

# ACOR Newsletter

## أخبار أكور

No. 3 - November 1990



### Efforts to Preserve Jordan's Cultural Heritage:

This issue features the ACOR/Dept. of Antiquities Cultural Resource Management Program and ACOR's Archaeological Development Projects.

### *Bert de Vries, ACOR* **The Director's Report**

The ACOR 1989-1990 academic year was filled with activity. Ten field projects, spaced throughout the year, representing the work of seven different national groups, used ACOR as a base of operation. For the first time more projects took place in winter than in summer. Chronologically, they covered all major periods from Pre-historic to Ottoman. In addition, ACOR itself conducted the four USAID granted projects featured in this issue. Four resident fellows, who stayed from five to twelve months, describe their work in these pages. ACOR also sponsored seventeen lectures, and its library accommodated numerous foreign and Jordanian users. Late in the year we received news of several major grants that will greatly enhance our research facilities and our scholar-in-residence program. See page 8.

Though the Gulf Crisis forced serious precautions on ACOR, activities have continued almost normally, because Jordan has remained quiet, and its people patient and gracious. Through the first week of September all field work proceeded as scheduled, but after that projects involving the arrival of staff from overseas have been postponed or rearranged. Gaetano Palumbo's Wadi el-Yabis Project began Oct. 2 with locally available staff substituting for the Italians and Americans who had planned to participate. The four ACOR managed archaeological development projects are progressing on schedule. At ACOR sixteen people, including nine foreign residents and seven Jordanian staff, continue their labors and studies, and the library is busier than ever.

My advice to those who had planned to come to Jordan for research or field work in the winter or spring, 1991, is to continue those plans on the assumption that our situation will be back to normal by then. Should it be, those plans could be implemented on schedule, but should it not be, projects can be postponed. Please contact me for advice on current conditions.

As we cope, I am reminded of two scholars of yore who worked in troubled times. Archimedes did his thinking with such rapt abandon that soldiers surprised him in his bathtub hard at work on a theorem. Sallust withdrew from public life to write history while his contemporaries, Julius Caesar, Catiline, et al, wrought carnage and mayhem. We emulate their priorities. However, we promise not to be caught like Archimedes, but aim to carry on like Sallust.



The new: ACOR from the back stairs.



The old: Roman farmstead in front of ACOR in snow.



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### **Ruba Kana'an, ACOR, CRM planner CRM: Planning Heritage Preservation**



Ruba Kana'an

The Cultural Resource Management Project (CRM), initiated in 1987 and funded since then by USAID grants, is a joint effort of the Department of Antiquities (DAJ) and ACOR. Its purpose is the prevention of destruction of archaeological sites as a result of rapid and unrestricted economic development. The key to CRM's effectiveness is advanced planning in three areas: 1) Interagency coordination; 2) arrangement of salvage, and 3) education.

To promote interagency coordination, CRM developed a senior staff network of government agency representatives who are taking responsibility for lessening the negative impacts of development on cultural heritage. This network comes close to functioning as an official channel for the sharing of information between development agencies and those responsible for heritage preservation. Specific products of such coordination are the inclusion of heritage preservation policies in **The Greater Amman Development Plan (1987-8)** and **The National Environmental Strategy for Jordan (1989)** and the preventive planning that aims to save 'Ain Ghazal from

destruction.

Because salvage archaeology in Jordan is done by the DAJ, the role of CRM is the planning, coordination and enabling of rescue excavations necessitated by development projects. Such coordination between the CRM consultants, DAJ, the Jordanian universities, the foreign archaeological institutes and the ministries responsible for development has enabled the salvage of significant archaeological sites including, for example, the Amman Citadel lower terrace, and those threatened by the Irbid-Jerash-Amman road and by the Wadi Walla and Wadi Mujib proposed dams.

CRM operates on the assumption that heritage preservation can only succeed if it is popular among the general public. To bring about wider public awareness of antiquities CRM has contributed to the activities of public groups like the Friends of Archaeology and to the developing of public policy, such as the National Environmental Strategy. Educational efforts have included public lectures on CRM, an exhibit at the Bilad esh-Sham Conference, training sessions at the DAJ and school outreach programs.

### **Gaetano Palumbo, ACOR, CRM archaeologist CRM: Inventory of Archaeological Sites**

Many countries develop inventories of their archaeological sites as part of efforts to prevent industrialization and development from destroying them. These inventories hold the basic site information essential for development planning. Such inventories have limited importance as research tools, but they are extremely useful to CRM planners for alerting developers to the presence of antiquities and thus to minimize their projects' negative impact on ancient sites.

As part of the USAID funded ACOR/DAJ CRM project, such an inventory of archaeological sites of Jordan is now in progress. This computer-aided list, compiled using DBaseIII Plus software, will hold coded information on each site known through survey or excavation from the Paleolithic to the Ottoman periods. DBaseIII Plus was chosen because of the possibility of running its databases under ARC/INFO, a Geographic Information System program made available to



ACOR by ESRI Co., its manufacturer. The advantage of interfacing a text-oriented database with graphic software is that maps containing information from the database can be easily produced, for example, for site location purposes.

For manageable size, the information will be coded and limited to essential features, including: site name, coordinates, size, period and type of occupation, topographical location, elevation, condition, disturbances, inventory rating and bibliographical reference. Five phases are planned for this project. In the first phase data will be collected and coded on special forms from the Department of Antiquities files and literature. Secondly,

the data will be checked for errors, and, thirdly, entered into the computer database. During and following the third phase, ARC/INFO software will also be used to digitize base maps for the site list (fourth phase). The fifth phase consists of field visits for updating or adding missing information.

Department of Antiquities personnel will provide assistance during all phases of the project, and will receive training in the use of the computer program. This will ensure technical expertise in the Department when the site inventory is housed there at the end of the project.



Gaetano Palumbo.

Throughout its history ACOR has been active in the saving of specific sites, often with financial support from USAID. Recently this activity has grown drastically in both volume and nature.

The growth in volume is partly due to the broad vision of several members of the USAID-Jordan staff, who have recognized serious archaeological study as an integral preliminary aspect of cultural tourism development. The combined budgets of the projects described in the following five articles, adding up to over a

million dollars, have been met with USAID grants.

The growth in nature has been from mere rescue to site development. This includes both preservation and enhancement for visitors. These projects go far beyond excavation for research or salvage into the realms of heritage preservation and cultural tourism. They succeed through close cooperation between the Department of Antiquities, USAID and ACOR. We are grateful to be a part of that.

## Archaeological Development Projects at ACOR

The Feasibility Study was carried out in 1989-90 under the direction of the author. Representatives of agencies with an interest served on a coordinating committee that met periodically to discuss the parameters and direction of the study. Ruba Kana'an was project coordinator, and the concept design was done by a University of Jordan team consisting of archaeologist Kheir Yassine and architects Kamel Mahadin, Mohammad Kadhim and Talib Rifa'i.

**The Citadel.** After review of previous archaeological and concept studies, design plans were developed in three areas:

1. Beautification. The University consulting team's design study incorporated four factors to achieve total archaeological park concept: Movement of people along pedestrian routes; plazas and viewing stations; landscape, and readaptation of

the existing museum.

2. Excavation and preservation, including the development of a master plan for excavation, preservation and cleanup that can be integrated into the ongoing development of the archaeological park.

3. Museum. While long term plans for locating a national museum elsewhere progress, the Citadel Museum will continue its role as the national museum temporarily. Meanwhile, a redesign and minimal expansion anticipate its future role as a site museum.

Though the overall plan will take years and millions, small affordable components can be completed every year.

**'Ain Ghazal.** Two disadvantages of 'Ain Ghazal are private ownership of the property and visually undramatic ruins. The saving of

## Rudolph Dornemann, Milwaukee Public Museum Citadel 'Ain Ghazal Feasibility Study



Architect's analysis of Citadel.



the site from private development is a major challenge still in process by the Amman Municipality. To deal with the lack of obvious eye appeal of the exposed Neolithic antiquities, the consulting team's concept envisions a structure that will serve as a visitors' center, archaeologist's workspace and that will in-

clude a stratigraphic sequence ending with an excavated Yarmoukian house. Pathways radiate from it to other areas of the site. This concept aims to orient the visitor to the dramatic historical significance of the place and to incorporate ongoing excavation into the museum display.

**Mohammad Najjar,  
Dept. of Antiquities  
of Jordan**

### **The Temple of Hercules Project**

The Temple of Hercules Project, a direct outgrowth of the Citadel Feasibility Study, is funded by USAID over a two year period from July, 1990 to July, 1992. The goal is to excavate the temple temenos in order to delineate as much of the surviving temple complex as possible, complete an architectural study and restoration on paper, and consolidate and restore as much of the temple as the surviving architectural components will permit. It is expected that most of the massive columns of the entry portico can be reerected.

So far, three one month seasons of excavation have been conducted between July and November. The first season was co-directed by Dr. Mohammad Najjar of the Dept. of Antiquities, Dr. Kheir Yassine of the University of Jordan, and Dr. Rudolph Dornemann of the Milwaukee Public Museum, and the next two were directed by Mohammad Najjar. The goals were to learn as much as possible about

the Temple for reconstruction purposes, and to link the upper (Roman and Islamic) strata to the earlier (Ammonite and Hellenistic) ones.

Three main architectural strata were found in the temenos area. The first dates to the 7-6th centuries B.C. with reuse in the Hellenistic period, the second begins in the second century A.D. and pertains to the Roman Temple, and the third is from the 9-13th centuries A.D., when the temenos wall was reused as an Abbasid fortification elaborated in the Ayyubid period with the tower south of the Hercules Temple.

Probably the most significant discovery is the possible remnant of an Ammonite Temple. Although the limited area of excavation and the disruption by the Romans did not permit the recovery of a plan of the building discovered east of the Roman Temple, the nature of the associated artifacts suggests that the building may have served a communal, possibly cultic function. The other significant result is that inside the Islamic ramparts enough of the foundations and lower courses of the Roman temenos were preserved to reconstruct its entire plan and part of the elevation.



Temple of Hercules.

**Ammar Khammash,  
Architect, Ministry  
of Tourism**  
**Resthouses at  
Umm Qeis  
and Pella**

The construction of two resthouses at Pella and Umm Qeis represents a revival of Jordan's traditional architecture, more as labor-intensive construction fully done by the local village community and less as a nostalgic revival of the architectural style of the nineteenth century. The buildings are being designed and constructed concurrently by the author. Part of the Ministry of Tourism's strategy for northern Jordan, the project is funded with a USAID grant and managed by ACOR in conjunction with CRM.



Pella Resthouse in process.



The resthouse at Umm Qeis combines newly created structures with already existing ones. The whole complex achieves a sensitive harmony between the architectural style of the Late Ottoman village and the functional requirements of a modern resthouse. It is an ideal vantage for viewing both the antiquities and the breathtaking panoramas of the Golan and Lake Tiberias.

In Pella a brand new structure of approximately 400 sq. meters is being constructed east of the main tell. The building sits on a mountain side that overlooks most of Pella's attractions and offers spectacular vistas of the Jordan Valley and the West Bank mountains in the hazy background.

The design concepts are geared to using the maximum possible local labor and materials. For this reason traditional compression spans - arches and vaults - are used. The goal is to demonstrate that

contemporary, functional architecture can be built in which the labor cost reaches the highest possible percentage of the total. Traditional construction methods are being revived experimentally in order to reintroduce the communal building techniques as an alternative to the industrialized systems that require imported materials and outside specialists. Thus both construction sites are like training workshops for masons, architects, students and the rural community.

When finished, these buildings will be equipped to serve the touristic public and they will also be an integral part of the local communities economically, educationally and aesthetically. Hence they will make the archaeology meaningful and significant to a wider public, including both area residents and visitors from afar.



Grants Administrator Cynthia Shartzer.

The 1986 and 1987 excavation seasons revealed the early Islamic city of Ayla beneath the sands on the beach near the center of modern Aqaba. Excavation of the towered walls and the Egyptian Gate on the west side, the Central Pavillion, the Large Enclosure, and private residences secured an understanding of over two thirds of the remains of the city. Stratigraphy revealed three distinct occupation phases: Umayyad, Abbasid and Fatimid.

The 1988 season concentrated on the Royal Yacht Club which is building a new marina and whose property includes the southeast third of Ayla. Excavation revealed over two hundred meters of city wall, towers and two city gates, the Sea Gate and the Hijaz Gate, which had been blocked in the earliest period, with the area outside it used as an early Islamic cemetery.

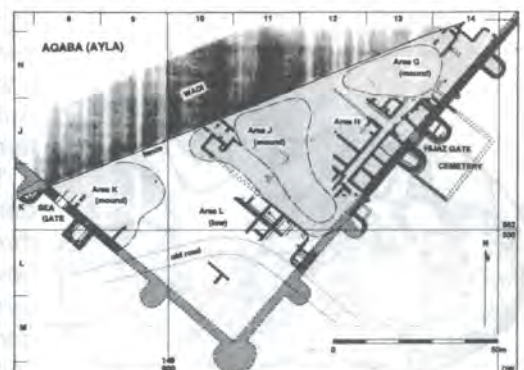
The short 1989 season was to clarify the remains on the Yacht Club property in anticipation of further development of the marina. At Area H, behind the Hijaz Gate, excavation exposed an Abbasid urban plan, possibly an urban renewal following the 748 earthquake. A network of streets divided the area into structural blocks, with one main street running

parallel to the wall, and the street leading from the blocked Hijaz Gate not axial with that gate.

Area L, the most likely locale for the earliest city mosque, revealed instead irregular rectangular rooms with walls of stone rubble and mudbrick, Umayyad or Rashidin in date. Area K, the uniquely square tower flanking the Sea Gate, proved to be an Abbasid remodeling, with a doorway on the seaside and a fine plaster floor subdivided into several bins with mudbrick walls. Below this floor the remains of the original Umayyad curved tower were exposed.

The 1989 season was a limited salvage campaign that affirmed the historic and monumental value of the sector of Ayla on the Yacht Club property. Cooperation between the various groups, the Department of Antiquities, the Aqaba Region Authority, the Yacht Club, The Oriental Institute, the National Geographic Society, USAID and ACOR is coming to be recognized as an investment in knowledge and heritage.

## Donald Whitcomb, The University of Chicago Excavations at Ayla in Aqaba



Plan of Ayla.



**Cynthia Shartzter, ACOR,  
Grants Administrator  
Ayla Cultural  
Tourism Park**

Excavations at Ayla have been accompanied by a long term project, development of the site into a cultural tourism park with funding from USAID grants to ACOR. Working in cooperation with the Department of Antiquities and excavator Donald Whitcomb, the project has moved from rescue archaeology in 1987 and major consolidation in 1988-9 to implementation of the cultural park design in 1990. Current USAID funding is to complete the project by June of 1992.

The goals are to make Jordan's Islamic heritage more understandable, add cultural features to Aqaba's otherwise one dimensional tourist attraction (the beach) and increase public awareness



Consolidation of West Wall of Ayla.

of Jordan's less well known archaeological sites. The method is to turn Ayla into an open air museum to be appreciated through a self-guided tour, made possible with a series of eight high quality well placed signs combining English and Arabic text with illustrative graphics. These have drawn numerous visitors.

This tour will begin at an orientation center, a replica of one of Ayla's gates built at the original site of the North Gate along the corniche. The design and construction of this center is the product of cooperative funding and effort involving a team representing the Ministry of Tourism, the Department of Antiquities, consultants Whitcomb and James Richerson and ACOR. The Orientation Center will introduce visitors to the site and also direct them to the Ayla museum display, designed by Richerson, which was installed in the Aqaba Visitor Center in the fall of 1989.

The progress on the project has been due to a high level of cooperation between a diverse group of people and agencies. In addition to the individuals and staffs of the organizations mentioned above, there have been an array of consultants, the Aqaba Region Authority, the Board of the Yacht Club on which part of Ayla is located, the CRM staff and a local geotechnical and materials testing firm. It is this great cooperation that is producing a highly significant cultural monument for Jordan's heritage and tourism.

**Oystein LaBianca,  
Andrews University,  
NEH Fellow, 1989  
Residential uses  
of caves**

Much more than previously realized, past inhabitants of Jordan lived in caves and rock shelters, sometimes permanently, but more frequently seasonally in conjunction with tents or houses.

The survey of residential uses of caves and rock shelters in Jordan has documented entire villages with such shelters as the primary residences. While today these villages have made the transition to regular housing above ground, as recently as 1952 the Jordan census of housing listed 1,140 cave dwellers on the East Bank, and 2,336 on the West Bank. Amman itself still had 325 families in caves then.



Cave dwelling interior.

These abandoned residential caves may be seen throughout Jordan. They now serve as animal shelters, storage barns or garbage dumps. Although people are often hesitant to discuss their lowly cave

dwelling backgrounds, some very important conclusions about the history of the practice could be drawn from site visits and interviews.

First, Jordan was much more fully inhabited during the Ottoman centuries than is commonly recognized. In addition to Husn, Salt, and Kerak, the well known towns of the previous century, there were numerous villages in which most people had cave homes. Examples are Umm Qeis, Hazzar, Mushaqqar, Hesban, Qureifilla, Daba, Dilagha and Sammakh, but there were many others. Thus, this was not a period of abandonment, but of an altered manner of living on the land.

Second, the practice of cave dwelling was a reflection of three key values of past generations of Jordanians: simplicity, hospitality and flexibility. By living with few possessions, bestowing generosity on guests and strangers and being prepared to adapt to changing circumstances, they were able to survive



earthquakes and droughts and cope with economic and political disasters without being forced to leave their traditional lands. This research was supported by a grant from the National Endowment for

the Humanities at ACOR and carried out in cooperation with the Department of Antiquities of Jordan.



Kenneth Russell.

During my tenure as ASOR-NEH fellow I analyzed and reported domestic (household) materials excavated between 1974 and 1977 under my supervision by the American Expedition to Petra, Jordan (Dr. Philip C. Hammond, Director). These materials of the Hellenistic through Byzantine periods were recovered from a series of houses located to the north of the main paved street in the heart of ancient Petra. Beyond helping to dispel the concept that Petra was simply a Nabataean necropolis and cult center but not a city, their analysis has produced startling insights into the chronology of Nabataean painted wares.

The well known Nabataean thin wares seemingly appeared around the middle to late first century B.C., along with black and dark red drip-painting on heavier cups, bowls and storage vessels. The earliest painted fine-ware appeared early in the first century A.D. These were painted in a red slip of varying pigment concentrations. Predominant patterns consist of a thin line around the upper interior rim of vessels, with short slanted drops of inverted triangular form running off it. Wavy lines of various thicknesses running towards the center of the cup or bowl, or feather and floral motifs in a naturalistic style, completed the decoration. By the middle of the first century A.D., these motifs had been superseded by complex and crowded line, dot, cross-hatch, fruit and

stylized feather patterns.

By the end of the first century A.D., dark red and black concentric and radial palmette designs, interspersed with stylized feathers, geometric forms and a fine-lined parallel or criss-crossed background, were predominant (as with the example depicted). By the middle of the second century A.D., background filling had ceased, although the palmette designs continued with black paint superceding dark red. The execution of designs became increasingly coarse. The second and third centuries A.D. also witnessed the floruit of externally painted deep bowls, cups and juglets.

By the middle of the fourth century, horizontal and vertical patterns of elongated diamonds had appeared on enclosed vessels, with a horizontal pattern of spaced solid "paisley-like" elements used on thick-bodied open bowls. These motifs and forms continued through the sixth century, although crudely executed radial and concentric patterns of palmettes and geometrics on comparatively thinner bowls were also being produced.

Contrary to previous interpretation, the production of Nabataean painted wares did not witness a rapid demise in the post-annexation period. The potential influence of this tradition on the later painted wares of the early Islamic period remains to be explored.

**Kenneth Russell,  
ACOR, NEH Fellow,  
1989-90**  
**The Chronology  
of Nabataean  
Painted Wares**



Nabataean painted ware.

Geographic Information Systems (GIS) is a concept in database management which links the fields of cartography, geology, surveying, remote sensing and image analysis, spatial statistics, computer science, and, in the case of the Transjordan GIS Mapping Project, archaeology and cultural resource management.

Unlike traditional verbal/numerical databases, GIS is designed for digital graphics image data. Such data is available

from satellite infrared and radar imaging and from manually digitized maps. GIS has the capacity to allow analysis of locations by combinations of data types, but also to create new types of data; such as, percent grade values, ground facing directions, indices locating ridges and valleys and "distance to source" themes. And map data can be added as separate layers; such as, soils, geology, water resources, flora and fauna,

**Glen Peterman, ACOR,  
Teagle Fellow, 1989-90**  
**The Transjordan  
GIS Mapping  
Project**



climate and manmade features like roads, toxic dumps and archaeological sites. The result is a tool for powerful analysis and precise description that will render traditional locational descrip-



Computer generated digital elevation image of the Wadi Hasa with site locations.

tives like "in the hill country" obsolete.

The Transjordan GIS Mapping Project's use of GIS is grounded in the anthropological premise that humans behave in patterns, the decoding of which can lead to greater understanding of

cultural change. The project premise is that settlement behavior is inextricably linked with landscape and ecology, whose data records lend themselves to analytical identification of such patterns.

The Project seeks to understand ancient location-selecting and subsistence behavior by analyzing land form, ecological resources and settlement data from recent surveys in south-central Transjordan. This dedicated archaeological GIS, the first in the Middle East, uses that data to construct settlement pattern models. The archaeological usefulness of these will be verified through their use as settlement models, which will be tested through a field survey in the Wadi Heidan.

**Carol Redmount,  
U. of Cal. Berkeley,  
Shell Fellow, 1989  
Ware It's At:  
Typology of  
Ceramic Fabrics**

During my tenure as Shell Fellow I began work on a typology of ceramic fabrics (wares) for Jordan, a long term project building on the work of others and requiring future field research by others. This typology will enable systematic examination of body sherds and will supplement information from typologies based on shape. Such a fabric typology is already established in Egyptian archaeology.

Initially I concentrated on Middle Bronze fabrics to identify inter-site patterns for one time period, using sherds from Tell Irbid, from a tomb at Tell Abda' and from Tell Hayyat (courtesy of excavators C. Lenzen, S. Schreideh and S. Falconer respectively). I also studied the surface survey pottery of Tell Nimrin (courtesy of the co-directors), which allowed me to work on identification of patterns over an extended time for one site.

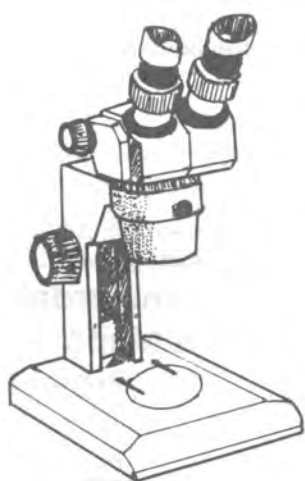
I examined 8000 sherds and took fabric chips from 800. Rather than laboratory analysis (thin sections, etc.), my goal was to find visually detectable patterns with practical use for on-site analysis

during field excavation. Though my study is not complete, some preliminary findings can be suggested.

In general, though Jordan's geology pertaining to clays and tempers is complex, there seems to be a basic division between fabrics from the north and from the south.

There was considerable variation in the Middle Bronze fabrics, with only a few identical at the three sites. For some ware groups variations fell into the following pattern: 1) Imported fabrics indicating traveling pottery, 2) local imitations, perhaps indicating traveling potters (Lenzen's suggestion) and 3) purely local pottery. Preliminary analysis of the Nimrin sherds suggests strong temporal variations in fabric. Also, visual separation of local and imported fabrics appears possible for most Nimrin sherds.

Over the long term, a fabric typology database, with both diachronic and synchronic comparative ware data, will have to be built in stepped fashion beginning with individual sites, then for small areas and finally broad geographic regions.



**The ASHA Grant**

American Schools and Hospitals Abroad, a branch of USAID, has awarded ACOR a grant of \$300,000 for books and equipment (shelving and binding). This follows a grant of \$400,000 during the construction of the building. Nearly half the grant will be spent on 3,000 books

from an acquisition list prepared by NYU librarian Meryle Gaston. These will especially strengthen the library, because that list is based on a study to eliminate major gaps in ACOR's holdings. The result will be a vastly improved research collection.



One sixth of the grant is for computers. This will enable us computerize the library with separate cataloguing and reference stations using SDS-ISIS, software donated by UNESCO. Another set of hardware will run ARC/Info, Geographic Information System (see Peterman's article) software donated by ESRI Co. In addition, ACOR will acquire a new generation of computers for scholars and offices. One third of the grant will equip conservation and analytical laboratories in ACOR's sub-basement, where space

for them was planned. This should create an outstanding facility for the study and conservation of ceramics, metals and other materials.

The book purchases have begun, the computers will follow in November, and the lab. equipment next spring and summer. ACOR owes a debt of gratitude to ASHA for this immeasurable boost to its academic capabilities.



Librarian Humi Ayoubi advising students.

The ACOR library is seeking help from the ACOR Newsletter readers in obtaining out-of-print books. We intend to list such books in several issues of the Newsletter.

#### Semitic Languages and Linguistics:

- Harding, G. Lankester  
1952 Some Thamudic Inscriptions from the Hashemite Kingdom of Jordan. Leiden.  
Littmann, Enno  
1943 Semitic Inscriptions. Leiden.  
Littmann, Enno  
1904 Semitic Inscriptions. New York.  
Winnett, Fred V.  
1957 Safaitic Inscriptions from Jordan. Toronto.

#### Middle East/Islamic Studies:

- Arury, Naseer H.  
1972 Jordan: A Study in Political Development (1921-1965). The Hague.  
Atkinson, K.  
1972 Soil Conservation Study of Wadi Shueib and Wadi Kufren, Jordan. Durham.  
Borzatti von Lowenstein, E.  
1977 Wadi Rum. Milano.  
Branden, A. van den  
1966 Histoire de Thamud. 2e ed. Beyrouth.  
Brunnow, R. E.  
1904-9 Die Provincia Arabia. Strassburg.  
Franken, Henk J.  
1979 Yadoudeh: The History of the Land. Leiden.  
Gautier, L.  
1895 Au dela du Jourdain: souvenirs d'une excursion faite en Mars 1894. Geneve.  
Hemsley, J.H.  
1966 Azraq Desert National Park: Draft Management Plan. London.  
Jaussen, A.  
1922 Les chateaux arabes de Qeseir 'Amra, Haraneh et Tuba. Paris.  
Jureidini, Paul  
1984 Jordan: The Impact of Social Change

- on the Role of the Tribes. New York.  
Laborde, L. de  
1836 Journey through Arabia Petraea to Mount Sinai and the Excavated City of Petra, the Edom of the Prophecies. London.  
Luynes, L. de  
1847-76 Voyages a la Mere Morte a Petra et sur la rive gauche du Jourdain. 4 vols. Paris.  
Medebielle, Pierre  
[1957] Salt: histoire d'une mission. Jerusalem.  
Oliphant, L.  
1880 The Land of Gilead with Excursions in Lebanon. London.  
Peake, Frederick G.  
1958 History and Tribes of Jordan. Miami.  
Rey, E. Guillaume  
1861 Voyage dans le Hauran et aux bords de la Mer Morte execute pendant les annees 1857-1858. Paris.  
Robinson, E.  
1889 Survey of Eastern Palestine. London.  
Ruete, S.  
1895 Reisen durch Syria und Palastina. Torgau.  
Sachau, E.  
1883 Reise in Syrien und Mesopotamien. Leipzig.  
Saulcy, L. F.  
1853 Voyage autour de la Mer Morte et dans les terres bibliques, execute de Decembre 1850 a Avril 1851. 2 vols. + atlas. Paris.  
Schattner, J.  
1962 The Lower Jordan Valley. Jerusalem.  
Schneider, A. M.  
1952 Bericht uber eine Reise nach Syrien und Jordanien. Gottingen.  
Seetzen, U. J.  
1813 A Brief Account of the Countries Adjoining the Lake of Tiberias, the Jordan and the Dead Sea. London.  
Stillman, Yedida K.  
1979 Palestinian Costume and Jewelry. Albuquerque.

**Burton MacDonald,  
St. Francis Xavier  
University  
ACOR Solicits  
Out-of-Print  
Books for Library**





- Toukan, B.U.  
 1945 A Short History of Jordan. London.  
 Tristram, H. B.  
 1873 The Land of Moab: Travels and Discoveries on the Eastside of the Dead Sea and the Jordan. London.  
 Trumpelmann, Leo  
 1962 Mschatta: ein Beitrag zur Bestimmung des Kunstkreises zur Datierung und um Stil der Ornamentik. Tübingen.  
 Van de Velde, C. W. M.  
 1854 Narrative of a Journey through Syria and Palestine in 1851 and 1852. New York.  
 al-Wahaybi, A.  
 1973 The Northern Hijaz in the Writings of the Arab Geographers 800-1150. Beirut.

Meryle Gaston, a member of the Library Committee, serves as the "clearing house" for books donated to the ACOR Library. These are evaluated for income tax purposes, if the donor wishes. She may be contacted at 18 E. 8th St., #3B, New York, NY 10003 or at the E. H. Bobst Library, New York University, 70 Washington Square South, New York, NY 10012.



Board Members Mohammad Asfour, Prince Ra'ad bin Zeld and President Robert Coughenour.

## July 1990 Board Meeting

ACOR's "spring" board meeting was held in Amman July 11. Because the board's membership of 24 is one third Jordanian and two thirds North American, it is policy to have at least one meeting every two years in Amman. The meeting was attended by seven members from North America and six from Jordan. Events around the meeting gave the board opportunities to meet the staff and resident scholars and to see ACOR's programs first hand.

## Scholars-in-Residence at ACOR

Besides enabling field research, ACOR operates a scholars-in-residence program. It provides library, study and work space, living quarters and meals under one roof, and is within walking distance of other institutes and the University of Jordan. In addition to archaeologists, scholars are welcome from all disciplines concerned with the past and present human condition in Jordan and the surrounding region. They may stay for as little as a day to a year. To facilitate their scholarship ACOR offers a number of fellowships, some in cooperation with the American Schools of Oriental Research. Please send inquiries on fees, qualifications and fellowships to the ACOR director. See separate page for news on fellowship.

## ABOUT ACOR AND ITS NEWSLETTER

ACOR, the American Center of Oriental Research, is an International Research Institute in Jordan. It is a non-profit academic institute, whose services are offered at or below cost, and which is supported through voluntary donations and grants. Inquiries and comments may be sent to ACOR, P.O.B. 2470, Amman, Jordan, or to the American Schools of Oriental Research, 711 West 40th St., #354, Baltimore, MD 21211, U.S.A.

The ACOR Newsletter is edited by the ACOR director, Dr. Bert de Vries, and produced for ACOR by Al Kutba Publishers, Amman, Jordan. Graphics are by Randa Azar Sayegh, except the plan of Ayla, which is courtesy of the author. Photos are by Bert de Vries. Newsletter design is by Maha Zabaneh Madbak.

The Spring, 1991, issue will include articles on field projects and research, reports on archaeological development projects and information on other research institutes, departments and libraries in Jordan.

## READERS' SURVEY

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# ACOR Fellowships

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When the situation allows, ACOR will have the following fellowships available, beginning the spring or fall of 1991: There will be four fellowships for the amount of \$10,000, including a \$6,000 award plus room and board at ACOR for 4 to 6 months. USIA awards are restricted to U.S. citizens or permanent residents. Recipients are expected to participate in the scholarly and cultural activities of the ACOR community and to submit a final report to the Fellowship Committee and to the ACOR director.

- **Dodge Fellowship.** Funded by the Dodge Foundation, open to senior scholars in the area of social sciences and humanities or the processing of field data.
- **Senior Fellowship/Annual Professor.** Funded by USIA, open to senior scholars in the area of the social sciences and humanities or the processing of field data.
- **Junior Fellowship.** Funded by USIA, open to pre-doctoral scholars in the area of the social sciences and humanities or the processing of field data.
- **Winnett Fellowship.** In memory of Fred Winnett and sponsored by his heirs, ACOR, the Embassy of Canada, and the Dept. of Near Eastern Studies of the Univ. of Toronto. Any scholars at Ph.D. and post-doctoral levels are eligible to apply.

This fellowship promotes research in the history and culture of ancient Arabia from Yemen to Syria. The 1991 award is for work in the history of **hydraulic engineering** in the Jordanian desert, including the application of ancient technology to modern water resource development. An award for **pre-Islamic inscriptions** (Safaitic, Thamudic, Nabataean, Aramaic, South Arabic, related Greek and Latin texts) will be offered in a subsequent year. The amount of the award will vary with the research, but not exceed \$10,000.

In addition, grants for the following will be available:

- **Resident Specialist.** Funded by USIA, \$5,000 for 6 to 8 weeks for a special service to ACOR; e. g., lab. technician, photo lab/studio designer, library computerization. Award pays for travel to Jordan, room and board at ACOR and a modest honorarium.
- **Student Travel.** Funded by USIA, \$1,300 each. Two grants for U.S. graduate students to explore research topics in Jordan, and two for Jordanian M.A. holders to pursue Ph.D. studies in the U. S.
- **Jennifer C. Groot Fellowship.** Two awards of up to \$1,000 to help undergraduate or graduate students meet the expenses of participating in an archaeological project in Jordan. Write ASOR for applications (711 W. 40th St., Suite 354, Baltimore, MD 21211); the deadline is Feb. 1, 1991.

For more information about these fellowships and their terms contact the Fellowship Committee Chairperson, Nancy Lapp, 18 Oxford Ct., Pittsburgh, PA 15237.

## Arabic Speaking Academic Immersion Program (ASAIP)

ASAIP, funded by the Mellon Foundation for both faculty and graduate students, to be held at the University of Jordan and ACOR in Amman, will give Fellowships to all candidates regardless of race, religion or other non-academic criteria. Rather than language courses, the program consists of three graduate seminars in academic fields including history, geography, Islamic civilization, economics, political science, philosophy and Arabic literature. These will be conducted exclusively in Arabic, so that ability to follow seminar discussions is necessary.

The target group is non-native speakers who are just at the threshold of fluency in the Arabic of university teaching. To qualify, candidates must be 1) matriculated in a Ph.D. program or on the instructional staff of an American academic institution, and 2) must have had substantial advanced training in Arabic, roughly on the level of "CASA III" or the highest level at Tunis or in Jordan. It is not the intent to compete with these or similar language programs, but to build on them to achieve academic fluency. A significant secondary goal is the interchange of ideas between the fellows and Jordan's academic community.

Candidates who pass the initial screening of the Selection Committee will be asked to an interview and to undergo language skill testing. Those accepted will be housed at ACOR in Amman, across the road from the University of Jordan. The first session is planned for the semester beginning September, 1991.

ASAIP's coordinators are L. Carl Brown of Princeton and Frank E. Peters of NYU. Institutional involvement includes the University of Jordan, ACOR and a consortium of over twenty American universities with specialization in Arabic and Near Eastern Studies.

For application information write: The ASAIP Selection Committee, c/o Dr. L. Carl Brown, Program in Near Eastern Studies, Jones Hall, Princeton University, Princeton, NJ, 08544-1008.