TECHNOLOGY AND THE ORIENTAL INSTITUTE

PLUS: Preview to an Exhibit: Daily Life Ornemented • Through Young Eyes: Nubian Art Recreated
FROM THE DIRECTOR’S STUDY

This issue of News & Notes highlights the role of technology at the Oriental Institute. As Scott Branting’s fascinating survey points out, the Institute has been a major innovator in this field, starting with Breasted’s pioneering use of aerial photography in 1920, and continuing through to the present.

One of the most striking things about technology is the degree to which it represents “solutions in search of a problem.” The brilliance of scholars like James Breasted and Robert Braidwood lay in their ability to recognize that technologies such as aerial photography or radiocarbon dating could be applied to real archaeological problems. Once they had seen the potential ways that these technologies could be transferred from the original domains for which they were invented and applied to address long-unsolved archaeological problems, then truly revolutionary discoveries followed.

The other wonderful consequence of technology transfer of this sort is that once archaeologists know about the existence and potential of a given technology, they can start to define entirely new questions that could never really be posed before as anything but the purest speculation. At the same time, the pressing need to address a specific theoretical question can push archaeologists to search out and develop new technologies of their own. Thus, for example, archaeologists’ interest in the origins of agriculture and the study of prehistoric subsistence necessitated a technology that could recover subsistence data. This need led to the development in the 1960s of the simple but highly effective technique of flotation, thereby making it possible for researchers to recover carbonized plant remains from archaeological sites. In this way, theories and methods move in an upward spiral, where each enriches the other and pushes it forward.

We are now in the midst of yet another technological revolution, this one involving information technology. The combination of high-speed computing, vastly increased memory, digital technology, relational databases, and near ubiquitous access to the Internet now allow for linkages between data sets and the people who use them in ways that have quite simply never existed before in the entire history of scholarship. This revolution is so far-reaching that scholars are barely beginning to grasp its potential. I am happy to say that the research projects of the Center for the Ancient Middle Eastern Landscape (CAMEL), the Diyala Database, and the NSF-funded program to Model Ancient Settlement Systems (MASS) are all pioneering new uses of this technological convergence. The Oriental Institute is showing its commitment to explore this frontier of knowledge by establishing a new Technology endowment, as part of our Research Endowment Campaign. With basic infrastructural support of this kind allowing us to obtain new technologies as they become available, we can look forward to great discoveries and entirely new perspectives on the development of the ancient civilizations of the Near East.

Cover: Thousands of multispectral Landsat images like this one are contained in the Center for Ancient Middle Eastern Landscapes’ (CAMEL) holdings. This particular image is a false color composite of a portion of the Pontic Mountains in northern Turkey and was taken on June 13, 2000. This image is courtesy of the U.S. Geological Survey (USGS) and the Global Land Cover Facility (GLCF).
Technology — the word itself conjures up various images of the present and the future. From iPods to astronauts landing on Mars, technology has a particular hold over the world today. Because of modern science and technology our abilities to dream and the time and effort it takes to realize those dreams have for some time seemed like the key limitations on what we can accomplish. One might think of exploring the stars, delving into the bonds that bind matter, or stopping dangerous diseases. However, the pursuit of the past is one core area of science that you might overlook, but which has frequently seen the early application of new technologies.

Since its inception the Oriental Institute has recognized and integrated technologies that can advance its ability to explore the past and to communicate the knowledge gained from its research. With a focus on the Middle East, a critical region prior to the start of history to the present day, this knowledge of the past is particularly important and relevant. It can provide context and a cultural understanding within which to interpret actions in the present and can provide clues as to where different courses of action can lead into the future. It could also reveal a great deal to us about ourselves.

As Oriental Institute founder James Henry Breasted noted in 1919, the disappearing heritage that lies buried within the soil of the Middle East is foundational to understanding who we are today and how we became this way (Breasted 1919:196). He cited a variety of factors leading to the disappearance of this important heritage, including natural forces, business and agricultural practices, and looting. In the present-day Middle East many of these factors have become more widespread, more organized, and more destructive, and there are new factors of destruction such as intentional and unintentional bombings. Yet the need to record, preserve, and understand this heritage before it disappears, using any and all available technologies, is even more critical today than it was in Breasted’s time.

A Short History of Technological Innovations at the Oriental Institute

Eighty-eight years ago, Breasted was already actively involved in pioneering the use of new technologies in support of the Institute’s mission. From batteries to cameras and airplanes, he was very interested in bringing together expertise in the ancient Near East with new forms of technology that could serve as research tools. In 1919 he wrote,

This is the first generation of orientalists who have been aided by the possession of highly perfected mechanical appliances for recording and multiplying graphic reproductions on an extensive scale, especially the various applications of artificial illumination, and of photography and photo-engraving so reinforced. For the portable storage battery has now made it possible for the first time to direct a brilliant light on interior wall surfaces for any length of time and to control completely the direction of the stream of light. Never before, therefore, has it been so feasible to undertake the immense task of making a permanent and multiplied record of all the written monuments of the past in the Near East (Breasted 1919:204).

From this intersection of technology and expertise in 1924 was born the Epigraphic Survey that continues to this day. It is a testament to what can be done by the hands of experts with a lot of work and judicious use of technology. But this wasn’t the only area in which Breasted was a technological pioneer.

In 1920 Breasted was able to persuade Lord Allenby, then High Commissioner of Egypt, to lend him the use of a Royal Air Force plane and pilot for the purpose of taking aerial photos in the area around Abu Roash, Egypt on January 13, 1920.
Abu Roash. He later writes,

On January 13, 1920, I flew with this plane from the Heliopolis aerodrome across the southern delta directly to Abu Roash. Here, as the first snapshot I ever made from the air, I was able to photograph the extraordinary causeway in which Lord Allenby is so much interested... I was told that a first flight is usually limited to twenty minutes, but in order to cover the desired ground on this trip it was necessary to stay up some two hours and circle repeatedly over the various sites. It was an exceedingly "bumpy" day and I suffered greatly from seasickness... While this flight was only a preliminary trial it is evident from this first experiment that an exhaustive air survey of the desert margin recorded in photographic negatives would disclose much that has not yet been discerned on the ground (Breasted 1922:3–4).

Airsickness aside, Breasted had already grasped the importance of aerial photography. When in May of that same year, after traveling from Egypt to Mesopotamia and then on into Syria, Breasted was offered another opportunity to make use of an RAF bomber and pilot he jumped at the chance. Both he and one of the Institute’s members, Daniel D. Luckenbill, used the plane to fly over and photograph Dura-Europos and the adjacent Euphrates valley.

Breasted’s use of airplanes for photography of ancient cities and archaeological landscapes in 1920 was pioneering. It was undertaken less than a year after George Beazeley published the first article on the subject (Beazeley 1919), and less than four years after the very first use of planes for archaeological purposes by Theodor Wiegand. However, as with the Epigraphic Survey, once these new technologies had been tried and found useful, the Institute rapidly began to incorporate them in its work. Many Institute expeditions soon used aerial photography as a portion of their research designs, a practice that continues to this day.

This tradition of technological innovation did not end with Breasted. I remember as a graduate student sitting in Robert and Linda Braidwood’s laboratory and hearing stories from them of an interesting series of lunches they had in 1947 at the Quadrangle Club with a professor in Chemistry, Willard Libby. Libby and his associates had of course just discovered the basic principles of radiocarbon dating, and these series of lunches led to a collaboration with the Institute on the testing of the technique. In fact, one-third of the original samples used to test and calibrate carbon-14 dating came from the Institute and its excavations (Arnold and Libby 1949).

The Institute was also involved very early on in incorporating computers into its research and data management activities. In 1965 Ignace Gelb, Erica Reiner, Miguel Civil, and John Brinkman attended a seminar put on by the...
Humanities Division to encourage the use of an IBM 7094 mainframe computer that had been purchased by the University of Chicago. Growing out of this meeting was the Institute’s first use of a computer, a concordance generated from 7,000 lines of Sumerian texts, undertaken in 1965 by a young Gene Gragg, then a graduate student in the Department of Linguistics. This and the start of several long-term computer projects by Hans Güterbock in 1965, Gelb in 1966, and Civil in 1968 fall within the first fluorescence of computer use within archaeology and anthropology between 1963 and 1968. The Institute also adopted one of the first personal computers, a Radio Shack Model I, brought to the Institute by Civil in 1979. The Institute project at Nippur in Iraq saw one of the earliest uses of a computer in the field by McGuire Gibson and John Sanders in 1981.

Satellite images are yet another example of the early incorporation of technological innovations in support of the mission of the Oriental Institute. In the late 1970s the Institute’s Robert McC. Adams first introduced the use of Landsat satellite imagery in combination with aerial photography and other established survey techniques to explore extensive portions of central and southern Mesopotamia. In *Heartland of Cities* he states,

> A final mapping exercise was undertaken on a somewhat experimental basis. Figure 6, covering essentially the whole of ancient Sumer and Akkad, tests the utility for archaeological purposes of the Earth Resources Technology Satellite (now LANDSAT) images… What the LANDSAT images supply is a very broad overview of almost the whole of the alluvial plain, permitting the major features of canal and watercourse systems in at least the vast cultivated region to be identified very quickly. And the essential congruence of that overview with the findings of many months of field survey and work on other maps and air photographs can be confirmed easily by comparing figure 6 with other maps included in this study (Adams 1981:33).

Not only was Adams instrumental in introducing and testing the utility of satellite imagery for archaeology, but subsequently he also played a key role in bringing about the declassification of even earlier high resolution spy satellite images that were taken by the United States government through the 1960s and 1970s. These declassified images have proved invaluable to modern archaeological research.

**Technology and the Oriental Institute Today**

Today the Oriental Institute remains committed to pursuing its mission through integrating new technologies with world-class expertise in the ancient Near East. The inclusion of technology as one of the five core areas within the new Research Endowment Campaign demonstrates the strength of this commitment. Such work can be expensive, but as the history of the Oriental Institute demonstrates, it is an investment that can yield excellent dividends when used astutely.

The use of technology at the Institute today can be divided into three main areas: infrastructure, field equipment, and projects specifically focused on new technologies. Of these the area
of infrastructure may seem the least exciting, but without it there would be no framework within which to undertake more cutting-edge endeavors. Two key areas that the Institute is pursuing in this regard are the Oriental Institute Archive (OIA) and the Integrated Database. The OIA addresses the need for secure, offsite storage for the massive amounts of data that are being generated by the digitization of large quantities of the Institute’s photographic and paper-based historical archives, 3-D scans of objects and ancient structures, and new field research projects that focus on remote sensing or computer-based modeling. At the same time it also provides a secure repository for smaller, but not less important, caches of data produced yearly by every member of the Institute. The OIA allows us all to be good stewards of the wealth of Institute data collected both by ourselves and our esteemed predecessors. At present the OIA is five terabytes (5,000 gigabytes) in size and continues to grow.

While it is critical to have a space like the OIA for securely maintaining the Institute’s digital collections, it is no less critical to be able to find and use particular files and images within this massive and growing collection. In the words of Breasted (as applicable today with computers as it was in his day), data must not only be collected, but also “brought together by some efficient organization” (Breasted 1919:200). The Integrated Database, which is in the process of development, will meet just such a need. It will allow members and staff to find what they are looking for within the collections and records — much like the Diyala Project has done with a smaller group of Institute material — and put us on par in terms of digital data organization with institutions such as The Field Museum and the Smithsonian. It will also allow greater access to the collections by the general public over the Internet, helping to better communicate and disseminate the valuable information the Institute possesses.

The second area in which the Institute is expanding technologically is in the acquisition and use of field equipment. If you were to stop by my office in the Institute you would find that this is not a new phenomenon, as I have a number of surveying tools there from earlier generations of archaeologists within the Institute. Many of these tools, including the Braidwoods’ plane table, are still actively used in my classes to train the next generation of archaeologists on basic principles of map making and survey. But there are new tools, more efficient ones that can do things that before were only dreamed of, which are necessary for equipping scholars today in order to investigate both the languages and civilizations of the Near East.
The Institute is continuing, therefore, to acquire necessary field equipment as technology and the needs of the Institute change. The new Leica total stations are seeing heavy use for mapping by nearly all the Institute’s field projects. Next on the list is the acquisition of new types of remote-sensing equipment that use measurements of electrical resistance or magnetic fields to see below the surface of the ground. These have been used for over a decade on the joint Institute project that I co-direct at Kerkenes Dağ in central Turkey, where they have been used to map out the entire ancient Iron Age city and carefully plan precision excavations. Drawing on successes such as this, a number of additional Institute projects plan to use this type of equipment in the years ahead. In addition, scanners of various sizes and shapes are becoming standard tools for dealing with two- and three-dimensional objects both in the field and at home. These are being used more and more by the Institute to digitize photographs, large maps, cuneiform tablets, statues, and even ancient architecture.

One unique and exciting aspect of the Institute’s work that complements the acquisition of this field equipment is the incorporation of green technology and alternative energy sources. Back in the 1990s, while undertaking an archaeological project on the edge of the Serengeti Plain in Africa, I first began to use solar cells to power the computers and field equipment. In remote areas such as this there are few other options, and even as this issue goes to press the Institute’s Merowe Salvage Project in the Sudan will likewise be running their computers off the power of the sun. But the use of renewable energy sources has advanced well beyond this. At Kerkenes Dağ we are running a parallel Kerkenes Eco-Center project with Middle Eastern Technical University’s Department of Architecture that focuses on sustainable rural development, alternative energy, organic farming, eco-tourism, and other forms of environmentally friendly practices. Archaeologically this helps us lower the costs of mounting an expedition and provides us with new facilities and some excellent home-grown vegetables, while at the same time giving a great deal back to the village and the region that graciously host us each year.

While making use of various forms of new technology, the Institute has also maintained its ability to undertake pioneering technological development work of its own within the framework of its mission. This is often taking the shape of new types of software, such as OCHRE (formerly known as XSTAR), a cultural heritage database system designed by David and Sandra Schloen and used for (among other things) the METEOR Project and the electronic version of the Chicago Hittite Dictionary, and SHULGI, a new software system that I am developing with Argonne National Laboratory to analyze pedestrian transportation in both the past and the present. It has also, on occasion, taken the shape of new hardware, such as the solar-powered field supercomputer that I began developing while still in Buffalo, New York, and which ran on the top of a building there for over a year straight when it wasn’t getting buried in snow.

Two additional Institute projects are also pushing the boundaries of technology in archaeology and science more broadly. These are the Modeling Ancient Settlement Systems (MASS) project and the Center for Ancient Middle Eastern Landscapes (CAMEL). The MASS project, a National Science Foundation-funded collaborative effort started by Tony Wilkinson in 1998 between the Institute and Argonne National Laboratory, is at the cutting edge of using computer simulations to better understand the development and
progress of ancient societies and their interactions with their environments. This is an exemplary project that is garnering widespread acclaim by the archaeological community and has already led to several follow-on projects that have opened up interest into whole new areas of research.

CAMEL was also, strangely enough, started in 1998 under the direction of Tony Wilkinson. Since 2004 it has expanded into directions that bring both this article and the Institute full circle. CAMEL’s underlying mission is to integrate the spatial data acquired and collected by the Institute’s members over the past eighty-eight years, from aerial photos to maps and surveys, with satellite images and other forms of remote sensing data for the entire Middle East. The deep historical view that this provides of the evolving Middle Eastern landscape is unparalleled in the world. Breasted himself noted in 1919 that,

… all these and many other natural forces carry on a steady and uninterrupted work of destruction which is appallingly evident when one compares a photograph of a monument taken today with one taken ten or fifteen years ago (Breasted 1919:197).

CAMEL has thousands of photographs and maps, stretching across not a fifteen-year but a 150-year span. It has thousands more satellite images collected over a forty-five year span and covering the entirety of the Middle East. These thousands include, a bit ironically, one of the largest collections in the world of the very U.S. spy satellite images that Adams was so instrumental in seeing declassified. This massive archive is in the process of being effectively brought together and digitally overlain within Geographical Information System (GIS) software. The use of this imagery, now and in the years to come, by researchers and interested members of the general public around the world, stands as a fitting tribute to the Institute’s long-term vision and an invaluable resource for understanding both the ancient and modern Middle East.

Conclusion
In looking at the application of technology by the Oriental Institute in pursuit of the past, I am constantly reminded of the dictum, attributed to Daniel Burnham, of making no little plans. The long involvement of the Institute with new and emerging technologies certainly demonstrates an ability to not only have such vision, but also to bring it to fruition. Time and again, the Institute has been and continues to be able to identify technologies that serve as highly effective tools in the hands of its world-class experts, allowing them to open up new visions of the past and remember things long forgotten.

Acknowledgments
I am very grateful to a number of Oriental Institute members and staff for speaking with me about their recollections for the historical section of this piece. I am also extremely grateful to John Sanders and Charles Jones for putting together an unpublished internal document in 1992 on computers and the Oriental Institute. It was a very useful jumping-off point for the research on computation in the historical section.

Bibliography


By Donald Whitcomb, Research Associate, and Tanya Treptow, Graduate Student, Islamic Archaeology

Few of the members of the Oriental Institute may realize that the depths of its basement contain amazing archaeological sites ready to be excavated. Last year a group of students asked me to teach them how to draw and study ceramics. As the Institute was preparing to open the Nubian Gallery, I asked Ray Tindel, our wonderful keeper of the mysteries of the storerooms, if we had any medieval ceramics from Nubia. To my surprise he produced numerous boxes of glazed and painted sherds, almost completely forgotten since they came here from the excavations at Serra East and Darmus Island at Kalabsha. These beautiful sherds produced a fine subject for study and a small addition to the Nubian Gallery.

Later that year another of my students, Tanya Treptow, was looking for some ceramics to study, so I asked Ray if we had any sherds from the Iranian site of Rayy (no pun intended). Again he worked his magic and soon Tanya was busy with a dozen large boxes of sherds. A few weeks later she asked me to look at the results of her excavations; she proudly showed me her discovery of a treasure of glazed ceramics, an artistic trove which excited everyone who passed through the museum registration area of the basement. Even our museum director Geoff Emberling seemed impressed, so Tanya and I proposed a temporary exhibition to share these wonders with visitors to the Oriental Institute.

Archaeological Perspectives of a Medieval Persian City

I knew of the excavations at Rayy (the ancient Rhages) because of my great admiration for its director. Erich Schmidt, a German-American archaeologist, is most well known for his scientific excavations of the great ruins of Persepolis in the 1930s, which resulted in the massive sculptures and artifacts which fill the Iranian Gallery at the Oriental Institute. His research agenda also expanded to the nearby Islamic city of Istakhr, also on display in this gallery. His wide-ranging interests were facilitated by an airplane which he used for travel and to record great numbers of mounds and urban sites throughout Iran. He used this transportation at one point to conduct simultaneous excavations at Persepolis, at Iron Age sites in Luristan in western Iran, and both Sasanian and Islamic sites near Tehran in northern Iran. Schmidt’s financial support was no less enterprising, coming from a consortium of museums; gradually, with the blessing of James Henry Breasted, first director of the
Oriental Institute, these folded into aspects of the Persian Expedition of the Oriental Institute. Thus from the 1930s, the Oriental Institute came to include some of the most important excavations and cultural research in the field of Islamic archaeology.

The site that Schmidt chose to begin his archaeological research in northern Iran was Rayy (with the nearby Chalcolithic site of Cheshmeh Ali and the Sasanian palace of Chal Tarkhan). His focus was on the vast remains of the walled city, which was to be the predecessor of modern Tehran. This city held a key geographical position at the crossing of ancient Silk Roads and was often mentioned by historians of the Islamic era. Schmidt was well aware of Rayy’s history, both as a political capital in the early Islamic period and as a center of scholarship from the ninth to the thirteenth centuries. Here were the streets walked by Harun al-Rashid, who went on to become Caliph of the wide-reaching Abbasid empire, and libraries used by Avicenna, before his philosophy attracted Western attention. Further, the city could boast of an observatory for astronomers and a hospital that advanced medical studies. As the geographer al-Muqaddasi noted in the tenth century, “the people have beauty, intelligence, honor, refinement. Here are councils and schools, natural talents, handicrafts …”

Among the most renowned of its handicrafts were its glazed ceramics. During three seasons of excavations from 1934 to 1936, Schmidt uncovered thousands of ceramics that had been deposited in trashpits throughout Rayy’s neighborhoods. These ceramics range in design from humbly etched cooking wares to the finest luxury wares, but all reflect a fascination for decoration. Some of the most intriguing glazed bowls are known as *mina’i*, painted with animals and human figures in time-consuming detail, similar to the Persian miniature illustrations found in contemporary books. Likewise Rayy’s lustre wares, painted with metallic golden colors, have long attracted the attention of historians of Islamic art.

Daily Life Ornamented provides a unique opportunity both to present the beauty of these objects and, through their archaeological context, to examine the cosmopolitan life that was the source of an amazing variety of ornamentation. Rayy’s ceramics had a very visible role in the city of Rayy throughout the Islamic period. In addition to wealthy patrons who promoted ceramic arts, small families invested in beautiful ceramics in their private, daily lives. Even everyday storage and cooking vessels have patterns of incised decoration or added bits of glaze as a colorful mosaic. These ceramics indicate local traditions of Rayy’s people, but many of their designs and decorations link Rayy to a shared culture that spanned the Middle East.
Scholars often identify this larger society as “Islamic Culture,” a term which usually includes secular life in regions ruled by Muslim governments in addition to its obvious connotations of religious practice. A connected Islamic world encouraged travel and the quick spread of technology, a phenomenon that especially affected the ceramic industry and allowed the development of inventive shapes and incredibly detailed designs. Rayy was part of this sweep of innovation, but it was also a source for new creativity. Its ceramic traditions reflect the conventions of an Islamic value system and also the city’s unique Persian identity.

This exhibit presents over fifty objects from Schmidt’s excavations at Rayy to examine the meaning of Islamic culture at Rayy. Most of these ceramics and ceramic sherds have never before been displayed publicly and will be complemented by original watercolor paintings and photographs from the excavations. Several Persian miniature paintings will help visitors to visualize the important uses of medieval ceramics from the perspective of contemporary eyes.

The Love of Potsherds

A key theme in Daily Life Ornamented is the role of ceramics in a cosmopolitan city and how they provide a valuable overlap between the archaeological approach and the art historical. I was reminded of a conversation with Renata Holod, Professor of Islamic Art at the University of Pennsylvania, when she taught in our art department about thirty years ago. Together, we examined a collection of ceramics from Istakhr, the Islamic successor of Persepolis in Iran, but we saw completely different significances in these sherds. I went on to utilize these artifacts in my dissertation but, over the years, I have wondered how to express to the public this difference in approach. The theme of Islamic archaeology as a discipline in relation to Art History is one of active concern for students at the Oriental Institute, who have organized a graduate student workshop entitled “Islamic Art and Artifact,” under the joint direction of Persis Berlekamp, from the Art History Department, and myself.

Archaeological excavations present two essential advantages: the artifacts have contextualization and patterns of occurrence. Of course it is true that usually about 95% of the sherds recovered from an excavation are broken pieces of storage jars and cooking pots that, as even archaeologists will admit, only they can love. I have often taken young students to the field, especially beginning

Restoration of ceramics at Rayy in 1936
Egyptologists when we were digging at Quseir al-Qadim. As they worked through hundreds of sherds, they were drawn to the excitement of glazed sherds. The frequency of bright colors and designs was just enough to compensate for less interesting potsherds. Gradually the analysis of all the ceramics as assemblages (groupings found in the same contexts) showed them that every artifact, the beautiful and the ugly, fit into a complex picture of the life of people in that port.

This picture of the process of archaeology may become much clearer if one selects an excavation that was a special place, such as a cosmopolitan capital, a city of special artistic intensity and variety. It was a very pleasant surprise to find just such an excavated collection in the storerooms of the Oriental Institute and we hope that our exhibition of ceramics from Rayy illuminates the understanding of medieval Iran while demonstrating how even the humble potsherd has a role to play in our exploration of earlier peoples and civilizations.

Art and Artifact in Chicago

Both archaeological and art historical approaches to the Islamic world will be on display here on campus this spring. The Smart Museum will host an exhibition from the David Collection in Copenhagen called Cosmophilia, that is, “Love of Ornament.” The curators of the exhibition, Sheila Blair and Jonathan Bloom, discuss four categories of ornament that have inspired Islamic artists: the writing of Arabic script; the flow of vegetal into arabesque forms; the play of geometrical forms; and, somewhat surprisingly, the enjoyment of figural imagery. The Smart Museum exhibition features a number of ceramic pieces, each a complete aesthetic treasure and abundantly illustrating calligraphic, arabesque, geometric, or figural themes.

The Oriental Institute has a large collection of artifacts in its galleries illustrating the ubiquity of fine epigraphy as well as abstract designs and the rich variety of human depiction of ancient cultures of the Middle East. There is an abundant overlap in subject matter, but a major difference occurs in investigative approach. Archaeology can offer additional perspectives for looking at cultural objects, incorporating contextual information about their origin and use. In Daily Life Ornamented, we take the theme of ornamentation as our guide through archaeology to understand Rayy as both the source and consumer of beauty in everyday life.

Together these two exhibitions, both cosmopolitan in design, create an interesting dialogue on the phenomenon of Islamic decoration. They should enrich everyone’s understanding and appreciation of Islamic culture, especially at a time when so many negative associations are fostered on the cultures of the Middle East.
DAILY LIFE ORNAMENTED EVENTS

Presented as part of the citywide celebration of Silk Road Chicago

MEMBERS’ PREVIEW

DAILY LIFE ORNAMENTED: THE MEDIEVAL CITY OF RAYY

Monday, May 14
6:00–8:00 PM

Be among the first to view the Oriental Institute’s new special exhibit, Daily Life Ornamented: The Medieval Persian City of Rayy. Enjoy light refreshments as you tour the galleries. Pre-registration is not required, and you are welcome to bring a guest!

GUIDED TOUR

DAILY LIFE ORNAMENTED: THE MEDIEVAL PERSIAN CITY OF RAYY

Cross-Campus Tour of Islamic Art and Archaeology
Oriental Institute and Smart Museum of Art

Sunday, May 20
2:00–4:00 PM

Join the Oriental Institute and the Smart Museum of Art for a collaborative tour that explores the role of archaeology in providing context for Islamic art, as well as the exquisite nature and enduring legacies of Islamic artistic traditions. Begin at the Oriental Institute with a visit to Daily Life Ornamented: The Medieval Persian City of Rayy, to discover how archaeological excavations have revealed the ornamentation and ways of life of a great city that was the predecessor of present-day Tehran. Then walk to the Smart Museum for an engaging discussion of general themes of Islamic ornamentation, including use of patterns, representations, and writing on varied Islamic objects that span eras and cultures.

Free. Space is limited and advanced registration is required. Contact Museum Education at (773) 702-9507 to register or for more information.

FILM SCREENINGS

PERSIAN MINIATURE: THE GARDENS OF PARADISE

Sunday, June 3
2:00 PM
Breasted Hall

Tanya Treptow, Co-curator of Daily Life Ornamented: The Medieval Persian City of Rayy, introduces and then leads a discussion of this outstanding documentary film that shows how Persian miniature painting, which reached its peak from the fourteenth to the seventeenth centuries, serves as dual entry point into Persian art and culture. Then visit the Rayy exhibit to see how examples of Persian miniature illustrate ways the exquisitely ornamented ceramics on display were made and used.

CHILDREN OF HEAVEN

Sunday, June 10
2:00 PM
Breasted Hall

Nominated for an Academy Award as Best Foreign Language Film in 1998, this Iranian feature was shot in Tehran, where narrow streets and alleyways hark back to the medieval city of Rayy, predecessor of the present-day Iranian capital and featured in our current special exhibit. Get a glimpse of the complexity of Iranian culture as you travel through medieval-era streets with a boy and his little sister on their search for a lost pair of shoes. A touching and universal story of family life, this highly acclaimed film was given four stars and called “nearly perfect” by the Chicago Sun-Times.

Color. 87 minutes. With English subtitles.
SPRING 2007 CALENDAR
Unless otherwise noted, all programs take place at the Oriental Institute. All programs subject to change.

APRIL

3 | TUESDAY
Voices From the Past: The Literature of Ancient Egypt
Adult Education Course
Tuesdays, April 3–May 8
7:00–9:00 PM
At the Gleacher Center
See page 18 for details

4 | WEDNESDAY
The Core of the Matter: City, Craft Specialization, and Conflict
Members’ Lecture
7:00 PM
See page 17 for details

8 | SUNDAY
The Great Pharaohs of Egypt: Episode I
Film
2:00 PM
See page 16 for details

11 | WEDNESDAY
The Road Map of the Silk Road: How Did Caravans Reach China in the Early Middle Ages?
Members’ Lecture
7:00 PM
See page 17 for details

11 | WEDNESDAY
Through Young Eyes: Nubian Art Recreated
Special Exhibit Opening
April 11–May 6
See page 19 for details

12 | THURSDAY
“Lo, The Vile Asiatic!” Ancient Egypt’s Love-Hate Relationship with Canaan and Ancient Israel
Adult Education Course
Thursdays, April 12–May 31
7:00–9:00 PM
At the Oriental Institute
See page 18 for details

14 | SATURDAY
Islamic Art and Archaeology
Adult Education Course
Saturdays, April 14–May 19
10:00 AM–12:00 PM
At the Oriental Institute
See page 18 for details

15 | SUNDAY
The Great Pharaohs of Egypt: Episode II
Film
2:00 PM
See page 16 for details

22 | SUNDAY
The Great Pharaohs of Egypt: Episode III
Film
2:00 PM
See page 16 for details

29 | SUNDAY
The Great Pharaohs of Egypt: Episode IV
Film
2:00 PM
See page 16 for details

MAY

5 | SATURDAY
Kids and Kites
Family Event
10:00 AM–3:00 PM
At the Museum of Science and Industry
See page 19 for details

6 | SUNDAY
Dining al Fresco with Herod the Great
Associate Members’ Event
2:00 PM
See page 17 for details

13 | SUNDAY
Pioneer to the Past: The Life and Times of James Henry Breasted
Film
2:00 PM
See page 16 for details

14 | MONDAY
Members’ Exhibit Preview
Gallery Event
6:00–8:00 PM
See page 13 for details

15 | TUESDAY
Daily Life Ornamented: The Medieval Persian City of Rayy
Special Exhibit Opening
May 15–October 14
See page 13 for details

20 | SUNDAY
Mesopotamia: I Have Conquered the River
Film
2:00 PM
See page 16 for details
**SPRING 2007 CALENDAR**

**20 | SUNDAY**

**Daily Life Ornamented: The Medieval City of Rayy**
Cross-Campus Tour of Islamic Art and Archaeology  
2:00–4:00 PM  
Oriental Institute/Smart Museum of Art  
See page 13 for details

**27 | SUNDAY**

**Mysteries of the Holy Land**  
Film  
2:00 PM  
See page 16 for details

**JUNE**

**2 | SATURDAY**

**Beneath the Mountain-of-Anubis**  
Members’ Lecture  
5:00 PM  
See page 17 for details

**3 | SUNDAY**

**Persian Miniature: The Gardens of Paradise**  
Special Film Screening  
2:00 PM  
See page 13 for details

**10 | SUNDAY**

**Children of Heaven**  
Special Film Screening  
2:00 PM  
See page 13 for details

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### ADULT EDUCATION REGISTRATION FORM

**Registration deadline is one week before the start of the course**

**COURSES**

- **Voices From the Past: The Literature of Ancient Egypt**  
  *(Register by March 27)*  
  **MEMBERS** $169  **NON-MEMBERS** $199  **TOTAL**

- **“Lo, The Vile Asiatic”**  
  *(Register by April 5)*  
  **MEMBERS** $199  **NON-MEMBERS** $229  **TOTAL**

- **Islamic Art and Archaeology**  
  *(Register by April 7)*  
  **MEMBERS** $199  **NON-MEMBERS** $229  **TOTAL**

**GRAND TOTAL**

- I would like to become a member of the Oriental Institute. Enclosed is a separate check for $50 for an individual membership or $75 for a family; $40 for individual senior, UC/UCH Faculty and Staff, or National Associate (persons living over 100 miles from Chicago within the USA) or $65 for a family.
- I prefer to pay by  
  - ☐ Check (payable to the Oriental Institute)  
  - ☐ Money order  
  - ☐ MasterCard  
  - ☐ Visa

  **Account number:** ___________________________________________________________  
  **Exp. date:** __________  
  **3-digit security code:** ________

  **Signature:** __________________________________________________________________

  **Name:** _____________________________________________________________________

  **Address:** ___________________________________________________________  
  **City / State / Zip:** _____________________________________________________________________

  **Daytime phone:** __________________________  
  **E-mail:** ____________________________________________________________

  **Cut out and send form to:** The Oriental Institute Education Office, 1155 East 58th Street, Chicago, IL 60637

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### ADULT EDUCATION REGISTRATION AND REFUND POLICY

For multi-session courses, a full refund will be granted to anyone who notifies us about his/her cancellation before the first class meeting. A student who notifies us of his/her cancellation after the first class meeting, but before the second class meeting, will receive a full refund minus a $50 cancellation fee. After the second class meeting, no refunds will be given unless the course is canceled by the Education Office. Those who are not registered may not attend classes. The Education Office reserves the right to refuse to retain any student in any course at any time. Failure to attend a course does not entitle a registrant to a refund. No credits are issued. All schedules are subject to change. Some courses may be subject to a small materials fee, which will be announced at the first class meeting. For single-session programs, no refunds are given, but if notification of cancellation is received at least forty-eight hours before the program begins, a credit voucher will be issued for the full amount of the program, less a cancellation fee. The voucher will be usable for any single-session Oriental Institute Museum Education program for a full calendar year from the date that appears on the voucher.
SUNDAY FILMS

Each Sunday afternoon, enjoy the best in documentary and feature films on the ancient Near East at the Oriental Institute. Films begin at 2:00 PM and are free. Unless otherwise noted, running times range from thirty to fifty minutes. Following the films, museum docents will be available in the galleries to answer questions about our exhibits.

In April we feature screenings from The Great Pharaohs of Egypt (1997), the acclaimed A&E series that uses archaeological evidence, on-location footage, expert interviews, and computer recreations to tell the story of ancient Egypt’s greatest rulers.

April 8  Episode I
Shows how the warrior Narmer united Egypt to become the first pharaoh and introduces the kings who built the pyramids at Giza.

April 15  Episode II
Focuses on the military-minded rulers of the New Kingdom and explores the legacy of Hatshepsut, one of the most well known of the women who ruled as pharaoh.

April 22  Episode III
Begins with Akhenaten’s ascension to the throne and then examines the many mysteries surrounding this controversial king.

April 29  Episode IV
Provides an in-depth look at the reign of Ramesses II, whose foreign conquests and massive building projects earned him the title Ramesses the Great. The film concludes with the life and tragic death of Cleopatra.

May 6  No Film Showing: Special Members’ Lecture
Breasted Hall reserved for members-only event. See page 17.

Part of WTTW’s Chicago Stories series, this film presents Chicago-area native James Henry Breasted, founder of the Oriental Institute. His scholarly vision, entrepreneurial flair, and unbending determination helped shape the Oriental Institute into a great academic institution that is still guided by his principles.

May 20  Mesopotamia: I Have Conquered the River (2000)
Explore the vital role of ancient Mesopotamia’s waterways in the development of one of the world’s earliest and most powerful civilizations.

May 27  Mysteries of the Holy Land (1994)
From the award-winning Archaeology series produced by the Archaeological Institute of America, this film hosted by John Rhys-Davies investigates some of the best-kept secrets of Old Testament times.

June 3  Persian Miniature: The Gardens of Paradise
See page 13 for details.

June 10  Children of Heaven (1997)
See page 13 for details.

FROM THE DEVELOPMENT OFFICE

One of the Oriental Institute’s great strengths is its ability to undertake large-scale, long-term research projects focused on the major questions and issues in the study of ancient Near Eastern civilizations. These projects require significant financial resources and the need will only increase over time.

The Research Endowment Campaign is a five-year campaign to increase funding for the core research areas of the Oriental Institute providing a stable and predictable level of support for this work. To reach this goal, the Campaign will raise $3 million between 2006 and 2011 to boost our research endowments from the current level of $2.2 million to $5.2 million.

The Research Endowment Campaign targets five crucial areas that require long-term financial resources:

- Ancient Languages
- Archaeological Fieldwork
- Research Archives
- Technology
- Museum Holdings and Special Collections

A gift to the Research Endowment Campaign will ensure the continued excellence of the many projects for which the Institute has gained its worldwide reputation. For more information, contact Monica Witczak, Director of Development, at (773) 834-9775 or via e-mail at mwitczak@uchicago.edu.
MEMBERS’ LECTURES

The Members’ Lecture Series is made possible by the generous support of Oriental Institute members. Lectures are free and open to the public, with light refreshments afterward.

THE CORE OF THE MATTER: CITY, CRAFT SPECIALIZATION, AND CONFLICT
Clemens Reichel, Oriental Institute
Wednesday, April 4
7:00 PM
Excavations by the Oriental Institute and the Syrian Department of Antiquities between 1999 and 2005 have shown the presence of a walled city at the site of Hamoukar in northeastern Syria dating to the early fourth millennium B.C. — centuries earlier than the earliest cities were previously assumed to have emerged in northern Syria. Using the results of the 2006 excavation season, this lecture traces Hamoukar’s development from a large obsidian-processing center in the fifth millennium B.C. to a walled city with large administrative buildings, which found a violent end when it was destroyed by warfare around 3500 B.C.

Clemens Reichel is a Research Associate at the Oriental Institute. He is the American co-director of the Hamoukar Expedition.

THE ROAD MAP OF THE SILK ROAD: HOW DID CARAVANS REACH CHINA IN THE EARLY MIDDLE AGES?
Pavel Lurye, Institut für Iranistik
Wednesday, April 11
7:00 PM
One of the most difficult stretches along the famed Silk Road lay roughly halfway between Iran and China. Here, traders’ caravans had to cross the most severe mountains and the driest deserts of the continent. To pass through safely, caravaneers had to know this region’s geography, and we possess several “itineraries” or descriptions of this road, ranging in date from the “geography” of Ptolemy to the writings of Marco Polo. This lecture focuses on the underestimated significance of early Islamic sources from Persia, and the important influence of one lost source that the speaker believes predates all existing Persian sources by more than two centuries.

Dr. Pavel Lurye is a Russian scholar currently associated with the Institut für Iranistik, Austrian Academy of Sciences in Vienna.

Presented by the Membership and Museum Education Offices as part of the citywide celebration of Silk Road Chicago.

TRAVEL PROGRAM

For complete itineraries, contact the Membership Office at (773) 702-9513 or oi-membership@uchicago.edu.

ANCIENT ISRAEL REVEALED
June 16–July 3, 2007
Escorted by Gabrielle Novacek, Ph.D. Candidate in
Syro-Palestinian Archaeology

Uniquely situated at the crossroads of cultures, Israel is among the most historically rich areas in the world. The Oriental Institute has had an archaeological presence in modern Israel since the early 1900s, when we excavated at the site of Megiddo. Since then, scholars from the Institute have undertaken study of the Dead Sea Scrolls and excavated at the sites of Ashkelon, Yaqush, and Tel Beth Yerah. Visit sites at Jerusalem, Massada, Qumran, Tiberius, Galilee, Tel Dan, Haifa, Tel Aviv, and Megiddo.

TOUR ESCORT GABRIELLE NOVACEK will receive her Ph.D. in Syro-Palestinian Archaeology from the University of Chicago in June 2007. Her research focuses on the Early Bronze Age in Israel.

BENEATH THE MOUNTAIN-OF-ANUBIS
Joseph Wegner, University of Pennsylvania
Saturday, June 2
5:00 PM
Discovered in 1902 but not excavated until 2006, the Mountain-of-Anubis at Abydos is ancient Egypt’s first hidden royal tomb. Built by Pharaoh Senwosret III of the Twelfth Dynasty, this remarkable achievement of mortuary architecture gives new insight into the emergence of the hidden royal tomb. The lecture includes photos of the tomb’s interior and discussion of new evidence indicating that Senwosret III was buried at Abydos.

Prof. Joseph Wegner is Associate Professor of Egyptian Archaeology at the University of Pennsylvania. He directed excavations at South Abydos.

Co-sponsored by the Archaeological Institute of America and the Chicago Chapter of the American Research Center in Egypt.

ASSOCIATE MEMBERS’ EVENT

SAVE THE DATE!

DINING AL FRESCO WITH HEROD THE GREAT
Kathryn Gleason, Cornell University
Sunday, May 6
2:00 PM
Kathryn Gleason is Chair for the Department of Landscape Architecture at Cornell University. She has conducted archaeological excavations of some of the earliest gardens known in Western history.

For more details, contact the Membership Office at (773) 702-9513 or oi-membership@uchicago.edu.

This event is open to Associate and Breasted Society members, and their guests.
ADULT EDUCATION COURSES  Don’t miss out — Register early!

The first two courses are co-sponsored by the Graham School of General Studies. These two courses offer Teacher Recertification CPDUs from the Illinois State Board of Education. For more information call Museum Education at (773) 702-9507.

**VOICES FROM THE PAST: THE LITERATURE OF ANCIENT EGYPT**

Jacqueline Jay  
**Tuesdays, April 3–May 8**  
7:00–9:00 PM  
At the Gleacher Center  
450 Cityfront Drive

The literature of ancient Egypt speaks to us over the ages and its themes transcend time. Discover writings that range from hymns and prayers to adventure stories, fairy tales, and even love poetry in this course that explores ancient Egyptian literature from the Old Kingdom to the era of Cleopatra. Read a variety of literary genres in translation, discussing their importance to our understanding of Egyptian history, religion, and culture, as well the rightful place of ancient Egyptian literary masterpieces in the history of world literature. There is also an optional Saturday afternoon tour of the Egyptian collection at the Oriental Institute Museum to see papyrus scrolls, writing implements, ancient biographies, and a Book of the Dead.

*Pre-registration is required.*

**INSTRUCTOR:** Jacqueline Jay is a Ph.D. candidate in Egyptology in the University of Chicago’s Department of Near Eastern Languages and Civilizations. Her dissertation research focuses on the narrative structure of ancient Egyptian tales.

**CPDUs:** 12

**REQUIRED TEXT:**  

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**“LO, THE VILE ASIATIC!” ANCIENT EGYPT’S LOVE-HATE RELATIONSHIP WITH CANAAN AND ANCIENT ISRAEL**

Gabrielle V. Novacek  
**Thursdays, April 12–May 31**  
7:00–9:00 PM  
At the Oriental Institute

From the time of the earliest pharaohs, the ancient Egyptians frequently came into contact with the Canaanites and then the Israelites as traders, raiders, and at times, conquerors. Although Egyptian monikers for their neighbors were frequently far from flattering, the southern Levant’s geographic position, natural resources, and agricultural produce often brought the two regions into a relationship with one another. Drawing together the evidence provided by texts and archaeology, explore the interconnected histories of Egypt and its neighbors in the southern Levant from 3500 to 500 B.C. Topics include the impact of Egyptian demand for olive oil and wine on the development of cities in Canaan; Egyptian copper mining in the Negev desert; foreign rule of the Nile Delta by Canaanites whom the Egyptians called the Hyksos; and Egypt’s control over the southern Levant during the empire of the New Kingdom. We also explore the role of Egypt in the Bible, including a discussion of the historicity of the Exodus.

*Pre-registration is required.*

**INSTRUCTOR:** Gabrielle V. Novacek is a Ph.D. candidate in Syro-Palestinian Archaeology in the University of Chicago’s Department of Near Eastern Languages and Civilizations. She was also Guest Curator for the Oriental Institute’s Haas and Schwartz Megiddo Gallery.

**CPDUs:** 16

**REQUIRED TEXT:**  

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**ISLAMIC ART AND ARCHAEOLOGY**

A. Asa Eger  
**Saturdays, April 14–May 19**  
10:00 AM–12:00 PM  
At the Oriental Institute

From the seventh century onward, the Islamic world grew to span three continents and inspired a golden age for art and architecture that lasted more than 1,000 years. This spring the arts of the Islamic world come to Chicago, with exhibits at the Art Institute, the Smart Museum of Art, and the Oriental Institute all highlighting the beauty and ornament of Islamic culture. This course, which includes visits to all these exhibits, focuses on the role that archaeology plays in appreciating and understanding Islamic art. Gallery tours combined with classroom lectures and discussion sessions consider Islamic art and artifacts in relation to their manufacture and function, their environment within rural or urban settings, and the impact of cross-cultural influences in regions that stretched from Spain to Egypt to India. Tuition for the course includes admission and instructor-led tours of the Islamic art exhibits at all three museums.

*Pre-registration is required.*

**INSTRUCTOR:** A. Asa Eger is a Ph.D candidate in Islamic Archaeology in the Department of Near Eastern Languages and Civilizations at the University of Chicago. He currently conducts fieldwork in Turkey and has participated in excavations in Israel, Greece, and Cyprus.

**REQUIRED TEXTS:**


In conjunction with the Cosmophilia exhibition on Islamic art at the Smart Museum of Art, this course is being offered to Smart Museum members at the Oriental Institute members’ rate.
FAMILY EVENT

MAYOR DALEY’S KIDS AND KITES FESTIVAL

Saturday, May 5
10:00 AM–3:00 PM
At the Museum of Science and Industry
57th Street and Lake Shore Drive

Come fly a kite with the Oriental Institute Museum at Mayor Daley’s Kids and Kites Festival! Watch professional kite-flying demonstrations and decorate and fly your own kite at this outdoor fest. Visit the Oriental Institute Museum booth to play an ancient game or make a special Egyptian-themed craft to take home.

Free. Co-sponsored by the Mayor’s Office of Special Events.

SPECIAL EXHIBIT

THROUGH YOUNG EYES: NUBIAN ART RECREATED

A Chicago Public Schools/Oriental Institute Museum collaboration in partnership with Little Black Pearl Art and Design Center
April 11 through May 6

This exhibit highlights interpretations and recreations of ancient Nubian art in ceramics, drawings, and prose produced by students from Fiske Elementary School in Woodlawn. Supported by a year-long grant from the Joyce Foundation, Through Young Eyes is the outcome of a project designed to build new bridges of collaboration in our community. Over the course of this collaboration, Chicago Public School teachers and administrators, Oriental Institute Museum staff, and artists from Little Black Pearl addressed serving a sector of the population of Woodlawn by developing and presenting a school outreach program that has enriched the learning experiences of sixty sixth-, seventh-, and eighth-grade students and their families.

Using the Oriental Institute’s Picken Family Nubia Gallery as the springboard, educators from Fiske School, the Oriental Institute, and Little Black Pearl introduced the students to the rich history and heritage of ancient Nubia with specially developed curriculum materials for the classroom and a series of gallery tours and discussion sessions at the museum. During their museum visits, students selected, researched, and photographed their favorite artifact from the Nubia exhibit. This work prepared them to interpret their chosen artifacts in drawings, sculpture, poetry, and prose during writing workshops at their school and hands-on arts sessions with teaching artists at Little Black Pearl.

Development of students’ literacy, research, social studies, art, and critical thinking skills was a fundamental goal of this project. Through Young Eyes presents the project’s outcomes with a two-part exhibit on view at two venues. Thirty student-produced displays are on view in the Holleb Family Special Exhibits Gallery at the Oriental Institute, and thirty additional displays are on exhibit in Gallery II at Little Black Pearl Art and Design Center, 1060 East 47th Street. We invite you to visit these exhibits to see the culmination of an educational partnership which has enabled members of the Woodlawn, Hyde Park, and North Kenwood/Oakland communities to create a collaborative model that we can all build upon for the future.

Teachers and administrators from Fiske School take notes during a lecture on ancient Nubia by Museum Director Geoff Emberling. The educators used information from Oriental Institute lectures and gallery visits to develop curriculum on ancient Nubia for their students. Photograph by Wendy Ennes.
WHAT’S COOKING AT THE ORIENTAL INSTITUTE?

Explore Middle Eastern Cuisine with these titles from the Suq!

Claudia Roden helped introduce Middle Eastern cuisine to U.S. audiences; in *The New Book of Middle Eastern Food* (members’ price $31.50), she presents over 800 easy-to-follow recipes from Egypt, Turkey, Syria, Lebanon, and North Africa, as well as personal anecdotes and tips for health-conscious cooking. Roden’s most recent book, *Arabesque* (members’ price $31.50), explores the traditional regional flavors of Morocco, Turkey, and Lebanon in greater depth.

Jean Bottéro provides a historian’s perspective on some very traditional cooking in *The Oldest Cuisine in the World* (members’ price $20.25), in which he examines the role of food in ancient Mesopotamia, including — for the adventurous cook — translations of some ancient recipes.

Finally, Najmieh Batmanglij takes readers on a tour of Persian winemaking traditions in *From Persia to Napa: Wine at the Persian Table* (members’ price $45.00), which includes almost 100 fully-illustrated recipes, menus, and suggestions for hosting a Persian-style dinner in your home.