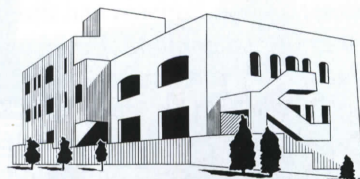


ACOR Newsletter

أخبار أكور

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First Lady Hillary Clinton Visits the Petra Church

Kurt Zamora

On November 12, 1999, First Lady Hillary Clinton visited the Petra Church, an ACOR project since 1991, to commend ACOR and the Jordanian Government on their collaborative efforts in preserving Jordan's rich cultural history and to present ACOR with a symbolic check in the amount of \$1,085,000.

Accompanied by her daughter Chelsea, as well as



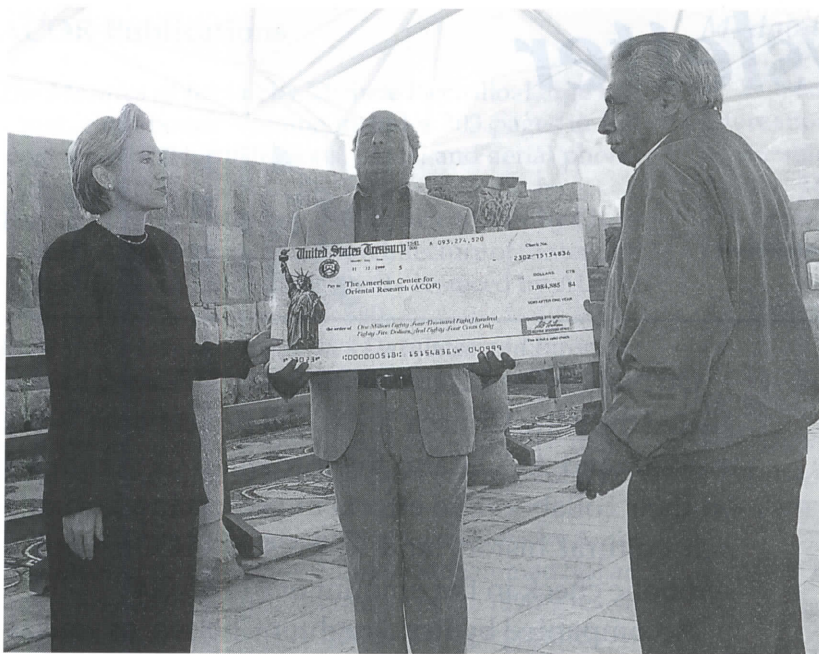
U.S. Ambassador William J. Burns, First Lady Hillary Clinton, ACOR Director Pierre Bikai, Chelsea Clinton, H.R.H. Princess Aisha, and H.E. Mr. Aqel Biltaji



Pierre Bikai, the First Lady, and Chelsea Clinton. Behind are U.S. Ambassador William J. Burns and the Minister of Tourism and Antiquities, H.E. Mr. Aqel Biltaji

by H.R.H. Princess Aisha, Jordan's Minister of Tourism and Antiquities H.E. Mr. Aqel Biltaji, and U.S. Ambassador to Jordan William J. Burns, Mrs. Clinton arrived at the church at one in the afternoon. She was welcomed by ACOR Director Pierre Bikai and USAID/Jordan Mission Director Lewis Lucke. Mrs. Clinton, Chelsea, and H.R.H. Princess Aisha were then presented with bouquets of flowers by three children from Um Sayhoun, the Bedul village behind Petra. Pierre then gave a brief tour of the church to the First Lady and Chelsea Clinton, explaining its history and the beautiful mosaics.

Following the tour, Mrs. Clinton spoke to those gathered. In her speech, she applauded the cooperation between the U.S. Government, the Jordanian Government, and ACOR on developing Jordan's tourism industry by restoring and preserving the country's rich cultural heritage.



Mrs. Clinton presenting the symbolic check to Pierre Bikai with H.E. Aqel Biltaji to the right

The First Lady also commended ACOR on its efforts and stated that "the people-to-people nature of ACOR's programs is one of the most impressive features of its work. By providing opportunities for scholars and students from the U.S. and Jordan, they can work together to better understand Jordan's rich past."

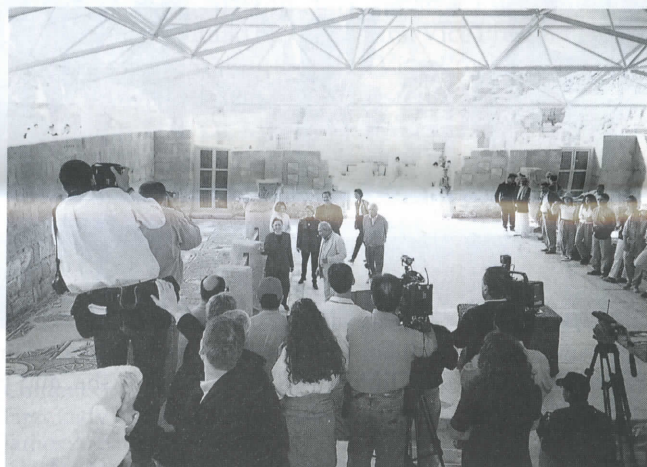
After her speech, Mrs. Clinton presented Pierre with an oversized symbolic check in the amount of \$1,085,000. This figure represents the amount of funding the U.S. Agency for International Development (USAID) had given to ACOR for the Petra Endowment. USAID initially provided ACOR with \$900,000 in 1997 to establish a permanent endowment, earnings from which are used to fund ACOR's projects in Petra. ACOR was then awarded an additional \$185,000 grant for the Petra endowment at the time of Mrs. Clinton's visit.

The income from the endowment is currently being used to fund the Petra Mapping Project, a cooperative venture with Hashemite University. The objective is to create a large-scale digitized map of the Petra National Park. To date, the center of the city has been mapped and this year the map is being expanded to the north. It is the ultimate goal of the project to map the whole park. As a component of the mapping project, ACOR architect Chrysanthos Kanellopoulos is documenting the free-standing architecture of Petra. Endowment income is also used to sponsor an exchange program with the U.S. International Council on Monuments and Sites, and to support the North Ridge Project, as well as for a variety of smaller projects such as the construction of a fence around the Neolithic site of Beidha which is in Petra.

With cooperation from the Jordanian Department of Antiquities and funding from USAID over the past decade, ACOR has become a leader in preserving Jordan's cultural heritage. Funds from USAID have allowed

ACOR to restore the Great Temple of Amman, excavate and restore the Petra Church, develop the Jordan Antiquities Database and Information System (JADIS), and build archaeological parks in Madaba and Aqaba. These projects have restored and preserved important historical sites in Jordan, which has allowed Jordan to increase its tourism industry, an important sector of the country's economy. Indeed, tourism now accounts for over fifteen percent of the gross national product.

Mrs. Clinton's visit to the Petra Church was an historical day for ACOR. Not only did the First Lady of the United States visit an ACOR project, but ACOR also received recognition and commendation for its work. She also reminded us that cooperation between governments and non-governmental organizations, such as ACOR, benefits all of us.



The press at the Petra Church



On Nov. 13, Pierre led a tour of the Citadel for Chelsea Clinton, Mable Meares, the Director of American Schools and Hospitals Abroad, and Jonathan Addleton of USAID

James A. Sauer (1945-1999):

An Appreciation and Remembrance

The American archaeologist and scholar Jim Sauer, who dedicated much of his professional life to the study of the antiquities of Jordan, passed away November 23 in the United States from complications arising from Huntington's Disease. He is survived by his wife Sue, and his children Tom and Kate. The family has asked that donations be made in Jim's name to the Huntington's Disease Foundation of America, 158 West 29th Street, 7th Floor, New York, NY 10001.

Jim Sauer spent much of his adult life working in Jordan and the United States to build up the American Center of Oriental Research (ACOR) in Amman and the American Schools of Oriental Research (ASOR) in North America. He leaves behind a powerful legacy and an example of professional excellence, personal integrity, and a boundless humanity that will inspire future generations of scholars and archaeologists for years to come. His many friends and colleagues will miss him dearly, but we will long feel the impact that he had on our lives personally and on the fields of scholarship that he so dearly enjoyed and excelled in.

Jim Sauer changed my own life in several ways, for which I shall always be grateful. His intellectual enthusiasm, broad scope of knowledge, clarity of technical thought, and very warm and human way of communicating his knowledge spurred me to start writing about archaeology some two decades ago, when I first met him in Amman. I first met Jim at the old ACOR building near the 6th Circle around 1980, when I was researching my first book about the agricultural and socio-economic development of the Jordan Valley. I went to see him because he had participated in an archaeological survey of the Jordan Valley. I wanted to ask him about the ancient agricultural development of that area, so that I could place the modern development of the valley in its proper historical perspective. We talked for about an hour, during which he used many terms that were both difficult for me to pronounce and to grasp: the Chalcolithic, Early Bronze Age IV, and others—for I knew virtually nothing about ancient history then.

After that one hour, my knowledge expanded significantly, but my enthusiasm and curiosity about ancient life in Jordan grew even more. His capacity to educate his audience was simultaneously matched by his unique ability to transmit a sense of awe and enjoyment of what happened in this land thousands of years ago. He made the complex easy to understand, distant history relevant to life in Jordan today, and intricate technicalities of archaeology and pottery a source of endless wonder and joy for lay people like myself.

I left that one-hour session with Jim Sauer forever hooked on the excitement and relevance of the antiquities of this land. I also left comforted by the knowledge that I could always turn to him for guidance and expla-

nation of the little details, the big words, and the large concepts that are such central elements in the study of the past. I have spent the last 20 years enjoying and writing about the antiquities of Jordan; through books, articles, and radio, my work has reached perhaps millions of people around the world. Looking back, I now appreciate that I have been just one of many extensions and manifestations of that personal and scholarly enthusiasm for antiquities that sprang from the person of Jim Sauer. Many other scholars and friends have guided and assisted me in my work since 1980, for which I remain eternally appreciative, but he was the person who generated the first spark.

I also now realize that his special quality was not only about archaeology. Rather, it was his unlimited capacity to share what he knew with others, without requiring anything in return. He taught me about archaeology, but he also taught me more important lessons about selfless giving, devotion, and love for the world and for the people of antiquity and today. He taught by example, not by lecturing. His example helped others to enjoy the study of the ancient world, but it also provided others with a model of giving and sharing. I try always today to respond positively to other people's demands on my time and knowledge, because I remember how much I gained when people like Jim responded positively to me early in my career, when I asked for and generously received their time, thoughts, and expertise. I know that he changed my values as a human being, simply through the force of his own example of living a good, generous, and humble life. He sometimes sacrificed his own career prospects because of his insistence on sharing his knowledge and helping others in their careers, and on placing the needs of other people before his own.

His pioneering work on ancient pottery and chronologies will be refined and expanded in time by other scholars, just as he went beyond the work of archaeologists and historians who preceded him. But his example as a generous, kind, and patient human being remains a perpetual standard against which many of us will always strive to measure our own lives.

I still don't fully understand what was going on in the Chalcolithic Period or the Early Bronze Age IV or the many other pivotal ancient periods of human civilization. But I do understand a lot more today about the qualities that make people good, and special, and perpetual beacons of how to make the world a better place. This may be the most meaningful gauge of a life well lived. And this is why, ultimately, Jim Sauer's contribution to the interaction of human civilizations in Jordan will be partly about what he taught us about the past, but mostly about what he taught us about ourselves.

May his soul always rest in peace, and the memory of his fine life inspire us to achieve the worthy standards that he set.

Rami Khouri [Reprinted from the *Jordan Times* with the permission of the author]

Field Reports

Wadi-as-Sirhan Survey

An American professor and student joined by three consecutive representatives from the Department of Antiquities undertook an archaeological survey in eastern Jordan between September 16th and December 15th, 1999. The objective of the survey was to locate sites contemporary with the earliest human migration out of Africa and into Asia during Pli-Pleistocene times approximately two million years ago (mya). Since 1990 human remains and stone artifacts have been discovered at Longgupo Cave in southern China in a context dated 1.8 mya. Also, in Java, a child's skull at Mojokerto was re-dated by paleomagnetism to 1.81 mya while two skulls at Sangiran were dated by argon/argon technique to 1.80 and 1.66 mya. The presence of humans in eastern Asia 1.8 mya presupposes an initial migration into Asia from Africa 100,000 to 200,000 years earlier, that is, about 2.0 mya.

Migration from Africa into Asia could have proceeded along one of two routes: (1) down the Nile and across the Sinai into the Levant, or (2) from Djibouti across the Bab al-Mandab into Yemen thence to points east. The northern route across the Sinai would lead directly into Jordan. In Pliocene times, the Wadi-as-Sirhan was a vast inland lake fed by numerous wadis presently located in Jordan and in Saudi Arabia, extending from Azraq in Jordan to al-Jawf in Saudi Arabia. A fresh water lake of such dimensions attracted many forms of animal and plant life and would form a natural pathway for human migrants gradually infiltrating eastward across Asia. Our goal was to investigate the Jordanian side of this vast waterway, of which the desiccated bed of Lake Hazawza in Saudi Arabia is the sole surviving remnant, for evidence of early human occupation.

The survey began September 16th with a general overview of the area and ended on December 15th. During that time a total of 38 sites was discovered in an area extending geographically from 31 degrees 07 minutes north to 31 degrees 13 minutes north; and from 36 degrees 51 minutes east to 37 degrees 14 minutes east, an area encompassing 161 square miles or 407 square km. From those sites the research team recovered 1872 artifacts of which 1306 were classified pre-Acheulean (possibly Developed Oldowan or Early Acheulean) and 566 Acheulean. This disproportion between the earliest (pre-Acheulean?) and Acheulean artifacts may be attributed in part to the implementation of our research design which focused on tools related to the Oldowan or Developed Oldowan/Early Acheulean time frame. It must be noted that only the slightest trace could be found of Upper Acheulean Mousterian, or Upper Paleolithic with no evidence whatsoever of the Neolithic or later protohistoric periods. Early sites were sought on geomorphological formations likely to harbor them, namely, at the top and base of escarpments bordering major wadi

systems such as Wadi Husaidat and Wadi Makhruq. Those wadies, in the time period we are dealing with here, were major tributaries of the immense Pliocene lake mentioned above.

Certain generalizations have emerged from the survey:

(1) Due to limitations of time only a fraction of the entire Wadi-as-Sirhan basin could be surveyed for early prehistoric migration.

(2) With rare exceptions, no artifacts of a culture subsequent to the Acheulean were found—no Mousterian, no Upper Paleolithic, no Neolithic or later cultures.

(3) Most sites recorded in the survey yielded Acheulean and the earlier pre-Acheulean artifacts. The latter were distinguished from the former by extensive erosion and weathering. Corrosion on some pre-Acheulean artifacts was so advanced as to render identification either impossible or questionable.

(4) Since all sites were surface sites, exact dating and chronological placement of artifacts must remain to some degree subjective and limited.

(5) The preponderance of limestone in the survey area had two effects on artifacts: (a) in some cases it resulted in an accretion of chert on the artifact; while (b), in other cases, it contributed decisively to the corrosion and ultimate disintegration of many of the oldest tools.

(6) The massive quantities of limestone were a source of chert nodules of which some were converted into tools. As a result the only raw material used to make artifacts was chert which was readily available in outcrops everywhere.

(7) The Acheulean is often identified by the presence of handaxes. Strangely, these occurred at only six sites clustered in one localized sector of the survey area. The handaxes that were found, 20 in number, were mainly lanceolate or cordiform in outline. Handaxes of the Upper Acheulean such as the triangular, ovate, or microquian, were absent.

(8) Distinction between pre-Acheulean and the Acheulean was based upon the artifact classification of Mary Leakey in the Olduvai Gorge series and on Francois Bordes in the *Typologie*. Another determinant was the extent of weathering with the pre-Acheulean exhibiting greater erosion and weathering than the later Acheulean. Artifacts from both periods displayed a heavy patina of black desert varnish.

(9) Lacking stratigraphic placement and radiometric dating, we tentatively assigned the pre-Acheulean to an Oldowan sequence or Early Acheulean at the latest. Artifacts classified Acheulean in the survey were Middle Acheulean at the latest since an occasional polyhedron and discoid appeared in an Acheulean context. Those two tool types disappeared in Upper Acheulean times. Conversely the absence of the Levallois technique, which first appeared toward the end of the Middle Acheulean, suggest an age no later than Middle Acheulean. In addition, most Acheulean tools were produced by hard

hammer percussion yielding large flake scars. Soft hammer percussion (wood, bone, antler) with small scars was characteristic of the Upper Acheulean, not early or Middle periods.

(10) The absence of the Neolithic and later period sites in the research area indicates that this region of Jordan was ill adapted to support farming enterprises which seem to have taken place in the Jordan Valley with its abundant supply of water. With the disappearance of the Plio-Pleistocene/Early Pleistocene lake, occupation of the region declined and with it, any manifestation of post Acheulean cultures.

(11) The widespread occurrence of pre-Acheulean and Acheulean sites in eastern Jordan implies that hunters and gatherers, at that remote time, found the area congenial for survival. Wadi-as-Sirhan in the distant past was a fresh water lake supporting many forms of animal and plant life indispensable for early humans. The vast quantities of chert, so easily obtainable, was a further inducement for human settlement in the area.

Norman M. Whalen
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Ar-Rasfa 1997-1999

Recent excavations at the site of ar-Rasfa (Wadi el-Yabis, Ajlun District) have revealed a deeply-stratified deposit of Middle Paleolithic stone tools. This site fills a gap in our knowledge of Jordanian prehistory during a crucial phase of human evolution. The Middle Paleolithic (MP) period in the Levant (45,000-250,000 BP) preserves some of the oldest anatomically-modern human fossils in the world, and it is the focus of intense paleoanthropological research (Akazawa *et al.* 1998).

The distribution of MP sites in the Levant is strongly associated with Mediterranean woodland (Shea 1998). Typically dominated by oak and terebinth, and found in areas with more than 350 mm annual rainfall, the Mediterranean woodland contains a wide range of edible plants and small animals. Faunal assemblages from most MP sites are dominated by woodland species, such as gazelle, fallow deer, and wild boar. In Jordan, the Mediterranean woodland occurs in the hills and valleys flanking the Jordan Rift Valley. During cooler and wetter phases of the later Pleistocene, it extended farther, into areas that are now steppe or desert. Most excavations of Jordanian MP sites have occurred in the arid southern part of the country (Coinman 1998; Henry 1995). Northwest Jordan retains significant woodland vegetation even under today's hyperarid climate. It is reasonable to expect that Northwest Jordan was also a major focus of MP settlement.

The ar-Rasfa MP site complex is located in Wadi el-Yabis on the southwest promontory of a hill bearing the same name, about 1.5 km east of Marza (Shea 1999). The surface of the main site has a shallow southeasterly grade running from -37 to -40 m below sea level. MP artifacts can be observed eroding from an area approxi-

mately 100 m in extent. Four test pits were excavated in a transect across the site, revealing 2.5 m of sandy silt deposits enclosing MP stone tools. Most of these artifacts within the silty deposits below are in fresh condition, and they generally lie parallel to the horizontal plane. These observations suggest relatively rapid burial under low-energy conditions. Neither fossilized bones nor carbonized plant remains have been found, thus, the sole evidence for human activity at ar-Rasfa is the lithic record.

The lithic sequence from ar-Rasfa seems to encapsulate a transitional phase within the "Levantine Mousterian" industry. The lowest levels feature elongated points ("Abu Sif knives"), blades, and cores with unidirectional preparation. Upper levels contain more oval flakes and cores with bidirectional or centripetal preparation. At the well-dated sites of Tabun and Hayonim caves, this technological shift dates to around 130,000-180,000 BP (Bar-Yosef 1998). Similar Levantine Mousterian assemblages have been discovered in the Jordan Valley at Ain Difla (Wadi el-Hasa) and at several as-yet-undated sites in the Wadi Khareitun, near Hebron (*i.e.*, Umm Naquus, et-Tabban, Abu Sif). Future work at ar-Rasfa will attempt to confirm this age estimate from TL dates on burnt flints.

Analysis of the stone tools recovered in 1999 is still in progress, but the overall picture that emerges is on an



Tools from ar-Rasfa

assemblage dominated by both the initial and final stages of tool production. Many flakes are large, thick, and feature weathered cortical surfaces, indicating the initial reduction of flint boulders (*i.e.*, when a flintknapper is trying to discover the quality of the flint). Yet, the ar-Rasfa assemblage also contains relatively large numbers of cores made on truncated flakes. These kind of cores yield only small, marginally useful flakes, and they are thought to reflect raw material scarcity. However, flint is abundant at ar-Rasfa, outcropping from local limestone and occurring as clasts in Middle Pleistocene gravel deposits. One possible explanation for this pattern in the lithic evidence is that ar-Rasfa was a specialized workshop site, perhaps a waypoint along an annual migration route, at which new tools were fashioned to

replace worn-out elements of a portable "toolkit." ar-Rasfa's position in the local landscape would also have made the site an excellent location from which to monitor game movements and availability. It is possible, indeed likely, that the site served these and other functions for the same human populations at different times of the year.

During our 1999 season, we also identified several cave/rockshelter sites containing Middle Paleolithic deposits in the nearby Wadi Kufrinja. Caves are more likely than open-air sites to preserve fossilized bones and plant remains. We plan to conduct test excavations at these sites in the near future to further improve our understanding of Middle Paleolithic human adaptations in Northwest Jordan.

The 1997 and 1998 field seasons at ar-Rasfa were supported by grants from the L. S. B. Leakey Foundation and the ASOR Committee on Archaeological Policy.

John J. Shea

State University of New York at Stony Brook

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Ghwair I

The fourth season of the joint University of Nevada-Las Vegas and Department of Antiquities interdisciplinary excavations at the Pre-Pottery Neolithic B (PPNB) settlement of Ghwair I was successfully completed in late January 2000. The project is co-directed by Alan Simmons of UNLV and Mohammad Najjar of the De-

partment of Antiquities. Major funding for the project comes from the National Science Foundation and the National Geographic Society. We concentrated at three previously defined areas of the site, designated as Areas I, IV, and VI. Area VI included a portion where ground-penetrating radar conducted during the summer of 1998 suggested considerable architectural complexity.

The excavations continued to reveal considerable architectural and artifactual variability. In particular, the architectural complexity of Ghwair I is now readily apparent, and the site's configuration now has taken on a distinct village layout. Of especial significance is the presence of two sets of internal stairs, supporting the interpretation of at least two stories in many of the buildings. In addition, excavation outside of a room block in Area IV revealed a large set of step-like stones that appear to form either a major outdoor stairway or, perhaps, some sort of "theater" or public area. These stairs seem to lead down to a level open area of hardpacked earth. Additional excavation is required to clarify the function of this area, but it clearly was an elaborate feature.

Other architectural highlights of the excavation were the exposure of complete rooms, including some that are quite large (ca. 4 x 4 m). Other rooms consisted of a series of small bins or storage rooms. In Area VI, large walls that appear to be non-residential were encountered, verifying the ground penetrating radar results.

We also completed excavation of a room in which a sub-floor burial was encountered last year. This clearly was a special room, as it contained a cache of goat and cattle skulls laying nearly directly on a plastered floor, as well as two caches of finely produced blades, polishing stones, some with malachite imbedded into them, and several malachite pendant blanks. The burial itself is a especially intriguing internment, since it consisted of an infant (9-12 months old) in a flexed position, with the skull intact, which is an unusual feature for the PPNB. The infant was adorned with a mother of pearl ornament around its neck.

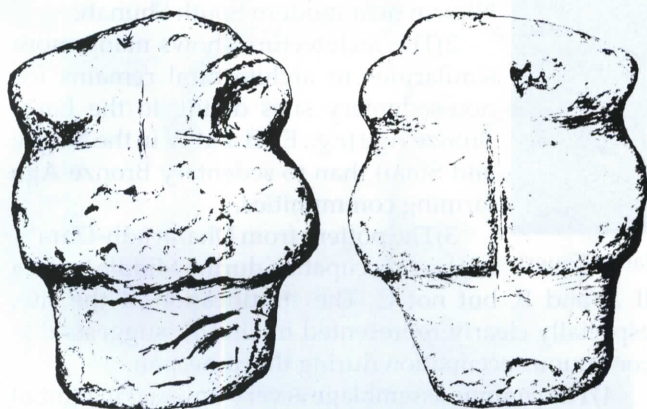


Mother of pearl ornament from the infant burial

After a paucity of burials from previous seasons, three other burials were encountered. These also are unusual in that they are adults buried in crude cobble-lined graves in structure tumble. They also have their craniums, but the subcranial materials are in fragile condition. Radiocarbon dating will determine if, in fact, these are Neolithic.

In addition to the elaborate architectural features and unusual burials, a huge and varied material cultural assemblage was revealed. This consisted primarily of chipped stone artifacts and a surprising varied and

complex ground stone assemblage. The chipped stone continues to reflect a typical PPNB assemblage, with a very large number of projectile points, primarily Byblos types. Of interest, however, was the discovery of a cache of finely worked and large points that, upon additional study, may be tentatively classified as "Ghwair Points." The ground stone from the site continues to be varied. We also recovered three stone human figurines, including two of which are clearly female.



Gwair: female figurine

Fauna continues to be abundant, and flotation recovered numerous paleobotanical specimens. Finally, we also conducted an initial ethnoarchaeological study.

In summary, the results of the 1999/2000 season have demonstrated that Ghwair I was an exceedingly complex village. Continued investigations will greatly expand our knowledge of Neolithic adaptations in this region.

*Alan H. Simmons, University of Nevada at Las Vegas
Mohammad Najjar, Department of Antiquities of Jordan*

Dharat adh-Dhra'

This multidisciplinary project has completed its first field season investigating the long-term human settlement and ecology on the extremely arid Plain of Dhra', which lies well below sea level immediately east of the Dead Sea in Jordan. Phillip Edwards conducted a first season of excavation at Dharat adh-Dhra' 2 (DAD 2), a Pre-Pottery Neolithic A site, between mid-November and mid-December 1999. Steven Falconer directed a first season of excavation at Dharat adh-Dhra' 1 (DAD 1), a Middle Bronze II A-B site, between mid-December 1999 and mid-January 2000. Patricia Fall directed the recovery of several sediment cores from the northern Lisan Peninsula during January and February 2000. Palynological interpretation of this core will provide a portrait of the regional palaeoenvironment during the occupations of DAD 1 and 2.

Dharat adh-Dhra' 1 and 2 were unknown prior to their discovery during preliminary reconnaissance by project geomorphologist Phillip Macumber between 1988 and 1993. The site is located along a northwest-southeast

trending ridge bounded by two tributaries that drain into the Wadi Kerak. Rectilinear and curvilinear stone building remains protrude through topsoil over an area of six hectares. The most common building plans show one and two-roomed structures with courtyards.

The 1999/2000 season began with a general mapping of surface architecture. Most Middle Bronze Age settlements in the southern Levant are buried beneath later cultural deposits in mounded tell sites. Fortunately, the absence of later occupations at DAD 1 makes its Middle Bronze deposits immediately accessible. Rather than employing traditional 5 x 5 m excavation squares, we used our survey results to place 23 units of varying sizes in optimal locations to explore the chronological, functional, and architectural variation within DAD 1. Our units sampled two multi-enclosure architectural complexes, one toward the southeastern end of the site (Units D, E, F, M, N, and V), and another toward the northwestern end (Units J, K, L, P, and Q). More isolated rectilinear structures were sampled by Units A, G, H, and I. Units B and C crosscut a massive boulder alignment. Unit T tested a wall apparently bounding the northwestern architectural complex. Units O, R, S, and V searched for exterior midden deposits, especially in hope of producing significant floral and faunal remains. All excavated sediments were dry-sieved through 0.5 cm mesh screen. The following is a summary of the findings of the 1999/2000 season:

ARCHITECTURE AND ARCHAEOLOGICAL DEPOSITION: DAD 1 includes a variety of rectilinear structures of various sizes, often including a nearly square room at one end of a rectangular building. In some cases these buildings are attached to curvilinear courtyard or enclosure walls that may have defined use areas or segregated residential space. The best stratified interiors, from Units F, I, J, and K reveal that interior living space was created by founding walls on the site surface or set into shallow foundation trenches. Subsequently, an interior use surface was created by excavating 50 cm or more below the wall founding levels in a fashion similar to that seen in pithouses in the southwestern U.S. The structure walls at DAD 1 rarely stand higher than one or two courses. Unit K revealed walls standing four courses high. Substantial rock fall indicates that structure walls once stood much higher. Rock fall was generally greatest within square rooms (e.g., Units F and K), less abundant in the rectilinear rooms attached to them, and limited along apparent enclosure walls. There is no obvious indication of roofing material (e.g., roof beams), although flat rock slabs were found in the lowest deposits of Unit A. The architecture suggests various heights of construction and the possibility that perishable materials (e.g., brush or hides) may have been used for roofing material.

CERAMICS: The pottery from DAD 1 is entirely Middle Bronze Age. The assemblage includes straight-sided cooking pots with appended rope molding that are consistent with Middle Bronze II A and B examples



Aerial view of the Dead Sea Plain east of the Lisan Peninsula (photo: James Sauer)

found commonly at other sites. The form of a nearly complete dipper juglet is consistent with MB II A or possibly B. Among the few bowl forms found is an open bowl base with a moderately high foot, consistent with MB II B forms. There are no chalice or high-footed forms that might suggest an MB II C date. Unlike domestic assemblages found elsewhere, the repertoire at DAD 1 includes a striking predominance of cooking pots sherds. Store jar sherds, which often make up the majority of other assemblages, are only modest in number, and bowl/cup forms are very rare. Interestingly, the jar remains include no handles and no body sherds with handle attachments. It would seem that the occupants used a very specific and unusual repertoire of jars, predominantly short-neck jars, without handles.

LITHICS: Chert fragments provide the largest assemblage of material culture excavated from DAD 1. The lithic assemblage includes a large amount of shatter fragments. Utilized lithics include expedient flake tools, with little evidence of formal blades, which are normally found in triangular and trapezoidal forms at Middle Bronze Age sites. Utilized tools also include bladelets, presumably used in hafted tools, an unusual aspect of Middle Age lithic technology.

FLORAL REMAINS: All visibly carbonized organic sediments at DAD 1 were processed using simple water flotation. These samples produced ample charcoal chunks, and a substantial sample of seeds. Preservation of seeds may have been impeded by the deposition of relatively coarse, shallow sediments of DAD 1. The charcoal collection may provide our most robust floral evidence, and could indicate construction and fuel woods in use during the Middle Bronze Age.

FAUNAL REMAINS: The preservation of bone remains also seems to have been somewhat limited at DAD 1. Despite routine sieving of all excavated sediments, bone recovery was sparse. The 1999/2000 season produced only five identifiable bones: 4 domesticated sheep/goat and 1 domesticated pig.

SUMMARY: Several major insights are apparent following the excavation and preliminary analysis of evidence from the 1999/2000 field season at Dharat adh-Dhra' 1:

1) The site represents a rare example of a Middle Bronze Age settlement in southern Jordan. While MB tombs are known from the region of Ghores-Safi to the south, the nearest MB domestic site lies at Tell Nimrin near modern South Shunah.

2) The architecture shows many more similarities to architectural remains for non-sedentary sites dating to the Early Bronze Age (e.g., EB II and IV in the Negev and Sinai) than to sedentary Bronze Age farming communities.

3) The pottery from Dharat adh-Dhra' 1 suggests occupation during Middle Bronze II A and B, but not C. The stratification at the site, especially clearly represented in Unit K, suggests discontinuous occupation during this timespan.

4) The ceramic assemblage is very unusual in light of the relative abundance of cooking pot sherds, near absence of fine wares, and repertoire of unusual handleless jars. This assemblage may be indicative of the remote location of the site from other MB settlements and/or its function as a rare example of a non-sedentary, possibly seasonal MB site.

5) While floral and faunal assemblages are limited in their value for inferring special use or seasonality, the architecture, ceramics, and lithics may provide means of inferring spatial patterning of activities and general inference of site function for this very unusual example of Middle Bronze Age settlement.

Steven Falconer and Patricia Fall, Arizona State University

Tell Safut

During July 1999, Seton Hall University conducted its ninth season of fieldwork at Tell Safut, a joint venture between the University and the Department of Antiquities of Jordan since 1982. This season's excavations, which explored the lower terrace at highway level east of the parking lot (Area L), revealed that the slopes of the tell were not used solely for terrace farming. Excavations in 1995 had uncovered complex architecture halfway down the tell, and results from this season's fieldwork revealed that the lower slopes, on the south and east sides, were occupied to at least 5 m below the level of the present highway.

In Area L, excavations uncovered a wall, running east-west, that measured 20 m long and almost 3 m deep. The size and trim of the stones, particularly at the corners, are significantly different than others found at the site. Most other walls are constructed of smaller stones that can be moved by one or two persons. The dressed cornerstones of the new wall measure ca. 1.0 m



Fellows' Reports

Umayyad Architecture in Context

The period of transition from Byzantine to early Islamic rule in *Bilad al-Sham* (the geographic area of modern day Jordan, Syria, Lebanon, Israel and Palestine) provides the student of the sociocultural history of the eastern Mediterranean in late antiquity with particularly challenging questions. Among these, the question of the transformation of urban life is not the least complex. My primary research question addresses the fate of cities in *Bilad al-Sham* after the political transfer of power from Byzantine to Islamic rule in the 7th-8th centuries A.D. In particular I am investigating how the shape and function of cities were adapted and altered during this transitional period as a reflection of a changing civic, religious, economic, and political culture. The cities that my research has so far focused upon are Pella, Umm Qais, Jerash, and Madaba. These cities were in continuous use from the Roman through the Umayyad periods and thus provide ample examples of how urban life was transformed during the period in question.

The majority of recent scholarship, both historical and archaeological, has stressed the sociocultural continuity in *Bilad al-Sham* during the first two centuries of Islamic rule. This continuity has been characterized as a "continuity of change," in that it actually represented social developments that originated in the later decades of the preceding Byzantine period, when urban centers in *Bilad al-Sham* started to witness major and permanent alterations in their urban fabric which resulted in their eventual "decline." My research evaluates what is meant by a city's "decline" and investigates those urban alterations that occurred in the 7th and 8th centuries, and how these alternations might shed some light on the overall changes (or continuities) that were occurring in society in general and urban life in particular. Specific problems that I am considering include the fate of churches (and non-Muslim communities) under the

Nagam Assaf in Area L of Tell Safut

x 0.5 m x 0.5 m and extend down six or more courses. Excavations also revealed another wall, extending north for at least 10 m, and a buttress wall that extends 10 m south before turning eastward. Over 400 m² of the site now show complex architecture.

A long range, site-wide consolidation program was also begun during the season. Neif al-Zaben, a conservation specialist at ACOR, began the program in L.3, where ancient plaster still adheres to the Iron II/Persian walls. He continued to preserve selected walls after the field season ended. In addition, the Ninth Expedition also cleaned the site of weeds and trash that had accumulated since the last season.

At the end of the season, the Minister of Tourism and Antiquities, H.E. Mr. Aqel Biltaji, informed Excavation Director Donald Wimmer that Tell Safut would become a Jordanian national heritage site. Tell Safut will be placed on future maps of Jordan, and road signs will announce the location of the site. Informational signs will also be placed at strategic locations throughout the site. An impressive view and easy access make Tell Safut a site worth visiting.

Donald Wimmer, Seton Hall University



The Roman bridge at Jerash, one of the cities in the study (photo: James Sauer)

nascent Islamic empire, the use and reuse of civic buildings (such as public bathes and theaters), and the use of spolia in the construction of new buildings.

My approach has been to gather preliminary data from published excavation reports, as well as from primary literary and documentary sources. This information is supplemented by on-site analysis of these cities and the recording of the ways in which specific architectural structures and motifs (from roads to columns) were used, reused, constructed, or adapted.

*Lara G. Tohme, Massachusetts Institute of Technology
Kress Fellow in the Art and Archaeology of Jordan*

The Internet in Jordan: A Status Report

Satellite dishes on the rooftops, a garage-full of sheep that graze in front of ACOR, and a dozen Internet cafes across the street from the university, where students chat away on mobile phones—the information revolution is in full swing in Jordan. In just three years since my first visit, three Internet cafes in Jordan have grown to over a dozen in west Amman alone; another is in the medina directly across from the Roman theater. Jordan University is into its first year of a “One Thousand PCs” project to make Internet-connected computers available to all students, with a second thousand in the planning. Demand overwhelms supply, and Jordan’s original two private-sector Internet Service Providers have increased to five. Internet Service is spreading to the rest of the country: University Street in Irbid has reputedly the highest concentration of Internet cafes per block in the world, plus what is perhaps the world’s first Internet shwarma shop. “The enterprising restaurateur,” says *The Jordan Times* (20 January 2000), “felt that students would surf better on full stomachs.” There is even an Internet cafe in Petra.

The attraction? “It’s the freest place in Jordan,” said one Princess Sumaya University College student of NETS’s path-breaking forums for open discussion online. Another is the opportunity not just to meet socially but to work with different kinds of people from diverse backgrounds. A medical school graduate founded Jordan’s own Arabia.On.Line, an innovative web window on the Arab world. Others are not so sure about the Internet. “There are maybe forty thousand Internet accounts in Egypt,” says an Amman businessman, “and over a million mobile phones.” Are mobiles that you can carry around, rather than an Internet that tethers you to a PC, the technology for Arab ways and communication needs? Three years ago a geologist staying at ACOR told of a Bedouin in the south who had worked with him for years and recently acquired a mobile phone because it was easier to keep in touch with his parents when they were out with the sheep—much easier than searching for them on horseback.

Maybe they’re all right. A clutch of Jordanians are not just exploring options but making them. An innovative plan is slowly being implemented to create a National

Information System that will join and make available to all the information that the government collects and now stores electronically. In the private sector, young info-tech entrepreneurs are busily preparing for an IT Forum, to which King Abdullah II has invited leading U.S., European, and Asian companies to see what Jordan has to offer as a producer in this field.

Some think that the Middle East is on the verge of an information revolution, others that the region is already deep into it. Countries that a few years ago treated all such technology as taxable imports now see a development opportunity in combining local knowledge with technological talent, something the Internet uniquely facilitates. Syrian and Saudi Arabian authorities approach public Internet service gingerly, while pressing forward with official, sanctioned uses in education, science, medicine (in Saudi Arabia) and industry (in Syria). Elites eager to participate in the world communications order, particularly business elites, press governments across the region to upgrade infrastructure and liberalize information regimes in order to accommodate Internet services and spread them faster to more of the population.

Clearly, this is a “people” story as well as one about technology, which is why my current research focuses on retrieving a social history of the Internet in Jordan. The Internet does not merely diffuse, as if outward from a center. It has evolved through the addition of new uses and new users. It spent 20 years in academic obscurity before going public and becoming an overnight success in the 1990s. It spawned a gaggle of gurus enthusing over new forms of work, leisure, politics, culture, and selves—usually generalizing from a narrow base of experience, not infrequently their own. The kinds of other experiences that people bring to and have with the



Haroon's Internet Cafe, Irbid

Internet is the focus of my project. What kinds of values do they build into the system that has already passed from the hands of engineers and applied scientists to the wider worlds of academic research, and now the international stage?

There are several clear mediators of Arab culture and interests to the Internet. Diaspora pioneers were perhaps the first; but it was commerce, more than academe, that brought Arabia on-line, at least to the point that large public investments in infrastructure and education are crucial to further growth. With those come financiers and other sponsors, regulators and administrators, and a rising number of voices that want to discuss, if not to define, what would be a culturally appropriate Arab Internet. The range of what we would call "technology actors" is expanding with the expansion of the Internet beyond elites. Now it intersects a long-term trend in the region, the expansion of middle classes with rising levels of education, particularly higher education, throughout the region. Jordan is in the vanguard of the Arab world in this respect.

What this might mean is anyone's guess, which is why this project is focusing on what has already happened. Two generations of rising mass education, and particularly mass higher education, opened up access to knowledge and a more diverse base of skills as never before, fostering what I and my colleague, Dale Eickelman at Dartmouth College, have argued is a new public sphere (*New Media in the Muslim World*, Indiana University Press, 1999). It is populated by this rising middle class that acquire new tools from education to satellite TV, exchanging an information deficit for an information surplus. These may not be the traditional skills of intellectuals, but the point is that people use them, and more people have them to use. Might the situation with the Internet be similar?

The Internet requires skills and knowledge, which were developed by specialists; but computer science is not the only route to those skills and knowledge, particularly as machines and systems like the Internet are made increasingly user-friendly. And this Internet is encountered by a public that brings other skills and knowledge to use a technology that is increasingly intimate, increasingly unmediated, increasingly participatory. The Internet is transformed in the process, as some would say religion is transformed or made more diverse as well as more personal by contemporary mujahid. Similarly, just as new interpreters represent a range of opinions, and there is a range of opinion about them, so the Internet's newcomers bring diverse values and interests that they build (or are built for them) into it. The distinctiveness of the Internet is that, unlike mass media with its few senders and many receivers, the Internet is, in communications jargon, a "pull" technology. Users have to go in search of information, it does not come "pushed" to them as in the mass media. Also, it takes very little more skill or investment to create Internet content than to consume it. Could this be what comes



Internet Oasis

after the refuge metaphors of the Amman Safeway's "Cybertunnel" Internet cafe or the "Internet Oasis" that beckons across the street from Jordan University's main entrance?

Jon W. Anderson, Catholic University
NMERTA Senior Fellow

Petra Church Conservation Endowment: Adopt a Mosaic

In late 1999, ACOR began an endowment campaign to ensure the long-term preservation of the Petra Church with its mosaics. Contributors can choose a specific small panel for \$1000 or one of the large ones for \$5000. A plaque at the site will honor the donors. Below are two of the as-yet-unadopted small panels.



Director's Report: July through December 1999

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 M. Bikai and Megan Perry, USAID Petra Endowment

Amman Citadel, Great Temple, Landscaping and Presentation, Pierre Bikai and Jihad Kafafi, USAID and the Ministry of Tourism and Antiquities

Petra Papyri Publication Project

U. of Helsinki / Academy of Finland: Antti Arjava, Maarit Kaimio, and Marjo Lehtinen; U. of Michigan: Ludwig Koenen, Robert W. Daniel, Traianos Gagos, and William Short

ACOR-Assisted Field Projects

Burton MacDonald, St. Francis Xavier U., Tafila/Busayra Archaeological Survey

Michèle Daviau, Wilfrid Laurier U., Wadi ath-Thamad Project

Timothy P. Harrison, U. of Toronto, Tell Madaba Archaeological Project

Martha Sharp Joukowsky, Brown U., Brown U. Excavations, Petra Great Temple

Thomas E. Levy, Russell B. Adams, U. of California, San Diego, Jebel Hamrat Fidan

Mary Louise Mussell, Carleton U., Tell el-Kheleifeh Project

Jane Peterson, Marquette U., Wadi el-Hasa Neolithic Project

Randall W. Younker, Andrews U., Madaba Plains Project-Tall Jalul

Donald O. Henry, U. of Tulsa, Ain Abunekeileh Excavation

Chang-Ho Ji, La Sierra U., Dhiban Plateau Project

Norman Whalen, Southwest Texas State U., Wadi as-Sirhan Survey

John J. Shea, State U. of New York/Stony Brook, Middle Paleolithic of Northwest Jordan Survey

Denyse Homès-Fredericq, Musées Royaux d'Art et d'Histoire, Belgium, Lehun Excavations

Guido Vannini, U. of Florence, Medieval Petra

Steve Falconer, Pat Fall, Molly Davies, Arizona State U. and Phillip Edwards, La Trobe University, Archaeology and Environment of the Dead Sea Plain

Alan Simmons, U. of Nevada, Ghwair I Neolithic Project

Lectures

July 3. Mary Louise Mussell, Recent Discoveries at Tell el-Kheleifeh

July 5. Timothy Harrison, 1999 Update on the Tell Madaba Archaeological Project

July 12. Jane Peterson, Marquette U., Wadi el-Hasa

In Memoriam: Stephen Infantino

On March 1, 2000, ACOR lost a good friend when Stephen Infantino, a former fellow, passed away from head injuries sustained in a fall.

Steve was born in Green Oaks, Illinois in 1938 and graduated from St. Mary of the Lake in 1960 with a B.A. in philosophy. He later completed his Ph.D. in classical languages and literature at the University of Chicago. Since 1973, Steve had been a faculty member of the College of Lake County (CLC), a community college in Grayslake, Illinois, teaching philosophy, comparative religion, ethics, and Middle Eastern studies.

During the spring of 1996, Steve was an ACOR fellow pursuing research that would allow him to develop an interdisciplinary seminar class on the Middle East at CLC. His research focused on the philosophical and religious concepts and values of the Middle East and how these concepts and values were expressed in Middle Eastern culture. During the two months he resided at ACOR, Steve conducted numerous interviews and, often accompanied by his wife, Cindy, visited countless organizations and important cultural sites in Jordan. The entire ACOR staff always found it a joy to work with

him. Even after his fellowship was completed, he and Cindy remained friends of ACOR. Over the past few years, they have been ACOR's representatives at the annual Middle East Studies Association (MESA) meetings, passing out literature on ACOR and talking with prospective fellows. He will be greatly missed.

Sandra Rodriguez, dean of communication arts, humanities and fine arts at CLC, said: "We often expect people who are retiring to slow down, to suspend creativity. Not Steve. He recently developed our Middle Eastern Civilization course and helped us to appreciate the peoples and cultures of that region. He spearheaded the development of our new Arabic language program, offered for the first time this spring. Steve was a luminous star and his light will continue to reach us in his absence."

The family has requested memorial donations to the Infantino-Percak Memorial Scholarship Fund, c/o College of Lake County Foundation, 19351 W. Washington Street, Grayslake, Ill. 30030.

[Parts of this article were excerpted from *The News Sun-ed.*]



On Sept. 18, H.M. King Abdullah and H.M. Queen Rania met with the H.H. Pope John Paul II. His Majesty presented the Pope with a copy of *The Mosaics of Jordan* (visible on the far left).

Neolithic Project

July 14. Randall W. Younker and David Merling, Andrews U., Madaba Plains Project: 1999 Tall Jalul Excavation

July 19. Michèle Daviau, Wilfrid Laurier U., Nabataeans and Moabites on the Wadi ath-Thamad

July 20. Donald Wimmer, Seton Hall U., 1999 Update on the Tell Safut Project

July 26. Jerome C. Rose, U. of Arkansas, Bioarchaeology of Byzantine North Jordan

Donors to ACOR

(July through December 1999)

The following friends of ACOR donated to the endowment: Dr. L. Carl Brown, Mr. Henry Christensen III, Dr. Bert De Vries and Mrs. Sally De Vries, Ambassador Wesley Egan and Mrs. Virginia Egan, Dr. Harold Forshey, Mrs. Nancy Frederick, Mr. Sami Habayeb, Dr. Donald O. Henry, Dr. Stephen Infantino and Mrs. Cynthia Infantino, Mr. Artemis Joukowski and Dr. Martha Joukowski (Joukowski Family Foundation), Mr. Kamel Kawar and Mrs. Widad Kawar, Dr. Øystein S. LaBianca, Ms. Nancy Lapp, Mr. Ken Miller, Dr. S. Thomas Parker, Dr. Walter E. Rast, Ms. Ann Boon Rhea, Ms. Carolyn Draper Rivers, Mr. Charles P. Schutt, Jr., Senator Leila Sharaf, Dr. Donald H. Wimmer, Mrs. Judy Zimmerman.

General Donations were made by Mr. Henry Christensen III, Mr. Ben Elliot, Mr. Felix W. Emse, Dr. Thomas Levy and Mrs. Alina Levy, Mr. Edwin Taylor and Mrs. Heather Taylor.

Donations to the Petra Church Conservation Endowment were received from Mr. Luther H. Soules III and Mr. Tony Vander Heide and Mrs. Gail Vander Heide. The Jennifer C. Groot Endowment received contribu-

July 28. Thomas E. Levy, U. of California, San Diego and Russell B. Adams, U. of Bristol, Gateway to Faynan: Recent Excavations in the Jebel Hamrat Fidan

Aug. 9. Martha Sharp Joukowski, Brown U., 1999 Discoveries by the Brown University Team at the Petra Great Temple

Aug. 18. Chang-Ho Ji, La Sierra U., The Dhiban Plateau Survey Project

Fellows in Residence

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

Douglas R. Clark, Walla Walla College, Iron I Domestic Architecture in the Hill Country of Jordan

Philip J. Wilke, U. of California, Riverside, Neolithic Use of the Desert Margins

Douglas C. Comer, U. of Maryland, Three Dimensional Mapping of Environmental and Prehistoric Cultural Features in the Beidha

Region with Spaceborne and Airborne Imagery

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

Ranjit Singh, U. of Virginia, Political Liberalization in the Middle East

Dmytro Roman Kulchitsky, George Mason U., Information Technology and Public Policy

United States Information Agency Fellows:

Andrew Smith, U. of Maryland, Final Publication of the Southeast Araba Archaeological Survey

tions from Mr. Bruce R. Gould, Dr. S. Thomas Parker, and Mr. Walter E. Pond.

Donations to the Pierre and Patricia Bikai Endowment were received from Drs. Pierre and Patricia Bikai and Dr. Bert De Vries and Mrs. Sally De Vries.

The Harrell Family Trust received contributions from Drs. Pierre and Patricia Bikai and Mr. Edgar Harrell.

Donations to the library endowment were made by Dr. Roger S. Borass, Mrs. Anne Cabot Ogilvy, Dr. John P. Oleson, and Dr. Donald Whitcomb.

Donations of books and journals were received from Abdul Hamid Shoman Foundation (Courtesy of Ms. Yusra Abu), Mr. Musa Ayeshe, Ms. Martha de la Torre, Ms. Dina Dhakhan, Dr. Fred Donner, Ms. Edith Dunn, The Finnish Institute in the Middle East (Courtesy of Dr. Aarne Toivanen), Fondation René Seydoux pour le Monde Méditerranéen, Dr. Giacobbe Manca, Dr. Teresa Marot, The Ministry of Planning (Courtesy of Dr. Maen Nsour), Mr. Akram Oweidi, Dr. Anson T. Rainey, Ms. Janset Shami, Mr. Ranjit Singh, Dr. Guido Vannini.

In-kind donations: The United States Information Service donated a substantial amount of used furniture; Ammar Khammash donated a painting.



Fellows Ranjit Singh, Roman Kulchitsky, Christopher Parker, and Lara G. Tohme, with her husband, Conrad Schmidt

Michael Neeley, U. of North Carolina, Greensboro, Late Pleistocene Land Use Strategies in the Eastern Hasa Periphery

Jane D. Peterson, Marquette University, Khirbet Hammam Test Excavations

Leslie Quintero, U. of California, Riverside, Archaeological Reconnaissance of the al-Jafr Basin.

Christopher Parker, U. of Ghent, Belgium, Palestinians in the Margins of State Building: Conflict, Mobilization, and Survival

National Endowment for the Humanities Fellows:

Gary Rollefson, 'Ain Ghazal Research Center, Stratigraphy and Architecture at Neolithic 'Ain Ghazal, Jordan

Samuel H. Kress Foundation Fellow:

Lara G. Tohme, Massachusetts Institute of Technology, Out of Antiquity: Umayyad Art and Architecture in Context

U.S. International Council on Monuments and Sites Fellow:
Brian M. Lione, Petra Documentation Project

Pierre and Patricia Bikai Fellow:

Deirdre Grace Barrett, Brown U., Eliciting Patterns of Trade in Petra by Examination and Interpretation of the Terracotta Oil Lamps found within the Precincts of the Ancient City

ACOR-Affiliated Council of American Overseas Research Centers Fellow:

Michelle Bonogofsky, U. of California, Berkeley, Early Neolithic Burials

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 4. ACOR residents attend the American Embassy's 4th of July reception.

July 8. Pierre takes off for Petra to lead a group of 70+ members of the Friends of Archaeology on a tour.

July 11. ACOR hosts a reception for Michèle Daviau's team; they have been living at ACOR.

July 13. Pierre gives a lecture on dendrochronology for the Friends of Archaeology.

July 14. The Great Cat Search: fellows Gary Rollefson, Doug Clark, Leslie Quintero, and Phil Wilke, as well as other residents team up to chase an unexpected furry guest around ACOR until it departs via the veranda.

July 15. There is a reception for Tim Harrison's team at ACOR's Madaba House.

July 29. Alberto Fernandez, the new director of USIA, Amman, visits ACOR.

Aug. 6. Fellows Phil Wilke and Leslie Quintero give a workshop on prehistoric stone toolmaking for the Friends of Archaeology. Afterwards, chef Pierre serves up mountains of pasta for the fifty persons who attend; the event was a fundraiser for Friends of Archaeology.

Aug. 9. ACOR hosts a lunch for the Jordanian Trustees.



In ACOR's gazebo, Phil Wilke demonstrates how stone tools were made in antiquity

Aug. 11. There is a reception for Arte and Martha Joukowsky and the Petra Great Temple Team who have had an excellent season. Earlier in the day, residents had fun finding different ways of observing the eclipse.

Aug. 30. The Amman Citadel Project closes.

Sept. 4. Pierre and Patricia attend the celebration of the Madaba Map Centenary in Madaba.

Sept. 8. Pierre and Patricia attend a BBQ at the German Institute in honor of Dr. Ghazi Bisheh, who has retired as Director General of the Department of Antiquities. ACOR is very grateful to Dr. Ghazi for his many kindnesses to us.

Sept. 13. Pierre takes off for Petra where the arches

of the shops are being restored.

Sept. 14. In Petra, the columns of the baptistery are going up.

Sept. 14. In the morning, Abed finds an ostrakon among the North Ridge Project pottery. By afternoon, Bob Daniel has translated it, footnoted it and corroborated it!

Sept. 16. Geographers Kurt Zamora, former ACOR fellow Tom Paradise, and Mick Frus are impressed by their tour of the Royal Jordanian Geographic Centre.

Oct. 1. Welcome back to Fatma Marii who returns from her one year internship with the J. Paul Getty Museum in California.

Oct. 3. Pierre concludes a three day tour for the Australians Studying Abroad.

Oct. 4. A big thank you to Riet Versteeg who finishes putting stamps on 3000 plus envelopes for ACOR's fellowship advertisement poster.

Oct. 5. Pierre delivers a lecture to the Peace Corps in Aqaba.

Oct. 6. Congratulations to Abed Adawi on the birth of his son Odeh.

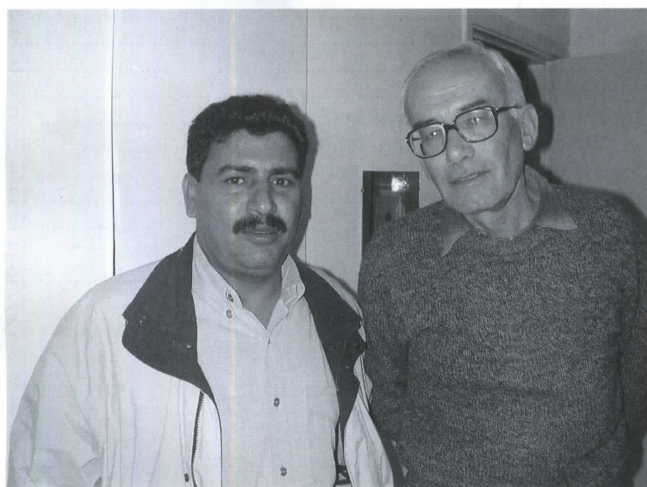
Oct. 18. Kurt completes a grant application requesting funds from the U.S. Department of Education to purchase more books for the library.

Oct. 30. ACOR residents are invited to Widad Kawar's home for a showing of her stunning collection of traditional costumes.

Nov. 5. Pierre and Patricia return from five days of giving tours and lectures in Petra.

Nov. 12. At Petra, Kurt and Mable Meares, Director of the American Schools and Hospitals Abroad office of USAID, are two of the very few allowed to be present when Hillary Clinton visits the Petra Church. Later in the day, Kurt gives his first Petra tour to Ms. Meares.

Nov. 13. Pierre takes Kurt and Ms. Meares on tours of Little Petra and Shobak in the morning, and they return to ACOR in time for Mohammed's wonderful musakhin. Ms. Meares, who is in Jordan for an ACOR site visit, is given a complete tour of ACOR.



Dr. Fawwaz al-Khraysheh, the new Director of Antiquities, and Dr. Ghazi Bisheh

Nov. 15. Pierre leaves for Boston for the annual ASOR Board Meeting.

Nov. 22. Fellow Roman Kulchitsky attends the American Embassy's Thanksgiving coffee.

Nov. 25. Staff and residents enjoy a wonderful Thanksgiving dinner prepared by Mohammed, Said, Abed and Hani.

Dec. 2. Kurt attends a reception at the British Institute to welcome the new director Bill Finlayson and assistant director Alex Wasse.

Dec. 7. Joel Schwartz and Steven Collins tour ACOR on their official site visit for the National Endowment for the Humanities.

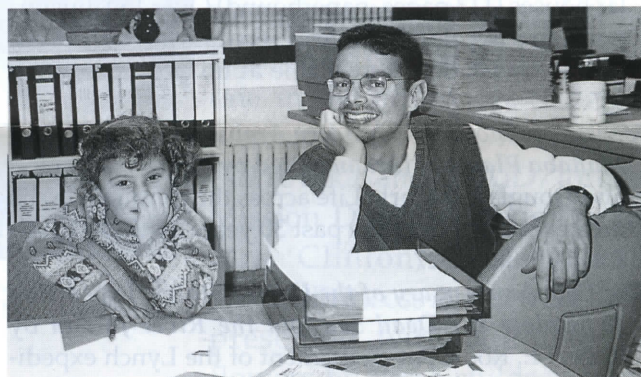
Dec. 9. Ramadan begins.

Dec. 10. Yoko Ueba and Tomoko Asaoka depart. Under the sponsorship of the Osaka Ethnographic Museum, they have been cataloguing ACOR Trustee Widad Kawar's beautiful collection of traditional Jordanian, Palestinian and Syrian textiles.

Dec. 12. Pierre meets the St. Olaf College tour group in Aqaba.

Dec. 25. ACOR residents, staff and families enjoy a festive holiday Iftar dinner at sunset.

Dec. 28. Kathy brings in a mountain of homemade holiday cookies. They are gone in two hours.



Sa'id Adawi's daughter Saja imitating Kurt

Dec. 29. Humi, Kathy, Nisreen, and Kurt keep busy creating back-ups for all their computer files. Staff and residents enjoyed the holiday Iftar dinner so much, ACOR decides to repeat the affair with another turkey dinner.

ACOR's Ecosystem



Left: kestrel (*Falco tinnunculus*), identified by former fellow Brett Hill; right, hedgehog (*Erinaceus europaeus*), identified by Kurt Zamora

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 Kanellouopoulos. 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's Web Site: www.bu.edu/acor

ACOR and its Newsletter

ACOR, the American Center of Oriental Research, is a nonprofit academic institute whose services are supported through endowments, donations and grants. ACOR is tax exempt as a 501(c)(3) organization, as determined by the U.S. Internal Revenue Service. Inquiries may be sent to ACOR, P.O. Box 2470, Amman 11181, Jordan, Tel.: (962-6) 534-6117, Fax: (962-6) 534-4181, e-mail: ACOR@go.com.jo, or to ACOR, Boston University, 656 Beacon St., 5th Floor, Boston, MA 02215-2010, Tel.: 617-353-6571, Fax: 617-353-6575, e-mail: acor@bu.edu. The *ACOR Newsletter* is edited by Patricia M. Bikai with assistance from Kurt Zamora. Printed in Jordan by Jordanian Printing Press.

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 Trustees Meet in Boston

The ACOR Board of Trustees met in Boston on Nov. 19, 1999. The major topic of discussion was fundraising and the election of new trustees. Additionally plans were made for the meeting in June of 2000 which will take place in Amman.

ACOR Trustees

Class of 2000: Mr. Mohammed Asfour; Mr. Sami Habayeb; Dr. Donald Henry; Mrs. Nancy Lapp; Mrs. Judy Zimmerman; Dr. Øystein LaBianca; Dr. John P. Oleson; and Mr. Neil Silberman

Class of 2001: Mr. Artemis A. W. Joukowsky (President); H.R.H. Prince Raad 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

Class of 2002: Mrs. Nancy Frederick; Dr. Harold Forshey; Mrs. Widad Kawar; Mrs. Anne C. Ogilvy (Secretary); Mr. Randolph B. Old (Treasurer); Dr. S. Thomas Parker; H.E. Senator Leila Abdul Hamid Sharaf; and Dr. James Wiseman

Ex-Officio: Dr. Pierre M. Bikai, ACOR Director and Dr. Joe Seger, ASOR President

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