

# bulletin

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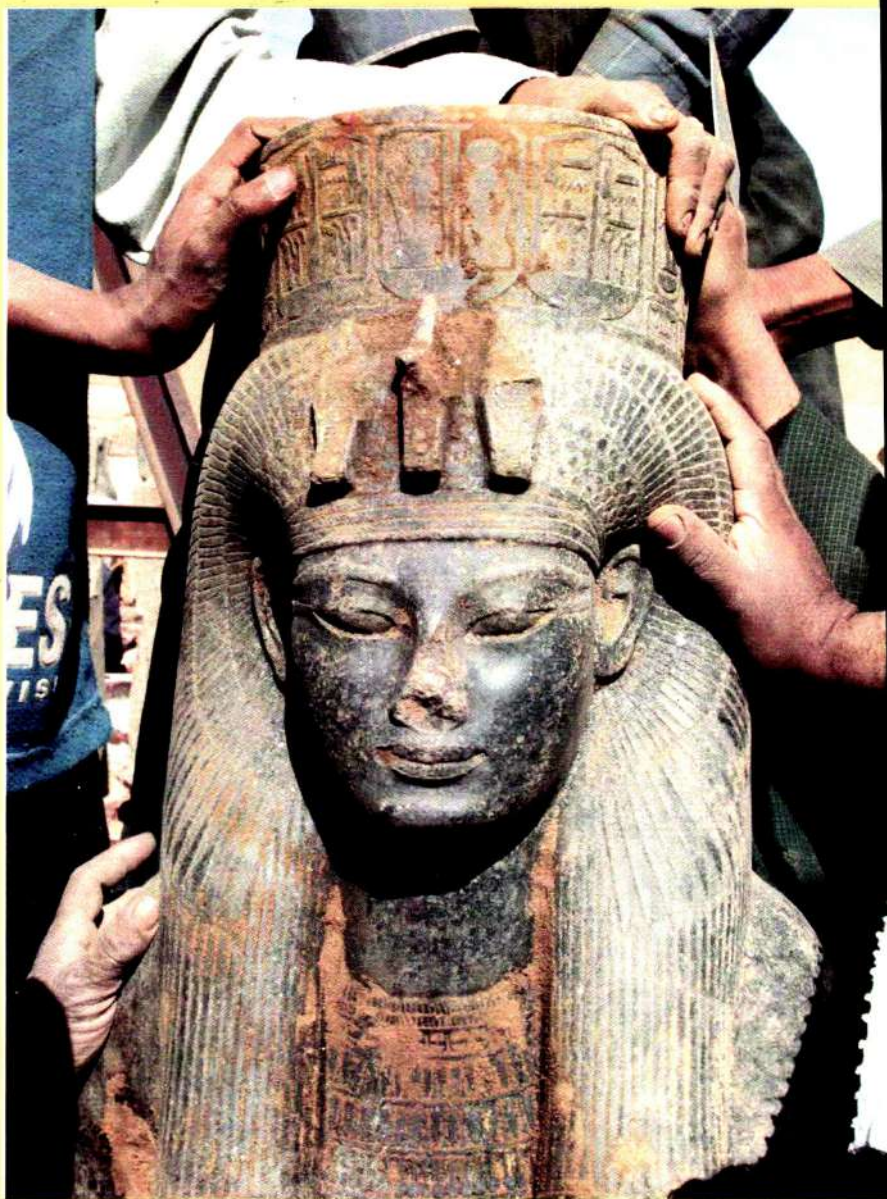
## of the American Research Center in Egypt

NUMBER 189 — SPRING 2006

### American Contributions to Egyptian Archaeology The Egyptian Museum, Cairo

Gerry Scott

On February 28, 2006 a special exhibition entitled "American Contributions to Egyptian Archaeology" was inaugurated at the Egyptian Museum in Cairo by American Ambassador Francis J. Ricciardone, Dr. Zahi Hawass, Secretary General of the Egyptian Supreme Council of Antiquities, Dr. Wafaa El Saddik, Director of the Egyptian Museum, and myself as Director of the American Research Center in Egypt (ARCE). The exhibition was first proposed to Dr. Hawass six months ago and had a very short time for preparation, but was organized and curated with the assistance of several American scholars in collaboration with the curatorial staff of the Egyptian Museum. The exhibition brings together over 50 important objects of ancient Egyptian art from within the Egyptian Museum that were excavated by American archaeologists from 1900 to the present.



The newly excavated lifesize statue of Queen Tiye that was discovered by the Johns Hopkins University team at the Mut Temple at Karnak in January 2006. Photo courtesy of Betsy Bryan.

The history of American interest in ancient Egypt predates the founding of the United States of America to the period of British colonial rule, but it was not until the nineteenth century that many Americans visited Egypt. Several important nineteenth-century Americans worked in Egypt at this time and formed collections of Egyptian antiquities, some of which entered important American museum collections, where they may be seen today.

However, it was approximately one hundred years ago, with the dawn of the twentieth century, that Americans began to contribute seriously to the systematic study of ancient Egypt. The Metropolitan Museum of Art's Egyptian department was established in 1906 and began archaeological excavations

in Egypt that same year. When funding from the University of California for George Reisner's work ended in 1905, the Boston Museum of Fine Arts took over sponsorship of the American concession at Giza. At the same time, from 1905-1907, James Henry Breasted of the University of Chicago led a field expedition to record in photographs and facsimile copies hieroglyphic texts from Meroe to Aswan.

Each of these three American institutions has continued to excavate in Egypt and to contribute to the scholarship of ancient Egypt through publications and exhibitions. In this work, they have been joined by many other American universities and museums, including the University

*continued on page 3*

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# from the director

Dear ARCE Members:

The extraordinary diversity of the articles and contents of this issue of the *Bulletin* serves to remind us that, although the American Research Center in Egypt is a relatively modest organization in terms of the number of its members and staff, it is a remarkably ambitious, complex, and robust institution with a host of activities in both Egypt and the United States. Among the many ARCE projects highlighted here is the recent opening of a special exhibition of Egyptian antiquities at the venerable Egyptian Museum in Cairo that was organized and sponsored by ARCE. The exhibition, which seeks to bring to the attention of the thousands of visitors who daily tour the museum, the fact that Americans have been active and productive participants in the recovery of Egypt's ancient past for more than a century. Opened by the Secretary General of Egypt's Supreme Council of Antiquities, Zahi Hawass, and by the U.S. Ambassador to Egypt, Francis Ricciardoni, the exhibition received intense Egyptian media coverage and has been very well attended.

Continuing in the tradition of American support for Egyptian archaeology are two articles that focus on current archaeological research and monument conservation sponsored by ARCE, both on the West Bank at Luxor. For more than a dozen years now, ARCE has also been a leader in the conservation, preservation, and presentation of Egypt's Coptic and Islamic monuments. Featured in this issue is the conservation and presentation project conducted by



ARCE exhibition gallery just before opening on February 28, 2006.

ARCE at the historic Quseir Fort, a structure that was briefly at the forefront of international affairs when it was contested by French and British forces during the Napoleonic Wars. On yet another front, ARCE has been active in assisting with the professional training of our Egyptian colleagues. For many years, ARCE has conducted a highly successful field school in archaeology for SCA inspectors, and in this issue you will read about ARCE's first training course in conservation and monument maintenance for SCA officials working in the Coptic and Islamic sector. From ARCE's US Chapters, there is a contribution in the combined areas of astronomy and archaeology. Finally, there is a piece on the Cairo Office's first international trip organized for our members in Egypt. As you will read, ARCE is a very busy and very productive organization!

Gerry D. Scott, III  
Director

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of Pennsylvania, the University of California system, the Brooklyn Museum, The Johns Hopkins University, and the University of Michigan, to name only some of the most prominent institutions. Indeed, American museum, universities, and individuals have contributed so much to the field of Egyptian archaeology, at so many different levels, it would have been far beyond the capability of this modest exhibition to present either a comprehensive overview of American work or to enumerate all of the institutions and individuals deserving recognition. Rather the exhibition is an attempt to introduce audiences in Egypt to the fact of just how much Americans have contributed to our understanding of Egypt's ancient past.

In 1995, the American Research Center in Egypt co-organized, in concert with the Los Angeles County Museum of Art, an exhibition and accompanying catalog entitled *The American Discovery of Ancient Egypt* that traced American contributions to Egyptian archaeology and Egyptology based on objects in American museum collections. The present exhibition and accompanying catalog, illustrated with objects from American archaeological excavations in Egypt in the permanent collection of the Egyptian Museum in Cairo, should be seen in some ways as a pendant to that 1995 exhibition. It is a complimentary presentation that celebrates the contributions of American institutions and individuals to the advancement of knowledge about Egypt's cultural past and the close ties that exist between Egyptian and American scholars. The exhibition is also an excellent vehicle for bringing attention to ARCE and its work in Egypt as well as to American archaeology in Egypt in general, not only to the many foreign visitors who go to Cairo's Egyptian Museum every day but also to its enormous Egyptian audience.

"American Contributions to Egyptian Archaeology" runs through April at the Egyptian Museum, Cairo and includes the most recent discovery of a life-size statue of Queen Tiye (its discovery is shown on the cover) made by the Johns Hopkins University expedition, led by Dr. Betsy M. Bryan, in January. The discovery was made during work sponsored by the American Research Center in Egypt and supported with grant



Zahi Hawass, Gerry Scott, Marie Ricciardone and Ambassador Ricciardone, and Betsy Bryan at the opening of the exhibition.  
Photo: Barbara Emmel

funds provided by the United States Agency for International Development (USAID). A didactic panel, also included in the exhibition, discusses and illustrates the latest tomb found in the legendary Valley of the Kings (KV 63), discovered by Doctor Otto Schaden and a team affiliated with the University of Memphis.

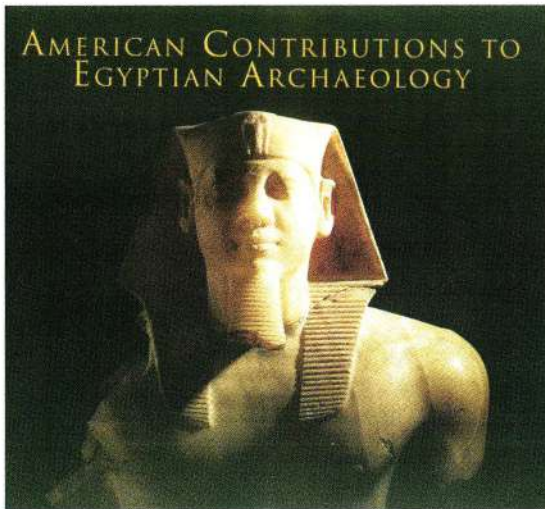
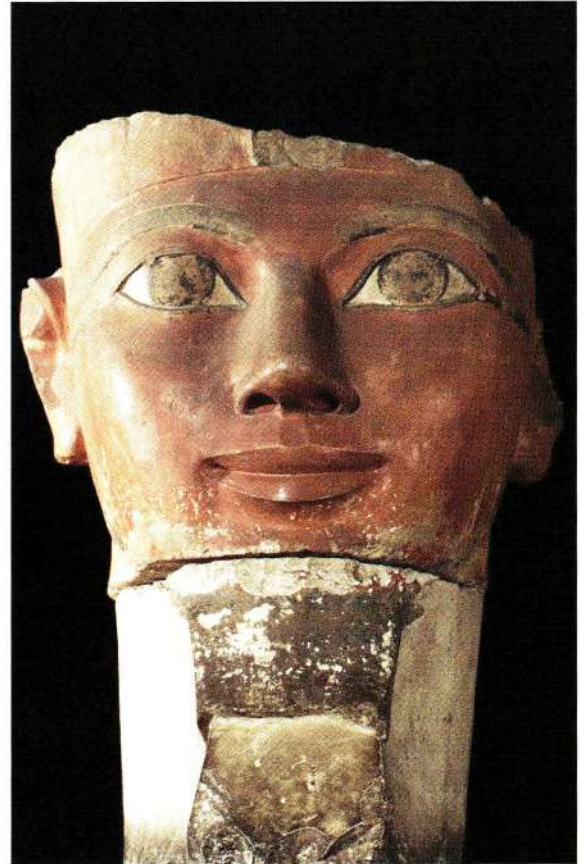
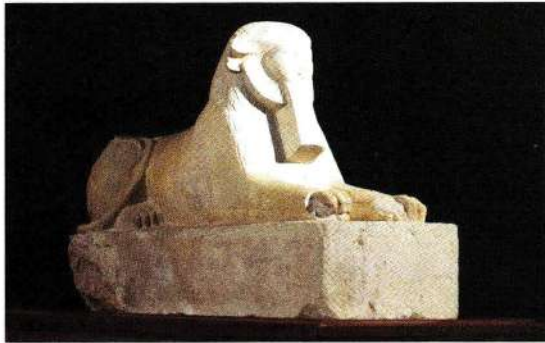
On behalf of ARCE, I am deeply grateful to Dr. Zahi Hawass for his enthusiastic support of the exhibition, to Dr. Wafaa El Saddik for her generous help in all things, and to the curators and staff of the Egyptian Museum for their remarkable assistance. I would also like to sincerely thank Dr. Janice Kamrin, Dr. Salima Ikram, Shari Saunders, Charles Van Siclen, and Kathleen Scott for their scholarly contributions and tireless efforts in helping to mount the exhibition. Thanks are due, as well, to Rachel Mauldin for her art handling and exhibition preparation expertise, to Stephanie Boucher for her hard work and always-cheerful assistance, and to Gustavo Camps whose photography and design work resulted in handsome text panels, labels, and the catalog that serves as a permanent record of everyone's efforts.

The exhibition "American Contributions to Egyptian Archaeology" was made possible through support provided by the Antiquities Endowment Fund of the American Research Center in Egypt. The endowment was established with funds from USAID. ■

*Catalog distribution is still pending.*

# exhibitions

Dr. Scott is Director of the American Research Center in Egypt. He is an Egyptologist who specializes in ancient Egyptian art history.



Clockwise from top left:

Sphinx of Hatshepsut, Dynasty 18, painted limestone, from Deir el-Bahari. Excavated by the Metropolitan Museum of Art expedition of 1928-29. Photo: Gustavo Camps

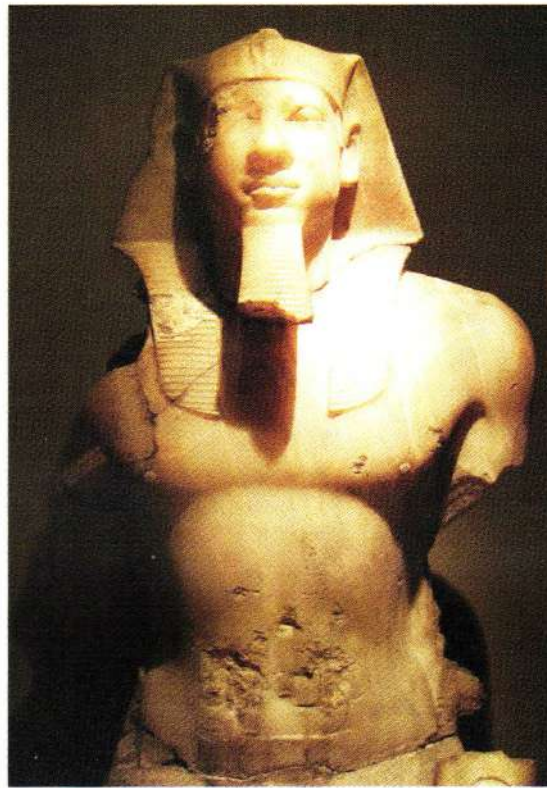
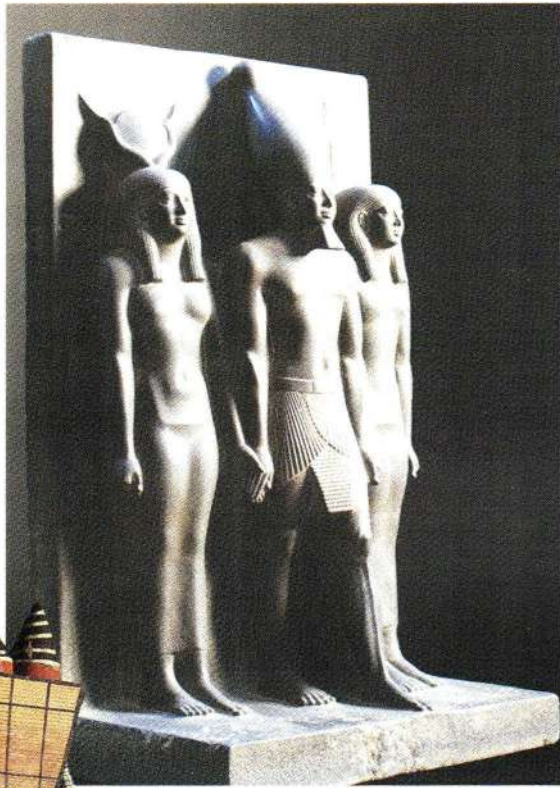
Colossal head of Queen Hatshepsut from her mortuary temple at Deir el-Bahari. Metropolitan Museum of Art expedition of 1926-27. Photo: Gustavo Camps

Opening night crowds as seen from gallery above. Photo: Kathleen Scott

Cover of the catalog accompanying the exhibition.



# exhibitions



Clockwise from top left:  
Triad of Menkaure, Dynasty 4, greywacke, from Giza. Excavated by George Reisner.

Life size seated alabaster statue of Menkaure excavated by George Reisner in 1908.

Ka Statue of Weni, Dynasty 6, limestone, from Abydos. Excavated by Janet Richards, University of Michigan expedition 1999.

Statue of Nefer, Dynasty 18, granodiorite, from Medinet Habu. Excavated by the University of Chicago, Oriental Institute in 1929.

Reserve head of Sneferuseneb, Dynasty 4, limestone, from Giza. Excavated by George Reisner.

Female Offering Bearer, Dynasty 11/12, painted wood, from Deir el-Bahari. Excavated by Herbert Winlock in 1919-1920.

Photos: Gustavo Camps



## Quseir Fort Visitors Center Opens

On Sunday, November 20, 2005 representatives from the Supreme Council of Antiquities, the United States Agency for International Development, and the American Research Center in Egypt gathered to mark the official opening of the completed Quseir Fort Visitors Center.

The Quseir Fort remains the most impressive standing ancient monument on the Egyptian Red Sea coast, although when the present restoration project began in 1997, it had declined into a state of advanced decay.

Quseir Fort was founded in 1571. After Ottoman Turks conquered Egypt in 1517, they built forts and garrisoned them with troops along the Nile Valley, in the deserts, and on the coasts. An important reason was to defend the Red Sea against the Portuguese and to protect Muslim pilgrims who embarked at Quseir for the cities of Mecca and Medina.

The fort was chosen as the venue for a visitors center aimed at presenting the history and cultural

environment of the Red Sea region to tourists and residents

The USAID-financed ARCE project that resulted in the creation of the Visitors Center was directed by Michael Jones.

Archaeological work was conducted by Charles Le Quesne, the survey was done by Michael Mallinson and Peter Sheehan, and the Visitors Center designed by Mallinson Architects. ■



Top: Gerry Scott welcomes the official party to the Visitors Center. Noted guests are (left foreground) Magdy el-Ghandour, Director of Foreign Missions for the SCA, Quseir Inspector Mohamed Abu al-Wafaa, Mayor of Quseir Mr. Sayed Abou al Fotouh, Engineer Amr Shaway (center back row), Dr. Abdallah Kamal Musa, and Anthony Vance.

Bottom Left: Officials tour the restored Napoleonic viewing platform.

Bottom Right: Dr. Abdallah Kamal Musa, Head of the Islamic and Coptic Sector of the SCA (left) and Anthony Vance of USAID cut the ribbon at the Fort's entrance as Gerry Scott, ARCE Director looks on.

Photos: Kathleen Scott

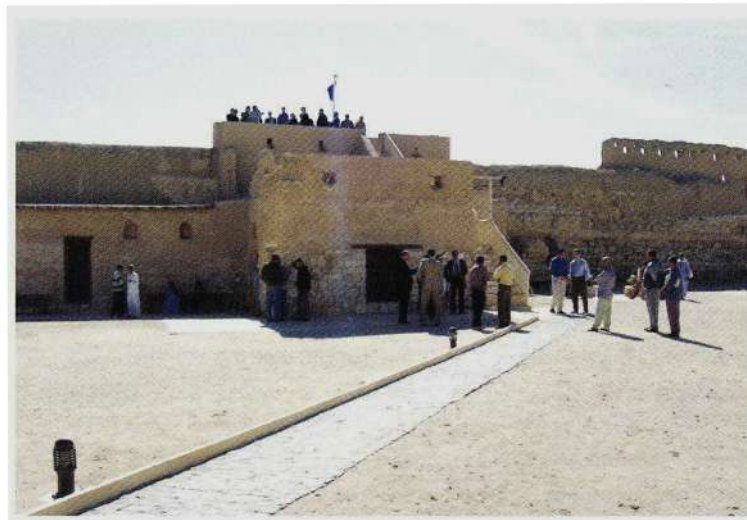


# The Lost History of Quseir Fort

Charles Le Quesne

*Editor's note: The town of Quseir is located south of Hurghada on Egypt's Red Sea Coast. ARCE, with funds from USAID, and in collaboration with the Egyptian Supreme Council of Antiquities, began restoration of the Ottoman Period Fort in 1997 and completed the Quseir Fort Visitors Center in 1999. The Visitors Center was officially opened by the SCA on November 20, 2005. Charles Le Quesne's complete report of his archaeological investigations of the fort are scheduled for publication by AUC Press.*

The archaeological investigations of Quseir Fort from 1997-1999 were undertaken in the context of the conservation of the Fort and its transformation into a Visitors Center, presenting the little-known but rich history and culture of the Red Sea. When the project started, very little was known about the history and development of the fort apart from the fact that it had been manned by Ottoman and, briefly, Napoleonic garrisons. What was known was due to the scholarly diligence of Kamal el-Din Hussein Ali, known locally as Mr Hammam, the main repository of knowledge of the history of the town and particularly its role in the Napoleonic occupation of Egypt (1798-1801). In fact Mr Hammam was at least partly responsible for the continued existence of the



Top: Quseir Fort Visitors Center in 2005. Photo: Kathleen Scott

town's old citadel, as an influential objector to repeated threats of demolition to make way for roads and housing.

Four months of investigation in the field, followed by years of intermittent post-excavation study and research, including archives in London, Paris and Istanbul, have finally revealed the extraordinary story of the fort and, inevitably, the town that it protected. This has demonstrated for the first time that the fort was built on a virgin site, following the issuing of a firman by the Ottoman sultan, Selim II, in 979 AH/AD 1571. It was intended to serve a dual role of providing a strategic supply base for Ottoman troops in Nubia as well as protecting the important trade and pilgrimage route to the Hejaz. Crucially, this trade involved the transport of Upper Egyptian wheat to the resource-poor Holy

Cities that depended upon the Egyptian Exchequer to feed their populations and endless streams of pilgrims. The significance of the fort and town of Quseir seems to have declined markedly during the seventeenth and eighteenth century at a time when Suez was by far the most important Egyptian Red Sea port. For much of this time, the fort seems to have contained a semi-domestic settlement, although the crumbling walls were still manned

Bottom: Quseir Fort before conservation work in 1997. Photo: Charles Le Quesne



# conservation

and the cannons served to keep away Bedouin raiders.

The most incident-packed part of the fort's history, though, was the brief Napoleonic occupation of 1799-1800 when, for a very short period, it lay close to the epicentre of world events. A central pillar of Napoleon's strategy in occupying Egypt was to connect up with potential allies in India, in the hope of undermining the British hegemony of the sub-continent. For this reason, control of the Red Sea briefly became a question of major strategic importance, with the British sending a naval task force from India and South Africa, and the French taking steps to secure the major Red Sea ports, including Quseir. On May 28<sup>th</sup>, 1799, a French force – the 21<sup>st</sup> light demi-brigade of chasseurs – entered the town and occupied the fort.

For the short period that follows there is a fantastically rich variety of documentary and archaeological sources: the letters of the French commander of Quseir – General Donzelot; the log books of British sea captains; superb coloured and



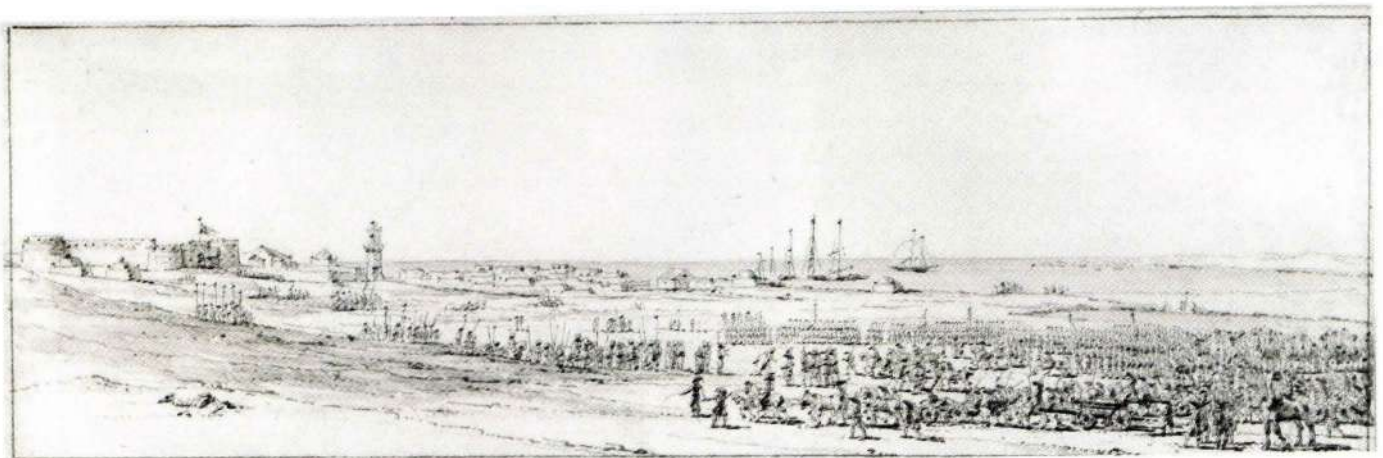
inked French engineers' maps and plans of the fort and harbour; and the testimony of the stones of the fort itself, largely rebuilt at this time. The French garrison desperately dug itself in, fearful of attack from the British warships that they knew to be lurking in the Red Sea. The speed with which the Napoleonic troops worked, in adverse circumstances, with poor tools and scant resources, is breathtaking. In two and a half months they cut large external ditches into solid rock, constructed vaults inside the corner towers, turned the southern tower into an artillery battery, built a covering redan in front of the main gate, patched up the main existing cistern west of the fort, commenced

work on the construction of an internal square barracks and constructed two coastal batteries on either side of the town connected by a covered traverse.

On the morning of August 14, 1799, two British frigates – the *Daedalus* and the *Fox* – arrived in Quseir harbour and began an intense bombardment of the fort. Their aim, according to Commodore Blankett, who ordered the attack, was to make a show of strength, designed to stop the Sherif of Mecca from making an alliance with the French. The point was forcefully made, with a bombardment that continued without cease for three days and two nights, involving the firing of at least 6,000 cannon balls, as well as a series of landings

Top: Canon found within the fort are now on display. Photo: Kathleen Scott

Bottom: Print showing the entry of the French army into Quseir in 1799.





by forces of marines. Extensive reconstruction of the fortress walls reveals that much of the seaward defences were destroyed in this assault. However, there were also French successes. Captain Brown of the *Dædalus* describes in his log the loss of a seaman together with a six-pound cannon in heavy surf just after 5.30pm on Friday, August 15th, 1799. A British ship's gun of this date now stands on display inside the fort.

Showing tremendous resolution, following the retirement of the British ships, the French garrison rebuilt the fort for a second time. A plan dated to November 1799

seems to be a working drawing from this time. It reveals a building familiar to anyone who has made the pilgrimage to the findspot of the Rosetta Stone. The stone was discovered during the excavation of the foundations for a new Napoleonic fortification at Rashid, which still stands and shows what Quseir Fort would have looked like had it ever been completed. As it was, the Treaty of el-Arish signed in January 1800 required the French garrison to leave Quseir in February, before their labours were complete.

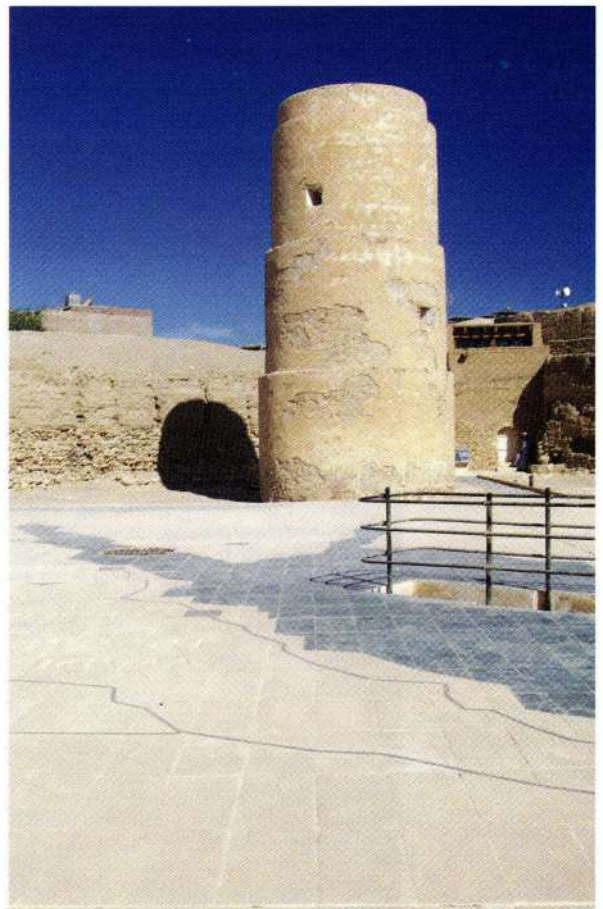
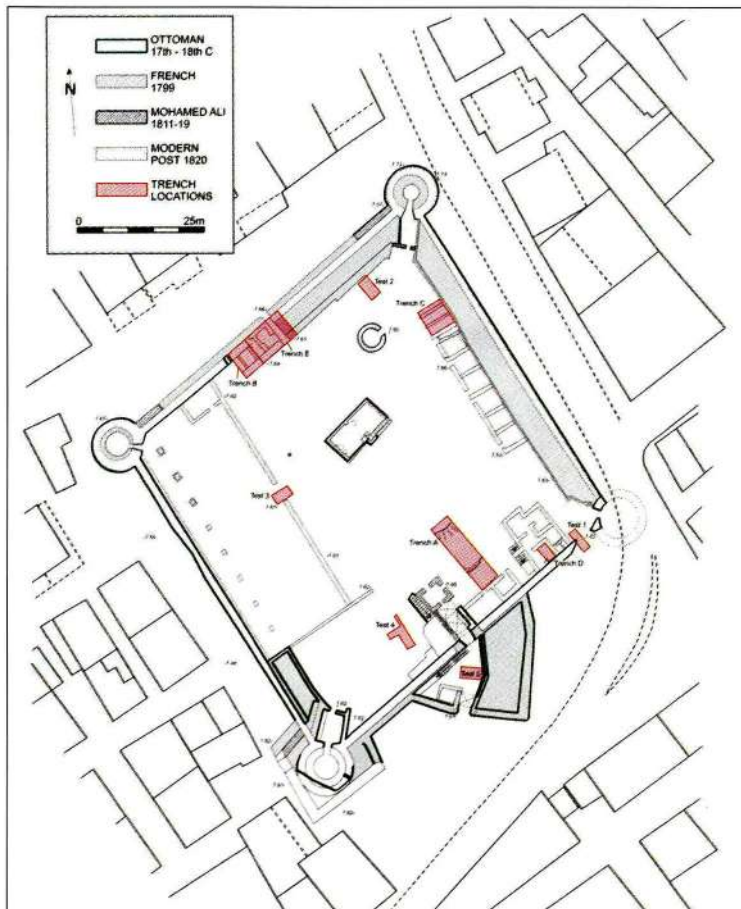
The fort was rebuilt by Mohammed Ali, presumably when it acted as a supply base for his

Arabian campaigns against the Wahhabis. However, it seems to have become gradually less important thereafter, as, once again, the fortunes of the port waned.

The building that the visitor sees today is therefore very much a multi-phase structure. The western and northern defences, largely untroubled by British Cannon balls, retain much of their original sixteenth century Ottoman masonry. The seaward eastern defences are largely Napoleonic, with a flourish of Mohammed Ali baroque in places. It is a monument true to the history of Quseir, the great late medieval port of Upper Egypt. ■

Left: Map of Quseir Fort showing the various stages of construction and recent archaeological trench locations.

Right: Restored watchtower in courtyard of the Fort with large scale map of the Red Sea coastline and the stairs leading into the cistern. Photo: Kathleen Scott



# ARCE Training Course for SCA Inspectors of the Islamic and Coptic Sector Summer 2005

Nairy Hampikian and May al-Ibrashy

ANTIQUITIES ENDOWMENT  
FUND (AEF) GRANT REPORT

Nairy Hampikian is an architect and restorer. She directed ARCE's conservation project of the Bab Zuwayla.

May al-Ibrashy has recently earned a PhD (University of London) with her study of the urban history of the cemeteries of Cairo from the mid 14th century to the present.

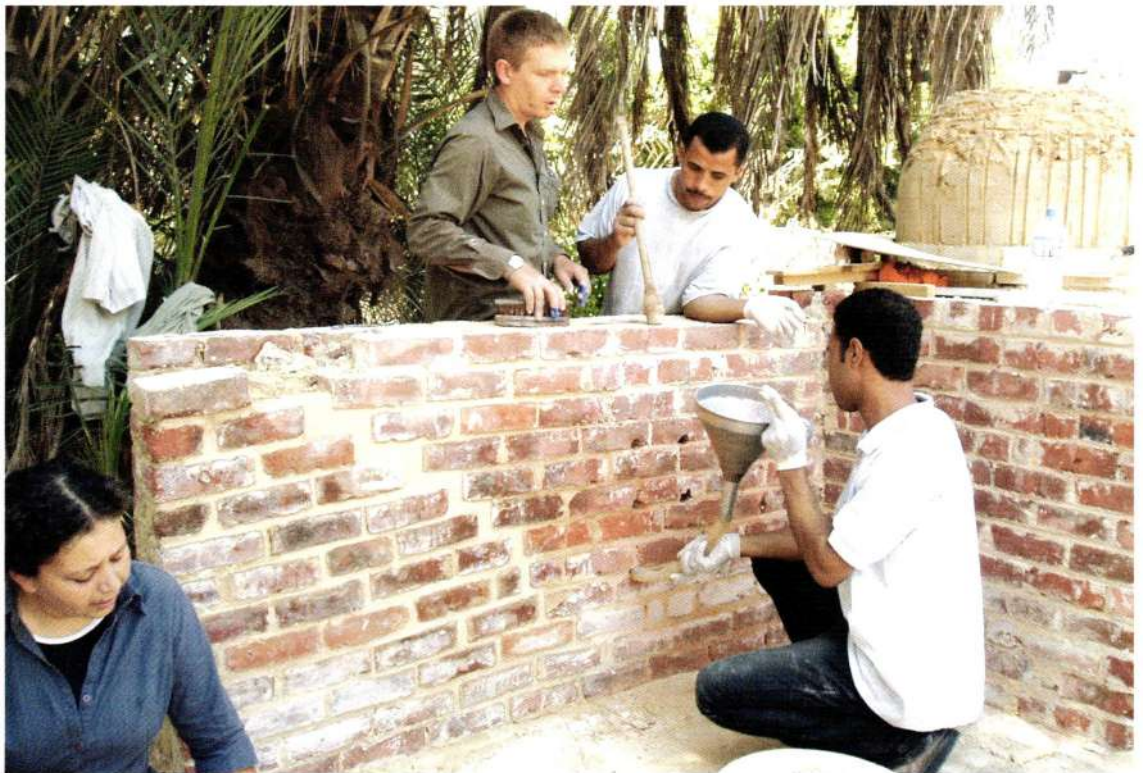
Students learn masonry conservation.

This year ARCE has added a new branch to its growing number of training courses for the inspectors of the Supreme Council of Antiquities. This year's course targeted, for the first time, the training of the inspectors of the Islamic and Coptic Sector of the SCA. Funded by the ARCE AEF grant, the nine-week course introduced these inspectors to the mechanisms of overseeing a conservation project.

As experienced architectural conservators, one of the cornerstones of our practical work was to always establish a good working relationship with our site inspectors. We have learned from our site inspectors and have also taught them. It became clear that the misunderstandings that arise on a conservation

project are simply due to the lack of a common language between the different disciplines working in conservation. Our goal was to create a stronger and more permanent bridge between all the professionals participating in a conservation project and the inspectors supervising these projects. This, we felt, could be achieved through teaching the basic vocabulary of architectural conservation.

The inspectors, all working in Cairo, were recent graduates to mid-career professionals and graduates of the Faculty of Athar, the Islamic section. The degree of Athar is normally translated as archaeology with an Islamic art and architecture major, and it is a blend of history of Islamic art and architecture and archaeology,



with the emphasis more on history of art. About half of the participants were pursuing graduate studies in the same department. Their professional experience ranged from administrative work in the central department, to research for SCA publications, to holding the position of inspector in charge of a historic site that could be a monument or a group of monuments. This historic site could be under conservation, or recently conserved.

This full-time course, in which 19 inspectors participated, was divided into three sessions, with each session concentrating on one phase of the conservation process.

## SESSION I: INSPECTION OF BUILDING

No conservation work is possible without understanding historic buildings first as buildings, then as historical monuments. The following questions were asked and answered: How do we see a building? How do we read a building? How do we understand a building? How do we record each and every item that we see, read and understand in a building?

We first took an in-depth look at buildings analyzing them in different ways; as architectural elements, as a structural system, as built environment undergoing decay, as a space of functional, spiritual, artistic, political, economic value. We then looked at the specific case of historic buildings and discussed the first major decision that faces the conservator: should I intervene practically, and if so, how? The discussion was kick-started by public lectures by our two keynote speakers, Mr. Ayman Abdel Moneim, head of the Historic Cairo Project and Dr. Jukka Jokilehto, WHC and ICCROM consultant. This session's practical exercise concentrated on architectural documentation, and students were taught to execute scale drawings of buildings. The group project was a pre-conservation study of al-Takiyya al-Gulshaniyya, with a report on its main problems, and a condition survey and complete documentation of sections of the building.

## SESSION II: INSPECTION OF A CONSERVATION PROJECT

This session concentrated on the steps that follow the study of a building, namely the decision to intervene practically and the execution of practical conservation works. It, of course, goes without saying that a month



of study is barely enough to scratch the surface where conservation is concerned. This session was meant as an introduction to the basics of conservation and it is hoped that it provided the inspectors who participated in the course with the tools to understand enough to ask the right questions of professional conservators, questions that will enable them to do their job in making sure that practical works in no way undermine the authenticity and historic integrity of the building under their responsibility.

The theoretical foundations were set in the first week and topics discussed included internet and library resources on the subject, international conservation charters and properties and uses of building and conservation materials. Emphasis was placed on traditional building materials and how to conserve and restore them. This knowledge was then utilized during the group project which involved the preparation of a preliminary conservation proposal for the mausoleum of Ali Najm off al-Darb al-Ahmar. Field visits ensued and participants were given a chance to see conservation work in progress and to discuss it with members of the team. The last section of this session concentrated on practical exercises in conservation and documentation. Participants learned how to document and restore pottery, how to clean coins and how to carry out onsite layer analysis of plaster, for example. Masonry conservation techniques such as repointing, pinning and grouting were demonstrated on a miniature of a stone dome and a brick wall, beautifully executed in authentic materials by Theo Gayer-Anderson.



Class meeting in ARCE conference room.

## SESSION III: MAINTENANCE, RE-USE AND URBAN CONSERVATION

The first part of this session concentrated on providing the participants with the necessary know-how to prepare a maintenance project for a historic building. Bab Zuwayla was used as a case study and the result of the group project was a detailed maintenance scheme for the building. During the second part of the session, issues of adaptive re-use and area conservation were dissected through a series of presentations and field trips in addition to a round table discussion. The purpose was to remind ourselves of the bigger picture; of the fact that the monument is part of a greater system, that is, the metropolis of Greater Cairo. During our last day we drove through this great city and created our own private maps of it, in an attempt to re-acquaint ourselves with it in light of what we had learned.

To best convey the multi-disciplinary language of conservation, a field in which architects, conservators, structural engineers, material engineers, archaeologists, art-historians, and artisans, etc. cooperate, representatives of these different disciplines were invited as guest speakers. Their contributions were in the form of power point presentations, field trips, and practical demonstrations and exercises.

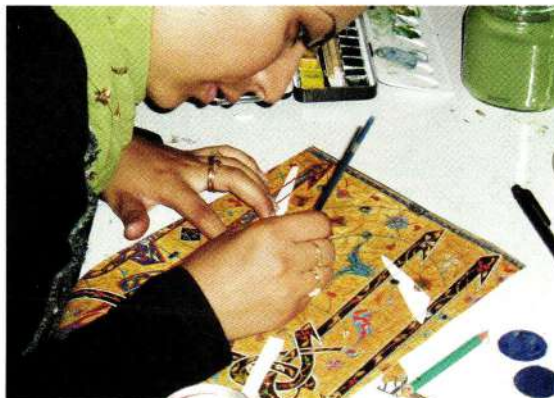
Participants were given a kit with the necessary tools needed for the execution of these projects and for use during the practical sections in the course. This kit which

included a small digital camera, in addition to basic surveying and conservation tools, was theirs to keep after the course, and it is hoped that it will be the seed of a larger kit that they will put to good use in the course of their professional career. Reports on these projects were also presented in different ways, whether as an exhibition or as a written report, or a power point representation, and in the process of preparing them, participants honed their computer skills, and their abilities to write reports or design and execute simple exhibitions.

In addition to the kit, participants also left the course with a reader that touches on all the issues of the course and as such, is an indispensable reference tool that they will utilize over and over again in their career. The reader contains sections from seminal conservation references such as the writings of Feilden, Ashurst and Jokilehto, in addition to major heritage documents and charters, translated to Arabic for the first time. This is, in addition to a large number of Arabic references in conservation collected from countries such as Syria, Lebanon and Iraq, and of course, Egypt. Finally, participants were introduced to internet resources related to conservation and architectural history. They were taught how to search for them, and were given an annotated list of all the major websites and their uses.

During a ceremony in September at ARCE participants were handed their certificates of course completion. The event also included a public talk about the whole experience given at ARCE by Hampikian and Ibrashy in addition to a small exhibition that focused on presenting the work of the participants. We are optimistic that this is not the end, but the beginning, of more co-operation between ARCE and SCA in the field of training, in addition to the participants themselves 'spreading the word' as they pass on what they have learned to their colleagues whether by good example or direct instruction. ■

Student practices conservation techniques



# Conservation and Reconstruction of the Tomb of Nespakashuty (TT 312) At Deir El Bahri II

Elena Pischikova

Thanks to the renewal of the ARCE/AEF Conservation grant in 2005 restoration and reconstruction work in the tomb of Nespakashuty was continued in July-August 2005.<sup>1</sup> The team members of the mission, Dr. Elena Pischikova, Director; Lamia el-Hadidy and Carlo Usai, conservators; Krisztian Vertes, artist; and Carlos De La Fuente, photographer, are extremely grateful for the support provided by the American Research Center in Egypt and The Metropolitan Museum of Art. The success of the project would also not be possible without the help and support of our colleagues from the Supreme Council of Antiquities.<sup>2</sup>

This summer we concentrated on conservation and reconstruction work at the entrance gate to the tomb. During the winter 2004 season it was built up a height of 320 cm (almost three quarters of its original size). The result of the last season's work is the completion of the reconstruction of the gate that is now built up to its original dimensions: height 560 cm (10 cubits 4 palms), width 326 cm (ten cubits, 1 palm, 1 finger).<sup>3</sup>

## Reconstruction of the Top Part of the Gate

During the summer season we recreated the 240 cm high top

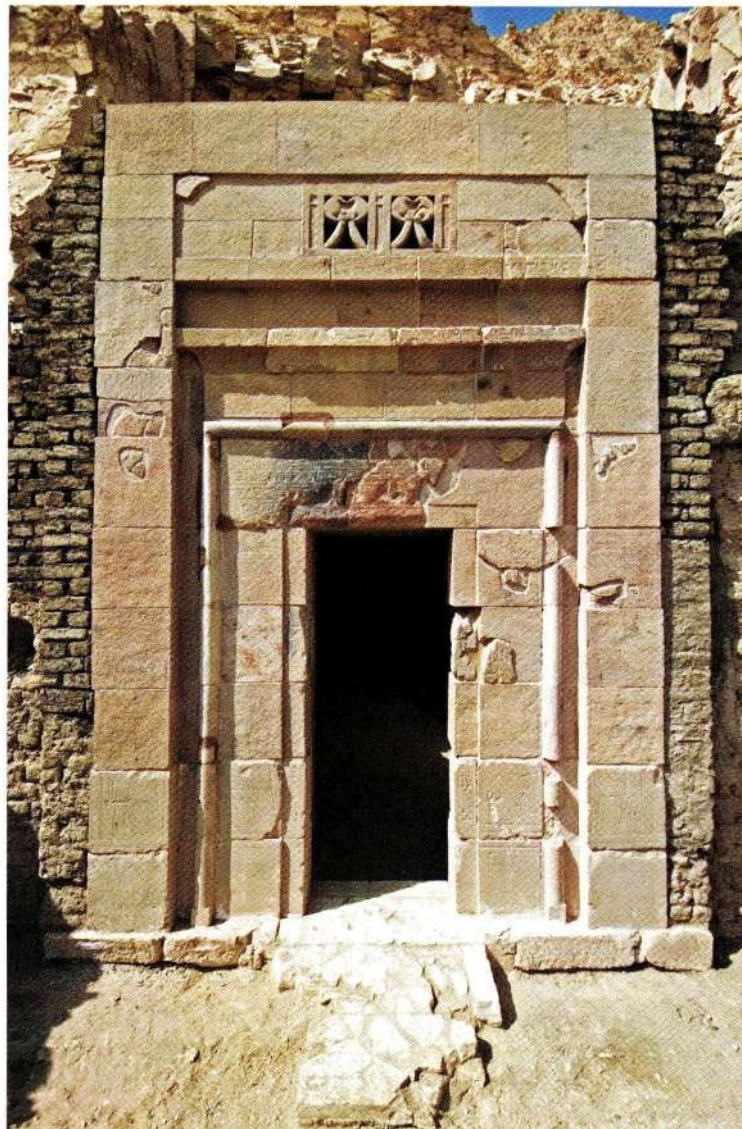
part of the double face entrance structure. It included such architectural elements as a cavetto cornice, a window, and a lunette.

The window of the gate proved to be the most difficult part of the reconstruction. The fragments of the windowsill on the back side are

ARCE AEF Grant/  
Metropolitan Museum of  
Art Conservation Project

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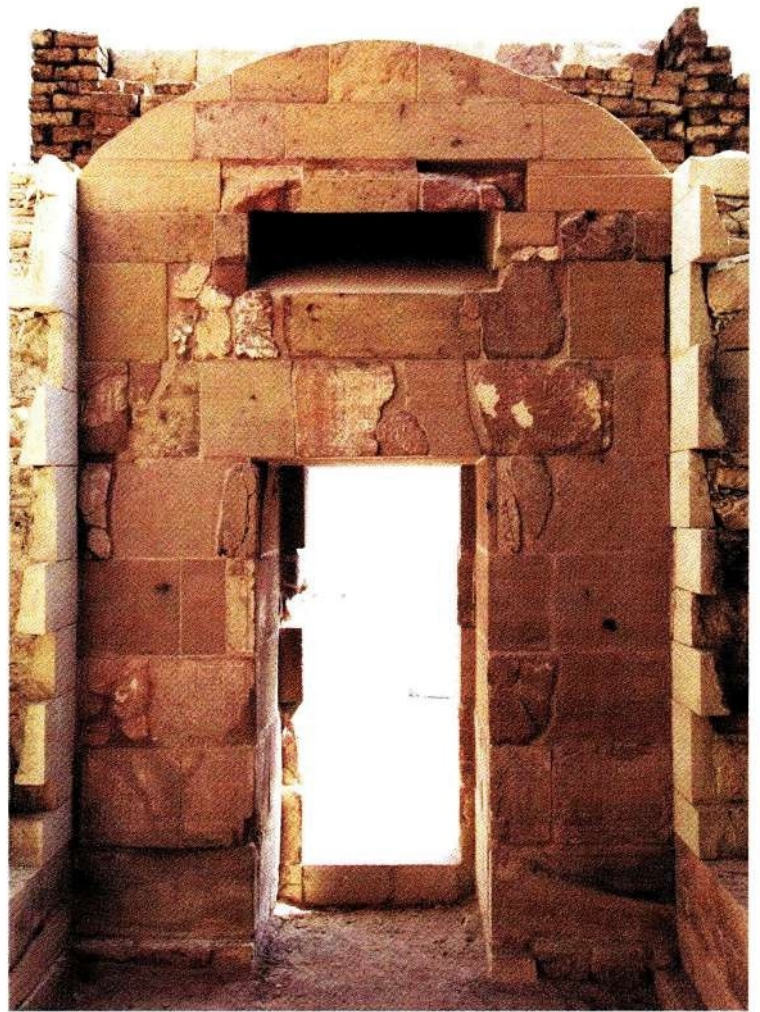
Reconstructed gate viewed  
from the outside.  
Photo: Elena Pischikova



Reconstructed gate viewed from the inside.  
Photo: E. Pischikova

very fragmentary and could not provide fully reliable information on the exact measurements of the acute angle of the slope. Yet our preliminary measurements were confirmed by the blocks of the window lintel with a much better preserved slope surface. With the slope determined at 28 degrees we were able to establish the original location of the window at the front. The slot of the window widens towards the back at an angle of 16 degrees (determined based on the remains of the side sections of the slot) The window used to be placed in the middle of the lunette between two kneeling figures of Nespakashuty (one of which is preserved). A few small fragments of a bound papyri element from the original window grid (found in 2003) helped to create a computer reconstruction of the grid in its original proportions – two papyri bound elements, 30 x 35 cm each. Following the reconstructed pattern, the conservator of the team, Carlo Usai, carved the outlines of the grid with the “sockets” for the original fragments.

The outlines of the torus molding were recreated as well, based on the original pieces that included three full sections and numerous small fragments. Torus molding formed a finishing element running along the vertical and horizontal edges of the inner part of the gate. The Cavetto cornice emerged out of the horizontal torus molding in the original structure. Four large sections of the top part of the cavetto were found during the clearing of the first chamber of the tomb. The



bottom section was carved out of the new stone based on the cavetto proportions characteristic for the early Twenty-sixth Dynasty that are considerably different from the New Kingdom examples. The only reliable measurement we had in order to find the original size of cavetto was the height of the flat top section of the architectural element. The Twenty-sixth Dynasty proportional relationship of the top part to the height of the whole cornice is from 1:5 to 1:6.<sup>4</sup> The 1:6 relationship was chosen based on the door frame cavetto in the tomb of Nespakashuty's mother Irtieru (TT 390) designed under the supervision of Nespakashuty and also left unfinished.<sup>5</sup>

Re-creation of the general outlines of the missing sections of

the architectural elements created a distinctive place and context for the original fragments and proved to be instrumental in reconstructing the entrance structure in its original proportions. All the new elements were carved in a very general manner and treated with a spiked hammer to imitate a broken surface in contrast to the carved ancient surface.

The back part of the gate structure was originally surrounded with perpendicularly placed limestone blocks of the first chamber's wall casing. Some of the blocks were still found *in situ*. We chose to imitate the missing blocks in limestone of a different shade of color and place them following the pattern of the remaining blocks. It provides necessary support for the

outer sides of the gate and shows the connection of the sandstone entrance with the limestone casing of the walls which is now almost completely lost.

Another important architectural connection was achieved by recreating a 78 x 3.24 cm rounded top section on the back part of the gate. It would echo a small preserved section of the original vaulted ceiling in the north end of the chamber. The vault of the ceiling used to be nearly 10 m long, from the north end of the first chamber to the back part of the entrance gate in the south.

The now mostly ruined mud brick pylon that would have surrounded the entrance structure was partially reconstructed as a broken line of bricks framing the gate to show the connection between the gate and the pylon. The markings on the bedrock show that the original mud brick pylon stood as high as 8 meters, completely obscuring the view of the cliff at the entrance area.

The work on the reconstruction revealed the reasons for the total collapse of the structure in antiquity. It was built hastily - we know that Nespakashuty died prematurely - out of re-used blocks of sandstone, sometimes of irregular shapes, and attached to a core of mud bricks and thick layers of mud. The approximately eight meter high mud brick pylon that the gate was inserted into was built on an unstable foundation of broken Middle Kingdom bricks, funerary cones, and pottery. A fire in the burial chamber affected the whole tomb including the gate and burned sandstone weakened by the heat started to crumble. Some of the fragments that we are missing today may have completely disappeared due to deterioration of the stone.

Even though no Saite entrance gates have survived from antiquity, Nespakashuty's reconstruction is supported (besides by the features of the original fragments) by such parallels as architectural niches and door frames in the tombs of the same period in the Asasif necropolis: Harwa (TT 37), Petamenophis (TT 33), Mentuemhat (TT 34), Ibi (TT 36), Pabasa (TT 279), Irtieru (TT 390), Karabasken (TT 391), Basa (TT 389), Bakenrenef at Sakkara and some others. Nespakashuty's gate decorative program includes images of Nespakashuty and his wife, Appeal to the



Living, Offering, and Threat formulae, titlature, and biographical inscriptions. While this decorative program was popular at the time, Nespakashuty's gate offers a new combination of these elements.

As superstructures of all the Saite tombs are badly damaged Nespakashuty's reconstruction becomes the only example of a standing Twenty-sixth Dynasty pylon gate. Architecture of private tombs of the Twenty-sixth Dynasty clearly utilizes features of temple architecture of the New Kingdom and Third Intermediate Period. The superimposed chapel facades element first known by the false door of the chapel of Osorkon III at Karnak sets a certain pattern for the chapels to Osiris built at Karnak.<sup>6</sup> Probably this symbolic connection made it very popular to the Theban Asasif necropolis. They are usually seen framing entrances to the Sun Court or false doors and sacred niches of Osiris (Harwa, Mentuenhat). Compressed into shallow spaces when framing niches, this element appears in its richness of layers and profiles in the gate of Nespakashuty as structurally it appears to be a sequence of three superimposed gates. For the time being Nespakashuty's is the only gate of this architectural type reconstructed in a private tomb. Thus this project saves and gives context to a large number of poorly preserved ancient pieces of art as well as achieves a scholarly result of considerable importance.

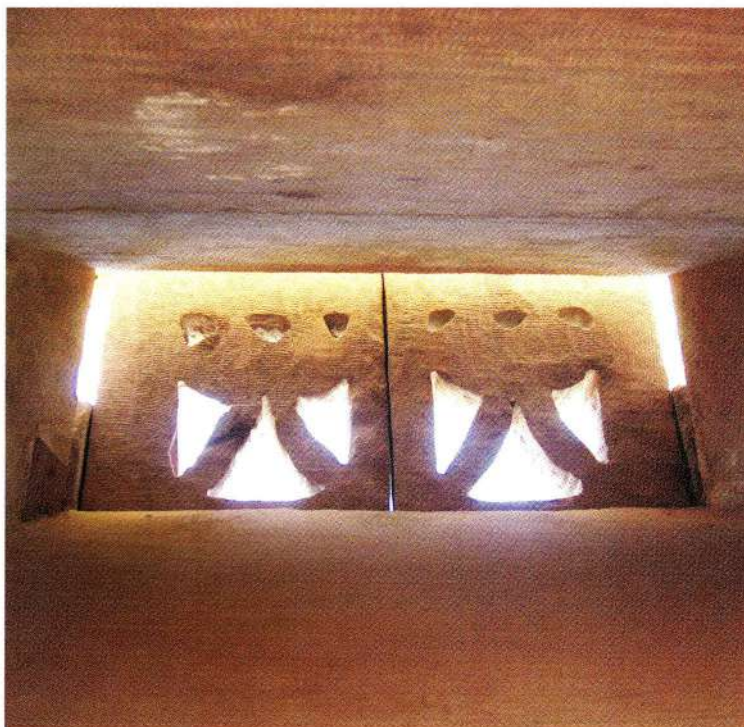
Installation of udjat eye fragment.  
Photo: E. Pischikova

## Methods of reconstruction

The remains of the two courses of the structure discovered *in situ* in 2001 as well as found fragments provided information on the building methods employed. The gate was built in a core masonry technique. Clearing the debris out of the sandstone casing of the second course revealed the remains of the original core. It consisted of layers of both mud brick and mud. It is possible that rough fieldstones and building stones were added to the core on the upper level of the gates.

Over one hundred and fifty carved and numerous uncarved sandstone fragments of the gate were found during the clearing of the tomb in 2001-2004. Most of the fragments were found in the first chamber and the entrance area; a smaller number were found in the courts. The condition of the found fragments varied from relatively stable to almost completely deteriorated. Those in the worst condition were found in a group of fragments placed face down at the entrance to the tomb. As the result of being exposed to humidity they demonstrated active deterioration of the surface of the stone and plaster to the extent of making the hieroglyphs practically unreadable. (These fragments were from the lintel level of the back part). The size of the found fragments varies from a few centimeters to over a meter in length. All the remains of inscriptions and imagery were extremely fragmentary.

The nature and condition of found material necessitated



Window slot viewed from the inside of the tomb.  
Photo: E. Pischikova

certain methods of treatment and reconstruction.

1. The fragments were cleaned and reinforced by Acryloid B-48 and B-72. As dozens of joints were found, small broken fragments were connected where possible with epoxy fixative (100 parts of epoxy resin Araldite BY 158, 28 parts of hardener HY 2996, micronized silix or other inactive charge depending on the desirable thickness of the mixture).

2. Preliminary reconstruction on paper showed that although found fragments could clearly outline the size, proportions and major architectural elements of the gate, a considerable amount of gaps would still be left in between. The solution for including all the found fragments into the structure was to complement existing blocks with the new sandstone blocks quarried at Gebel es-Silsila. New

blocks were shaped to imitate ancient masonry. Only two courses of ancient masonry were still *in situ*. Comparison of the bottom and second courses of the gate clearly demonstrated that the gate towers were built out of two interchangeable arrangements of stone layout. Although upper courses could have been of different sizes and proportions, the remaining original fragments suggested certain regularity in stone layouts with some variations. The decision to use blocks of stone of ancient dimensions instead of a larger brick core and thin slabs of stone is based on two factors: maximum achievable stability of the structure and the necessity to create support for fragile and fragmentary ancient stones.

3. In order to take the weight from the ancient fragments,



support them from behind and at the sides, and include irregular broken stones into the structure of the gate, the “sockets” were carved into new stones. Depressions of the necessary depth and size cut into the new blocks and ancient fragments were set into them one centimeter out from of the surface of the new stone. The size of a “socket” would be always larger than a fragment so it would not be damaged by the edges of a harder stone and could be easily removed in case it needs further treatment in the future.

4. The fragments were set into lime mortar (one part of lime, two parts of sand or pulverized sandstone and water). This way the ancient stones were set in natural materials with good resistance to heat. Lime mortar was also used to attach the larger blocks to the core and to compensate for the irregularity of gaps between the joints. The tomb was built and decorated hastily probably due to ill health and premature death of the tomb owner. (The tomb was left unfinished). One of the consequences of the hasty building was an irregularity

of block joints that in antiquity were disguised with small stones and gypsum mortar. In the process of restoration a similar technique was used – small stones and lime mortar. A rough texture mixture with small chips of limestone was used for deep cracks. The outer layer (one centimeter thick) was composed with the finest lime and a small amount of colored oxides of reddish and brownish hues to bring the mortar closer to the color of the stone and yet keep a one-two step difference. As a final touch, an outer layer of gap filling mortar was treated with a wet sponge to bring out the grains of sand thereby creating a more textured surface.

5. The treatment of the surface of the new stone underwent a long experimental period. The general conception was to unify the front surface of new stones by creating a broken surface effect. This would also generate a strong visual contrast between ancient dressed and carved surfaces and those newly rough and uncarved. A first attempt was to imitate the chisel marks characteristic for the late Kushite-Saite periods. A



Cavetto cornice during installation.  
Photo: E. Pischikova

new kind of chisel was introduced around this time – a 7 cm wide claw chisel with seven teeth.<sup>7</sup> Imitations of these chisels were produced in a local iron workshop in Luxor. The results of the experiment were unsatisfactory, as every stonemason dressing a stone surface with a chisel would produce chisel marks different in depth, length, and angle. To a certain extent it was also the case with the ancient stonemasons. Nevertheless as dressing with this chisel was very difficult to unify we were getting a visually disturbing picture with dramatic pattern that would overshadow the original delicate shallow sunk relief carving. Clearly the marks left by a seven-claw wide chisel have their own aesthetic quality.

For the next try it was necessary to find a tool that would provide a more uniform result when used by different carvers. The successful solution was to use a spiked hammer that created a visually unified boss-like surface around the carved fragments.

6. The next technical problem was the new stone color unification. Different shades of color in the new blocks would create a too-multicolored picture to be observed comfortably. The surface of the new stone was therefore “painted” with a mix of mud dust, water, lime, where necessary, for a more covering effect. Small amounts of colored oxides were added in the areas where the original stone color was very intense. Achieving a grayish-brown subtle color for the new stone created a unified background of vividly colored ancient fragments.

All the reconstruction principles developed were based strictly on the analysis of the remains of the original structure. Every fragment - even the smallest ones - produced information as to how the gate was built in antiquity.

### Conservation and restoration of finds

The second goal of the season was conservation and computer registration of all the found objects and relief fragments. All the registration books from the previous years were computerized and a unified database of all the tomb finds was created. Lamia El-Hadidy cleaned and consolidated various finds such as faience shawabties, beads, amulets, fragments of painted wood and cartonnage, pieces of painted bandages and shrouds, examples of interestingly woven pieces of linen, tunics, pottery and wood models.

Objects registered under 293 numbers were packed into a wooden crate and transferred to SCA storage on the West Bank. 582 fragments of tomb relief decoration remain in the tomb in specially manufactured storage cupboards.

### The future of the project

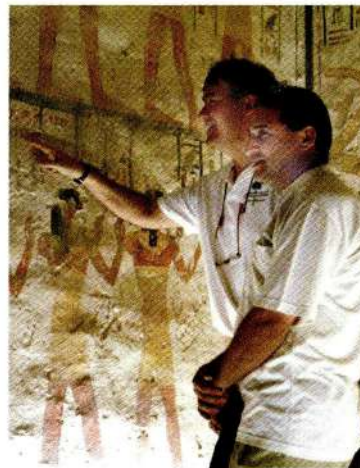
The fieldwork in the tomb of Nespakashuty is completed. The last phase of the Nespakashuty project will be the full publication of the tomb including its architectural features, decorative program, history of excavations, full catalogue of the relief fragments and other finds. It is now a work in progress due to be finished in 2006. ■

### NOTES

1. The first part of the article was published in *The Bulletin of the American Research Center in Egypt* 187 (2005), pp. 12-16;
2. Previous partial publications of the tomb and its relief decoration: E. Pischikova, “Conservation and Reconstruction of the Tomb of Nespakashuty (TT 312) at Deir el Bahri I”, *Bulletin of The American Research Center in Egypt* 187 (2005), pp. 12-16; “Thirteen Images of the Vizier Nespakashuty of Dynasty 26”, in *Egyptian Museum. Collections around the World* (Cairo, 2002), pp. 967-979; “Two Ostraka from Deir el Bahri and the Lily Flower Motif in Twenty-sixth Dynasty Theban Tombs”, *JARCE* 39 (2002); E. Pischikova, “Reliefs from the Tomb of the Vizier Nespakashuty: Reconstruction, Iconography, and Style”, *MMJ* 33 (1998), pp.57-101; E. Pischikova, “Four Reliefs from the Tomb of Nespakashuty(TT 312)”, *Journal of The Walters Art Gallery* 55-56 (1997-1998), pp. 1-10.
3. We would like to thank Dr. Zahi Hawass, Secretary General of the Supreme Council of Antiquities; Mr. Magdy El-Ghandour, General Director of Foreign and Egyptian Mission Affairs; Dr. Holeil Ghaly, General Director of Antiquities for Upper Egypt; Mr. Ali El-Asfar, General Director for the West Bank of Luxor; Mr. Soltan Mohamed Aid, Director of the West Bank of Luxor; Mr. Nour Abd El – Ghafer, Chief inspector of the Middle Area; Mr. Abdel Hady Mahmud Mohamed, inspector, and Mr. El – Taib Abu El Hagag Husein, SCA conservation supervisor. They gave invaluable support to our mission.
4. See discussion on the correction of the royal building cubit during the Saite Period, in D. Arnold, *Temples of the Last Pharaohs* (New York, 1999), p. 67
5. D.Eigner, *Die Monumentalen Grabbauten der Spätzeit in der Thebanischen Necropole* (Wien, 1984), p. 64
6. Personal observations of the author (summer 2005)
7. See D. Arnold, *Temples of the Last Pharaohs*, p. 41, fig. 14
8. Eigner, *Monumentalen Grabbauten*, p. 84, pl. A-B; O. Palada and R.S. Biachi, “Who Invented the Claw Chisel?”, *Oxford Journal of Archaeology* 13(1994), pp.185-97

# Djedhor was Here: Ancient Graffiti in the Valley of the Kings

Steve Vinson



I suspect that nearly anyone who has ever been to Egypt has been struck by the large amounts of graffiti that are to be found in nearly all the most prominent temples and many of the tombs that are on typical tourist itineraries. Many people probably notice first the most recent graffiti, of which there is a distressingly large amount – especially in the remote nooks and crannies of places like Karnak, places that may be far from the watchful eyes of temple guards or the reproachful eyes of other tourists.

But nearly all visitors to Egypt have probably also noticed the far more “attractive” traveler’s graffiti that was executed in the 19th century. These are usually done in a nice cursive style, often carved deeply into walls and pillars. Even though this graffiti certainly count as “vandalism” from our perspective, it

is also surprisingly intriguing. Those of us who have left a bit of graffiti here or there in the past – but never, I am sure, in Egypt! – can appreciate why those travelers were moved to leave their names and the dates of their visits behind. When we look at them, we can imagine Victorian ladies and gentlemen in exactly the same place where we stand now, enjoying and studying the ruins just as we are. Looking at those old graffiti seems to create for us a real moment of communication with a real person.

But what many tourists who visit Egypt may never notice is the fact that most ancient sites are also covered with ancient graffiti – graffiti left by people who visited these sites thousands of years ago. Some of them were pilgrims, who visited temples or famous tombs

with the intention of gaining spiritual benefit. These visitors left behind their names, the names of family members, and often a short prayer to the local god – a prayer that usually included the wish that the visitor’s name would remain forever, continuing to proclaim the visitor’s devotion to the god, and continuing to obtain for the visitor the god’s blessing. But some of the visitors to these sites were tourists, and at least some seem to have left their names behind with more or less the same intention as a modern tourist: to proclaim to the world “I was here!”

What is it about graffiti that grabs the attention? Obviously all the hieroglyphs and images that we see in Egypt were carved or painted by hand, and so if we stop to think about it, we can certainly imagine draftsmen and sculptors sitting or standing just where we are, producing the texts and the scenes that we see. But somehow, official, formal hieroglyphs don’t quite create the same impression of immediacy that graffiti do – probably because they were official, planned by bureaucrats, and executed by paid workers who may not have been much interested in, or even able to read, their handiwork.

Graffiti are different. Just as we can when we look at a modern or 19th-century graffiti, we can look

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Left: Steve Vinson and Egyptian workmen photographing Demotic graffiti in KV2.

Right: Eugene Cruz-Urbe and Supreme Council of Antiquities Inspector Magdy Shakir inspect graffiti in KV2.

Photos: Steve Vinson and Eugene Cruz-Urbe

at these ancient texts and imagine a real person standing there, writing his name, being awed enough by the surroundings to wish that he (or, more than occasionally, she!) could stay there, at least spiritually, forever. Anyone who has been to Egypt knows just how such a person felt.

This past summer, Eugene Cruz-Urbe of Northern Arizona University and I began a project that we were, frankly, amazed that no one had ever undertaken before: the documentation and study of Demotic graffiti from the Valley of the Kings. Demotic is a cursive script that developed in Egypt around the 7th century BCE. It descended from hieratic, the cursive form of the more familiar hieroglyphic script that seems to have crystallized around 3100 BCE. Even though both hieratic and hieroglyphic writing continued to be used in Egypt until the 5th century CE, Demotic had long since displaced the two older scripts for most purposes in the Ptolemaic and Roman periods of Egyptian history.

Almost from the beginning of Egyptology, Demotic graffiti has been collected, deciphered, and studied. Quite a few Demotic graffiti appear in Carl Lepsius' great *Denkmaeler aus Aegypten und Aethiopen* (or "Monuments from Egypt and Ethiopia"), undertaken in the middle of the 19th century. But probably the first important and comprehensive collection and study of Demotic graffiti is the collection by Francis Llewellyn Griffith, the British pioneer in Demotic studies, who copied hundreds of Demotic texts at the temple of Isis at Philae and others of the temples in the region south of Aswan, and published them in facsimile and translation from 1935 to 1937.

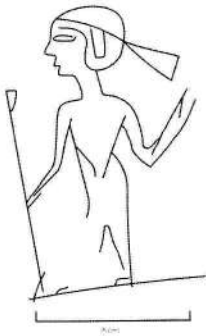
Also in 1937, the Epigraphic Survey of the University of Chicago published a volume of first-rate facsimiles of Demotic graffiti from the two temples at Medinet Habu: the mortuary temple of Ramses III, and the older, smaller 18th-Dynasty temple built by Hatshepsut and Thutmose III. Because Medinet Habu was the center of a substantial village in Western Thebes in the Graeco-Roman period, these temples, also, are covered with Demotic graffiti. But decipherment of these graffiti had to wait until 1989, when German Egyptologist Heinz-J. Thissen tackled the job.

Of course there are many other publications of Demotic graffiti from elsewhere in Egypt, and so it was very much a surprise to Eugene and to me to discover that no one had ever systematically studied the many Demotic graffiti in the later tombs of the Valley of the

Kings. I think that anyone who ever visited the Valley has noticed that quite a few of these tombs – especially those of the 20th Dynasty – are full of graffiti. One of the most impressive from this point of view is KV 2, the tomb of Ramses IV, who ruled Egypt from c. 1155 BCE to 1148 BCE. Many visitors know to look for the large, prominent Coptic graffiti right by the tomb's entrance. And with even a cursory glance at the walls, any visitor will notice immediately that the tomb is just covered with Greek graffiti – several hundred, although we haven't tried to count them. Mixed in with these Greek graffiti, however, are more than 100 Demotic graffiti, and a few hieratic graffiti as well. In a few cases, there are also some simple figures drawn on the walls in Egyptian style.

In our first field season (June of 2005), we copied the graffiti of KV 2 along with KV 15 (the tomb of Seti II) and we surveyed KV 9 (Ramses VI), KV 1 (Ramses VII), and KV 6 (Ramses IX). To make our copies, we used digital photography and computer-aided drawing. This is a new and still-rare technique of copying ancient Egyptian inscriptions and images that, we hope, will speed up the process and make it less expensive, while still allowing us to achieve the accurate results that scholars demand and need. Our work was supported by ARCE's Antiquities Endowment Fund (AEF). In our work, we benefited greatly from the help and support of the ARCE staff in Cairo and in Atlanta. We also cooperated closely with the Egyptian Center for Documentation, a special unit of the Supreme Council for Antiquities that takes on just the kinds of work we were engaged in: to document inscriptions and images on monuments. Needless to say, our work benefited immensely from the Documentation Center's support and cooperation, and especially the help of our inspector, Mr. Magdy Shakir.

The graffiti are fairly simple. Most are just names. In some cases, there are several names together, and we get the impression that a group of friends or relatives visited the tomb. Sometimes, the graffitists left a short prayer. The typical format is: "May the good name of (personal name) remain here before (name of god) forever." In a very few cases, we have dated graffiti. Two such were left by a pair of brothers, and they are both dated to the same day in the fourth year of the Roman emperor Caligula (in the graffiti Caligula is referred to by his actual name, Gaius; "Caligula," or "Bootsy," is a nickname that the



Handcopy of a standing figure graffito in KV2.

future emperor acquired in childhood, through his love of wearing legionnaires' boots):

"4th year of Gaius Caesar, the revered one (or, protecting one), first month of summer, day 4: there came Petichnum ("The one whom the god Chnum gave"), son of Djedhor ("The face has spoken"), son of ..."

This day, expressed in traditional Egyptian calendrical terms, is the equivalent of April 29, 40 CE. Close by, and on the same day, Petichnum's brother, with the nice Greek name of Ptolemaios, left a similar graffito. And there is one other graffito in KV2 that mentions a Roman emperor, or more precisely, a pair of emperors, by name: Marcus Aurelius and his co-emperor Lucius Verus. Unfortunately, this graffito is not precisely dated. But, Marcus Aurelius and Lucius Verus ruled Rome jointly for only nine years, from 161 to 169 CE. So the graffito was almost certainly written sometime within that time span.

The other graffiti are harder to date. Our general impression is that many or most of them are from the Roman period, just like the three datable examples. Some could be Ptolemaic (that is, from the period between Alexander the Great, who conquered Egypt in 323 BCE, and the death of Cleopatra VII in 30 BCE), but none are definitely dated to that period. However, a few seem to be considerably older. We've noticed some that seem to be written in a handwriting that is more typical of the Persian period – that is, the period before Alexander the Great. And there are a handful of hieratic graffiti as well, which might also be much earlier than the bulk of the Demotic graffiti.

Of course, what we would really like to know is, what were these late-period or Graeco-Roman-period Egyptians doing in the royal tombs, which had long since been emptied out, and even from their point of view were already ancient? Unfortunately, none of the inscriptions really make that clear. The short texts with prayer formulas suggest that at least some of the visitors attached some religious significance to the tombs. But in other cases, we just get a name. Were these people just curious tourists? Or were they actually tour guides – are these the names of the Egyptians who brought curious Greeks into the Valley to see the sites?

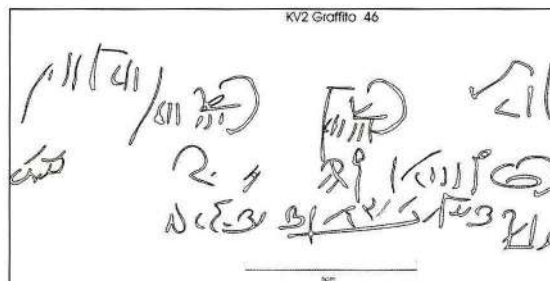
We'll probably never know for sure. But once in a while, we get the feeling that we're closing in on individual people that we can almost believe that we have come



Top: Digital photo of graffito naming the Roman Emperor Caligula in KV2.

Below: Digital handcopy of the same graffito.

Photos: Steve Vinson



to know. The most intriguing of our graffiti are those that were left by a single person: Djedhor son of Usirwer ("Osiris is great"). We've found Djedhor's name in every tomb we've examined, sometimes more than once. In some cases, he wrote just his name and the name of his father. In a few cases, he added a few titles and the name of his grandfather. We're sure that all the graffiti with this name are the same person, because the handwriting is very large and distinctive.

What is also distinctive is Djedhor's favorite places to write his name. His is often the graffito that is furthest in the back of the tomb, often in the tomb chamber itself. Relatively few graffitists wrote in the far ends of the tombs; graffiti tend to be concentrated near the entrance, where visitors could see by natural light. What was Djedhor doing in all of these tombs? Was he just a curious adventurer like us? Or could he have been a guide? That remains to be seen. It may be that, as we continue to study the graffiti, we'll identify other individuals whose names appear in two or more tombs. In fact, I think it's quite likely. As we do, we'll learn more about these early visitors to the Valley of the Kings – people who, as long as 2,000 years ago, were fascinated and impressed by these ancient monuments just as we are today. ■

## Illuminated in Lightland: The Archaeoastronomical Origins of the Seat of the first Occurrence in the Egyptian Solar Cult Religion

Patricia Blackwell Gary and Richard Talcott

PATRICIA GARY is Vice-President of the New York Chapter of ARCE which recently hosted a symposium on archaeoastronomy at the 2006 Annual Meeting in New Jersey.

RICHARD TALCOTT is the Senior Editor of *Astronomy Magazine*.

The night skies that existed before modern civilization would have afforded the ancient Egyptians a view that most of us now can only dream about. Under those conditions, natural phenomena that typically go unnoticed today would have been obvious to anyone who looked. Symbolic images in Egyptian iconography emulated the potent majesty of the environment in significant ways. As a consequence, the employment of images as collective symbolic ideals based upon natural phenomena re-emphasized the larger tapestry of life in ancient Egypt. The fact that the Egyptians could “see” the language of nature all around them was attested to in their art, architecture, pictorial script, and literature. They could see evidence of the pyramidal benben shape in the surrounding mountains (figure 1). The Egyptians looked at natural phenomena and put things together in sequences. This is particularly true of the cosmic dimensions. Mark Lehner points out that both the benben and the pyramid may have symbolized shining rays of the sun through cloud breaks called crepuscular rays (figure 2).

Crepuscular rays (literally, “twilight rays”) are rays of sunlight that appear to radiate from a point. Clouds break the sunlight into beams of light, and perspective

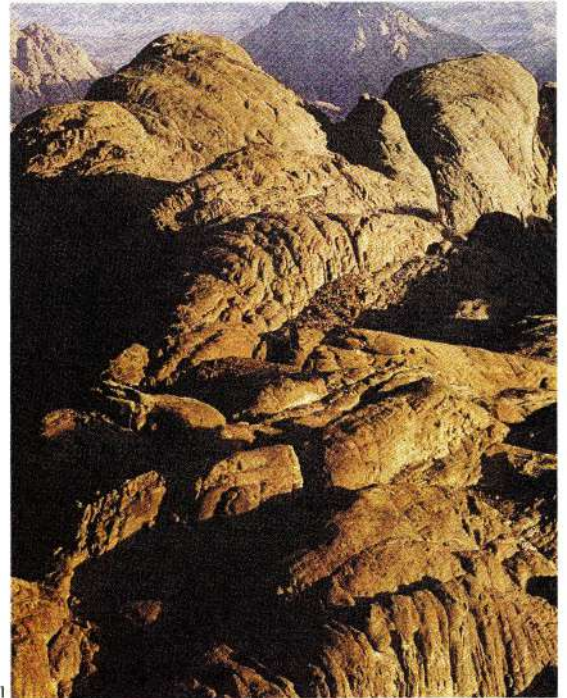


Fig. 1 Sylvain Grandadam, 1998.

Fig. 2 Montanari Enrico.

Fig. 3 Heidi Grassley, *The Complete Temples of Ancient Egypt*, Richard Wilkinson.



effects make them appear to fan out from the sun. (The same effect causes parallel railroad tracks to seemingly converge in the distance.) Crepuscular rays can occur with the sun at or just below the horizon, in which case they open up, or with the sun higher in the sky, in which case they point down.

The shape of the obelisk also has solar significance. The obelisk is ancient Egypt's earliest symbolic architecture. According to Egyptian mythology, the obelisk, curved in the form of a pyramidion, came in pairs; two in the celestial realms and two on earth. They were identified as the first manifestation of the primeval god Amun, thought to correspond to rays of the rising sun on the first sacred place. Traditionally, they were architecturally positioned to reflect sunrise and sunset, as seen in (figure 3), the sacred lake at the temple of Amun at Karnak.

The obelisk's shape closely matches that of a sun pillar (figure 4). This vertical shaft of light typically occurs around sunrise or sunset. The pillar either rises above or falls below the sun's position, and usually ends in a point. Occasionally, a pillar will appear both above and below the sun simultaneously. Sun pillars arise when sunlight reflects off the surfaces of six-sided, plate-like ice crystals associated with thin, high-level clouds. Although they require ice crystals, sun pillars can appear anywhere around the world because of the low temperatures found at high altitudes.

As in all primitive cultures, the sky was both an integral part of daily life and a presence of cosmic power. The early Egyptians, like all ancient peoples, saw in the sun, moon, and stars meaningful patterns of continuity of birth, death, and resurrection. These

patterns symbolizing death and afterlife associated with the sunrise and sunset are seen in a petroglyph of boat and star in the Wadi Hammamat (figure 5) which "...foreshadows classic ancient Egyptian motifs of the afterlife journey, such as those carved in royal tombs in the Valley of the Kings, thousands of years later!" Symbolically, the religious values assigned to certain celestial objects inspired awe and adoration, but knowledge of them also had practical applications. The sky was map, clock, and calendar.

The sky was both the realm of the gods and the birds. Preserved scenes contained in the 4<sup>th</sup> register of the outer face of the Pronaos walls in the Temple of Edfu (figure 6) define the elementary nature of the first sacred places and seems to explain the mythological circumstances by which the early Egyptians appear to have connected the origins of the djed-pillar with the origins of the "first time of creation" (figure 7). The mythological situation represented in this particular scene shows a thicket of reed within which the Falcon dwells. He is described as "lord of djeba." This is not Horus, son of Osiris. It was probably a tradition of a later period that associated Horus with the primeval perch. The thicket of reeds bears the name "djeba in wetjeset-hor." Above the reed thicket is depicted another falcon whose name is "the flying ba." The aspects of the surroundings seem to illustrate the Egyptians' concept of a very primitive place of worship. The fundamental idea inherent in the inscriptions is clear: The djed-pillar is equal in its nature to the creation of the first sacred seat of the god that emanated from the margins of the primeval waters of the Nun. The temple mirrored the lord of djeba who came into being at the seat of the first occurrence. The king was thought to be identical in his



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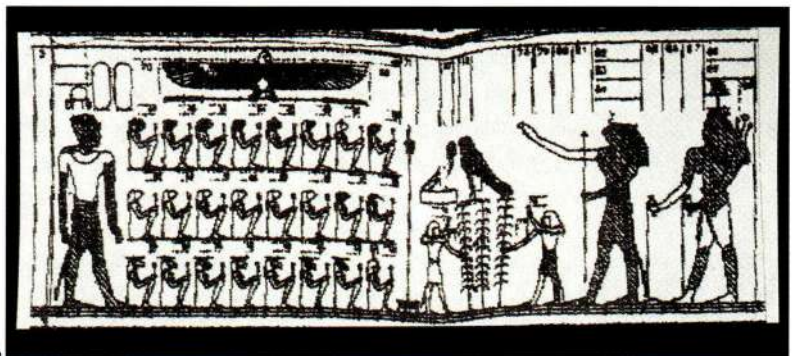
Fig. 4 Image from the University of Illinois WW2010 Project.

Fig. 5 Toby Wilkinson, *Genesis of the Pharaohs*.

Fig. 6 Temple of Horus at Edfu.



5



6

nature with the divine beings that were sanctified at the seat of the first occurrence. Based on this assumption, we can better understand why Abu Simbel's architects utilized their knowledge of the sun's swing along the ecliptic to astronomically plan that the angle of the sun's rays on two days of the year, around October 18<sup>th</sup> and February 22<sup>nd</sup>, would penetrate into the rock façade and pour down a 60-meter-long passage to an inner sanctuary where they fall directly on the statue of Ramses II, who stands with important creator gods of the mythical temple.

### The Mythology of Nut

In the Edfu records the akhet construct were elements that "came into being" by virtue of "sacred substances". We are told that after the primeval waters receded the akhets were "recalled." Other legacies of the ancient Egyptian astronomical abilities gleaned from the sky are less obvious to us today. We now know that it was light that the Egyptians saw as the divine, vital, creative element, which was made visible to the world through the sun disk. The primeval waters of Nun, where Nut the sky goddess—goddess of the birth of day and also the goddess of the death of day—mother in her aspect as the mother of Re as well as Osiris<sup>2</sup>, was identified with the sky. This point is worth noting because fundamental to the Egyptian perspective, it was from cosmic spots that the earth goddess, Nut, held up by Shu, her father, gave the virgin birth to the sun-god. By embracing the sky as a deity, the Egyptians may have seen their land and their own existence lifted "up" like Nut into manifestation by the primeval mound to a "high place." In this sense, the temple, the representation of the primeval mound where creation and the embodiment of the god began, could be made visible in the earth as a reflection of the mythical temple that came into existence at the beginning of the world.

### Akhet Construction

We argue that this place was directly associated with the cosmic realm known to the Egyptians as the most sacred part in the first primeval domain of the gods. It is well documented that because the sun in the horizon glows with intensity in the minds of ancient peoples, it charged the landscape. The ancient people vested sacred



meaning into the solar activities of the rising and setting sun and in turn incorporated that meaning into their sacred places<sup>3</sup>.

The Egyptian primitive mythologies were born amid this region of the sky, described as radiant places—high hills. The earliest actualized features of the primeval mound, perceived as perpetually rising out of the primal receding waters in "places of radiance" where the first mythological sanctuary was "erected at the highest point<sup>4</sup>" on a sacred "high hill"(qAj qAA)<sup>5</sup> within the regions of the akhet (Axt)<sup>6</sup>, had a profound effect on the architectural features of the historical temple throughout all dynastic periods in Egypt. "The entrance pylons of Egyptian temples were built to mirror the form of the hieroglyph for akhet...on which the sun rose each day<sup>7</sup>" (figure 8). It had an added aspect of a symbolic and magical rite of creation by the uttering of sacred spells by the creators over certain earth substances, ixt-tA. "We suspect", Reymond tells us, "that by virtue of this rite it was believed that the symbol (ixt) of the Earth was filled with special powers<sup>8</sup>."

Lightland, a "place of radiance" identified within the region of the akhet, represented an impressive display of diffused light, known to us today as twilight and dusk. These exist as long as the sun is less than 18° below the horizon; on average, from the latitude of Egypt, it starts about 90 minutes before sunrise and lasts 90 minutes after sunset.

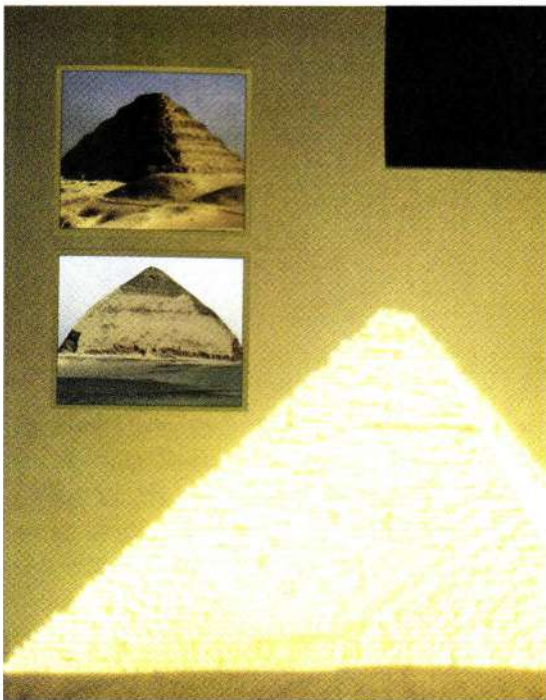
In the Edfu documents, this sacred place on the origins of the primeval mound or pyramidal benben stone, is described as a place where specific sacred symbols came into being in a place of special

Fig. 7 Courtesy British Museum.

Fig. 8 Heidi Grassley, *The Complete Temples of Ancient Egypt*, Richard Wilkinson.







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significance, which is described as *bw-sw-ixt-tA-im*, the “Place-in-which-the things-of-the-Earth-were-filled-with power.” The notion of “coming into being,” from the noun *xprw* meaning “emanation, embodiment, development” and the notion of “to come into being” from the verb *xhr*, “assume form,” literally “evolve into,” were important concepts germane to the Egyptian religious worldview. In this respect, the Egyptians *kheperu* model, when analyzed from the perspective of a modern theory of communication, shows that the *benben* was associated with a space somewhere between birth and sunrise and between sunset and conception, where the gods were born in a sacred place of “radiance” or “luminance.” In the *kheperu* model, the central theme represents the abstract world as having emanated from the cosmic light of Atum, the sun god who came into being by himself. As Jan Assmann points out, “This created world, in and on which humankind lives, constantly emerges from the sun god in the sense of his *Kheperu*”.

In the *kheperu* model, it appears that the earthly, concrete realm of humanity, embodied in the “god’s enclosure,” (Egyptian divine temple), the *Xwt-nTr*, a “living” entity and a direct outcome of the creation of Earth, assumed form and was brought into existence by becoming “effective.” The presumed view and time

period covered in this study ascribes that in application, “illuminated” here is likely to be a more accurate connotation. At the heart of it, the *benben*, the conical or pyramidal rock, which symbolized both the original creation<sup>10</sup> and the “evolution” of creation between divine realization and the visible reality, embodied the Egyptian concepts of the seat of the first time of occurrence.

As it stands now, Egyptologists are not certain as to the full meaning of the image of the *benben* and how it came into being. It is highly likely, at least initially, that the *benben* and its symbolic image may have been more important to the ancient Egyptians than they are given credit for. Analysis of the evidence proposed in this examination supports the notion that the existence of the *benben*, its symbolic significance embodied in the shape of the pyramids and obelisk and how it came into being, were critically important aspects of Egyptian solar theology that goes back to its most ancient roots. Judging from evidence presented in the Edfu records, the *benben* seemed to be linked, in images of symbolic meaning, to the island of creation of the sun-god, his sacred domain, and the radiance that issued from a substance that was created by the same natural forces as brought the island into existence<sup>11</sup>. The Egyptians mirrored this “radiance” in their pyramids, which were covered with limestone and would have appeared glowing, seen in this reconstruction (figure 9) as they probably would have looked when observed from the desert plain areas.

The *benben*, probably a very old feature at Iunu (Heliopolis), may predate the sun connection there. In John Baines view, the sun-cult at Iunu is not the original one and that Atum or another deity preceded Re there. Baines says that the evidence connects Atum with the *benben*. The Pyramid Texts combine elements showing that the emphasis is clearly on hill and *bn*, forms of Atum, and could point to a solar direction<sup>12</sup>. The conclusion Baines arrived at, in his 1970 discussion on the *benben*, indicates that the *bn* element is not associated with the word *wbn*, which means “to rise, shine of the sun,” but that *bn* (*n*) root is more or less an independent symbol of creation that has sexual meaning attached. He comments that, “...the symbolic associations of the *bn* were twofold and theoretically dissociable: with the masturbation of Atum and with the primeval hill.... They were then amalgamated by calling the primeval hill *bnnt*”<sup>13</sup>. He goes

Fig. 9 Art by Fred Holtz, Editors of Time-Life Books, 1992.

Fig. 10 John Ross, *The Complete Temples of Ancient Egypt*, Richard Wilkinson.



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on to say in that same discussion that any systematic evaluation of the subject brings with it a discussion of the mythological place of the *bnbn* and the structure of the myths in which cognate words occur. In the Theban myth of creation, the word *bnnt* was used in Egyptian cosmology to describe a definite place within the Nun in which a specific substance was formed by a process of creation. Faulkner transliterates *bnnt* to mean “pellets<sup>14</sup>.” The *bnnt* seems to be an inert matter that described the place in which the mystic union between the Primeval Ones and Nun occurred, and filled that place. The specific matter, after being fertilized, assumed creative powers and was capable of producing other substances<sup>15</sup>



Fig. 11 Chris Schur.

The setting and activity of Lightland, the “hill of light,” in ancient Egyptian art bear an important relationship to the “sacred” *bnbn* stone and the venerated *txn*. Although both symbols were tied together in worship at Heliopolis, the “Pillar of the Northern sky,” and outlined in relief as the primordial hill from which the creator-god Atum evolved, their significance in the eyes of the Pre-dynastic Egyptians may have been derived from distinct natural sources. The mythical past embodied in the shape of the pyramidal *bnbn* mirrored natural events occurring in the cosmological realms. The Fifth Dynasty regarded obelisks as the dwelling places of the gods. They were erected in pairs and stood in the front of the temple pylons.

The clues that we have identified from documentation, translated in this examination from the Egyptians’ primer notions of luminosity, shed more light on the meaning attached to the “sacred” *bnbn* and, to an extent, clarify the possible meaning intended in Hatshepsut’s

pair of red granite obelisk and temple of Karnak’s inscription, “Wrought with very fine electrum, they illuminate the Two Lands like Aten...their rays flood the Two Lands when Aten dawns between them, as he rises in heaven’s lightland...<sup>16</sup>” (figure 10). According to Dr. Ogden Goelet, who provided us with some guidance on a few scholars’ thoughts on the lexicography of the word Lightland, its related roots and various meanings, the idea that the root “*akh*” implies some connection with luminosity, generally speaking, is a very old one, going back to the 1920s. “Luminosity” is one of several meanings this root word meaning “to shine” has in the Egyptian context. This usage has been revived over the past decade or so in several sources, particularly Florence Friedman, who incorporated it in her dissertation some fifteen years ago. The effects of these dramatic events on the development of the ancient solar cult practiced in Pre-dynastic Egypt may hold significance for the unusual architectural features of the pyramid and the obelisk.

### The Ontological Substratum

The ancient Egyptians religion and cosmology involved belief in a system that was both totemic and polytheistic. The cosmic significance and astronomical import of the principles behind the notion of an enduring celestial territory from which the creator god springs confirms the first important clue, the earliest perceptions were derived from the forces of nature. Religious behavior towards the natural forces in the Egyptian context corresponds with “fascination,” “awe,” “fear,” “tranquility,” and “absolute iconographic surrender.” For the purposes of analogy and following arguments by Allen on the genesis of religion in Egypt, our understanding of the Egyptians’ explanations concerning their understanding of the cosmos may be pragmatically understood more through modern physics because they are “more metaphysical than physical<sup>17</sup>.” To the Egyptians, the sun’s apparent path along the ecliptic represented important points in the celestial world that they anchored to their first conceptions of gods. It seems clear from the Edfu records that the Egyptians are describing a common ontology that defined the shared vocabulary in which queries and assertions were exchanged among participating agents. In that context, the agents discussed in the Edfu documents commit to an ontology wherein



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Fig. 12 J. C. Casado.

Fig. 13 Randall Wehler.

observable actions are consistent with the definitions presented in its ontological substratum.

The cosmological tenets of the Specification of the Mounds of the Early Primeval Age incorporated in the Building Texts of the Edfu temple combine two continuous narratives that, according to Reymond, originally may have been separate<sup>18</sup>. This summarized, conflated version is primarily concerned with the interpretation of the origin of the sacred places of the Falcon included in the Sacred Book of the Early Primeval Age of Gods and those of the sun-god, the Coming of Re to his Mansion of Ms-nxt, where the origins of the solar temple seem to be explained. In this respect, reference is made to the ritual-scene inscription described in the Offering the Lotus found in the Forecourt of the Edfu Temple, where it is explicitly stated that "...God resides in the pool...issued from the pool in the island of the two flames, the Province of the Beginning, which initiated light ever since the First Occasion in the High Hill at the beginning of Coming into Existence."

The Coming of Re to his Mansion of Ms-nxt preserves a part of the myth that describes it as the sanctuary of the Seat-of-the-Two Gods. The Edfu accounts also give as one of its chief names "The House Of Appearance in the Mansion of the Throne." In this myth, the sacred domains of the Falcon were already in existence. The same idea is apparent from the inscribed names found in the Building Text of the Nao of the Edfu temple which marks it as the "Throne-of-gods of the Deities of the Primeval Age of the gods, the Seat-of-the-Two Gods..." and tells us that as the last to be created, it was made to house all of the divine deities in the historical temple.

The Edfu accounts are telling us that the emergence of the seat of the first occurrence established the

cosmos as a direct outcome of an "organic" and "physical process" that occurred in distinct sacred places and from distinct natural sources<sup>19</sup>.

### The Interweaving of Astronomical Imagery into the Myths

Our findings confirm the culminating act of the whole process of creation as a combination of a series of naturally occurring celestial events that produce pillars of light near the times of sunrise and sunset in the cosmological realms known to the ancient Egyptians' as Lightland on the horizon. The story of the creation and the concept of light incorporated in the seat of the first occurrence signal correspondence with the Egyptians' perceptions of the earliest sacred places within the prehistoric agricultural cultures of Egypt. Viewed in relation to Egypt's most recognized national artifact, and analyzed in the light of astronomical evidence, the complete picture of the seat of the first occurrence reverberated through Egyptian culture and "assume form" on nearly every historical temple. The architectural features of the venerated benben stone and obelisk may have been perceived initially as abstractly having features familiar to the existence of two striking solar phenomena—the zodiacal light and sun pillars—seen as they would have appeared to the primitive Neolithic people of Egypt.

### Reconstructing the Seat of the First Occurrence

Based upon astronomical evidence, the first act in the rite of morning is parallel to the first cosmological record added to the ritual scene of the myth of the Sanctified God who came into being at the seat of the first occurrence. We believe that specific celestial phenomena, which are aspects of sunrise and sunset,

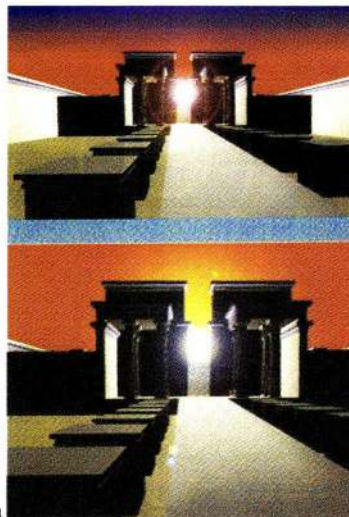
show consistency with the sun's journey characterized by three key concepts in the description of the rite of morning ritual: seeing god; the appearance, xaw, of god; and the coming out, prt, of god<sup>20</sup>. The Egyptian temple mirrored this complete visual picture in fashion and form:

(1) Ragnhild B. Finnestad describes the central place in the morning service as "the sanctuary of the High Seat, st wrt, which lay at the core of the temple naos, an independent structure having its own roof. The sanctuary was also central to the image of the world presented in the morning cultus. Its name connected it with the mythic high mound, which arises out of the waters of the Nun and on which the Creator begins his creation of the world by dispelling darkness<sup>21</sup>." The "darkness" represents the dark sky that reigns until the first sign of the approaching dawn.

(2) The first signs of the appearance of the sun god peaking over the akhet and becoming visible to the world. In this context, the god of the temple gazed upon the god of creation as he "comes into being" in his first manifestation. This we interpret to be the zodiacal light, sometimes referred to as the "false dawn." This glowing, pyramidal shape, with its base anchored to the horizon and its axis centered on the path of the ecliptic, becomes apparent in the east before the onset of twilight. (It also appears in the west after evening twilight fades away.) In its brightest parts, the zodiacal light exceeds the luminosity of the central Milky Way. The light

stems from sunlight reflecting off tiny dust particles in the inner solar system. The density of particles increases toward the Sun, which is why it appears brightest just before twilight begins of after twilight ends.

(3) Next follows the Coming out of the God. This is the time of twilight, which grows brighter and appears larger as sunrise approaches.



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(4) Next follows the Coming of Re to his Mansion, which we interpret as the appearance of the sun pillar. The pillar reaches into the sky, typically growing brighter and taller as sunrise itself approaches.

(5) Re then rises and traverses the sky to his high zenith, only to die at dusk and be resurrected again at morning twilight.

The Edfu inscriptions describe in great detail very primitive mythological domains, or sacred "virgin" grounds, where the Gods revealed themselves for the first time. Coming into being as secondary configurations during two related events, these sacred places

are generally pictured as primeval mounds or islands, iAt (iAwt), or high hills, kAy(w) where the first sanctuaries associated with the first Mansions of the Gods originated as entities in the Xnty wart (the forelands) and in the phwi wart (the hinterlands) in the Place-For-Glorifying the Gods in the wTst-nt (Wetjetset-neter), a region situated on the marginal lands of the islands in the gs-nbi of the watery Nun, where the mythical temple was created and where through means of the divine foundation ground it acquired sacred nature. It is also believed to be the home of the KA.

To shed more light on the significance of the divine names WA, aAA, and the KA, E.A.E. Jelinkova's view is that it may be justified in posing a question as to whether they are not the two or three names associated in one<sup>22</sup>. The idea of associating is documented throughout Egyptian history. In addition, Faulkner indicates that a variant of the word aAA (aA), can also mean "great of size<sup>23</sup>"

A description of the cultus-place of the Falcon Horus opens with a picture of a primeval island surrounded in darkness on the akhet. This notion corresponds to the opening of the sealed doors of the High Seat, the sanctuary, which was surrounded in total darkness.

When the light came, the primeval waters became radiant. Two divine beings, WA (the "Far Distant One") and aAA (the "Great One") sometimes described as the Ddw, the Ghosts, seem to have emerged from the island and were led to the water. WA, the Far

Fig. 14 Berlin, Agyptisches Museum, Amenophis IV, Robert Vergnienx and Michel Gondran, 1997.

Distant One, appears in the form of the primeval benben stone. Here correspondence signals the “coming into being” of the pyramidal benben stone in the form of the phenomenon known as the zodiacal light (figure 11).

Lightland, the aXmw nw Axt, the “divine image,” appears in the form of the phenomenon called twilight (figure 12), either before sunrise (dawn) or after sunset (dusk).

aAA, the Great One, next appears in the form of the phenomenon referred to as a sun pillar, marking the initial appearance of light coming into the world. On the cosmic spot designated by what appears as Nut giving birth to the sun god, marked by the first appearance of Re, the scene “culminates in the complete images” of the seat of the first occurrence. It appears to the naked eyes as a high seat perched on the highest point of the pyramidal benben imagery of Lightland within the akhet. Here the Falcon, the “lord of djeba,” sits on top of his high perch, the mythological sanctuary, the point of the sun pillar (figure 13). Here we have the House of Appearance in the Mansion of the Throne of Re, with the sacred domains of the Falcon already in existence.

The set of imagery is reversed at sunset, with Nut perceived as swallowing up the sun.

Perhaps in Akhenaten’s vision of “seeing” god, he may have been attempting to replicate the seat of the first occurrence in his sanctuary, the Hwt Aten, by throwing off the darkened temple structure (figure 14).

## Conclusion

Through the imagery of story of creation, wherein the sacred high mound was erected on Lightland, the place of manifestation of the god within the akhet, was the umbilical cord, which the Egyptians saw and sought to maintain an attachment to, was preserved within the temple in the persons of The Ancestor of the Temple, the Dfn, who “came into being” daily. The Ancestor of the Temple brought to life the historical temple by and through its solar connections to the complete imagery the Egyptians saw in their concept of the seat of the first occurrence, “the first sacred place” within the akhet on Lightland, the “place of radiance” reflected in the “complete” phenomena of sunrise and sunset.

The effects of these dramatic events may have formed the basis for some of the Egyptians most unusual characteristic symbols and architectural features, e.g. the

sacred bbn and the venerated txn. Insights into these ancient perceptions of the Egyptian prehistoric solar cult practices changes the dynamics of how we view why the earliest essence of the meanings the Egyptians attached to their view of place beyond the organization of the landscape became foundation myths. ■

## NOTES

1. Toby Wilkinson, *Genesis Of The Pharaohs: Dramatic new discoveries rewrite the origins of ancient Egypt* (London: Thames & Hudson, 2003), 37.
2. Margaret Bunson, *A Dictionary Of Ancient Egypt* (New York: Oxford University Press, 1991), 193.
3. This aspect of information was drawn from the writings of Dr. E.C. Krupp.
4. Barbara Watterson, *The House Of Horus At Edfu* (Gloucestershire: Tempus Publishing Limited, 1998), 38.
5. According to Reymond, the seat of the first occurrence generally pictured as a mound was also sometimes referred to as the xaj. See E.A.E. Reymond, *The Mythical Origin Of The Egyptian Temple* (Manchester: Manchester University Press, 1969), 43.
6. Most scholars have retained the conventional rendering of Axt as “horizon.” In Egyptian texts it is identified as the sacred places from which the sun emerged and disappeared. See Miriam Lichtheim, *Volume 1: The Old and Middle Kingdoms of Ancient Egyptian Literature* (Berkeley: University of California Press, 1973), 93. 115.
7. Wilkinson, 77.
8. Reymond, 92
9. Jan Assmann, *The Search for God in Ancient Egypt*, trans. David Lorton (Ithaca & London: Cornell University, 2001), 60.
10. Wilkinson. 62.
11. Reymond, 73.
12. John Baines, “BnBn: Mythological and Linguistic Notes,” (1970) 39: 391.
13. Ibid, 393.
14. Raymond O. Faulkner, *A Concise Dictionary Of Middle Egyptian*, (Oxford: Griffith Institute, 1996), 83.
15. Reymond, 64.
16. Lichtheim, 25-26.
17. See James Allen, *Genesis in Egypt: The Philosophy of Ancient Egyptian Creation Accounts*, in *Yale Egyptological Studies 2*, ed. William K. Simpson (New Haven: Yale Egyptological Seminar (1988): 56.
18. Reymond, 12.
19. Reymond, 73.
20. Dieter Arnold et al., ed. Byron E. Schafer, *Temples Of Ancient Egypt* (Ithaca: Cornell University Press, 1997), 207.
21. Arnold et al, 205-207
22. See E.A.E. Jelinkova, “The Shebtw in the temple at Edfu,” *Zeitschrift der Agyptischen Sprache* 87. Band (1962): 41-54.
23. E. Chassinat-Rochemonteix, *Le temple d’Edfu*, E. v 84, 12-16

## Bags, Boxes and Buckets: A Warehouse Treasury

Stephanie Boucher

STEPHANIE BOUCHER is now pursuing graduate studies in Anthropology at AUC.

I have news for anyone who thought that archaeology was all about making earth shattering discoveries and rewriting the history books. There is another side of archaeology that is much more mundane: artifact care and storage. This side of archaeology doesn't make the cover of National Geographic or the Discovery Channel specials. It's a bit tedious, and dare-I-say boring at times, but this is exactly what I have been doing for the past few months here in Cairo.

As a budding Egyptologist, I have found myself in what I can only describe as a dream come true, or at least the beginning of a dream come true. After scrapping enough money together to attend the American University in Cairo (AUC) for one brief semester to study Egyptology, I was fortunate enough to become aquatinted with Dr. Gerry Scott, director of the American Research Center in Egypt (ARCE) who, as luck would have it, was in need of an extra set of hands to do a little warehouse spring cleaning.

This was to be my first experience with artifacts outside of a classroom setting and I was more than ready to roll up my sleeves and get my hands dirty. Upon my first visit, it quickly became apparent that the entire facility could benefit from an excavation of its own. Lucky for me, my assignment was much more small scale. After crossing the threshold of the large multi-roomed complex I wound my way through the maze of old field equipment and personal effects, which had been long forgotten by their owners, towards a small cage-like area filled with bags, boxes, and buckets overflowing with pottery sherds.

This is where I found myself for the next two months, elbow deep in dust and the accumulation of years gone by. In between my classes at AUC I spent a few hours each week re-boxing and re-labeling artifacts from the archaeological excavations of George T. Scanlon at Fustat. These excavations began in the 1960s as the result of a decision made by the Egyptian government to redevelop parts of Old Cairo. Scanlon's team was assembled to



investigate the remains of the medieval town before it was lost to modern building plans. The site itself dates to 641AD, when it was founded as a temporary military settlement. Later the town evolved into an area of cultural flourishing and became a central hub known for its trade goods from such places as Spain, Turkey and China.

The American Research Center in Egypt supported these excavations, and thus, it is with the Research Center that some of the extracted materials has been stored over the past 45 years. To ensure the artifact's preservation, arrangements were made for them to be returned to the Supreme Council of Antiquities (SCA), a project initiated under interim ARCE director Jere Bacharach.

My time at the warehouse was spent transferring the excavated materials from old shoeboxes and deteriorating rubber excavation buckets into clean, sturdy Styrofoam® containers. While not as exciting as excavating mummies, tombs, or temples, the task was, nevertheless, made worthwhile by the prospects of handling pieces of treasure from the past. The vast bulk of the material was beautifully painted and glazed pottery sherds. However, there were also plenty of bones, stone tools, woods, metals, fragments of stucco, and a few large stone objects with which to occupy my time and attention. I was particularly excited to come across intact or nearly intact vessels. One intriguing find was the so-called "genie lamps", at the sight of which I could not help but be whisked back to my childhood and the story of Aladdin. Needless to say, the rest of that particular day was spent imagining flying carpets and pondering what I would do if a genie gave me three wishes.

Another wonderful find was a large stone bowl-shaped artifact. I thought this might have been a grinding surface

and then imagined workers laboriously grinding grains for breads and other foods. However, there was one small object that intrigued me the most. While transferring the contents of one box to another, I came across a very small, blue, glazed wadjet eye. Also known as the eye of Horus, this magical emblem was used by the ancient Egyptians for protection. I wondered how, exactly, this small treasure ended up in piles and piles of medieval pottery sherds, and also whether or not its magical powers would rub off on me.

As the weeks passed, my neatly stacked tower of white boxes grew larger and larger and I could not help but be overwhelmed by the feeling of accomplishment. The artifacts were finally handed over to the SCA after a midday luncheon during which official documents switched hands and everything received final approval. The climax of the entire event was watching as the pile of boxes, which had been moved from the warehouse to the ARCE office, were carried out, one by one to the barricaded street in front of the building. I stood at the

window and watched as everything was loaded into two small trucks, carefully roped down, and then rushed off through the crowded streets of Cairo on the way to its final destination.

With this project successfully completed I can proudly say that I've had some part, however small, in the preservation and recording of the past. I've considered this a stepping-stone in my life, and when looking back on the experience I'm extremely glad that I had the opportunity to see it through to completion. Since the end of this project, I've been put to work in our research library doing various projects, including building a database of our holdings, which will make our facilities more efficient and manageable.

I am certain that I have been lucky thus far in my pursuits for a future in Egyptology. I have loved working with the staff at ARCE and I can only hope to be so lucky in the future. Thanks to all who helped me get this far and to those who have encouraged me to keep reaching for my dreams. ■

Clockwise from top left:

Ancient Roman street at Jarash.

Group poses in front of the Treasury at Petra.

Dr. Pierre Bikai discusses ancient Petra with ARCE group.

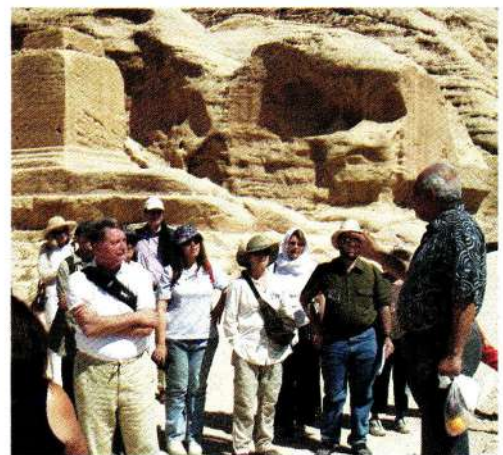
Mary Sadek rides in style.

Photos: Mary Sadek

## Jordan Trip is Great Success

The American Research Center in Egypt in cooperation with the American Center of Oriental Research in Amman (ACOR) offered its first international excursion to Jordan in October 2005 with Dr. Pierre Bikai, Director of ACOR. For five days, 33 participants were able to wander the colonnaded streets of Jerash, visit the wonders of Petra, the Rose Red city, walk in the footsteps of Moses at Mount Nebo and John the Baptist at the River Jordan and to see the famous mosaics of Madaba.

Mary Sadek, Program Coordinator for the Cairo office, organized the trip and stated that the Jordan trip "was a great success, due to Pierre's support and the collaboration of Ahmed Moussa and Pan Arab Tours. We are now looking forward to the next ARCE international trip - to Morocco."



## Fellowships 2005-2006

### **Asad Ahmed**

Research Associate  
 Doctoral candidate, Princeton University  
 The Hijazi Elite and the Internal Politics of  
 the Umayyad Empire (661-749 C.E.)

### **Katherine Strange Burke**

US Department of State ECA fellow  
 Doctoral candidate, University of Chicago  
 The Sheikh's House at Quseir al Qadim: A  
 Microcosm of Ayyubid Social History Seen  
 through Texts and Material Contexts

### **Amy Calvert**

Samuel H. Kress Foundation fellow  
 Doctoral candidate, Institute of Fine Arts,  
 New York University  
 The Regalia of Ramesses III: A Contextual  
 Study into the Variations and Significance of  
 Royal Costume

### **Travis Clark**

Council of American Overseas Research  
 Centers (CAORC) Research Associate  
 Doctoral candidate, Temple University  
 Imaging the Cosmos: The Iconography of  
 the Christian Topography by Cosmas  
 Indicopleustes

### **Wendy Doyan**

Research Associate  
 Doctoral candidate, University of Washington  
 Interpretive Methodology in Traditional and  
 Contemporary Museums of Egyptian  
 Archaeology

### **Stephen Emmel**

National Endowment for the Humanities  
 fellow, Scholar-in-Residence  
 Professor, Institut für Ägyptologie und  
 Koptologie, Westfälische Wilhelms-  
 Universität Münster  
 Works of Shenoute Preserved in Coptic  
 Manuscript Collections in Cairo

### **Shane Minkin**

US Department of State ECA fellow  
 Doctoral candidate, New York University  
 Foreigners, Locals, and the Contours of  
 National Consciousness in Alexandria,  
 Egypt 1865-1905

### **Robert Moore**

US Department of State ECA fellow  
 Doctoral candidate, Emory University  
 The Role of the Madrasah and the Structure  
 of Islamic Education in Mamluk Egypt and  
 Syria

### **Elisabeth O'Connell**

Samuel H. Kress Foundation fellow  
 Doctoral candidate, University of California,  
 Berkeley  
 Tombs for the Living: Ascetic Reuse of  
 Egyptian Funerary Architecture in Late  
 Antique Western Thebes

### **Peter Piccione**

National Endowment for the Humanities  
 fellow  
 Associate Professor, College of Charleston

Satellite Survey of the Theban  
 Necropolis

### **Clarissa Pollard**

National Endowment for the Humanities  
 fellow, Scholar in Residence  
 Associate Professor, University of North  
 Carolina, Wilmington  
 The State of the Egyptian Family and the  
 Egyptian State, 1923-1952

### **Maurita Poole**

US Department of State ECA fellow  
 Doctoral candidate, Emory University  
 Beauty Matters in Contemporary Egypt

### **Bruce Rutherford**

US Department of State ECA fellow  
 Assistant Professor, Colgate University  
 Constitutionalism and Political Development  
 in Egypt

### **Samer Shehata**

National Endowment for the Humanities  
 fellow  
 Assistant Professor, Center for Contemporary  
 Arab Studies, Georgetown University  
 The New Reform Discourse in Egypt

### **Martyn Smith**

US Department of State ECA fellow  
 Doctoral candidate, Emory University  
 The Medieval History of the Pyramids: A  
 Translation and Commentary on Maqriz's  
 Pyramid Chapter in the Khitat

## Losses

Henry George Fischer, the Metropolitan Museum of Art curator who helped the Temple of Dendur find a new life in New York as a focal point of the museum, died on Dec. 11 in Newtown, Pa., where he had moved from Sherman, Conn., in 2003. He was 82.

The death was announced by his family and the museum, where he was curator emeritus of Egyptology.

Starting with his doctoral dissertation in 1955, Dr. Fischer's books and articles brought a deeper understanding of the culture of ancient Egypt. In particular, he contributed to the study of the

previously neglected art and culture of the Egyptian provinces, as distinct from the centers of the rule of the pharaohs.

He spent virtually his entire scholarly career amid the Metropolitan Museum's Egyptian treasures but was also a student of poetry and early music. He signed on with the museum as an assistant curator in 1958, rose to associate curator in 1963 and was named head of the Department of Egyptology the following year. In 1970, a museum patron, Lila Acheson Wallace, endowed a special chair for him as curator of Egyptology, and he held it until his retirement in 1992.



# ARCE Staff News

There were a number of changes in ARCE operations in both Cairo and the U.S in late 2005 and early 2006.

A business office was established in San Antonio, Texas which will handle the financial and archival activities for ARCE in the US. We welcome ARCE's new CFO, Mike Allen, and the new Archivist, Rachel Mauldin, who will both work from that location. (photo 1) The San Antonio office address is: 8700 Crownhill, Suite 507, San Antonio, TX. 78209. The phone number is 210 821-7000.

The office in Atlanta on the campus of Emory University will continue to serve as ARCE's member services operations and we congratulate Candy Tate, who was promoted to the full-time position of Assistant Director of Development. (photo 2)

In Cairo, Shari Saunders, who administers the Antiquities Endowment Fund grants among many other duties, was named Assistant Director. (photo 3)

Reda Anwar is the new Front Desk Receptionist, Ghada Hazem El Batouty is the new Chief Accountant for the Egyptian Antiquities Conservation Project (EAC),

Lara Shawky is the new Assistant Grant Administrator, Matthew Carrington is Director of Publications for the EAP, and Eid Fawzy is a new messenger. (photo 4)

Some very young faces made their appearance within the ARCE extended family this year. Congratulations to Marwa Shehata, administrative secretary, on her son Khaled's (photo 5) birth and to Noha Atef, accountant, who welcomed Andrew (photo 6) to her family.

Sadly, ARCE said goodbye to five staff members during the last few months:

In the US Sandra Ferguson, ARCE's CFO, resigned but will continue on a consultant basis working with new CFO Mike Allen for the next few months. Carolyn Tomaselli has left the Atlanta office to pursue other oportunities. In Cairo, Kelly Zaug, Director of Publications for the Egyptian Antiquities Project, has left Egypt for New York City with husband Mike and young son Duncan, Adel Abdel Maguid is on leave pursuing opportunities in Kuwait, and Ibrahim Ali Ibrahim, accountant for the EAP, has taken a new position in Cairo. ARCE sincerely thanks these individuals for their past service and wishes them the very best in the future. ■



Photos: Kathleen Scott

## Donor Recognition

It is with sincere gratitude that we acknowledge the generous support of all our members who, through their membership dues and additional gifts, become partners with the American Research Center in Egypt in the important work of exploration, scholarship, training, and the conservation of Egypt's cultural heritage.

It is with special pleasure that we give specific recognition to these individual donors who contributed with extraordinary generosity over the past year:

Dr. Marjorie M. Fisher, '99*	Ms. Anne Salisbury	Dr. Susanne Thomas
Mr. John Gutler & Ms. Sarah Harte	Dr. Bonnie Sampsell	Ms. Roxie Walker
Ms. Nimet S. Habachy	Ms. Adina Savin	
Mr. Bryan A. Hokom	Mr. Richard Talcott	* indicates ARCE Fellowship year
Mr. A. Bruce Mainwaring	Dr. Emily Teeter, '86*	

## Research Supporting and Institutional Members

### Research Supporting Members

The American University in Cairo  
 Emory University  
 Georgia State University  
 The Getty Conservation Institute  
 Harvard University  
 The Institute for Bioarchaeology  
 The Johns Hopkins University  
 The Metropolitan Museum of Art, New York  
 New York University  
 The Oriental Institute of the University of Chicago  
 Princeton University  
 Trinity International University  
 University of California, Los Angeles  
 University of Pennsylvania

### Institutional Members

American Schools of Oriental Research  
 Ancient Egypt Research Associates  
 Brigham Young University  
 The Brooklyn Museum of Art  
 Brown University  
 College of Charleston  
 Columbia University  
 The Combined Prehistoric Expedition  
 Institute for the Study of Earth and Man (Southern Methodist University)

Polish Academy of Sciences  
 Conservation of wall paintings in the cave church of the Monastery of St. Paul at the Red Sea (EAP)  
 Conservation and publication of wall paintings at the Red Monastery (Deir Anba Bishoi) (EAP)  
 The Coptic Icons Project (EAP)  
 Council of American Overseas Research Centers  
 Drew University  
 Los Angeles County Museum of Art  
 Museum of Fine Arts, Boston  
 Pacific Lutheran University  
 Tennessee State University  
 Temple University  
 The University of Arizona  
 University of Arkansas  
 University of British Columbia, Vancouver  
 University of California, Berkeley  
 University of Delaware  
 The University of Memphis  
 University of Michigan  
 University of Notre Dame  
 The University of Texas at Austin  
 University of Toronto  
 Washington University  
 Yale University  
 Wittenberg University

Total ARCE membership has increased some 20% from one year ago, for a total of 1,415 members. During the same period, the number of members affiliated with Chapters has increased from 71% of the total membership to 73%; there are now 1,033 Chapter members, compared to 744 in 2004. That's a 38% increase in two years! The Executive Committee was informed that the dramatic increase in total membership was due to "the wonderful programs the Chapters mount", and of course the tireless assistance we get from Candy Tate.

Bob Bussey will be taking over as Chapter Representative

to the Board and EC at the New Jersey Annual Meeting. It has been a pleasure and an honor to represent you and your members to the "Mothership" for the past three years, and your help and support have made it a very productive period for ARCE and for Chapters. The membership increase alone shows how our local groups are helping the organization, and ARCE leaders have recognized this contribution by formally making our Representative a full, voting member of the Board and EC.

I'd like to offer my personal thanks to ARCE Presidents Everett Rowson and Carol Redmount, the EC members, Director Gerry

Scott and the ARCE staff for having been extremely kind and cordial to the "non-professional" in their midst. I would also like to thank Francis Niedenuhr for having set the stage and tone for Chapter Reps during his tenure in the job, and to thank Bob Bussey for accepting the challenge of continuing the improvement of our relations with the rest of ARCE. Finally, thanks to all of you Chapter people who give your time and energy to promote a wider exposure, awareness and understanding of one of the most fascinating subjects in the world. It's been a real pleasure.

- **John Adams**  
**Chapter Representative**

ARCE expresses its sincere thanks to John Adams for his excellent leadership and tireless efforts on behalf of the Chapters during his tenure as Chapter Representative to the Executive Committee.

This is an excerpt from his last report to Chapter presidents in April 2006.

## Chapter Events

There are now thirteen ARCE chapters nationwide. We welcome our newest organization in Philadelphia. There is also an ARCE Interest Group in Tampa/St. Pete, Florida. For information about chapter activities not listed here, please go to Events & Programs page of the ARCE website at [www.arce.org](http://www.arce.org).

### Illinois (Chicago)

May 27, 2006

Carol Andrews - British Museum  
The Ancient Egyptian Sense of Humor ,  
5:00PM

### Orange County California

May 20, 2006

Carol Andrews - British Museum  
"Ancient Egyptian Jewelry"  
Saturday - 3:00 p.m. at Sea Country  
Community Center

June 3, 2006

J. Brett McClain - University of Chicago,  
Chicago House (Luxor)

"Something Old, Something New:  
Ptolemaic Inscriptions on the New  
Kingdom Chapel at Medinet Habu"  
Saturday - 3:00 p.m. at Sea Country  
Community Center  
July 15, 2006

Dr. Kara Cooney - Stanford University,  
"Sex and Death: Gender Modifications  
and Coffins in Ancient Egypt"  
Saturday - 3:00 p.m. at Sea Country  
Community Center

August 25, 2006

Miroslav Barta - Czech Institute of  
Egyptology  
"In Sands Forgotten: New Abu Sir  
Cemetery of the Vanishing Old Kingdom  
Pharaohs"  
Saturday - 3:00 p.m. at Sea Country

Community Center

September 23, 2006

Dr. Richard Fazzini - Brooklyn Museum  
Topic TBA

Saturday - 3:00 p.m. at Sea Country  
Community Center

October 28 (tentative), 2006

Bob Partridge - Editor, "Ancient Egypt"  
magazine,  
Topic TBA

Saturday - 3:00 p.m. at Sea Country  
Community Center

### Washington DC

Tuesday, May 16, 2006, 6:30 PM

Dr. Rita Freed - Museum of Fine Arts,  
Boston

2006 B.C.: The Life and Afterlife of a  
Bersha Nomarch

Location: The Egyptian Embassy

# arce VIPs

Dr. Betsy Bryan and Dr. Gerry Scott admire Queen Tiye at the opening of "American Contributions to Egyptian Archaeology" at the Egyptian Museum in Cairo in February.



Newly appointed US Ambassador Francis Ricciardone (standing 12th from left) paid a visit to the ARCE offices in December and posed for a photo with the entire ARCE staff.

Ms. Hughes also met with Egyptian students in the courtyard of the Sabil at a tea hosted by ARCE.



In September, Karen Hughes, US Undersecretary of State for Public Diplomacy, visited the newly conserved Sabil Mohammed Ali and is shown talking with ARCE/EAP project director Agnieszka Dobrowolska, Zahi Hawass, Secretary General of the Supreme Council of Antiquities, Anthony Vance of USAID, and Gerry Scott.

