

Vol. 12.2—Winter 2000

Qastal, 1998-2001 Erin Addison

Abu Ghazi, a management trainee for the Qastal Conservation and Development Project (QCDP), was walking home from the Umayyad qasr and mosque complex at Qastal (map, p. 9). In the lot between the ancient reservoir and his home, he stopped to speak to some neighbor children playing a game. Then a teapot overturned and the late afternoon sun reflected off a blue-green, glassy surface. Ra'ed knelt to get a closer look and brushed gently at the loose earth. The area had recently been bulldozed, so the dirt was loose and only about five centimeters deep. As he washed the surface with tea water, a pattern of brilliant glass tesserae was revealed. Ra'ed had made an exciting discovery at Qastal: a large structure from the late Umayyad period (A.D. 661-750), floored with what experts have called some of the most exquisite mosaics in Jordan (Figs. 1-3). The new structure is only the most recent development in two-and-a-half fascinating years at Qastal.

On a cold afternoon in early February 2000, Ra'ed



Fig. 1. West Birkah site, south alcove mosaic

Qastal al-Balqa' is mentioned in the Diwan of Kuthayyir 'Azza (d. A.H. 105=A.D. 723): "God bless the houses of those living between Muwaqqar and Qastal al-Balga', where the mihrabs are." Although there remain complex questions about this reference to "mihrabs" (maharib—apparently plural), the quote at least tells us that Qastal was well enough known to have served as a geographical reference point before A.D. 723. The ruined settlement had been



Fig. 2. West Birkah site, north alcove mosaic



Fig. 3. West Birkah site, north alcove mosaic, detail

known to western scholarship since H.B. Tristram described it in *The Land of Moab* (1873). The qasr and mosque were also documented carefully at the turn of the century by R. Brünnow and A. von Domaszewski and published in their *Die Provincia Arabia* (1905). The structures were thought to be Hellenistic until Jean Sauvaget (1939) correctly identified the mosque and qasr as Umayyad.

Apart from the mosque and qasr, Qastal's early Islamic cemetery and waterworks (dam, cisterns, and reservoirs) were also well known. In the 1980s, a French team under the direction of Patricia Carlier spent two seasons documenting the qasr and cemetery, in particular. Eleven headstones, dating from the 8th to 11th centuries and bearing early examples of Kufic script, can be viewed at the Madaba Museum. Since the 1970s, nearly one-third of the qasr has been destroyed by the expansion of the diwan Shibli al-Fayez. Between 1985 and 1998, the qasr and mosque were used as a dumpsite for local waste and for debris from nearby road construction. Qastal is a rapidly growing village on the airport highway and land values around the site are rising fast, threatening ancient archaeological remains.

Since June 1989, QCDP, under the direction of Drs. Erin Addison and Stefania Dodoni, has endeavored to clear the qasr and mosque of plants and debris, excavate the water systems, consolidate the site legally and physically, and document the remains of Qastal. At the same time, QCDP is working in the Qastal community on land-use planning issues, including the rehabilitation of ancient cisterns to support drought-resistant landscaping around the site and in the village. One of QCDP's primary goals is to train staff and management from Qastal to maintain the site in the future. Ra'ed had been with QCDP for over a year when he recognized the value of the new mosaics and immediately took proper steps to ensure their safety.

Unlike strictly academic research projects, QCDP operates twelve months a year, working to create an infrastructure that will survive after the initial development phase is over. Once the site was cleared, for example, a sustained effort was necessary to bring trash collection to Qastal and to educate the surrounding community concerning waste disposal.

Vandalism and theft were also serious problems at Qastal: apart from the dramatic bulldozing of the qasr and mosque, ongoing damage was done at Qastal—as at other sites in Jordan—by gold-diggers. It is a pervasive belief that gold is buried under significant architectural features; thus mihrabs, highly carved reliefs, and mosaics invite their own destruction. After two years of community outreach, vandalism at Qastal has ceased, and local families have even begun to return architectural elements of the mosque. The outstanding community response to the new mosaic find is more than encouraging.

These issues also directly affect the success of the water development aspect of QCDP. Channels and cisterns, some pristine and some used continuously since the Umayyad period, have been opened throughout the

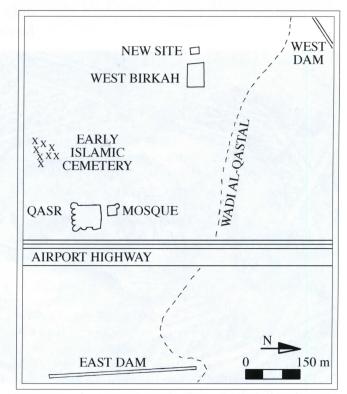


Fig. 4. Sketch of Qastal

site. Apart from the huge central cistern, there are nearly seventy more around the site, many of which are connected by a system of conduits, overflow channels, and filters. They are part of a sophisticated catchment, stor-

age and plumbing network laid down along with the gasr foundations. Most of these cisterns were used to store water or animal fodder until the mid-1960s. Since they then, have been employed as septic tanks and trash dumps. OCDP has cleared and documented nine cisterns adjacent to the site, and selected eight for rehabilitation. Sections of the channel network are exposed for display, as are the cisterns themselves. One intriguing example is a limestone cistern collar surrounded by a mosaic pavement and the remains of a reflecting pool. Nearly identical examples exist in



Fig. 5. Minaret, viewed from the south

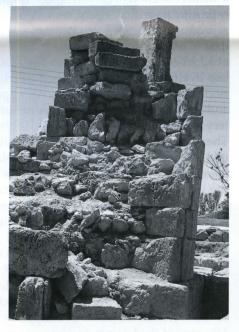


Fig. 6. Remains of the minaret's steps

Umayyad structures in Spain.

Catchment surfaces are being installed around the qasr to collect rainwater in the cisterns. This water will be used to support drought-resistant landscaping (xeriscape) and for maintenance of the tourist site. The new limestone tile surfaces are intended to mimic, without reproducing, the rather austere cream-colored mosaic forecourt which existed in the Umayyad period. All pavement and landscaping is installed with future research in mind and with buffer areas between interventions and historic structures.

Adjacent to the qasr is the historic mosque, once perhaps the location of 'Azza's maharib. One of the socalled "desert castles," the complex at Qastal most resembles Khirbet al-Minya in Tabariyyah/Tiberias, attributed to Walid bin 'Abd al-Malik, and Khirbet al-Mafjar ("Qasr Hisham," in Ariha/Jericho), attributed to Walid bin Yazid. However, Qastal's independent mosque with its minaret is an important departure from the floor



Fig. 7. Qasr, braided border



Fig. 8. Corridor with mosaics in the qasr

mosaics, and thousands of square meters of mosaic floors, ranging from simple, three-colored geometric designs to elaborate seven-color braided borders (Fig. 7) and sinuous vegetal motifs. Indeed, throughout the qasr and mosque, the decorative elements appear to have a

plans of the other qusur. Indeed the minaret at Qastal is the oldest extant minaret built as such. The small mosques attached to gusur do not have minarets; the congregational of the mosques Umayyad period adopted existing towers (e.g., the Great Mosque in Damascus), or the minarets were added later. The internal, spiral staircase at Qastal

> distinguishes this mosque tower from the towers in other contemporary structures. Mortar analyses and investigation of the foundations confirm that the minaret is contemporary with the qasr.

> The decorative motifs of the qasr and mosque are strikingly similar to those adorning the congregational mosque in Amman. They include elaborately carved limestone, wall

garden theme: several leaf patterns are repeated throughout the two buildings; eight different rosette patterns appear in different contexts, but in the same size and geometry. Very little abstract geometric decoration exists except in the simpler mosaic floors. In the qasr and mosque, however, no single example of figural representation, animal or human, has been found. Imagine, then, the surprise at the discovery of two stunning mosaics, each a little over 3 m² and both masterly, naturalistic depictions of large cats attacking their prey (Figs. 1-2), with birds in the corners of each panel (Fig. 3).

Once QCDP conducted the initial salvage investigation and determined the extraordinary value of the mosaics, Dr. Ghazi Bisheh took over the excavation for two months during the summer of 2000. Raghda Zawaideh did the cleaning, consolidation and conservation of the mosaics. QCDP is most grateful to the Department of Antiquities for promptly assigning a security guard to the site. It is also a tribute to the Qastal community's growing awareness of the value of the antiquities that no damage has been done since the site was opened in February 2000.

The new find (the so-called "West Birkah Site") actually lies some 400 m northwest of the qasr/mosque complex, immediately across the road from the Umayyad reservoir. In fact, much of the building lies beneath the road and is as yet unexcavated. While virtually all that remains now are the floors and traces of the first wall course, it seems likely that the building is the same one described by Tristram:

"Northwest of the castle ... [are] some singular remains of Greek architecture—one probably a tomb, with elaborately carved lintels of Corinthian character. Below this ... is a large square tank, " which is probably our reservoir (birkah). A marble capital fitting his description was salvaged from one of the mounds pushed up by the bulldozer in the winter of 1999 (Fig. 9).

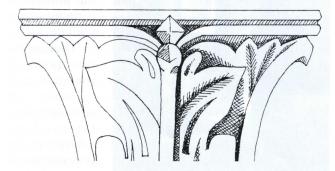


Fig. 9. West Birkah site, marble capital

So far six rooms have been exposed. The basic structure is a small, thick-walled building oriented toward the west. The immediate parallel with Qasr 'Amra is irresistible: the deep apse and small flanking alcove rooms open onto what appears to be a larger room, with the remains of a reflecting pool in the northwest corner. At Qasr 'Amra, however, the apse ("throne niche") is oriented almost due south. It is also the case that there is



Fig. 10. Marble flooring

at least one room original to the Qastal structure opening off of the north wall of the reception room, and the apse itself has two tiny flanking apses (though these again recall the niches in the calderium at 'Amra. Until further excavation is done, it will be difficult to understand the whole structure.

Certainly the most striking impression is that of extraordinary richness in the small building's decor. In the relatively

small area thus far uncovered, we have evidence of five kinds of mosaic and marble flooring (Fig. 10). Traces of pale gray marble paneling are still *in situ* along the bases of some walls. There is also evidence of wall mosaics and a small collection of carved stucco fragments. It is interesting to note that every remaining stucco fragment reproduces exactly some common motif found at the qasr in carved limestone. Like the extensive decoration at Khirbet al-Mafjar, however, the stucco versions are less lively and organic than the carved stone motifs.

The parallels between this richly appointed structure and the bath at Khirbet al-Mafjar are unavoidable. Pottery finds include Umayyad and Abbasid fragments. The extensive use of glass in the mosaics is intriguing, and—like the pottery finds—tends to place the structure later in the Umayyad period. Deposits of ashy soil and the likely presence of cisterns surrounding the site, as well as its proximity to the reservoir, tempt us to suggest that this may have been a bath associated with the qasr, somewhat as Hammam as-Sarakh is associated with Qasr Hallabat. However, this remains speculation.

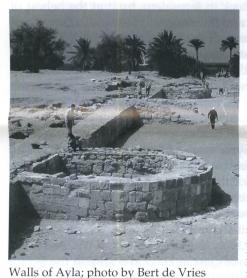
While a great deal remains to be done at Qastal, QCDP is grateful to be able to acknowledge the support of the Department of Antiquities of Jordan, the Ministry of Culture, the Majlis al-Baladiyya at Qastal, and the Ministry of the Islamic Awqaf.

Funding for the project, in cash and in kind, has been provided by the Department of Antiquities, Fulbright Hays Group Research Abroad, Fulbright Senior Research Fellowships, UNDP's Global Environment Facility, and private donors, including especially: the Main Street Trust of Ventura, California; Gardenia S.R.L. of Verona, Italy; and the Sabat family of Amman. Codirectors Dodoni and Addison began their collaboration while pursuing research on fellowships at ACOR in 1994-95.

The Umayyads and Jordan

The Umayyads (Arabic Banu Umayya) were a clan or extended family of the Quraysh tribe of Mecca, the tribe of Islam's prophet, Muhammad (ca. 570-632). The Umayyads had played an important part in the commercial activities of Mecca before Islam, and a number of their leaders were unquestionably among the Meccan "power elite." After Muhammad's death in 632, several Umayyads figured prominently in the early Islamic conquest of Jordan, Palestine, and Syria in the 630s. Moreover, the third caliph (temporal successor to Muhammad), 'Uthman ibn 'Affan, one of the prophet's early supporters, was an Umayyad.

The prophet Muhammad and his early followers, including the Umayyads, were of course Arabians, but they seem to have had a special interest in geographical Syria (which includes modern Syria, Lebanon, Jordan, Palestine, and Israel). Some Umayyads are even said to have owned property in Syria before Islam. During 'Uthman's caliphate (644-656), he placed the governor-



ship of Syria in the hands of his kinsman Yazid ibn Abi Sufyan and, after Yazid's death in the ' A m w a s plague of 636, of Yazid's brother Mu'awiya ibn Abi Sufyan. 'Uthman himself may have played a key role in establishing the

early Islamic settlement at Ayla (modern Aqaba), discovered by Dr. Donald Whitcomb of the University of Chicago and excavated by him in the 1980s and early 1990s as a joint ACOR and University of Chicago project; the ruins of Islamic Ayla, now a public archaeological park adjacent to Agaba's Corniche, are a "must see" for any visitor to southern Jordan. The discovery of this important site revealed how the earliest Believers (Muslims) from Arabia, when coming into new areas, established themselves in special colonies literally at the gates of existing cities—in this case, immediately adjacent to the older Byzantine settlement of Aila, now being excavated with ACOR's help by Dr. Thomas Parker. Presumably these new settlements (amsar) of Believers were to function as garrisons to keep an eye on the towns near which they were built, but they were probably also symbolic of the Believers' sense that they constituted a separate community of the saved, dedicated to the worship of the one God and to pious observance of God's revealed law.

'Uthman was murdered by dissidents in 656; this began a prolonged struggle for leadership within the community of Believers that is usually known as the first *fitna* or civil war. Mu'awiya, who remained in Syria throughout this struggle, emerged the victor and was acclaimed caliph in 660—the first of a series of Umayyad caliphs who would, for the next 90 years, rule the growing Islamic empire from Syria. Already in his role as governor of Syria under 'Uthman, Mu'awiya had established close ties with the powerful Kalb tribe that, at that time, dominated the steppe around Palmyra and the city of Damascus. Damascus therefore became, under Mu'awiya and most of his successors, the capital city of the empire.

Because they were among the earliest of the caliphs, the Umayyads were of paramount importance for the development of what we recognize today as Islam and Islamic civilization. As leaders of the early community of Believers, they continued to wage campaigns of con-



Qasr 'Amra; photo by James A. Sauer

quest by which the new state's borders could expand. This policy of expansion was pursued in fulfillment of what the Umayyads saw as their divine mandate to bring obedience to God's law to the whole world, but it was also very lucrative, for the conquest armies sent large numbers of captives and other booty to the caliphs in Damascus. Under the Umayyads' aegis, the caliphal armies pushed from Egypt across

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North Africa, eventually entering Spain in 717; they expanded eastward across Iran to the fringes of central Asia and Afghanistan; and almost annually they launched raids northward against the Byzantines, including two determined but ultimately unsuccessful attempts to seize the Byzantine capital, Constantinople, itself. By the eighth century, Damascus ruled an empire that stretched from Cordoba to Tashkent. And, wherever they went, the Believers established *amsar*, most of



The Dome of Rock, Jerusalem; engraving from Charles Wilson, *Picturesque Palestine , vol. I, 1881*

which developed into true cities from which, in due time, Islam and Islamic culture radiated to the surrounding lands: Fustat in Egypt, Kufa and Basra in Iraq, Qom in western Iran, Marv in eastern Iran, and Qayrawan in Tunisia, to name only the most prominent.

But the Umayyads' activities were far more than merely military. They also oversaw the systematic de-

velopment of Islamic institutions of state, such as the chancery, tax administration, and judicial system. When Mu'awiya assumed the caliphate in 660, the Believers' "government" was little more than a series of ad hoc arrangements growing out of recently-established military occupations, but by the end of the Umayyad period an organized bureaucracy, functioning in Arabic, had been created. The caliph 'Abd al-Malik (r. 685-705), perhaps the greatest of all Umayyad caliphs, played an especially important role in this process. He ordered that all official records henceforth be kept in Arabic, standardized the empire's weights and measures, and issued a uniform coinage for the whole empire, based on a radically new design, to replace the modified Byzantine and Sasanian coin types that had hitherto circulated.

The Umayyads, as heads of the Islamic community, clearly realized the need to affirm the legitimacy of the Islamic community as a religious entity, and to bolster its religiously-based claims to political supremacy. To do this, they sponsored the compilation of a coherent historical narrative about Islam's beginnings and early development, by patronizing leading scholars of the day who were involved in collecting traditions of the prophet and records about the early history of Islam. (I have studied this process in my book Narratives of Islamic Origins.) The Umayyads thus played a crucial role in establishing the Islamic community's very identity, a service to Islam for which, despite its importance, they have not always been given credit. Another part of this process was the Umayyads' construction of magnificent religious buildings that projected this identity and symbolized its claims in physical form-most notably, the Dome of the Rock in Jerusalem, built at the behest of 'Abd al-Malik, and the Umayyad Mosque in Damascus, built for his son and successor al-Walid (r. 705-715)two of the finest examples of Islamic art and architecture ever produced.

A distinctive feature of the Umayyad period was the construction of numerous buildings and architectural complexes, often lumped together under the term "Umayyad desert castles," at various sites throughout geographical Syria-not a few of them in Jordan. The nomenclature is a bit unfortunate, because most of these sites were not castles, many were not in the desert, and the majority were probably not built by the Umayyads themselves—but finding an alternative term for them is not easy. They include such diverse constructions as the palace of the Umayyad caliph Hisham (r. 724-743) at Jericho, the site of Qasr al-Hayr al-Sharqi in the Syrian steppe, some distance northeast of Palmyra, the town of 'Anjar ('Ayn al-Jarr) in the Biqa' valley in Lebanon, the bathhouse and audience hall with splendid frescoes at Qasr 'Amra, between Amman and Azraq, and the sites



Qasr Mushatta; photo by James A. Sauer

of Mushatta and Qastal near the Queen Alia International Airport (recent discoveries at Qastal are discussed in the article by Dr. Erin Addison in this issue). Scholars have debated what the function of these "desert palaces" was, but there is a growing sense that no single explanation will cover all of them. A few seem indeed to have been palaces for the Umayyad caliphs, but others may have been the nuclei of planned urban centers, or caravan stations along key trade routes, or the private homesteads of important Umayyad retainers; and, over the past several decades, more detailed archaeological study of these sites has revealed that many had sophisticated catchment and water-management arrangements that were usually not noted by early investigators. The existence of these "water works," some of which involve miles of sluices and dams and vast reservoirs and cisterns, have given support to the idea that some of these sites were intended as centers for agricultural exploitation. Whatever their purpose, they remain a group of thoroughly fascinating historical monuments testifying to the vitality of the Umayyad age in this region.

It is important to remember that during the period of Umayyad rule, the Believers or Muslims were still a minority of the population-at the beginning, indeed, a very small minority—in most of the areas they ruled, including Jordan. Islam spread among the local populations, but only gradually at first, and the Umayyads do not seem to have forced people to abandon their earlier religion. Indeed, there is good evidence not only of Umayyad religious tolerance, but even of a kind of symbiosis, whereby some Christians (and, perhaps, Jews) worked together with the newly-arrived Arabian Believers as part of the Umayyad regime (one only needs remember the case of the Christian saint, John of Damascus, who served as a high administrator in the Umayyad court). Although some seventh-century Christian texts speak of the destruction of churches and villages by the Believers, this probably reflected only the passing instability of the period of conquest and transition, for many other Christian texts describe the Umayyads' ecumenical qualities. Indeed, a Christian author from northern Mesopotamia, writing in about 687, even complains in his Syriac chronicle about this lack of religious bigotry under Mu'awiya's rule: "Of each person they required only tribute, allowing him to remain in whatever faith he wished ... There was no distinction between pagan and Christian ... the faithful was not known from a Jew." (Translation from Robert Hoyland, Seeing Islam as Others Saw It, 1997). Obviously, in his view, this was religious toleration to a fault!

Archaeological exploration in Jordan (and elsewhere) over the past forty years—not a little of it sponsored or facilitated by ACOR—has shown not only that churches continued to be used through the Umayyad period, but also that a number of important new churches were built at this time—a phenomenon studied in detail by former ACOR Fellow Dr. Robert Schick in his ground-breaking book, *The Christian Communities of Palestine from Byzan*- *tine to Islamic Rule.* In other ways, too, the archaeological record suggests that life of most communities in Jordan continued largely unchanged for many decades after the first arrival of the Believers/Muslims in the 630s. In Jordan, the transition from the Byzantine to the Islamic eras was not abrupt one, then, but rather constituted a gradual transformation of the society that we are still trying to understand. The fascinating mix of the old, the transitional, and the new that marked the culture of Jordan under the Umayyads is now elegantly presented in the recently-published Jordan volume of the "Museum with No Frontiers" project, entitled *The Umayyads*, which surveys admirably many aspects of the culture of this rich historical period.

Fred M. Donner

Dr. Donner is Professor of Near Eastern History in the Oriental Institute and Chairman of the Department of Near Eastern Languages and Civilizations at the University of Chicago. He is spending the winter and spring at ACOR as National Endowment for the Humanities Fellow, in order to draft a book tentatively entitled "Muhammad and the Believers: at the Origins of Islam."

Archaeology and Environment of the Dead Sea Plain: Excavations at the PPNA site of ZAD 2

La Trobe University (Australia) carried out a second season of excavation at the Pre-Pottery Neolithic A (PPNA) site of Zahrat adh-Dhra' 2 (ZAD 2) in January and February, 2001. The site is currently under investigation as part of the La Trobe University / Arizona State University 'Archaeology and Environment of the Dead Sea Plain' Project directed by Phillip Edwards, Steven Falconer, and Patricia Fall. The region called Zahrat adh-Dhra' (the hinterland of Dhra') lies on the broad Dead Sea Plain, east of the sprawling village of Ghor al-Mazra'a. It is delimited by a roughly triangular area formed by the merging channels of Wadi Kerak and Wadi adh-Dhra', which run to the west, and the Kerak Road to the east. The area is an unusual and spectacular place, and this is best appreciated by approaching it down the long winding Kerak road. As one draws near the edge of the Jordan Valley, deep rock beds buckle over and plunge straight into the ground. No less vivid, the eastern sector of Zahrat adh-Dhra' is dominated by the only extensive exposure in Jordan of the Dana Conglomerate Formation, represented by variously tilted blocks of red and white evaporites interbedded with massive alluvial chert seams. Here lies the PPNA site of ZAD 2, the target of our current investigations, with its companion Middle Bronze site of ZAD 1.

Below the ZAD sites to the west, the Dana Formation is overlain by the Lisan Marl Formation, composed of the sedimentary detritus of Lake Lisan. This brackish to saline body of water occupied the entire Jordan Valley between Lake Tiberius to the north and the Dead Sea basin to the south between approximately 60,000 and 11,000 years ago. The marls are formed by alternating layers of white and grey precipitates, and erosion has sculpted them into an eerie landscape of fluted spires and mesas. These sterile geological substrates constrain the agricultural productivity of the limited patches of stony alluvium. The saving grace of Zahrat adh-Dhra' is provided by Wadi adh-Dhra', which flows presently at the bottom of a steep, narrow gorge below the surrounding plains. In antiquity, this stream meandered westward over the plain at the higher elevation where the ZAD sites now lie.

The PPNA period represents a crucial intensification of earlier Natufian practices in the Levant, leading eventually to the substantial farming villages of the Pre-Pottery Neolithic. Significant PPNA innovations include domesticated varieties of emmer wheat and barley, a general increase in site size, and increased sophistication in PPNA architectural practices. However, when we compare ZAD 2 to the larger PPNA sites such as Jericho and Netiv Hagdud, we must rank it at the small end of the PPNA scale for size and complexity. ZAD 2



Aerial view of Structure 2

takes the form of a low mound about 2 m thick and 2,000 m² in area. It is littered with stone cobbles and fragments; flaked stone tools spread out to a radius of about 50 m from the central and highest part of the mound. Numerous oval huts protrude through the topsoil and several large cup-hole mortars and other broken groundstone tools such as pestles and shaft straighteners are present. Charcoal samples recovered in 1999 from Structure 3 indicate an apparently short-lived site dated to 9,500 BP (9,100-8,550 calibrated B.C.).

The 2001 excavations confirmed the evidence of the

radiocarbon dates previously obtained from Structure 3, in demonstrating that ZAD 2 was a short-lived settlement containing only one major construction phase. Structures 1, 2 and 3 were dug though to the natural levels (at about 1 m below the surface), showing that the low rise of the mound (ca. 1-2 m) is partially natural. The site plan consists of oval- to horseshoe-shaped stone huts that adjoin each other. In some cases, the walls of one structure continue on to form part of another structure. The architecture is notable for its regularity and high standards, and can currently be counted as the most substantial architectural array for the PPNA period yet discovered in Jordan. Within individual structures there are multiple floor phases—up to four phases in the case of Structure 2.

At the bottom of a deep pit dug into Structure 1 (Square E28), the remains of a child's skull were found in a small pit dug some 10 cm deep into the natural Dana layers, below overlying rubbish accumulations. The skull was manifest as a sediment endocast partially covered by wafer-thin fragments of cranial bone. A number of loose, deciduous teeth were found underneath, and the whole was surmounted by a little dome

of mud mortar.

In 1999, excavations revealed Structure 2 as a long arc of stone wall associated with a plastered floor and interior hearth. In 2001, the wall was traced to uncover a large walled enclosure which was preserved to 60 cm in height with 6 courses of wellmortared stones. Structure 2 has proved to be a most unusual design for the PPNA. Its shape is difficult to describe, but it appears as a constricted 'U'-, horseshoe-, or even 'teardrop'-shaped structure opening to the east, with its major axes measuring some 7 m in length (left). A further surprise is that the eastern wall of Structure 2 appears to swing around to the southeast to continue as Structure 3, though this awaits clarification by further excavation. Excavations inside Structure 2 this season revealed a total of four floors set with various stone features, overlaying natural sediments.

A second wall abuts Structure 2 in Square J 22 and curves away in the opposite direction. In 1999, a small cairn of

stones was discovered positioned in the interstices between the two walls. Further excavation showed that this feature marked the northern end of a complete human skull, which emerged in the balk. This season's excavation showed that this belonged to a secondary burial spread over 1.5 m on a northwest to southeast orientation. In all, many teeth and at least three mandibles were found, showing that the burial contained at least three individuals. Most bones were not articulated, although a few post-cranial elements were. Many artifacts were recovered from the shallow deposits, the



Stone figurine

most notable being a small phallic figurine in stone (left).

In 1999, two squares (U-V 22) were positioned at the summit of the site in order to investigate the deepest deposits of the site. The sounding revealed Structure 3, which con-

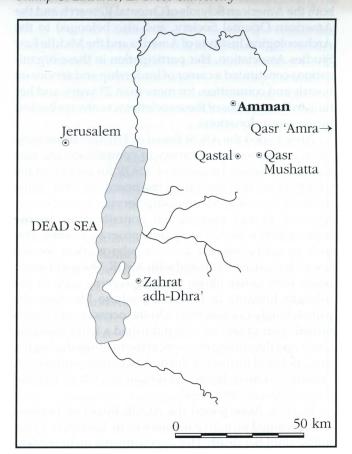
sisted of a wall curving east to west associated with an interior floor, sunk some 25 cm below the exterior one. Only two thin layers, including the basal floor of Structure 3 (Locus 7.4), were removed in 2001 before the underlying sterile Dana sediment was encountered. Like Structure 2, the base of the main wall was not set into a foundation trench, but was laid on a thick mortar base.

Clearance of the new Structure 4, located in the northern part of ZAD 2, was initiated in 2001. Excavation tracked a large curvilinear wall segment running in a northwest to southeast direction. Contrary to the previous structures embedded in the deep central parts of the site, Structure 4 proved to be a wall, one course thick and sitting on a thin layer of small pebbles and rocks. A cobblestone floor, composed of pebbles and small stones set into a rough, greyish plaster was associated with its interior.

The most unusual artefact of 2001 was the stone figurine (above), to add to the two small incised limestone pieces found in 1999. Malachite fragments (some facetted), a red (coral?) bead, Dentalium shells, a complete basalt pestle, and a cuphole mortar were other notable discoveries. Among the retouched lithics, tendencies noticed from the surface scatter and the 1999 excavations were only strengthened during 2001. Many tranchet axes (and some edge-ground axes), borers and picks were found. The small tools continue to be dominated by Hagdud truncations. Projectile points are noticeable for their almost complete absence (though this year a fine double-notched el-Khiam point was found on the surface), and lunates remain completely absent. Flint and basalt are local to Zahrat adh-Dhra', and external contacts are indicated by exotic materials such as marine Dentalium molluscs, copper ore and obsidian.

Residential flexibility and mobility would have been helpful coping strategies for the occupants of ZAD 2 some 9,500 years ago, and the site's location in the middle of the Dead Sea Plain provides a useful natural laboratory to test this proposition. There is some chance that cereals and legumes grew naturally or were cultivated in the Wadi adh-Dhra' and in the poor alluvium to its south, but there is no proof for this at present. Other resources also identified from ZAD2 by John Meadows, such as pistachios and figs, would probably not have been supported by the local geology, and this factor indicates wide ranging by the ZAD2 inhabitants up into the Wadi Kerak and onto the Plateau to the east. Meadows notes that although wild plant foods were clearly significant, the evidence suggests reliance on a narrow range of plants that would become the founder crops of the Neolithic—if they were not already domesticated in the PPNA. As at many other PPNA sites in the southern Levant, it is unclear whether any of the food plants were actually cultivated. Animal bones (analyzed by Mary Metzger) are as yet few, but indicate the hunting of *Capra sp.*, gazelle and cattle, and possibly badger.

Surprisingly for a region with such a high archaeological profile, this particular area, which we have also christened the "ZAD Triangle," appears never to have been the subject of any comprehensive archaeological survey. Christopher Day began a comprehensive geoarchaeological reconnaissance in the current season. He is confident that an accurate survey and dating of the multi-period settlement and land use history of the region immediately surrounding ZAD 1 and 2 will greatly enhance the understanding of the land use history and chronology of landscape change of the Dhra' Plain. The relationship and date of these other features to local landforms, particularly evidence of wadi erosion, will provide better resolution to models of the timing and phases of erosion at ZAD 1 and 2. Phillip C. Edwards, La Trobe University



In Memoriam: Anne Cabot Ogilvy

Anne Cabot Ogilvy, 69, died Nov. 13, 2000, after a brief illness. Anne's life combined family, professional activities, and international travel and research in near classic 20th century style. She played an active role in Near Eastern archaeological and academic studies as a staff member on several archaeological projects, as a researcher in zooarchaeology, and as an officer and trustee of both the American Schools of Oriental Research (ASOR) and the American Center of Oriental Research (ACOR).

After receiving her BA in philosophy from Harvard in 1965 and settling in New York City, Anne studied archaeological faunal analysis at Columbia University. As a pioneer zooarchaeologist she participated in several archaeological projects during the 1970s including the notable excavations at the Tell Dan, Caesarea, and at Stobi (in former Yugoslavia). Her work and love of archaeology also brought her to Egypt, Cyprus, Lebanon, Syria, and Jordan. Anne worked closely with faunal analysts Brian Hesse and Paula Wapnish, and they published two joint-articles: "The Fauna of Phlamoudhi-Melissa: An Interim Report," in *Report of the Department of Antiquities Cyprus*, 1975, and "The 1974 Collection of Faunal Remains from Tel Dan," *Bulletin of the American Schools of Oriental Research* 227, 1976.

Through this active career in research and scholarship, Anne became an avid participant in the organizations that enabled such work. She was a life member of both the American Schools of Oriental Research and the American Oriental Society, and also belonged to the Archaeological Institute of America and the Middle East Studies Association. Her participation in these organizations constituted a career of leadership and service on boards and committees for more than 25 years, and her faith in the missions of these societies was always backed by generous donations.

Anne joined the ASOR Board of Trustees in the early 1970s and served on a variety of committees; she was also the Assistant Treasurer of ASOR for several of the twenty years that she sat on the board. In 1998, Anne received the ASOR Membership Service Award in recognition of her exceptional contributions to the organization's membership and programs. Anne also took an active interest in those who worked for the research institutes affiliated with ASOR. She spent many hours with Omar Jibrin, the long-serving cook at the Albright Institute in Jerusalem, whose life-story she painstakingly documented. On the occasion of Omar's fortieth year of service, she published a letter thanking Omar and describing his work at the institute during the great political turmoil of the mid-twentieth century: "A Tribute to Omar Jibrin," American Schools of Oriental Research Newsletter 5, 1980.

In 1986, Anne joined the ACOR Board of Trustees and remained an active member of its Executive Committee until her death. Her appointments included Secretary, Treasurer, Finance Committee (at times chair), and liaison to the ASOR Board of Trustees. However, her most cherished activity was her long and highly productive service as chair of the ACOR Library Committee. In this capacity, Anne worked tirelessly to establish a comprehensive academic and archaeological research library at ACOR's institute in Amman, Jordan. She was also a consistent donor to the library. In 1993, a plaque commemorating her dedicated support was placed in the library.

Perhapsbest known for her sincere devotion to ACOR, AIAR, and CAARI, Anne was always a welcome guest whose kind and encouraging words touched the many employees of these institutions. Her generosity as a supporter of archaeology was matched by her generosity of spirit. She was quick to value the work of her colleagues, and to recognize the unsung heroes whose



efforts behind the scenes made archaeology a reality. Anne's remarkable dry wit and rich laughter were a delight at any occasion, and her breadth of knowledge and devotion to literature were astounding. In a serious vein, she would quietly recite poetry or sing in Latin. It was natural that Anne was an active patron of the arts.

Anne and her companion of nearly twenty-five years, the late

Dr. H. Keith Beebe, shared deep interests in Arab refugee and international Middle East issues. They actively supported education and training for young Arab archaeologists and researchers. Anne's respect for the culture and people of the Middle East was part of an unflinching dedication to excellence, truth, and justice, manifested both in her commitment to high academic standards and her belief in equal rights for all people. Those who knew Anne well enough to appreciate her ideals, sometimes stood in awe of her uncanny ability to see through any contrivance or pretension. Yet Anne always shared a great personal warmth with her colleagues, whether sitting together on committees, in a vehicle heading to a site, or around her dinner table.

Anne's untimely death is a deep loss for our archaeological community. Her many loving friends will think often of her as they continue their research in antiquity. The students and academics who sit in the ACOR Library will, perhaps unwittingly, touch and read many a volume given by Anne in support of their quest for knowledge.

Anne is survived by her three children, Moors, Tom, and Cecily, and by eight grandchildren. We extend our deepest sympathy to her family for their tragic loss. Memorial contributions may be sent to the American Center of Oriental Research Library Fund, ACOR, 656 Beacon St., 5th Floor, Boston, MA 02215. *Robin M. Brown and Bert de Vries*

The ACOR Library, Past and Present

History

The American Center of Oriental Research has undergone remarkable expansion since it was founded in July of 1968. One example of this expansion is its library. During its formative years, when ACOR was first based in a small apartment by First Circle and later a house by Third Circle, there was little room and funding to support a significant library. In 1975, the library consisted of only 600 volumes. However, the collection expanded considerably in 1976 when ACOR, with fundraising money, purchased 700 books from the personal library of G. Ernest Wright, an archaeologist and former president of the American Schools of Oriental Research. In addition, the ACOR Director at that time, James Sauer, added 500 of his own books to the collection. A year later, ACOR moved into a larger two-story building between the Fifth and Sixth circles, and the library doubled its space. The collection continued to grow through private donations and funds given by benefactors such as the Endowment for Biblical Research. By 1980, the library contained 2,000 books, 100 different journals, and a significant collection of offprints. The library also acquired new tables, shelves, a map case, and a copy machine. It was also gaining a reputation for being one of the better libraries in the country.

By 1979, it had become obvious that ACOR had outgrown its current location; its operations required a new building that was designed to specifically meet its needs as a research facility. After an aggressive fundraising campaign and almost two years of construction, the present ACOR building was inaugurated on July 17, 1986. The new library was a two-floor facility that contained 8 study carrels for resident fellows and scholars, computer facilities, and a collection of 3,000 volumes and 350 different journals. The following year, the United States Information Agency awarded a grant to ACOR to hire a professional librarian. Meryle Gaston, the first librarian, developed the library's acquisitions policy and a detailed acquisitions list that would not duplicate sources found in other local libraries. Meryle also designed the library's appearance and launched the computerization of the catalogues. She was succeeded by ACOR's present librarian Humi Ayoubi, who began her tenure in 1988. Over the years, Humi has been responsible for significantly increasing the holdings and continuing to computerize the catalogues and files with CDS-ISIS software donated by UNESCO.

By 1989, the library collection contained about 5,000 books and monographs, 4,000 periodicals in 345 series, and about 500 geological and topographic maps of Jordan. A year later, the American Schools and Hospitals Abroad awarded ACOR a \$300,000 grant that was used to purchase 4,000 books, library equipment, computer hardware and software, and equipment for the conservation lab. At this time, scholars in a variety of disciplines outside ACOR's traditional areas of archaeology and anthropology began using the facility. The Board of Trustees recognized this change in 1991 and amended the charter and by-laws to state that ACOR would assist scholars from all disciplines relating to the past and present human condition in Jordan and the region. Since then, the library has been actively expanding its collection to include books and journals in a variety of disciplines such as modern history, political science, Near Eastern studies, Islamic and biblical studies, art and art history, conservation, and many others. Two grants from the Department of Education have assisted ACOR with significantly broadening its collection. [History compiled from the ACOR archives.] *Today*

The ACOR library is now considered to be one of the premier research libraries in the region. The collection currently holds 13,431 volumes and 6,893 bound periodicals representing 13,442 separate issues. Areas of focus include Near Eastern archaeology, anthropology, Arabic language and culture, history of Jordan and the region, history of art and architecture, and Near Eastern studies. With new furniture donated by the Canada Fund in 1997, the library seats up to 70 scholars. The library currently receives about 9,000 reader visits annually, with almost half those visits from Jordanians, about 30 percent from North Americans, and the rest from Europeans and other scholars from around the world.

ACOR's library is unique in that its reference collection contains many sources not available elsewhere in Jordan, including the complete Loeb Classical Library, The Assyrian Dictionary, the Lexikon der Agyptologie, The Cambridge Ancient History, and the Survey of Western and Eastern Palestine by H.H. Kitchener and C.R. Conder. ACOR's rare books collection contains excellent works on the first travels in the region, including DeSaulcy's Journey Round the Dead Sea and in the Bible Lands, Guerin's Description de la Palestine, Robert's The Holy Land, Volney's Travels, and many others. In addition, the library has a wonderful collection of 1,500 maps on Jordan's topography and geology, along with many excellent regional maps. Furthermore, the library holds an impressive collection of over 10,000 slides on many archaeological projects and sites in Jordan. A unique aspect of this collection is that it contains slides on ACOR's Petra Church Project, from its inception to completion.

Thanks to librarian Humi Ayoubi and assistant librarian Pat Masri, consultant Meryle Gaston, past directors, present Director Pierre Bikai, the ACOR Library Committee, and ACOR's many friends and benefactors, the library has developed into an important and reputable resource center. However, no library can ever be complete because new and essential works are being published on a daily basis. In addition, the library needs to continue to broaden its collection and fill in gaps. Any book or monetary donations to the library would be a tremendous help and would make an important contribution to an invaluable resource in the Near East. *Kurt Zamora, ACOR*

The Petra Papyri: Prosopography

The carbonized Petra papyri were found in late 1993 in a room adjacent to the Petra Church excavated by ACOR. The number of extant papyri is ca. 140 and, since some of the papyri were written on both sides, the number of different documents is probably close to 200. All the texts are documentary and written in 6th century Byzantine Greek. The known time span of the documents extends from A.D. 537 to 593/4. The documents were the private archive of Theodoros son of Obodianos and his family. The documents deal mainly with real estate and other possessions and document various kinds of private transactions, such as inheritances, dowries, sales, leases, cessions and disputes. Quite a number of the documents are of a more public nature, involving the civic administration as regards tax responsibilities and registration of the holdings and possessions.

Prosopography is the study of the identity and relationship among a group of persons, in this case, the persons name in the papyri. The prosopographical index of the Petra papyri currently contains 318 entries of identifiable people (including fragmentary names). The identification is based on a person's proper name, father's name (or mother's name in the case of slaves), and titles (status, occupational and honorific). As names such as Theodoros, Alpheios, and Valens, to name a few, are common to several people in the texts, identification has not been always possible if other identifications such as titles are not preserved or mentioned. Consequently, some of the 318 entries must be duplicates; the correct number of entries may be closer to 250. In addition, there are 177 unidentified individuals. These include cases where only the title is preserved or where, for example, there is a reference to the "deceased," and no further identification is possible. Since this unidentified group likely overlaps with those who have been identified, the true number of these individuals may be closer to 100 rather than 177. In sum, the extant texts can currently be estimated to have touched directly or indirectly the lives of some 350 individuals.

The vast majority of these some 350 individuals are males. The archive has so far yielded 17 female proper names. In addition, 10 of all the 177 unidentified are certainly female, thus we have evidence of 27 females in all. The passive role of women in documents that deal with property is emphasized by the fact that seven of the 27 women are slaves.

The people acting in the documents were mainly wealthy landowners. Their wealth brought them civic responsibilities and at least ten persons are referred to as members of the curial class. The true number of *curiales* is probably higher, but since the documents are private in nature, the parties probably didn't deem it necessary to use their civic titles, for instance, when appearing as witnesses to private contracts. The members of the curial class were eligible, if elected, to collect taxes, and take on other such temporary tasks within the civic administration. As tax collectors, they risked their own property if they did not deliver the required taxes to the treasury.

A considerable number of the individuals in the papyri served in the church. Their duties included taking care of church finances and other administrative tasks. Some of them served in monasteries and in privately endowed institutions (e.g. hospitals) belonging to the church. However, in the documents they appear more as private citizens than as representatives of the church, thus little can be said of their ecclesiastical activities.

A handful of persons were in the army, especially in connection to the fortress at Zadakathon. The latest evidence of military presence in Zadakathon comes from a document written in 593/4 mentioning a recruit at the fortress. In the same document, a military *prior*, a non-commissioned officer, is mentioned.

The so-called lower strata of the society are mostly absent, except for some random references to farmers and tenants, who often remain anonymous. Slaves figure as property and are mentioned by name only in divisions of property where they are listed as property; otherwise, they are referred to in generic terms such as *andrapoda*, *i.e.*, 'human chattel'. In one contract, a tailor appears as a witness; otherwise, craftsmen, shopkeepers, and the like are not attested.

This somewhat restricted nature of the status of the people who appear in the documents is likely due to the status of the main character of the documents. As this is the archive of Theodoros son of Obodianos, who himself had apparently abundant possessions and served in the church, it is understandable that his partners in business represented the same status as he himself. The presence of military personnel in the documents probably had to do with Theodoros' possessions in Zadakathon, where he had a house that he had inherited from his father. However, his most frequent business associates are members of his family, who naturally had their interests entwined with those of Theodoros. One of his regular business partners was his maternal uncle, Patrophilos.

The texts reveal interesting information as regards Theodoros and his family. Theodoros was born in 513/ 4, to Obodianos, the son of another Obodianos, and to a mother whose name is not preserved. In 537, Theodoros married Stephanous, daughter of the above-mentioned uncle, Patrophilos. Thus the newlyweds were also first cousins. Such marriages were not acceptable in the rest of the Byzantine Empire, but they were allowed in the east due to local custom. The marriage produced at least two sons, Panolbios and Georgios. Some time after 544, Theodoros was ordained as a deacon in the church of the Most Holy Mary in the Metropolis of Petra, and sometime before 573, he had become an archdeacon. His son, Panolbios, died ca. 582 and some documents involved the estate that he left behind. The family tree of Theodoros currently consists of some 20 known relatives, and it appears to cover seven generations.

Marjo Lehtinen, Academy of Finland/University of Helsinki

Director's Report: July through December 2000

Pierre M. Bikai

ACOR Projects

- **Petra, Petra Mapping Project**, ACOR and Hashemite University, USAID Petra Endowment
- Petra, Petra Documentation Project, Chrysanthos Kanellopoulos, USAID Petra Endowment
- **Petra, Petra North Ridge Project**, Patricia Bikai, Megan Perry, and Naif Zaban, USAID Petra Endowment
- Petra Papyri Publication Project, U. of Helsinki/Academy of Finland: Marjo Lehtinen; U. of Michigan: Ludwig Koenen, Robert W. Daniel, Traianos Gagos; Brigham Young University, CEPART, Steve Booras

ACOR-Assisted Field Projects

- Edward (Ted) Banning, U. of Toronto, Wadi Ziqlab Project
- Nancy R. Coinman, Iowa State U., and Deborah I. Olszewski, Bishop Museum, Hawaii, Eastern Hasa Late Pleistocene Project
- Timothy P. Harrison, U. of Toronto, Tell Madaba Archaeological Project
- Donald O. Henry, U. of Tulsa, Ain Abu Nekheileh Excavation Project
- Martha Sharp Joukowsky, Brown U., Excavations at the Petra Great Temple
- Thomas Levy, U. of California, San Diego, Russ Adams, Bristol U., Mohammed Najjar, Dept. of Antiquities of
- Jordan, Jabal Hamrat Fidan Regional Archaeology Project
- Burton MacDonald, St. Francis Xavier U., Tafila-Busayra Archaeological Project
- John P. Oleson, U. of Victoria, Humeima Excavation Project
- S. Thomas Parker, North Carolina State U., Roman Aqaba Project
- Suzanne Richard, Gannon U., and Jesse Long, Lubbock Christian U., Expedition to Khirbet Iskander and its Vicinity
- Bruce Routledge, U. of Pennsylvania, Khirbat al-Mudayna al-'Aliya Project
- Chang-Ho Ji, La Sierra U., Iraq al-Amir and Wadi al-Kafrayn Project
- Alan Simmons, U. of Nevada, Las Vegas, Mohammed Najjar, Dept. of Antiquities of Jordan, Tell Wadi Feinan Testing Project

Guido Vannini, University of Florence, Medieval Petra

Denyse Homès-Fredericq, Musées Royaeux d'Art et d'Histoire, Archaeological Excavations at Lehun

Lectures

July 8. Elise Friedland, Rollins College, Marble as Cul-

tural Indicator: The Roman Marble Sculptures from the North Hall of the East Baths at Gerash

- July 10. Gloria London, Burke Museum, From Person, Place, to Thing: The Changing Meaning of Pottery. An Ethnoarchaeological Study of Traditional Potters of Cyprus
- July 11. Neil MacKenzie, Survey of Ayyubid/Mamluk Sites in the Ajlun Area: A Preliminary Report
- July 12. Nancy R. Coinman, Iowa State U., Deborah I. Olszewski, Bishop Museum, Hawaii, Recent Excavations at Late Pleistocene Sites in the Wadi al-Hasa
- July 15. Betty Anderson, Boston U., The Jordanian National Movement of the 1950s: Socio-Economic and Political Influences
- July 17. S. Thomas Parker, North Carolina State U., The Roman Aqaba Project: The 2000 Campaign at Ancient Aila on the Red Sea
- July 24. Jerome C. Rose, U. of Arkansas, Byzantine Tombs in North Jordan
- July 26. Thomas E. Levy, U. of California, San Diego, Russell B. Adams, U. of Bristol, UK, The Phase I Research in Jebel Hamrat Fidan: Social Archaeology and Ancient Metal Working in Southern Jordan
- July 29. Bethany Walker, Oklahoma State U., Mamluk Administration in Southern Bilad al-Sham
- July 31. Larry G. Herr, Canadian U. College, Douglas R. Clark, Walla Walla College, Report on the 2000 Excavations of the Madaba Plains Project: Al-Umayri
- Aug. 1. Douglas C. Comer, CSRM, Analyzing the Cultural Landscape of Beidha with the Assistance of Satellite and Aerial Remote Sensing Data
- Aug. 3. John P. Oleson, U. of Victoria, Excavations in the Roman Fort and Late Roman House at Humeima, 2000
- Aug. 9. Chang-Ho Ji, La Sierra U., Iraq al-Amir and Wadi al-Kafrayn Project
- Aug. 14. Martha Sharp Joukowsky, Brown U., The Brown U. Excavations at the Petra Great Temple, 2000
- Aug. 23. Timothy P. Harrison, U. of Toronto, Results of the Tell Madaba Archaeological Project, 2000
- Aug. 26. Jonathan Lawrence, U. of Notre Dame, Living Water? Investigating the Development of Jewish Ritual Bathing and Christian Baptism
- Sept. 28. Stephanie Nanes, U. of Wisconsin, Citizenship and Identity in Jordan

Fellows in Residence

- Near and Middle East Research and Training Act (NMERTA) Senior Research Fellow:
- **Neil D. MacKenzie**, Water Mills and Settlement Patterns in the Ajlun Area: An Examination of Ayyubid/ Mamluk Contexts
- Near and Middle East Research and Training Act (NMERTA) Pre-Doctoral Fellows:
- **Stephanie E. Nanes**, U .of Wisconsin, Citizenship and Identity in Jordan
- **Tori I. Rohl**, Chicago-Kent College of Law, The Influence of Islamic Law on Jordanian Contract Law

- United States Information Agency/Council of American Overseas Research Centers Fellows:
- **Betty Anderson**, Boston U., The Jordanian National Movement of the 1950s: Socio-Economic and Political Influences
- Christopher Parker, U. of Ghent, Palestinians in the Margins of State Building: Conflict, Mobilization, and

Donors to ACOR

From July through December 2000, the following friends of ACOR made donations:

- The ACOR Endowment received donations from Virginia and Wesley Egan, and Julianne and Harold Zimmerman.
- General Donations were made by Aldeth Amundson, Arletta and Roger Anderson, Carol Andreae and James Garland, Donna and Paul Antoon, Richard Antoun, Whitney and Roger Bagnall, Paul Baker, Laird H. Barber, Mette and Robert Beecroft, Alexandra and John Betlyon, Stephen Bonaies, Glen W. Bowersock, Virginia and A. Wendall Bowes, Margaret Boyd, Nancy Broeder, Elizabeth and Carroll Brown, Caroline Bruzelius, Connie and Henry Christensen, III, Nancy Coinman, Karen and Jon Cole, Therese D. Crandall, Bonnie Lee Crosfield, Sally and Bert de Vries, Catharine Detweiler, Laurel and Ralph Doermann, Barbara and George Donovan, Stephen Dyson, Joan and John Eadie, Christine and Dale Eickelman, Felix W. Emse, Jr., David England, Carol and Harold Forshey, Nancy Frederick and Francis Wenger, David Noel Freedman and David M. Freedman, Henry George, Jillian and Lawrence Geraty, Victor Gold, Crawford H. Greenewalt, Jr., Linda W. Gruber (Gruber Family Foundation), Lily and Sami Habayeb, William Hagel, Jill and Nelson Harris, Ellen Herscher and Frederick Brown, Adalat and Abed Ismail, Martha S. and Artemis A.W. Joukowsky (Joukowsky Family Foundation), Widad and Kamal Kawar, Carol and George Landes, Nancy Lapp, Anne and Robert Latz, Bill Libby, Judith and James Lipman, William H. Lyle, Jodi Magness, Elizabeth and W. Harold Mare, Lysbeth Marigold, Genevieve Maxwell, Doyen McIntosh, Patricia and Robert McWhorter, Janet and Eugene Merrill, Julene and J. Maxwell Miller, Kenneth Miller, Robert Mittelstaedt, Gerda and Donald Mook, Peter Nalle, Elizabeth and William Overstreet, S. Thomas Parker, Susanna and Walter Rast, Margaret and Lewis Reade, Ann Boon Rhea, June A. and W.L. Roadman, Nancy Rudolph, Benjamin Saidel, Sarah D. and Jack Sasson, Kim and Stephen Savage, Marilyn M. and R. Thomas Schaub, Denise Schmandt-Besserat, Arnout Schurmans, Charles P. Schutt, Monique and Robert Schweich, Bernard T. Selz (Selz Foundation), Cynthia L. Shartzer, Christine Sleeper, James Socknat, Marie Spiro, Suzanne and Jaroslav Stetkevych, Heather and Edwin Taylor, Mari and David Terman, Mary Ann B. Tittle, John Topham, Shirin Devrim Trainer, Connie

Survival

- Nancy R. Coinman, Iowa State U., The Upper Paleolithic of Jordan: Human Adaptation during the Late Pleistocene
- Jonathan Lawrence, U. of Notre Dame, Living Water? Investigating the Development of Jewish Ritual Bathing and Christian Baptism

Waltz, Dixie Lee and Ronald West, Norman Whalen, Theresa and Thomas Whetstine, Sarah and C. Marlin White, Donald Wimmer, Wren and Tim Wirth, Constance Worthington and Terry Tullis, and Mary and Dean Zeilon.

- Donations to the Petra Church Conservation Endowment were received from Francesca and Thomas Bennett, James Knight (The Cavaliere Foundation, Inc.), Joachim Laes, Mary Ellen Lane and Colin Davies, Ruth Anna and Ronald Stolk.
- The Jennifer C. Groot Endowment received contributions from Laurel and Thomas Hendrickson and S. Thomas Parker.
- Donations to the Harrell Family Fellowship Endowment were received from Brooke and Philip Harrell and Edgar Harrell.
- The Kenneth W. Russell Memorial Trust received a donation from Cynthia L. Shartzer.
- A donation towards the publication of the Petra Papyri was received from Lou Gonda (Gonda Family Foundation).
- The Petra Papyri project received a donation from Jenny and Bob Bowker.
- The James Sauer Fellowship Endowment received donations from Phyllis Bird, Sally and Bert de Vries, Jillian and Lawrence Geraty, Pamela Johnson and Stephen Linter, S. Thomas Parker, and Alice and Thomas Pickering.
- Donations to the library endowment were made by Richard Alexander, American Schools of Oriental Research, Ames Planning Associates, Roger S. Boraas, Jane Bradford, Laurie Brand, Robin Brown, Connie and Henry Christensen, III, Sally and Bert de Vries, Cynthia Eiseman, Lisa M. Gemmill, Cynthia Infantino, Kathryn Kelley and Nicholas Clapp, Nancy Lapp, Neil MacKenzie, Carolyn and Edward McGehee, Doris Miller, John P. Oleson, S. Thomas Parker, Coles H. Phinizy, Jr., Sandy and William Shepherd, Gail and Tony Vander Heide, Janet and Donald Whitcomb, and Jane and Prescott Williams.
- Donations of books and journals were received from the Aga Khan Program (Courtesy of Waleed Hazbun), Talal Akasheh, Rami Daher, Thomas A. Dailey, Michael Homan, Instituto Cervantes (Courtesy of M. Jimeno), Jennifer Jones, Jodi Magness, William Mierse, S. Thomas Parker, Cynthia L. Shartzer, Kathy Twiss, Alexander Wasse, and H.R.H. Prince Ra'ad bin Zeid.
- Petra C. Duffet donated her personal library of books that were originally collected by her father Roy Petran Lingle.

- **Benjamin Dolinka**, North Carolina State U., Nabataean Aila from a Ceramic Perspective: Local and Intra-Regional Trade in Aqaba Ware from the 1st Century B.C. through the Early 2d Century A.D.
- United States Information Agency/Council of American Overseas Research Centers Post-Doctoral Fellow:
- Elise Friedland, Rollins College, Roman Marble Sculptures from the East Baths at Gerash: Origins, Import, and Meaning
- National Endowment for the Humanities Fellow:
- **Bethany Walker**, Oklahoma State U., Reconstructing Mamluk Administration in the Transjordan: A Multidisciplinary Study

Jennifer C. Groot Fellows:

- Alyson Berkowitz, Mercyherst College, Khirbet Iskander Excavation
- Michael Martin, Princeton Theological Seminary, Khirbet Iskander Excavation
- Walter Ward, North Carolina State U., Roman Aqaba Project
- Harrell Family Fellow/Pierre and Patricia Bikai Fellow: James Cook, U. of Victoria, Humeima Excavation Project
- 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, or on the web at www.bu.edu/ acor

Happenings at ACOR

- July 2. ACOR celebrates the 4th of July and Canada Day with a wonderful BBQ lunch prepared by Mohammed, Abed, and Said.
- July 5. Pierre attends a meeting at the Department of Antiquities in regards to the 8th International Conference on the History and Archaeology of Jordan to be held in Sydney, Australia, in July 2001. ACOR throws a 4th of July reception for the Khirbet Iskander team in Madaba.
- July 13. ACOR hosts a reception for the Madaba Plains Project team.
- July 24. Pierre gives a paper at the North Arabic Inscriptions Round Table.
- July 25. The second heat wave of the summer hits; the temperature soars to 43° Celsius (109.4° Fahrenheit).
- July 26. Patricia leaves for Petra to attend the Petra Management Plan conference.
- Aug. 2. The heat wave finally breaks. Temperatures had reached 45° Celsius (113° Fahrenheit)—the hottest summer in 50 years.
- Aug. 15. Arte and Martha Joukowsky and Pierre go to Hashemite University to discuss the various Petra projects.
- Aug. 16. ACOR Vice President H.R.H. Prince Ra'ad and Princess Majda host a dinner for ACOR's trustees.
- Aug. 22. Patricia presents a lecture on Nabataean pottery for a pottery conference sponsored by the French

Institute (IFAPO).

- Aug. 30. Riet Versteeg and Marjo Lehtinen finish putting the stamps on 3,400+ envelopes for ACOR's fellowship advertisement poster. Thank you Riet and Marjo!
- Sept. 2. ACOR residents attend the opening day of Limes XVIII, the International Congress of Roman Frontier Studies.
- Sept. 8. ACOR hosts a reception for the Limes conference. Over 200 persons attend. Pierre & Co. have prepared enough food for an even larger army!



Librarian Humi Ayoubi and Assistant Librarian Patricia Masri in the ACOR Library

Sept. 30. Kathy and Nisreen are kept busy closing the books; it's the end of the fiscal year.

- Oct. 1. Pierre takes former Senator Timothy Wirth (Colorado) and his wife Wren Wirth on a tour of Petra and later of the Dead Sea and Jerash.
- Oct. 3. Humi leaves for Cairo fór a month-long training course for the Overseas Digital Library Project which is sponsored by the Council of American Overseas Research Centers (CAORC).
- Oct. 9. In the basement, Naif frantically tapes up pots from Petra so that Pierre can draw them and Patricia can comment on them for an article that is due in a few days.
- Oct. 31. ACOR hosts a Halloween breakfast for staff and residents. Kurt outdoes himself with the cakes!
- Nov. 2. Pierre gives a tour of ACOR to a group from the Los Angeles County Museum of Natural History.
- Nov. 5. Nancy Wilke, President of the American Institute of Archaeology, drops by for a visit. She invites Pierre to join her in a session on Cultural Heritage at the Peace through Tourism Conference.
- Nov. 5. In the evening, Deborah Kooring arrives. She too is here for the conference. Deborah was the area supervisor when the Petra Papyri were found. Her account of the discovery was featured in *ACOR Newsletter* 5.2 (Winter 1993), pages 2-3.
- Nov. 8. Pierre and Patricia leave for the U.S. to attend the ASOR Annual Meeting. At that meeting, Pierre is awarded the William F. Albright Service Award.

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. \$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.

ACOR and its Newsletter

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Madaba Map Centenary 1897-1997

With assistance from ACOR, the proceedings of the international conference on the Byzantine map have been published, edited by Michele Piccirillo and Eugenio Alliata. This well illustrated hard-bound volume has 278 pages, and is available from ACOR for \$125, inclusive of shipping.

ACOR Board Meets

The Board of Trustees held their annual fall meeting in Nashville, Tennessee, on Nov. 17, 2000. One important topic of discussion was the institution of an annual fund drive. That drive was a tremendous success (see page 14).

ACOR Trustees

- Class of 2001: Mr. Artemis A.W. Joukowsky (President); H.R.H. Prince Ra'ad bin Zeid (First Vice President); Dr. Lawrence T. Geraty (Second Vice President); Dr. L. Carl Brown; Mr. Henry T. Christensen III; Mr. Nicholas Clapp; H.E. Dr. Michel Marto; and Dr. Bert de Vries
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