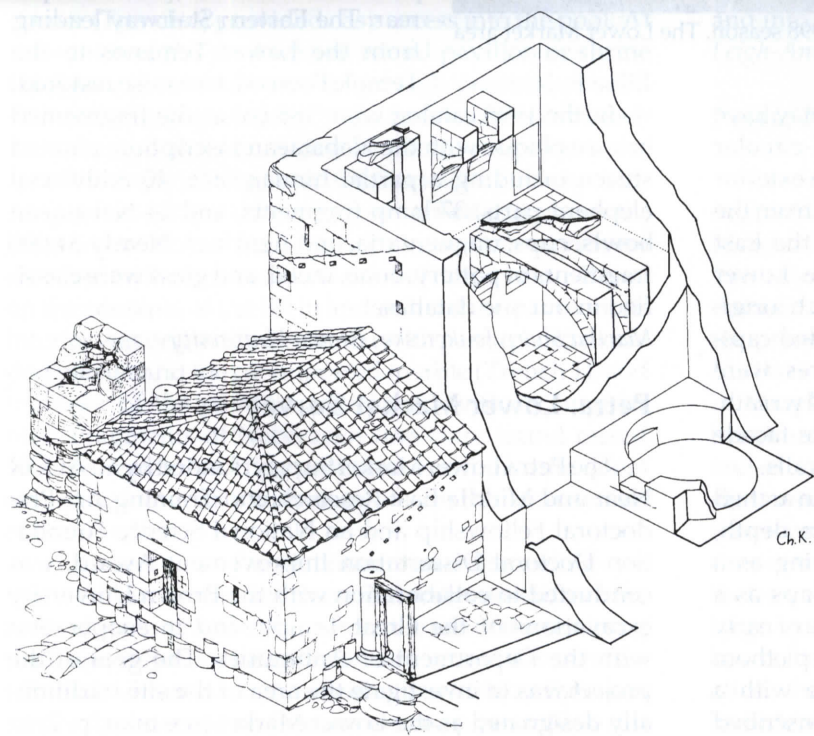
Commercial use of the shops is established from the predominance of storage jars among the finds. However, the installation of beds around the walls of Shop XXVIII, the one south of the staircase, indicates that the latter was used as a tavern. Its proximity to the Nymphaeum, which made possible the provision of running water, is also indicative. The doorway of Shop XIX, situated north of the staircase is 0.89 m wide, unlike the other openings of the shops which have widths ranging from 1.24 to 1.68 m. The exceptionally small width of doorway no. XIX may be related to security concerns in light of the discovery of more than a hundred coins inside the room.

The area around the staircase to the Upper Market can be recognized as a station or resting point within the city. It generally marks the end of the necropolis and cliffs and entry to the narrower city and leads into a more organized, artificial environment. Specifically, it marks the beginning of a new entity, the Colonnaded Street and Shops, the other end of which was at the Temenos Gate. The canyon of Wadi el-Mataha, meeting Wadi

Mousa at this very point, combined with the cliffs across and a narrowing of the landscape must have created a natural border. The staircase to the Upper Market with the Nymphaeum across, flanked by a shop used as a restaurant as well as a room that served as a "treasury" of some kind, is further evidence of the character of the area. It may not be a coincidence that the Arch honoring Trajan was erected exactly at this point. From the Colonnaded Street, and with the doors of Temenos Gate shut, traffic was distributed through "exits" south and north to the Upper Market, Middle Market, Great Temple and over bridges across the wadi to the so-called Palace and the Temple of the Winged Lions. The lack of wheel marks on the pavement of the Colonnaded Street supports the hypothesis that it was not a main artery and cannot easily be identified with the *Cardo Maximus*. This would also explain the softer sandstone pavers that were used beyond the dead-end of the Temenos Gate; they were used behind the gate and inside the sacred space of the sanctuary where constant traffic was probably not allowed. Equally, circulation within the street does not seem to have given access to domestic areas of the city. The street, with its lateral "exits," may have served, beyond a natural narrowing of the landscape, as the processional way leading to several piazzas and sanctuaries. The arrangement, with a Nymphaeum at the beginning, resembles the colonnaded street along the river bank at Leptis Magna.

The probable collapse of the upper story due to the A.D. 363 earthquake caused a partial destruction of the colonnade. Later, Byzantine structures were built from reused blocks against the shops' facade, thus encroaching onto the colonnaded sidewalk of the prior phase. Some of them even extended partially out over the street, resulting in a further narrowing of that street.

Restoration work in 1998 involved the enhancement of the remains of the western pier of the Trajanic Arch, the facade wall of five shops and colonnade, reconstruction of arched walls inside the shops from original voussoirs and ceiling beams and the partial re-erection of one Propylaea column. The underlayment of the staircase was consolidated and dislocated blocks of the street's pavement in front of the shops were reset; this included the re-incorporation of more than 20 scattered flagstones. The installation of iron doorframes is meant to brace and buttress the exposed doorjambs as the openings are now practically gaps in the walls. Iron doors in three of the doorways obstruct traffic inside the shops. The latter can be safely used as storage rooms for prominent architectural members found in the area. Appropriate documentation will soon be published.



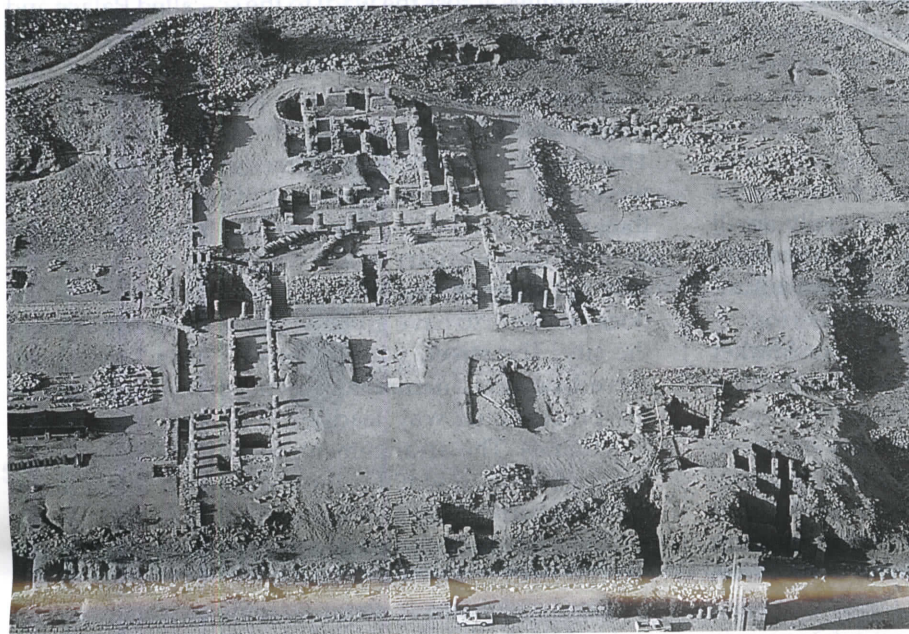
Axonometric reconstruction of Shops XXVIII and XXVII during the Byzantine phase with later structures built within the destroyed porch/sidewalk, later round installation inside room XXVII, and hypothetical condition of ruined pier of the Trajanic Arch.

Petra: Great Temple Excavations

Under the auspices of the Jordanian Department of Antiquities, the 6th excavation season of the Great Temple of Petra took place between June 9 and August 10, 1998.

In the Propylaeum, an arched walkway parallel to the Colonnaded Street, was excavated to a 3.5 m depth. It was constructed earlier than the present steps leading from the Colonnaded Street into the Temple precinct.

Completely excavated in the Lower Temenos was the elegantly-buttressed East Exedra, appointed with



Aerial view of the Great Temple at the end of the 1998 season. The Lower Market area is to the left.

interior benches and a central podium, which may have served for the placement of statuary. This semi-circular structure is preserved to a 5.8 m height, a 12.4 m exterior width, a 6.7 m interior width, and a 5.4 m depth from the double entry columns to its rear wall. From the East Exedra there is now a grand vista over the Lower Temenos' triple colonnaded walkways, which originally were adorned with Asian elephant-headed capitals. Five pilasters with relief-sculpted figures were found; one was embellished with an ornamental wreath. These elements probably fell from the Temple façade and served as building components for later walls.

Fully revealed behind the East Exedra was an arched structure measuring 10 m by 3.5 m by 5 m in depth, partially cut out of bedrock. Originally serving as a cistern, it later saw use as a dump and perhaps as a workshop. Recovered here was a full repertoire of early 2d century Nabataean painted and plain wares, a plethora of exquisitely painted plaster, including one with a partial Nabataean inscription, a Nabataean-inscribed bronze plaque, bone implements, and several Nabataean coins.

In the Temple, the excavation of the West Corridor with frescoed walls standing to a height of 6 m was

completed. This excavation made it possible to measure the Temple as 42.5 m in length. The visitor can now walk down the West Corridor and mount the southwest stairs to the Temple center for a view of the inner rooms. Descent is facilitated by the now-consolidated vaulted north-south stairway through the arch into the West Corridor, to the partially-excavated Theatron, and from there, to the Pronaos and the Temple entrance.

Highly informative was the excavation of the Temple's inner Central Arch to a depth of 5.25 m. Cut out of bedrock, and measuring 8.52 m by 3.32 m, its floor was

comprised of a canalization system with an additional series of bedrock-cut channels. Found in the canalization was a Nabataean cup. In the debris above were 160 coins, tentatively dated to the Late Roman period.

Also in 1998, excavations recovered more of the East Corridor. Here the initial deposit was clogged with fallen column drums decorated with fruit and acanthus-laden Nabataean floral capitals. Several drums of the Temple East were removed, stabilized, and re-erected. Among the projects involving the consolidation and conservation of the structure was the anastylosis and re-erection of 11 courses of the heart-shaped southeastern column of the Temple rear. The Eastern Stairway leading from the Lower Temenos to the Temple Forecourt was also restored.

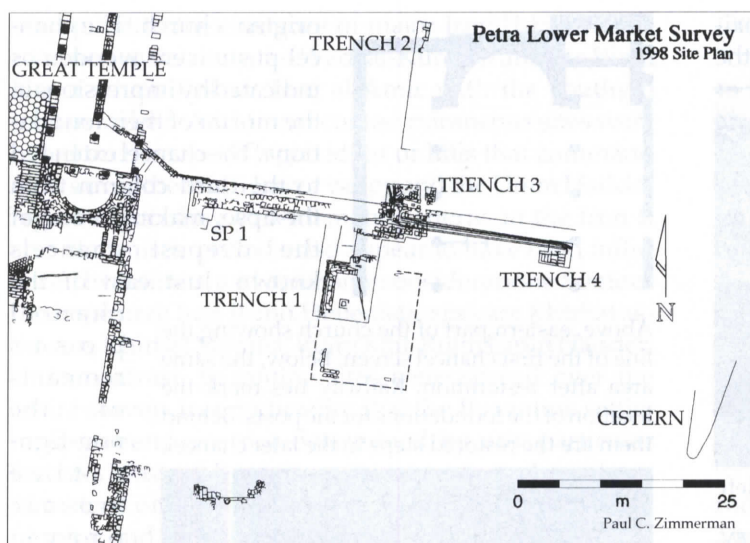
In the 1998 catalog were 186 coins, the fragmented bronze plaque with the Nabataean inscription, painted stucco including a partial human face, 40 additional elephant parts, 37 lamp fragments, and 24 Nabataean bowls, cups, unguentaria, and figurines. Nearly 34,000 fragments of pottery, bone, metal, and glass were classified in our site database.

Martha Sharp Joukowsky, Brown University

Petra: Lower Market Survey

The Petra Lower Market Survey, funded by an ACOR Near and Middle East Research and Training Act Pre-doctoral Fellowship and an National Science Foundation Doctoral Dissertation Improvement Award, was conducted in collaboration with the Brown University excavations of the Great Temple and in cooperation with the Department of Antiquities. The goal of the project was to investigate the area of the site traditionally designated as the Lower Market (see map, p. 2) in order to determine its function, historical development, and its relationship to the Great Temple and other monuments located in the city's civic center.

A survey and excavation of the Lower Market was



carried out over a two-month period in the summer of 1998. Work began with a surface collection of the area, the creation of an accurate map of its topography (using the Electronic Digital Mapping system provided by MASCA), and the location of architectural components exposed at the surface. Subsequent excavations focused on the south (Trenches 1, 3, and 4, and SP 1) where the ruins of a rectangular structure were clearly visible at the center of a terrace created by a large retaining wall which bisects the site. These excavations revealed that the entire southern half of the Lower Market is occupied by a monumental open-air pool (46 m x 23 m x 2.5 m) lined with hydraulic cement. Steps in the northeast corner (Trench 4) provided easy access into the pool. At the center of the pool was an island pavilion or shrine (11.5 m x 14 m) built on a 2.5 m high pedestal of solid stone construction faced with hydraulic cement (Trench 1). A bridge allowed access to the pavilion from the center of the retaining wall. A 4.5 m wide doorway with a triple step-recessed door frame marks the front (north) entrance of the building; similarly wide doorways were detected on the east and west sides of the pavilion. Based on the contents of the fill in and around the pavilion, its interior was originally decorated with painted and moulded plaster and tiles of imported marble (Trench 1), and the floor of the pavilion was paved with rectangular tiles. Fragments of Nabataean fine ware found mixed into the cement bedding provide a terminus ante quem of the late 1st to early 2d century A.D. for the construction of the pavilion.

Large sections of an elaborate water channeling system were uncovered which carried water down from the rocky slopes of Ez-Zantur, across the top of the retaining wall, and down to the lower terrace where it was redistributed, either in stone conduits which radiate out across the lower terrace or in ceramic pipes which run along the base of the retaining wall and connect with the drainage system in the Lower Temenos of the Great Temple complex. The convergence of water channels onto the lower terrace, along with its association with an

ornamental pool and pavilion and its lack of visible architectural features, except for a small section of wall at its center (Trench 2), makes it logical to deduce that the lower terrace was the site of a formal garden. Such gardens, or *paradeisoi*, are known in association with ancient Assyrian, Babylonian, and Achaemenid palaces. Swimming-pools and artificial lakes became a popular feature of *paradeisoi* during the Hellenistic period (see I. Nielsen, *Hellenistic Palaces: Tradition and Renewal*, 1994). The most comparable examples to Petra's *paradeisoi* known archaeologically are the pleasure gardens of the many palaces of Herod the Great dated to the late 1st century B.C. Petra's *paradeisoi*, however, appears to belong to the larger Great Temple complex (see above), through which one had to pass to gain access to the garden. A doorway flanked by two columns was uncovered

on the escarpment overlooking the pool and may mark an entrance to the gardens from the residential quarters on Ez-Zantur to the south. Access to the gardens from public and residential quarters of the city may indicate a more public function for Petra's *paradeisoi* than was typical for the palace gardens noted above.

Based on the material remains, the pool continued in use into the 4th century A.D. it was destroyed, most likely by the A.D. 363 earthquake which caused major damage to much of Petra. Evidence for reuse of some of the water channels, and the construction of walls and field terraces are evidence for the continued use of the Lower Market area throughout the Byzantine and Medieval periods and into the modern era.

Leigh-Anne Bedal, U. of Pennsylvania

Petra: North Ridge Project

In cooperation with the Department of Antiquities, excavations on the northern ridge were conducted from March 25 through April 2, and Sept. 21 through 24, 1998. The objectives of this year were to continue investigation of the southern approach to the ridge and to finalize the presentation of the Ridge Church.

Northern Side

Simple clean-up just outside of the northern wall of the church revealed the existence of a shaft just next to, and extending under, the foundation of the church. The shaft was cleared and a chamber tomb with four loculi was found. The tomb had been robbed before or at the time of the construction of the Byzantine church. Nevertheless, coins and a gold earring were recovered as were large quantities of ceramics including several intact bowls, lamp fragments, figurine fragments, and bones, all of which are now being studied. The ceramics, which include at least 200 restorable forms, date from the later part of the 1st into the 2d centuries A.D.

Southern Approach

Across from the main entrance of the church a small structure was uncovered, the function of which is not yet

clear. The exterior of the building measures approximately 5 m by 2.5 m. It is divided into two parts: to the



The structure across from the Ridge Church. East is to the left.

east is an entry hall leading to a very narrow doorway. From that doorway, one enters a room measuring only 1.5 by 1.6 m. The wall in the north of this room has a V-shaped slit window. The eastern half of the room was originally paved with marble of which only a few pieces remained. The western half of the room contains a "basin" measuring 0.9 by 0.5 m. It is presently preserved to a height of ca. 0.4 m. This feature is certainly the focus of the building. Its function, however, is as yet unclear.

A small wall separates the basin from the eastern part of the room. The eastern face of this wall is marble and has a Greek inscription. The stone is 36 cm high and was



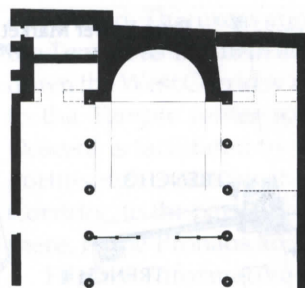
Part of the inscription

89 cm wide but was found broken into two parts. On it are carved ten lines of approximately 36 characters per line. The upper part of the inscription is poorly preserved but the lower five lines are in good condition. It certainly mentions Palaestina Salutaris and also seems to mention "speakers of a barbarian tongue" and "fighting." It may be honoring a person, perhaps a soldier. In its position in this building, the lower half was below the level of the marble floor to the east of the basin. It would therefore seem that it was reused in this building.

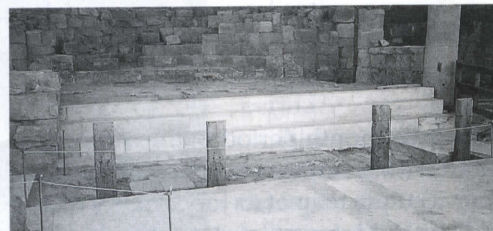
Patricia M. Bikai, ACOR

Petra: Petra Church Project

During the course of preparations for restoration of the *opus sectile* pavement of the nave of the church in the spring of 1998, removal of the mortar bedding of the original pavement revealed the line of the chancel of the



Above, eastern part of the church showing the line of the first chancel screen. Below, the same area after restoration. Railway ties mark the location of the foundations for the posts. Behind them are the restored steps to the later chancel.



indicating that the whole chancel was paved similarly.

Pierre Bikai and Nazez Fino, ACOR

Survey of the 'Iraq al-Amir Region

During the summer of 1998, the 'Iraq al-Amir Project conducted an archaeological survey designed specifically to examine the existence of ancient settlements and road systems connecting the Jordan Valley with 'Iraq al-Amir and the Transjordan plateau, particularly along the Wadi al-Kufayn and the Wadi Jariya. Attention was also given to the settlements in the hilly arid region between the Wadi al-Kufayn and the Wadi ash-Shu'ayb to investigate its association with 'Iraq al-Amir and the settlements in the southern Jordan Valley.

In 1998, the survey team recorded 88 archaeological sites with wide span of human occupation, with the earliest dating to the Paleolithic and the latest to the Ottoman period. However, the survey data clearly point to a consistent and dense occupation of the survey area for the Chalcolithic-Early Bronze I, Iron II, Hellenistic, and Byzantine periods. The concentration of Chalcolithic and Early Bronze sites is along the Wadi al-Kufayn and in the Umm Hadder region north of the Wadi Kufayn dam. Two of these sites, situated about 2 km north of the dam, are represented by a large number of broad-room houses and extensive wall lines. The architectural and ceramic materials from the sites are reminiscent of those from Tulaylat al-Ghassul.

A striking fact characterizing the locations of Iron II and Hellenistic sites are their proximity to Wadi al-Kufayn and the Wadi Jariya. Another noteworthy finding is that the majority of these sites are either watchtower-like sites or fortified villages built within a short distance of each other. They were often built in locales with no immediate relation to agriculture. All these facts

may point to the existence of major Iron II-Hellenistic road networks along the Wadi al-Kufraiy and the Wadi Jariya which linked 'Iraq al-Amir with the southern Jordan Valley. Additional contemporaneous sites were noted on the tops of high ridges or hills that command views over the Wadi Jariya valley and the Umm Hadder region. Accordingly, settlement patterns in the Iron II and Hellenistic periods also appear to have been influenced by military and defensive considerations. Some of the important Iron II and Hellenistic sites are Khirbat as-Suwan, Khirbat Medina, Rujm Klal, Rujm Umm Hadder.

In contrast, Byzantine sites were spread over the entire survey area, indicating that the Byzantine settlement pattern was not determined by any particular factors. Most of Byzantine sites appear to have been farmstead or watchtower-like sites associated with dry farming and animal-herding. A surprising discovery of



Sofinaz Kabagah, a draftsman of the 'Iraq al-Amir Project, working at a watchtower site.

the 1998 season was the almost total absence of Islamic sites in the region between the Wadi al-Kufraiy and the Wadi ash-Shu'ayb. This was also true of the Early Bronze II-III, Middle Bronze, Late Bronze, and possibly Iron I periods. Several sporadic Paleolithic sites were also registered along the Wadi Jariya and the Wadi al-Kufraiy.

In conclusion, the 1998 fieldwork of 'Iraq al-Amir project has documented a rich and diverse human occupation of the area between the Wadi al-Kufraiy and the Wadi ash-Shu'ayb. The surveyed area witnessed settlement intensification in the Chalcolithic-Early Bronze I, Iron II, Hellenistic, and Byzantine periods.

Chang-Ho C. Ji, La Sierra University

Madaba Plains Project

Madaba Plains Project (MPP) continued excavations at Tall al-'Umayri and Tall Hisban and vicinity in order better to understand the cycles of intensification and abatement in land use in central Transjordan.

Tall al-'Umayri

Excavations uncovered more earthen floors surrounding an Early Bronze Age I dolmen, or large stone burial monument, on the southeast slope of the hill. This is the first dolmen in all the Mediterranean basin to produce quantities of burials (20), complete EB I pottery vessels

(20), and surfaces indicating patterns of use.

The team also uncovered three new cities which date to times of limited settlement in Jordan. The site has already produced impressive cities from more highly populated periods. Altogether there are almost 20 superimposed cities, one on top of the other. The most impressive new discoveries include the remains of a building made with large stones from the Middle Bronze Age. Also from that period are the foundations of a tower perched atop a great earthen rampart which raised the height of the hill over 5 m. Associated with this tower was a water pool, which may be unique for this period in Jordan. There was also evidence for a large building made of massive stones inside the fortification system.

Just north of these ruins and slightly higher is a two-room building which dates to the Late Bronze Age. There were two levels of floors to the structure, each floor covered with a thick layer of burned bricks and wood, probably from destructions caused by invading armies. The bottoms of the walls of this building have not yet been found, although as far as excavated to this point, they stand over 3 m tall, constructed of flat stones which look much like mudbricks.

This season, excavators worked through the massive destruction of the early Iron I town. The debris was made up of burned bricks and roofing materials such as wooden beams and reeds. Just who destroyed the town is not known, but it seems to have been a military invasion to judge by the many bronze weapons found in the debris. One of the stone-pillared rooms was filled with almost 2 m of pure ash. Another significant find from this city was the thick town wall made of large stones, some over 1 m in diameter and almost 2 m in length. The wall was plastered in antiquity and, as uncovered by the excavators, stood 3 to 4 m above the ground. It must have stood higher in ancient times.

The team also attempted to locate the southern limits of 'Umayri's Iron II/Persian administrative complex. This was accomplished by uncovering a large wall which probably dates to the early Iron Age but was reused by the late Iron Age bureaucrats who ran the administrative complex. South of the large wall were other buildings dating to the Persian and Hellenistic periods. Minor settlement at the site also took place during the Hellenistic period when a few residents constructed a small farmstead on the southern edge of the site above much more substantial ruins from the Iron Age II. This small farm may have produced wine on the hillsides surrounding 'Umayri as well as grain crops in the valley bottoms. Among the small finds were about 10 seals and seal impressions, bringing the total discovered at the site to over 80, making this one of the largest collections from any site in the region.

Also part of archaeological research at 'Umayri for several seasons, the sub-surface mapping team again used Ground-penetrating Radar and differential Global Positioning System at the site, this time in areas north and east of the major areas of excavations on the western

portion of the tall, along the north rim of the tall and on the southern side, as well. In addition, they explored neighboring slopes for possible tombs and conducted seismic-reflection research at Tall Jalul.

Tall Hisban and Vicinity

Renewed research at Tall Hisban and vicinity involves investigation of several archaeological periods from prehistoric through modern. Following a hiatus from 1976 to 1996, work resumed at Hisban and, in 1998, saw its third new season. The current efforts are intended to fill in the gaps, to answer questions which have come to light in the process of publishing the final reports on the original excavations and also to re-examine certain questions left unanswered by the original campaigns.

The first example in this regard is the question of Tall Hisban's prehistoric past. In connection with a systematic survey of the hill of Hisban, the team identified a total of 154 stone tool fragments, dating from the Middle and Upper Paleolithic periods. From the Epipaleolithic, a lunate having served either as an arrowhead or sickle blade was found, while the Neolithic was represented by several axes and arrowheads. Excavations in a cave complex near the summit of the tall produced further evidence of prehistoric activity, including several hammer tools, scrapers, and arrowheads. In addition, a total of 57 sites with scatters of prehistoric tools were also identified beyond the site by the survey team. The Chalcolithic and Bronze Age uses of the site remain elusive, despite the discovery, during previous seasons, of an Early Bronze Age cemetery less than 1 km away. Architectural remains from Iron I also continue to be elusive. The team has identified a massive bedrock trench some 4 m deep and 2-3 m wide, running east-west across the south shoulder of the tell as a dry moat to protect the Iron I village at its weakest point.

While no one doubts that Tall Hisban was a prospering town during the Iron II period, judging from the large quantity of ceramic objects and inscriptions dated to this time, there is actually very little to see architecturally. Preliminary assessments of new excavations on the northeast corner of the tall suggest an Iron I cave complex later reused by the Iron II inhabitants as tombs. Caves played a greater role during the Iron Age than previously thought.

Extensive use of caves continued and intensified into the Hellenistic period. Around 200 B.C. a massive fortification was placed at the summit of the hill, consisting of four large towers linked by four equally massive perimeter walls.

Tall Hisban during the Byzantine period incorporated well over a thousand households. The team carried out an intensive survey of the water and soil management structures still extant in the wadi to the west and below the summit of Hisban. They mapped here an elaborate basin-wide water management system consisting of terraced hill-sides and a wadi bottom crisscrossed by numerous check dams to prevent gully for-

mation. The remains of numerous agricultural cisterns and a reservoir were also documented.

The Islamic periods at Hisban are well represented. Of particular interest this season was the area immediately south of the Mamluk bath complex on the summit. Excavations brought to light a series of small vaulted rooms clustered around a central courtyard. The walls which enclosed the building were also identified. The arrangement of the spaces in this building and its manner of construction, reminiscent of palaces of Mamluk administrators seen at Kerak and Aqaba, suggest it may be an administrative palace.

The season concluded with a 30th-anniversary celebration (1968-1998) at the summit of the tall and a commitment to make Hisban an open-air classroom for the archaeological education of visitors as well as Jordan's present and future citizens.

Douglas R. Clark, Lawrence T. Geraty, Larry G. Herr and Øystein S. LaBianca

Wadi ath-Thamad

During a third season of excavation and survey by the Wadi ath-Thamad Project, a Canadian team unearthed new information about the Iron Age fortifications and the Nabataean/early Roman town at Khirbat al-Mudayna on the south bank of the Wadi ath-Thamad. The project is under the direction of author and the excavations on the tell were supervised by Robert Chadwick. At the same time, Carlos Cordova conducted a geographical survey of the wadi and Chris Foley directed the regional survey. This year's team included students from Wilfrid Laurier University in Waterloo, Ontario, and the University of Saskatchewan in Saskatoon, Saskatchewan. The work was carried out with the support of the Department of Antiquities of Jordan and its director, Dr. Ghazi Bisheh. Department representatives Huda Kilani and Yazid Ulyyan assisted at the dig.

The Iron Age Gate

Khirbat al-Mudayna is a small, steep mound about 40 km south of Amman. Two previous seasons of excavation exposed rooms of a six-chambered gate and Carbon-14 dates from tree and reed samples of 810 and 790 B.C. This season, excavation in the central road of the six-chambered gateway at the north end of the tell revealed the collapsed debris of upper storey rooms along the entire length of the road. Ceiling material, fine wall plaster and roof beams all appeared among the stones that had fallen from the upper storey walls. Along the road itself, the piers of the gate rooms remained standing above the level of the ground floor. Along the roadway, each room was partially blocked off by a thin crosswall that framed small doorways that opened into each room. The fact that both the piers and the crosswalls were covered with the same plaster suggests contemporaneity. Scattered throughout the debris in the road were iron and bronze arrowheads indicating that an attack brought the town to an end. Finds in-

cluded animal figurines, seals, and female figurines.
The Nabataean Settlement

Work in the lower town unveiled the construction history of a large (10 x 16 m) reservoir which had been lined with plaster and covered by a ceiling supported by opposing arches. Only a small number of Nabataean to early Roman period ceramic sherds and partially restorable vessels testify to the principal period of use. To the north, in a typical Nabataean house, a stone pavement was exposed in the southern room (810) and an elaborate threshold led north into another area from Room 801, possibly into a courtyard. Coins found in both buildings, along with Thamudic inscriptions and painted pottery from Petra, will help date the structures, probably to about the 1st century A.D.

The Regional Survey

The project's survey team identified 24 new sites in the Wadi ath-Thamad area dating from the Middle Paleolithic to the Byzantine period. Of special note is the discovery of two broken building stones, each with a Thamudic inscription, from WT Site #16 (West Ureinebeh) where a complete inscription was recovered in 1996. The largest known inscription was recovered at Site #48 where the Thamudic text consisted more than 500 characters and measured more than 1.5 x 2.5 m.
P.M.M. Daviau, Wilfrid Laurier University

Humeima Excavation Project

Excavations at Humeima (ancient Hawar) between June 22 and August 2, 1998, concentrated on a Roman/Byzantine house and on the Abbasid family's qasr and mosque. In addition, preliminary examination was carried out on a presumed Roman watchtower 1 km SE of the site. Remarkable architectural and art historical results were achieved.

A mudbrick house in Field E125 provided exciting information about Hawar in the centuries following the arrival of the Roman garrison. Preliminary analysis suggests the house was originally constructed in the late 2d century or early 3d century and destroyed by a cataclysmic event in the late 3d century. In its initial phase, most excavated rooms of the house were decorated simply with red bands and red dots on a white background. In contrast, one room was decorated more elaborately with frescos depicting common Graeco-Roman motifs: e.g., a pedestaled birdbath and mythological figures. Most of the figures are still too fragmentary for identification but a label (in Greek) identifies one as Kleio, the Muse of history. Although the wall decoration suggests the Romanized tastes of the house's occupants, their ceramics followed indigenous traditions. In addition, several artifacts found within the house were manufactured in Egypt. This building exemplifies the cultural synthesis created in Provincia Arabia by Hellenized Nabataeans and Roman soldiers originally from Egypt and Syria.

Continued excavation at the Islamic qasr and mosque



Fresco of the Muse Kleio

the periphery from 42 x 52 m to 50 x 61 m. We found new evidence as well for Fatimid-Ottoman occupation, and a Byzantine wall that extended for almost 60 m under the southern part of the Qasr and adjacent mosque. Excavation revealed many later, mostly Ottoman, installations and artifacts, including many bins, some likely for animal feed, a *mastaba* (bench), and bronze objects such as a kohl stick and forceps. Many 4th and 5th-century coins were found along the north face of the Byzantine wall, which was probably not visible at the time the Qasr and mosque were built. Further excavation of the deepest stratum in Room 02 yielded more ivory furniture panels carved with human and animal figures and plant motifs. Destroyed by fire and the consequent collapse of the roof, the ivory fragments were once again associated with large amounts of charred wood and corroded iron fasteners and hinges. The human figures include two soldiers wearing armor, and a facing male (?) figure with a bouffant hairdo who holds a cartouche. Clearly of non-local, possibly Persian or Central Asian origin, the military motifs reflect the



Figure holding a cartouche, ivory

Abbasid intent to overthrow the Umayyads and demonstrate a close affiliation with their mid 8th-century power base in northeast Iran.

A watchtower in Field A127, earlier assumed to be Roman, turned out to be Byzantine in date, with Early Islamic and possibly Ottoman phases. Although the structure may have started out as a watchtower, in its developed phase it bears more resemblance to a farmhouse. Further excavation is necessary.

We continued our program of site development, clearing the rest of our excavation dumps from the site and undertaking the consolidation of excavated structures in the Roman fort.

John Peter Oleson, University of Victoria, Rebecca M. Foote, Harvard University, and M. Barbara Reeves, SUNY-Buffalo

Director's Report: January through June 1998

Pierre M. Bikai

ACOR Projects

Petra Church Conservation Project, Baptistry Restoration, Chrysanthos Kanellopoulos, architect; Floor Restoration, Pierre Bikai, Patricia Bikai, and Nazeh Fino, USAID and the Ministry of Tourism and Antiquities

Petra, Roman Street Project, Chrysanthos Kanellopoulos, architect, USAID and the Ministry of Tourism and Antiquities

Petra, Petra Mapping Project, ACOR and Hashemite University, USAID Petra Endowment

Petra Papyri Publication Project

U. of Michigan: Robert W. Daniel and Traianos Gagos; U. of Helsinki/Academy of Finland: Jaakko Frösén, Antti Arjava, Naarit Kaimio, Jorma Kaimio, Marjo Lehtinen, Mari Mikkola, Mari Mustonen, Tiina Rankinen, Manna Vesterinen, and Marja Vierros; Brigham Young U.: Steven Booras, Gene Ware, and Omar Kamal

Lectures

June 28. Traianos Gagos, *Negotiating Money and Space in the Sixth Century Petra Papyri*

June 29. Erin Addison and Stefania Dodoni, *Qastal: The Excavation*

June 30. Geoffrey Clark, *Jordan in the Context of the Levantine Paleolithic*

June 30. Alan Simmons, *Core and Periphery in the Neolithic*

ACOR-Assisted Field Projects

Ghwair in the Wadi Feinan, Alan Simmons, U. of Nevada/Las Vegas, and Mohammad Najjar, Dept. of Antiquities

South Araba Survey, Don Henry, U. of Tulsa

Petra: North Ridge Project, Patricia M. Bikai, ACOR Roman and Byzantine Ayla (Aqaba), S. Thomas Parker, North Carolina State U.

Eastern Hasa Late Pleistocene Project, Nancy Coinman, Iowa State U., and Deborah Olszewski, Bishop Museum, Hawaii

Petra: Great Temple, Martha Joukowsky, Brown U.

Khirbet Muday Nat'aliya, Bruce Routledge, U. of Pennsylvania

Humeima Excavation Project, John Oleson, U. of Victoria

Tell Madaba, Tim Harrison, U. of Toronto

Madaba Plains Project, Larry Geraty, La Sierra U.; Larry Herr, U. College of Canada; Sten LaBianca, Andrews U.; and Doug Clark, Walla Walla U.

Khirbet Iskander, Jesse Long, Lubbock Christian U.

Tell Safut, Don Wimmer, Seton Hall U.

Qastal, Erin Addison and Stefania Dodoni, Hollins College

ACOR Remembers: H. Keith Beebe

Dr. H. Keith Beebe, Old Testament scholar, died at 77 after a distinguished international career. Professor Beebe died suddenly, July 13, 1998, of complications following heart surgery. He was emeritus professor at Occidental College, where he held the David B. & Mary H. Gamble Chair of Religion. A graduate of Occidental College, he later taught there for many years. Recently, Dr. Beebe was Biblical Scholar in residence at the Presbyterian Church of Chestnut Hill. Born in Anaheim, California, he graduated from Occidental College in 1943, received his Bachelor's degree in Divinity from Princeton Theological Seminary in 1945, and his doctorate from Columbia University in 1951. A man of many talents, he was ordained a Presbyterian minister in 1945. He loved music and riding, and played a season with the New York Giants football team in 1944.

Professor Beebe's career included a broad range of activities connected with his Old Testament studies: teaching, lecturing, research, archaeology and writing. He was widely recognized for his pivotal monograph on the domestication of the dromedary (camel), Dr. Beebe taught for two years at Beirut College for Women, now the Lebanese American University. He was a Research Fellow at the Albright Institute for Archaeological Re-

search in Jerusalem in 1965, and again in 1970-71. He served as Annual Professor of the American Center of Oriental Research in 1985. He participated in several archaeological expeditions in Jordan and Palestine, including excavating in Jerusalem and Bab edh-Dhra (the site of ancient Sodom and Gomorrah). For six seasons, he worked at the site of Caesarea.

Dr. Beebe moved to Philadelphia in 1985. In his retirement, he continued to teach and lecture, and enjoyed riding his beloved horse, Caesar. He was a driver for Town Watch in Chestnut Hill. Professor Beebe was instrumental in promoting adult education at the Presbyterian Church of Chestnut Hill, where he participated in ministry.

He leaves two children, Sarah Dooley and Lawrence Keith; five grandchildren; and his companion of twenty-five years, Anne Ogilvy. On September 26, 1998, a memorial service, attended by family, friends and colleagues, was held at the Presbyterian Church of Chestnut Hill. Contributions in his memory may be sent to: American Near East Refuge Aid (ANERA), 1522 K Street, N.W., Suite 202, Washington, DC 20005-1270; or to the Presbyterian Church of Chestnut Hill, 8855 Germantown Avenue, Philadelphia, PA 19118.

Wadi ath-Thamad, Michèle Daviau, Wilfrid Laurier U.
Um al-Jimal, Bert de Vries,
Calvin College
'Ain Ghazal, Gary Rollefson,
'Ain Ghazal Research Institute,
and Zeidan Kafafi,
Yarmouk U.

Fellows in Residence

*Near and Middle East Research
and Training Act (NMERTA)
Post-Doctoral Fellows:*

Patricia Carter, U. of Tennessee,
Collection and Preservation
of Jordanian Folk Music
on Site

Bruce Borthwick, Albion College,
Policy Making in Jordan in Regard to Water
Michel Reimer, American U. in Cairo,
History of Towns in Transjordan,
1920s to 1950s



Fellows Najib Hourani, Megan Perry, Waleed Hazbun, Michaelle Browsers, Charles Reineke, Michele Bonogofsky, Bruce Borthwick, Catherine Warrick, Benjamin Saidel, and Molly Davies

Robert E. Rook, Fort Hays State U. (Kansas),
Blueprints and Prophets: Americans and Water
Resources Planning for the Jordan River Valley,
1848-1980

Donors to ACOR

From January through June, 1998, the following friends of ACOR donated to the endowment: Prof. Denise Schmandt-Besserat, Mr. and Mrs. Kosmo Kalliarekos, Mr. and Mrs. Khaled Shoman, Dr. and Mrs. Edwin Schick, Dr. and Mrs. Prescott Williams, Jr., Mr. and Mrs. Burt de Vries, H.E. Senator Leila Sharaf, Mr. Rex Rice, Ms. Giulia Battiti Sorlini, Mr. Randolph Old, Mr. Harold Forshey, Mrs. Judy Zimmerman, Ambassador and Mrs. Wesley Egan, Dr. Donald O. and Mrs. Nancy Henry, Mrs. Nancy Lapp, Dr. Harold Forshey, the American Schools of Oriental Research (ASOR), Mr. and Mrs. Kenneth Miller, Dr. Gaetano Palumbo, Dr. Lawrence T. Geraty, Mr. Henry Christensen III, Dr. S. Thomas Parker, Mr. Stephen Bonadies, Mr. Robert Trainer (Trainer Family Foundation), Mr. Chuck Morse, Ms. Eleanor Hewlett Gimon, Dr. Avner Goren, the Joukowsky Family Foundation, and Dr. John Oleson.

General donations were made by Ms. Cynthia Shartzer, Mr. Henry Christiansen III, Mr. Steve Infantino and Mrs. Cindy Infantino, Mr. Bernard Selz (Selz Foundation), Mrs. Lee Seeman, Dr. Doris Miller, Mr. Felix Emse, Jr., Mr. R.J. Hunt, Mr. Robert Latz, Mr. Robert E. Mittelstaedt, Dr. Martha Joukowsky, Mr. Randolph Old, Dr. Khair Yassine, Mr. Charles P. Schutt, Jr., Mr. Ronald Atkins, Dr. Patricia Bikai, and Mr. Jabr Dumit and Ms. Julene Dumit. An in-kind donation was made by Mrs. Gail Cleveland.

The Jennifer C. Groot Endowment received contributions from, Mr. Timothy Ferrell, Dr. S. Thomas Parker, Mr. Bruce Gould, and Mr. Thomas D. Hendrickson and Ms. Laurel L.G. Hendrickson.

The Harrell Family Trust received donations from Mr. and Mrs. Edgar Harrell. The Bikai Endowment

received donations from the Community Liaison Office of the U.S. Embassy, Mr. Hershel Shanks, Dr. Rodney Grubb, Ms. Eleanor Lawson, and Dr. Pierre Bikai.

The Russell Trust received contributions from Ms. Kay Russell, Ms. Rebecca Salti, Mr. Bruce Ludwig, Dr. Chrysanthos Kanellopoulos, Mr. Glen Peterman, and Mr. and Mrs. Danny Beal.

Donations to the library endowment were received from Mr. Isam Khalife, Mr. Roger Boraas, Fr. John R. Lee, Ms. Debora Grace, Ambassador and Mrs. Wesley Egan, and the American Women of Amman.

Donations of books and journals were received from: Dr. Lytton John Musselman, Mr. Amjad Malkawi, Instituto Cervantes, Dr. Jaakko Frösén, Ms. Megan Perry, Mr. Robert Mittelstaedt, Dr. Ghazi Bisheh, Mr. Mohammed Yusef Oteishat, Rev. John R. Lee, Dr. Denyse Homès-Fredericq, Dr. Donald O. Henry, Mr. Glen Peterman, Mr. Rolfe Mandel, Mr. Peter Warnock, Dr. Robin M. Brown, Dr. S. Thomas Parker, Dr. Harold Forshey, Mr. Dan and Mrs. Nancy Gamber, Dr. Yitzhak Reiter, Dr. Geoffrey Clark, Ms. Michaelle Browsers, Dr. Zeidan Kafafi, Dra. Guadalupe Lopez-Monteagudo, Dr. Zaki M. Ayoubi, Dr. Tina Niemi, Mr. Charles Reineke, Mrs. Majda Muasher, Dr. Oded Borowski, Dr. Peter Fisher, Dr. Giuseppe C. Infranca, H.R.H. Princess Ghada Talal, Dr. Seymour Gitin, Dr. Michele Piccirillo, Ms. Fatma Marii, Dr. Thomas Weber, Dr. Ricardo Bocco (CERMOC), Ms. Aida Bensaad Maraqa (CERMOC), Mr. Thomas Dailey, Ecopeace, Ms. Susan Norton and Ms. Kathy Moran (National Geographic), Dr. Thomas Paradise, Dr. Andrew Shryock, Dr. Neil Hannestad, Ms. Nahla Natour (Ministry of Planning), Ms. Mayyada Nimri, Dr. John Oleson, Dr. Bruce Borthwick, Ms. Nagham Assaf, Dr. Bert de Vries, Ms. Edith Dunn, Dr. Leslie Quintero, and Dr. Robert Smith.

*Near and Middle East Research and Training Act (NMERTA)
Pre-Doctoral Fellows:*

Michaelle Browsers, U. of Minnesota, The Concept of Civil Society in Contemporary Arab Political Theory
Charles E. Reineke, U. of Missouri-Columbia, Mass Tourism in the Jordan Rift Valley: Economic, Environmental, and Cultural Effects

Michelle Bonogofsky, U. of California, Berkeley, Human Relationships among the Neolithic Burials of Jordan

Najib Hourani, New York U., The Politics of Anti-Politics: Bureaucratization and Development in Modern Jordan

Robert Caldwell, U. of Michigan, Petra Papyri

Leigh-Anne Bedal, U. of Pennsylvania, Petra Lower Market Survey

United States Information Agency Fellows:

Catherine Warrick, Georgetown U., The Politics of Culture: Gender and Discourse in Jordanian Society

Waleed Hazbun, M.I.T., Staging Liberalization? The Politics of Tourism, the State, and Global Economy in Jordan

Megan Perry, U. of New Mexico, Bioarchaeology of Bir Madhkur

Benjamin Saidel, Harvard U., Bedouin Ethnoarchaeological Survey Project

Joy Farmer, UCLA, The Political Economy of Private Sector Growth in Jordan

Russell E. Lucas, Georgetown U., Opposition and the Politics of Institutional Reform in the Arab Monarchies

Jennifer C. Groot Fellows:

Robin Marie Armstrong, North Carolina State U., Roman Aqaba

Joseph Brett McClain, U. of Chicago, Tell Madaba

Warren J.L. Wood, Willamette U., Humeima

Harrell Family Fellow:

Campion R. Carruthers, U. of Victoria, Humeima

Kenneth W. Russell Fellow:

Linah Ababneh, Yarmouk U., A Survey of Wood Species Used in Antiquity in Jordan.

National Endowment for the Humanities Fellow:

Andrew Shryock, State U. of N.Y., Buffalo, The Politics of Hospitality in Tribal Jordan

US/ICOMOS Intern:

Susan B. Tillack, U. of Oregon, Petra Church Documentation Project

Council of American Overseas Research Centers (CAORC) Affiliated Fellow:

Caroline Davies, Arizona State U., Paleoenvironments of the Arabian Shield

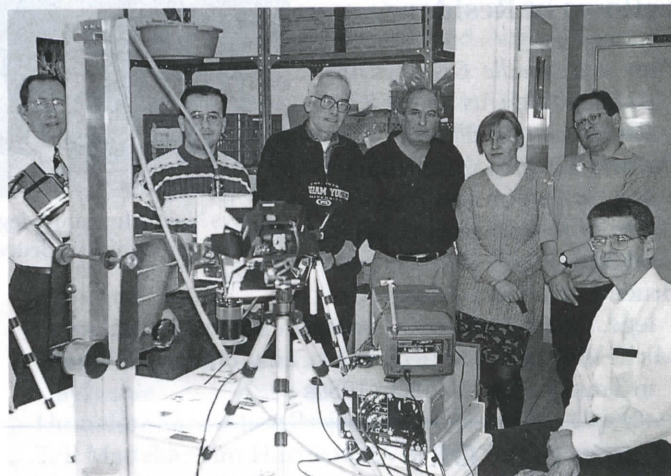
Social Science Research Council (SSRC) Affiliated Fellow:

Anne Marie Baylouny, U. of California, Berkeley, Social Determinants of Economic Liberalization in Jordan and Syria

For information on 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.

Happenings at ACOR

Jan. 1. Gene Ware, Steven Booras, and Omar Kamal from Brigham Young U. have arrived during the night to test a method for scanning the scrolls. Unfortunately, their luggage with all the scanning equipment is somewhere in the ether. By some miracle, the equipment appears later in the day and the group gets to work



Steven Booras, Omar Kamal, Dr. Ghazi Bisheh, Pierre Bikai, Marjo Lehtinen, Robert Daniel, and Gene Ware with the scroll scanning equipment

immediately. By late evening, it is clear that the method will not only work but that it will be an unqualified success.

Jan. 3. The Jordan Committee of the ACOR Board of Trustees meets at ACOR. Among other topics, they discuss preparations for the anniversary celebration of the Lynch expedition on April 18. They also tour the scroll scanning project.

Jan. 5. Fellow Bruce Borthwick arrives at 2:30 AM. Someone has forgotten to put his room key out and he telephones the director's house for help. Patricia, having picked up a new expression from Joy Lucke, says: "We live to serve!"

Jan. 5. Dr. Ghazi Bisheh and I leave for Los Angeles to give lectures at a conference there and then in San Diego. Because of severe storms in Europe, it takes eight hours and an refueling stop to get as far as London.

Jan. 5. Patricia orders a new computer with a "penitent chip" for Kathy. Kathy is pleased.

Jan. 9. In Los Angeles, the conference group tours the new Getty Center and has a meeting about conservation.

Jan. 10-11. Dr. Ghazi Bisheh and I lecture for the Los Angeles conference group.

Jan. 11. Meanwhile, back in Amman, snow falls. Everyone is volunteered to get the snow off the trees.

Jan. 15. At long last, the fellows have Internet access in the new computer area.

Jan. 16. Another quiet Friday, so Patricia finishes the

paperwork to close out both the NEH Endowment matching grant and the ASOR matching grant—both much earlier than expected due to the generosity of ACOR's friends.

Jan. 18. H.R.H. Prince Raad takes four of the fellows and me to see the budget debate at Parliament.

Feb. 1. I give a tour of Madaba to the Jerusalem bureau chief of the *New York Times*.

Feb. 2. The new cabinets for the scrolls are delivered.

Feb. 4. Glenn Markoe and Stephen Bonadies of the Cincinnati Art Museum arrive to make more preparations for the exhibit on Petra and the Nabataeans that will open at the Metropolitan Museum of Art in Oct. 2000.

Feb. 6. A nice quiet Friday. Several days will pass before anyone knows that the combined ACOR endowment have crossed the \$2 million mark.

Feb. 18. Rami Khouri meets with the fellows and gives them a briefing on his view of the evolution of the modern Arab world.

Feb. 19. Fatma, Marjo and Nazeh install the scrolls in their new cabinets.

March 18. Shishir Dutta, working as a volunteer at the Ridge Church, finds that he's digging right into a



Rear Admiral Charles W. Moore, Jr., presents the plaque to H.R.H. Prince Raad (Pierre in the center). The plaque reads:

IN COMMEMORATION OF
THE UNITED STATES' EXPEDITION
TO EXPLORE THE DEAD SEA AND THE JORDAN RIVER
MARCH 29 TO JULY 30, 1848
LED BY
LIEUT. WILLIAM FRANCIS LYNCH, USN
THE FIRST SCIENTIFIC EXPEDITION
TO DOCUMENT THE DEAD SEA AND
TRACE THE JORDAN RIVER TO ITS SOURCE

DEDICATED BY THE UNITED STATES NAVY AND
THE AMERICAN CENTER OF ORIENTAL RESEARCH
ON THE 150TH ANNIVERSARY OF THE DAY
LIEUT. LYNCH'S PARTY REACHED THE DEAD SEA
APRIL 18, 1998

Nabataean tomb.

March 22. Fatma Marii is offered a full-year internship at the Getty Museum in Los Angeles. Congratulations, Fatma!

April 12. Fatma is offered a US/ICOMOS internship! She's somewhat overwhelmed.

April 13. The Adawis take the day off—Abed is getting engaged!

April 15. In the morning, Patricia gives a tour of ACOR to the Diplomatic Wives Club.

April 16. The Vice President of Hashemite University and I sign the Petra mapping agreement. This will be the first project using income from the Petra Endowment.

April 17. There is a reception for a group connected with the Crow Canyon Archaeological Park.

April 18. I take off for Petra to give a tour to the Crow Canyon group.

April 19. First thing in the morning, I telephone ACOR from the Petra Church. Yes! The mobile telephone network now extends into Petra basin.

April 19. The Springtime posters that will be sold to benefit the Russell Trust are delivered.

April 19. Everything goes into high gear for the Lynch celebration.

April 20. At noon there is a run-through at Amman's new City Hall. Just after 6 PM, with the guests in place, the ceremony begins. Later, at ACOR, there is dinner for 50 persons.

A Celebration of the 150th Anniversary of the

United States' Expedition

TO EXPLORE THE

DEAD SEA AND THE RIVER JORDAN

Welcome

Dr. Pierre M. Bikai

The Lynch Expedition: An Assessment

Dr. Robert E. Rook

Remarks

H.E. Ambassador Wesley Egan

Presentation of Commemorative Plaque

Rear Admiral Charles W. Moore, Jr.

Concluding Remarks

H.R.H. Prince Raad bin Zeid

THIS EVENT WAS MADE POSSIBLE BY

United States Information Agency

Embassy of the United States

United States Navy

Municipality of Greater Amman

Royal Society for the Conservation of Nature

The program

April 23. Rex Rice departs after several days of assisting Patricia and Nisreen with the redesign of the budget process. It was so much fun!

April 25. ACOR hosts a luncheon in honor of the Mayor of Amman, Dr. Mamdouh al-Abbadi. H.R.H. Prince Raad and I thank him for all of his assistance with the Lynch event.

April 25. Bob Daniel arrives. Over the next few days, he and Marjo Lehtinen definitively establish the text of Scroll 10—for the 89th time!

April 27. Patricia and I head off for Beirut where she will lecture at the AUB Museum.

May 3. The photo editor and the director of Explorer's Hall at the National Geographic come by for a tour and to discuss the exhibit on Petra that will take place at NG in December.

May 5. I depart at 5 AM to give a tour of Petra to a visitor from Washington, Brian Atwood, Director of USAID.

May 5. Patricia and I go off to a dinner at Karen Asfour's in honor of the editor of National Geographic, Bill Allen, and Annie and Don Belt who are doing an article on Petra article for the December 1998 issue.

May 6. The signs for the Petra Church are finalized and

planning begins for the grand opening.

May 17. In the evening, a call comes in from the airport. One of Tom Parker's students is having passport/visa problems. ACOR rises to the occasion—all solved within an hour.

May 22. A tour group from AIA comes by.

May 23. There are two tour groups through ACOR. There goes another nice quiet Friday! One of the groups is led by Gerry Mattingly who brings 10 lbs. of chocolate chips. Thank you, Gerry—all such efforts are appreciated.

May 27. Late in the day, I return from Petra where I've been working on getting the church site ready for the official opening.

May 28. At the crack of dawn, I leave for another helicopter ride to Petra—this time with Newt Gingrich, Richard Gebhardt, Henry Waxman, Tom Lantos, and a slew of other congressmen. It's my third trip in a week.

May 31. In the evening, Martha and Arte Joukowsky arrive.

June 14. Very early, Don Henry and I go off to the airport to fly to Copenhagen for the 7th International Conference on the History and Archaeology of Jordan.

Petra Church Inaugurated by H.M. Queen Noor



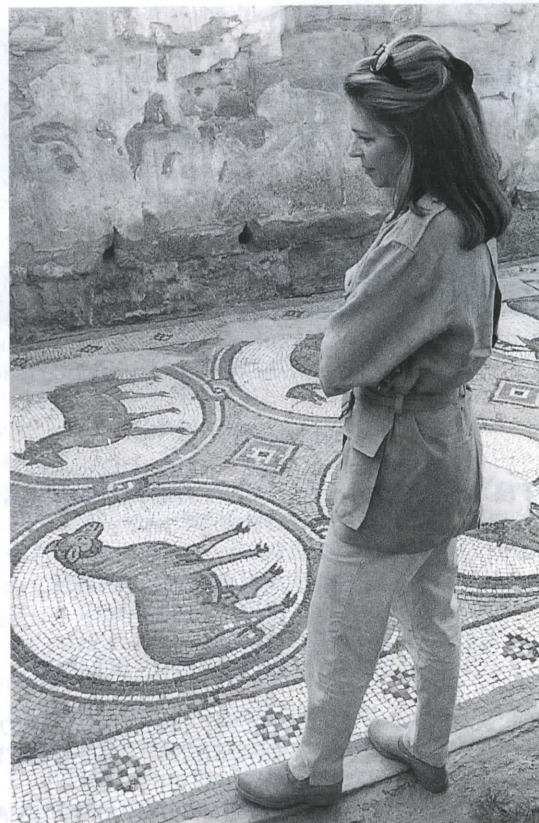
Having cut the ribbon, H.M. Queen Noor enters the church as Patricia and Pierre applaud.

On July 8, 1998, Her Majesty Queen Noor officially inaugurated the Petra Church. After she cut the ribbon, there were remarks by ACOR Board Chairman Artemis Joukowsky, H.R.H. Prince Raad, Ambassador Wesley Egan, and H.E. Mr. Akel Biltaji, the Minister of Tourism and Antiquities, for the 100 assembled guests. The guests included friends and family of Ken Russell who had come from

the U.S. for the event. After the official ceremony, the group was given a tour of the site. Following that there was a visit to the Ridge Church and then everyone walked to Brown University's Great Temple excavation where Martha and Arte Joukowsky led a tour of the site.



The assembled guests inside the Petra Church



Her Majesty admires the mosaics

June 14. A group of 25 landscape architecture interns who will be working in Petra come by ACOR for a tour.

June 19. With the Copenhagen conference over, the whole world descends on ACOR and everyone wants everything and they want it NOW!

June 20. I return from Copenhagen and report that the conference was a great success.

June 30. There is a celebration at ACOR: Canada Day and an early 4th of July. I make a series of speeches. First, the Canadians are thanked for the library furniture:

I thank the Embassy of Canada, the Canada Fund, and particularly Ambassador Molloy and Daniel Joly for their generous contribution of this furniture. As it happened, just when ACOR desperately needed furniture for the lower library, the Canada Fund was supporting a project to train young people in furniture making. It was, as they said, a win-win situation. We thank them for their generosity that has greatly expanded our ability to serve our researchers.

Next, a farewell for Ambassador Wesley Egan and Virginia Egan:

Four and one half years ago, the Egans arrived in Jordan. By chance, I was the first person outside of the U.S. Embassy to meet Wes. Since then, he and Virginia have become members of the ACOR family. They have helped us through difficult times and enjoyed the good times with us. Virginia is co-editor of the *Jordan Newsletter* that appears each year in the *American Journal of Archaeology*, and she served as Patricia's assistant director and master



At the Petra Church, Newt Gingrich and Pierre Bikai debate ... something.



Virginia and Wes Egan with Traianos Gagos and the scroll

organizer at the Ridge Church Project in Petra. Besides helping ACOR as an institution in many ways, including his support for the USAID grant to ACOR of \$900,000 for work at Petra, Ambassador Egan has gone out of his way to help our scholars and students, and he also excavated at Petra with us. This is scroll 63/65, a University of Michigan scroll. The text concerns a transfer of property as part of a marriage agreement. The total property is described as being worth about 3 kilos of gold. We wish we could give you the gold, but the best we can do is to name this scroll *Papyrus Petra Wesley Egan and Virginia Egan*.

Then Master Chef Mohammed Adawi served hamburgers, hot dogs, and all the trimmings:

The final ceremony today concerns the basics. Today marks the end of Mohammed Adawi's 30th year with ACOR. He was the first employee of the institution. By our estimate, during those 30 years, he has served over 100,000 good meals. Those



Pierre Bikai presents Mohammed with a watch as Sa'id and Abed Adawi look on

involved some 8,000 chickens and at least 300,000 chocolate chips. But Mohammed has been more than ACOR's master chef. He has counseled the ten directors of ACOR and the 200 plus fellowship holders as well as the thousands of others who have stayed here. We thank him for 30 years of loyal service to ACOR.

July 2. At Petra, Nazeh Fino and I restore some capitals, give interviews to a U. of North Carolina film crew, and then hang all the signs for the Petra Church.

July 4. Lead story in the *Jordan Times*: Tom Parker announces that he thinks he has uncovered the oldest church in the world at Aqaba!

July 7. By evening, most of the ACOR staff is in Petra and everything is ready. July 8, 4 AM. Sa'id departs Amman with the chairs, podium, refreshments, etc., for the Petra Church opening.

July 8. Meanwhile, the discovery of the church in Aqaba is on CNN, NPR, EuroNews, NBC, etc., etc., etc.

July 11. A half-page article on the Petra Church appears in the *Jordan Times*.

July 11. The evening's lecture by Tom Parker is packed; the press is there to hear about the "oldest church in the world."

ACOR Fellows 1991-1998

Since 1991, ACOR has hosted 197 research fellows drawn from 40 U.S. states and from Canada, France, and Jordan. Most of the fellows were at the dissertation level (42%), or were post-doctoral researchers (36%). Just over half were male (54%). The fellows were almost equally from the eastern (31%), midwestern (29%), and western (24%) U.S., in addition to 11% coming from the southern U.S. and 5% from other countries. The largest number of fellows was drawn from U. of Michigan (15), in addition to Georgetown U. (10), U. of Chicago (9), Harvard U. (6), Columbia U. (5), and the U. of Toronto (5). Of their research areas, 41% were in anthropology, archaeology, history, and art history; 21% in international relations and political science; 16% in Arabic/Near Eastern languages and literature; and the rest from a wide variety of fields. ACOR is grateful to all of the funding sources which have contributed to the presence of these fellows at the institute.

Megan Perry

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ACOR and its Newsletter

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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.

The Great Temple of Amman: The Architecture by Chrysanthos Kanellopoulos. The architecture of the temple that was excavated and partially restored by ACOR. Large format, cloth bound. \$80.

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, plus 117 maps. This 453-page, hard-bound volume is xerographically reproduced. \$40.

The Great Temple of Amman: The Excavations by Anthi Koutsoukou, Kenneth W. Russell, Mohammad Najjar, and Ahmed Momani. Description of the 1990-93 excavations undertaken by ACOR and the Department of Antiquities. This hard-bound volume has 180 pages and 3 fold-out plates. \$65.

Madaba: Cultural Heritage edited by Patricia M. Bikai and Thomas A. Dailey. Catalogue of the remains from the Early Bronze Age through late Ottoman vernacular houses (113 pages, paperbound) Over 150 illustrations, five in color. Includes a separate large map. An Arabic translation is available at no additional cost if requested. \$35.

Ancient Ammonites & Modern Arabs: 5000 Years in the Madaba Plains of Jordan edited by Gloria A. London and Douglas R. Clark. Life across the centuries in the area excavated over the past 30 years by the Madaba Plains Project. \$27.

The 150th Anniversary of the United States' Expedition to Explore the Dead Sea and the River Jordan by Robert E. Rook. An assessment of the Lynch expedition in 1848. Hard-bound volume of 32 pages. Many reproductions of Lynch's illustrations, including his three maps. \$20. All prices include shipping.

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