



**THE ORIENTAL INSTITUTE
2013-2014 ANNUAL REPORT**

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Cover illustration: Modern cylinder seal impression showing a presentation scene with the goddesses Ninishkun and Inana/Ishtar from cylinder seal OIM A27903. Stone. Akkadian period, ca. 2330–2150 BC. Purchased in New York, 1947. 4.2 × 2.5 cm

The pages that divide the sections of this year's report feature various cylinder and stamp seals and sealings from different places and periods.

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Overleaf: Modern cylinder seal impression showing a presentation scene with the goddesses Ninishkun and Inana/Ishtar; and (above) black stone cylinder seal with modern impression. Akkadian period, ca. 2330–2150 BC. Purchased in New York, 1947. 4.2 × 2.5 cm. OIM A27903. D. 000133. Photos by Anna Ressman

CONTENTS

INTRODUCTION

INTRODUCTION. <i>Gil J. Stein</i>	5
---	---

RESEARCH

PROJECT REPORTS

ACHEMENET. <i>Jack Green and Matthew W. Stolper</i>	9
AMBROYI VILLAGE. <i>Frina Babayan, Kathryn Franklin, and Tasha Vorderstrasse</i>	12
ÇADIR HÖYÜK. <i>Gregory McMahon</i>	22
CENTER FOR ANCIENT MIDDLE EASTERN LANDSCAPES (CAMEL). <i>Scott Branting</i>	27
CHICAGO DEMOTIC DICTIONARY (CDD). <i>François Gaudard and Janet H. Johnson</i>	33
CHICAGO HITTITE AND ELECTRONIC HITTITE DICTIONARY (CHD AND eCHD). <i>Theo van den Hout</i>	35
EASTERN BADIA. <i>Yorke Rowan</i>	37
EPIGRAPHIC SURVEY. <i>W. Raymond Johnson</i>	50
GIZA PLATEAU MAPPING PROJECT. <i>Mark Lehner</i>	67
JERICHO MAFJAR PROJECT. <i>Donald Whitcomb</i>	80
JERICHO MAFJAR: HISHAM'S PALACE SITE AND MUSEUM PROJECT. <i>Jack Green</i>	85
KERKENES DAĞ PROJECT. <i>Scott Branting</i>	88
MARJ RABBA. <i>Yorke M. Rowan and Morag M. Kersel</i>	91
MUMMY LABEL DATABASE (MLD). <i>François Gaudard</i>	99
THE NEUBAUER EXPEDITION TO ZINCIRLI. <i>David Schloen</i>	101
NIPPUR AND BEYOND. <i>McGuire Gibson</i>	107
ORIENTAL INSTITUTE-NATIONAL MUSEUM OF AFGHANISTAN PARTNERSHIP. <i>Gil J. Stein</i>	110
ORIENTAL INSTITUTE NUBIAN EXPEDITION (OINE). <i>Bruce B. Williams and Lisa Heidorn</i>	119
PERSEPOLIS FORTIFICATION ARCHIVE PROJECT. <i>Matthew W. Stolper</i>	128
SUREZHA. <i>Gil J. Stein and Abbas Alizadeh</i>	138
TELL YAQUSH. <i>Yorke M. Rowan</i>	152
WRITING IN EARLY MESOPOTAMIA. <i>Christopher Woods and Massimo Maiocchi</i>	154

INDIVIDUAL RESEARCH	161
-------------------------------	-----

RESEARCH SUPPORT

COMPUTER LABORATORY. <i>Paul D. Ruffin</i>	187
INTEGRATED DATABASE PROJECT. <i>Foy Scalf</i>	189
OCHRE DATA SERVICE. <i>Miller C. Prosser</i>	196
PUBLICATIONS OFFICE. <i>Thomas G. Urban</i>	197
RESEARCH ARCHIVES. <i>Foy Scalf</i>	200
TABLET COLLECTION. <i>Andrew Dix</i>	209

MUSEUM

MUSEUM. <i>Jack Green</i>	213
SPECIAL EXHIBITS. <i>Emily Teeter</i>	220
PUBLICITY. <i>Emily Teeter</i>	226
REGISTRATION. <i>Helen McDonald and Susan Allison</i>	227
ARCHIVES. <i>John A. Larson</i>	233
CONSERVATION. <i>Laura D'Alessandro</i>	234
PREP SHOP. <i>Erik Lindahl</i>	238
PHOTOGRAPHY. <i>Anna R. Ressler</i>	239
SUQ. <i>Denise Browning</i>	241

CONTENTS

PUBLIC EDUCATION

PUBLIC EDUCATION AND OUTREACH. <i>Catherine Kenyon</i>	245
FAMILY AND YOUTH PROGRAMS. <i>Moriah Grooms-Garcia</i>	249
K-12 TEACHER PROGRAMS. <i>Carol Ng-He</i>	252
VOLUNTEER PROGRAM. <i>Terry Friedman</i>	255

DEVELOPMENT AND MEMBERSHIP

DEVELOPMENT. <i>Tracy Tajbl</i>	265
VISITING COMMITTEE.	266
MEMBERSHIP. <i>Amy Weber</i>	267
SOCIAL MEDIA. <i>Amy Weber</i>	270
SPECIAL EVENTS. <i>Brittany F. Mullins</i>	271
HONOR ROLL OF DONORS AND MEMBERS	275

FACULTY AND STAFF OF THE ORIENTAL INSTITUTE	291
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INFORMATION	300
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INTRODUCTION

Gil J. Stein

I am honored to present you with the Oriental Institute's *Annual Report* for 2013–2014. This has been a year of unparalleled turbulence and upheaval across the Middle East, affecting Syria, Iraq, Turkey, Israel, the Palestinian Territories, and Egypt — almost every country in which we conduct our research. The armed conflicts and civil strife across the region have taken a horrific toll on the people of these countries. The impact on the irreplaceable cultural heritage of these areas has also been devastating.

As a result, our work is changing. The political situation makes it much more difficult to do our traditional research. We must face these challenges by recognizing the increasing importance of cultural heritage protection as a central part of the Oriental Institute's mission, and indeed we have begun to do so. At the same time, the closure of countries and the looting of sites demonstrate, as nothing else can, the importance of our museum as a safe haven for the material remains from the cradle of civilization, and the vastly increased importance of our scientifically excavated museum collections as a research resource that can continue despite the disruptions in the Middle East.

When one considers these factors, this *Annual Report* is a truly impressive accomplishment. At 300 pages, this is the longest *Annual Report* that the Oriental Institute has ever published. The length is not due to verbosity (the articles are the same length as always), but rather is a tribute to the scope and energy of the Oriental Institute's talented researchers, who have initiated new projects and made great strides in our existing excavations, textual projects, educational activities, and museum work. As you will see in these pages, the work of discovery continues to have a major impact in the exploration of ancient Near Eastern civilizations and the communication of this knowledge to the scholarly and general public.



RESEARCH



Overleaf: Modern cylinder seal impression showing the god Shamash, identified by the rays of light emanating from his shoulders, journeying in a fantastic boat; and (above) Shell cylinder seal (with modern impression). Akkadian period, ca. 2330–2150 BC. Iraq, Tell Asmar, Houses IVa. Excavated by the Oriental Institute, 1932. 3.7 × 2.1 cm. OIM A11396. D. 000082. Photos by Anna Ressman

PROJECT REPORTS

ACHEMENET PROJECT

Jack Green and Matthew W. Stolper

The Achemenet Project at the Oriental Institute began in April 2014, and although it will take just a year to carry out, its results will have effects for years to come, as the first quarter's work already shows. The aim of the project is to provide an online catalog of more than 2,600 objects of the Achaemenid period (ca. 550–330 BC) in the Oriental Institute Museum's holdings, and to provide high-quality photographs of up to 300 selected objects, including seals and sealings, coins, architectural fragments, jewelry, stone vessels, and other objects of daily life, for the Achemenet website. Some of the key objects are well known, such as sculptural fragments, inscriptions, and architectural elements from Persepolis (fig. 1) and the iconic Persian roundel thought to be from Hamadan, Iran (fig. 2), but others, particularly objects that have not been displayed or that are only published as entries in lists, have been obscure and until now all but impossible to visualize. In the course of investigating these, the Achemenet Project is already “rediscovering” registered objects in the collections that can be reinterpreted in the light of more recent research.



Figure 1. Column capital depicting a human-headed bull, ca. 522–486 BC. Persepolis, Iran. OIM A24066 (photo by Anna Ressman)



Figure 2. Gold roundel, ca. 404–359 BC. No provenance; thought to be from Hamadan, Iran. Diameter 11.5 cm. OIM A28582 (photo by Anna Ressman)

ACHEMENET PROJECT

The project is a new collaboration between the Oriental Institute, the Musée du Louvre, and the Collège de France, Paris. Achemenet is the brainchild of Professor Pierre Briant of Collège de France, who set out around a decade ago to create and direct an online resource for Achaemenid studies which includes an online “museum” of Achaemenid-era material culture from collections around the world. That resource can be found at www.achemenet.com and includes material from collections at the Louvre, the British Museum, and other museums in Europe, North America, and the Middle East. From the inauguration of Achemenet and its companion site, the Musée Achéménide (<http://www.museum-achemenet.college-de-france.fr/>), Briant has considered material from the Oriental Institute’s collections to be indispensable. Above all, items displayed in the Robert and Deborah Aliber Persian Gallery and related collections represent the largest, most significant, well-documented and provenanced collections from Achaemenid Iran in North America, most significantly those that stem from the work of Oriental Institute’s Persian Expedition at Persepolis, Istakhr, and other sites in Iran (1931–1939).

The Oriental Institute Achemenet Project, co-supervised by Jack Green and Matthew Stolper, has been made possible through generous funding provided by the Roshan Cultural Heritage Institute to support project researcher Tytus Mikołajczak (a PhD candidate of the Department of NELC) to lead the research and prepare the materials for Achemenet and the



Figure 3. Project photographer Austin Kramer at work using new photographic equipment (photo by Austin M. Kramer)

Musée du Louvre, which is the main digital repository for all materials for Achemenet. Our project partners at the Louvre include Béatrice André-Salvini, Yannick Lintz, and Salima Amann. We are also grateful for the support of Sue Devine of the American Friends of the Louvre. Mikołajczak is well qualified as our project researcher, given his research focus on Achaemenid seals and sealings. Matching funds from the Oriental Institute were generously provided by Oriental Institute Director Gil Stein to support assigned project photographer Austin Kramer (fig. 3). In addition, the Oriental Institute Museum purchased new photographic and computer equipment to adapt and upgrade the temporary shooting table that had previously been used during Metals Room Project photography. Our head of photography, Anna Resson, has made considerable efforts to ensure that the quality of our equipment, the photographic process, and resultant images are of the desired high standards for the project, while allowing us to photograph a significant number of objects within a short period. The first several weeks of the project were spent acquiring equipment and setting up the studio.

The project could not take place without the support of other members of the Museum staff, including registrars Helen McDonald and Susan Allison, who have already helped to retrieve many batches of objects for Tytus and Austin. Conservators Laura D'Alessandro and Alison Whyte are carrying out conservation assessments of these batches of objects. We are also grateful for the assistance of John Larson, who has provided access to the archives from Persepolis. The processing and formatting of digital images in preparation for transfer to the Achemenet team in Paris is being coordinated by Austin Kramer. In addition, these images and their records are being appended and updated in the Oriental Institute's Integrated Database so that they can be accessed as part of our online collections. Our summer intern for the Achemenet Project, University of Chicago undergraduate student Shoshanah Spurlock, is assisting us in this area, as well as in retrieving relevant object information from the archives. We are grateful for the support of Foy Scalf, head of the Research Archives, for his support as we add and modify records in the Integrated Database. In addition, Annalisa Azzoni of the Persepolis Fortification Archive Project has assisted us with the imaging and research on a number of inscribed objects in the collection.

At the time of writing, approximately 350 objects had been surveyed by the project researcher, and just under 200 cataloged. Of those 200, fifty objects have been photographed by the project photographer, resulting in 200 high-quality images. As a result of Mikołajczak's research, many objects that were only briefly described in Erich Schmidt's publications can now be fully documented, and field information thoroughly reconciled with museum registration records. Among "rediscoveries" are a box of unpublished Aramaic ostraca thought to be from Persepolis, fragments of inscribed Egyptian-blue pegs, fragments of glazed brick belonging to an inscribed panel that were never fully published, a fragment of an inscribed stone "foundation tablet" that probably come from the Elamite version of an inscription previously thought to exist only in Old Persian. Several other objects, such as "stone bowls" and "amulets," can be reclassified, making them much easier for future researchers to locate and study.

PRELIMINARY EXCAVATIONS AT AMBROYI VILLAGE, ARMENIA: A HOUSE ON THE SILK ROAD

Frina Babayan, Kathryn Franklin, and Tasha Vorderstrasse

Introduction

The summer of 2013 marked the foundational season of the Project for Medieval Archaeology of the South Caucasus (MASC) (see Franklin and Vorderstrasse 2014). Dedicated to archaeological explorations of social life in Armenia and neighboring regions during the medieval period (AD 301–1600), the MASC Project is a fundamentally collaborative undertaking enabled by cooperation between American researchers and archaeologists from the Armenian National Academy of Sciences Institute of Archaeology and Ethnography. Our long-term aim is to research the social forms and dynamic interactions of medieval life in the south Caucasus through cross-disciplinary methods and to build a community for such research throughout the region. The first year of the project worked toward this aim by strengthening research relationships and opening new directions of inquiry in the medieval past of Armenia. Opening new excavations at a previously unstudied medieval village site, we initiated a research program which should continue to produce challenging and interesting information about life in the medieval Caucasus.

Our research in the summer of 2013 was centered in the Kasakh River Valley of central Armenia, in the uplands north of the capital city of Yerevan. The Kasakh Valley is part of the contemporary Aragatsotn Province: this territory is dominated by the broad volcanic peak of Mt. Aragats, the highest mountain within the modern Republic of Armenia. The Kasakh River collects from tributaries on Aragats and in the Pambak and Tsaghkunyats ranges, and runs past the city of Aparan down the valley to Ashtarak, the capital of Aragatsotn. Ashtarak, itself an ancient city, contains a medieval crossroads where highways left the Ararat plain and took to the highlands, passing to the east and west of Mt. Aragats. One such highway climbed 800 meters in its course, passing the orchards of Ushi and Hovhannavank before reaching Aparan. This highway passed by the contemporary village of Arai (or Ara), the site of the MASC Project excavations in 2013.

During the late medieval period (AD 1200–1500) the Kasakh Valley was situated between major urban centers: Ani to the west, Tbilisi to the north, and Dvin to the south. Historical and archaeological research has demonstrated that these cities were connected in the late medieval period by a system of roads serviced by road inns (Manandian 1965; Haroutyunyan 1960; Franklin 2014a, 2014b). Such road inns (called *caravanserai* in the Near East, or *ijevanatanun* or *caravanatanun* in Armenian) were constructed in Armenia by members of the dynastic aristocracy: these princes or *naxarars* were at various times in Armenian history vassals to Byzantium and to Persia, as well as to the Georgian Bagratids and to the Mongol Ilkhanids. During the tenth to eleventh centuries the *naxarars* were ruled by some of their own under the Bagratid dynasty seated at Ani; in this period many of the fortresses and castles still standing in Aragatsotn were built. However, during the eleventh century the Kasakh Valley

and the surrounding territory of Nig-Aparan were incorporated into the Great Seljuk empire, which was centered in Iran. In the very end of the twelfth century, the territories of Armenia surrounding Aragats were reconquered from the Seljuks by the generals Ivane and Zakare Mhargrjeli, vassals of Queen Tamar of Georgia. After seizing lands from the retreating Seljuks, the Mhargrjelis distributed them to their own followers, among whom was Vache Vachutyan, who was granted the Kasakh Valley and the rest of Nig-Aparan. Vache and his heirs built and re-built castles, churches, and monasteries throughout their territory.

Travel through the Kasakh Valley during the time of the Vachutyans is illustrated in the late thirteenth-century chronicle of Kirakos of Gandzak, who described the journey of the Cilician king Het'um to pay tribute to the Mongol *qahan* Mongke. Kirakos Gandzaketsi described how King Het'um paused in the house of Kurd Vachutyan (son of Vache) and his wife, Xorishah.

And hurrying through his territory he came in twelve days to the town of Kars. And having visited Bacu Nuin, who was the commander of the Tartar army in the east, and other great men, and having been honored by them, he halted in Aragatsotn opposite Mount Aray in a village called Vardenis,¹ in the house of a Prince called Kurd, an Armenian by race and a Christian by religion; his sons were Vaçe and Hasan, and his wife Xorishah, of the race of Mamikonians.... (Boyle 1977, p. 179)

This mention in Gandzaketsi's history provides an interesting reference not only to the Vachutyans, but also to the significance of the Kasakh Valley for long-distance travel in the late medieval period. A major aim of our research at medieval Ambroyi is to learn about this period from the perspective of people who were perhaps less famous than Het'um or Prince Vache and his family, but who were nonetheless part of medieval Armenian society and whose lived experience can tell us much about what this stretch of the medieval Silk Road was like for the people who dwelt along it.

Research Aims for the Exploratory Season

The main research aims of the 2013 season were to (1) confirm medieval settlement in the western Kasakh Valley south of Arai village, (2) determine the period of this settlement in more detail, and (3) assess the potential for more sustained excavations in the area (fig. 1). All these aims were achieved.

This area of interest had been explored previously, in monumental surveys of archaeological remains in Aragatsotn (T'oramanyan 1942; Petrosyants 1988) and in an ethnohistorical survey carried out by the National Department for the Preservation of the Historical and Cultural Environment. This work noted the presence of the ruined caravanserai (also recorded by Shakhatunyan in 1842), and recorded local references to an extensive (if only generally defined) area of abandoned settlement south of Arai village called Ambroyi. Our investigations of the Ambroyi medieval settlement established that medieval occupation at this site seemed to be spatially divided into two general areas. The first of these to be investigated was a poorly preserved site of late medieval and early modern occupation on the slope of Mt. Aragats; this area was designated Upper Ambroyi, and was heavily damaged by Soviet-era agricultural landscape modification. The second area of occupation is an approximately 3-hectare area at the western margin of the cultivated area of the Kasakh Valley, around a locally built Tukh Manuk² shrine. In 2010 K. Franklin collected late medieval ceramics from

AMBROYI VILLAGE

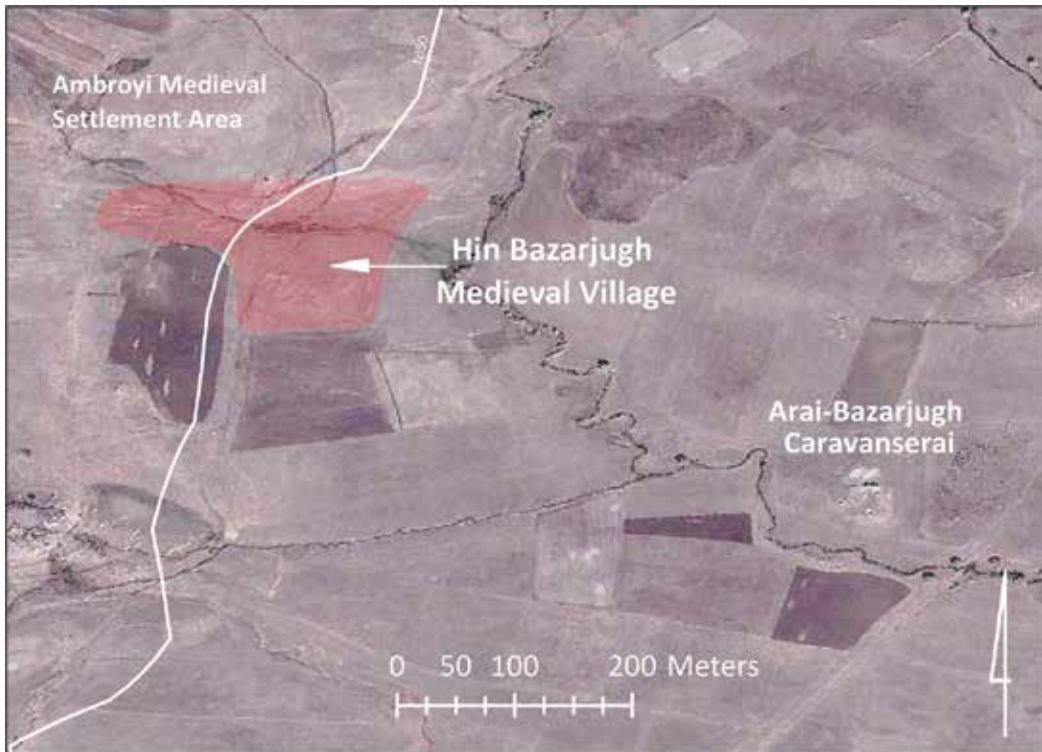


Figure 1. Aerial image of the western Kasakh Valley, showing the research area

this area during pedestrian survey (Franklin 2014a), and field walking confirmed the presence of visible subsurface architecture that was also visible in satellite images. We designated this area Hin Bazarjugh or “Old Bazarjugh,” after the name used ethnohistorically to refer to Arai village (Xalpakchyan 1971, p. 203).

Summary of Investigations

An immediate priority for the MASC research team was negotiating the legacy of Soviet landscape modification in the research area. In the region of Upper Ambroyi, it was surmised that earth-moving tractors had been used to scrape back meters of soil, including the masonry walls and contents of most of a village. Our contacts in Arai village recalled episodes in the 1970s when “the Russians” found enormous vessels, bones, coins, and other artifacts in the course of working in this area. In the region around Hin Bazarjugh, it was observed that the landscaping efforts had preserved an area of medieval settlement south of the contemporary cemetery.

In the area of Hin Bazarjugh we explored what appeared from the surface to be one of several relatively undisturbed architectural units. The excavation team (consisting of Frina Babayan, Kathryn Franklin, and Tasha Vorderstrasse as well as two workers from Arai) opened a 4 × 4 meter excavation unit toward the southern margin of the identified area of medieval remains (fig. 2).

The excavation unit exposed a thick deposit of collapsed stones and soils associated with the masonry walls, which met in a corner in the southwestern sector of the unit. After removing large fallen basalt boulders, we uncovered the rim of a large cylindrical ceramic object embedded in the soils that filled what appeared to be the corner of a room. It emerged that this rim belonged to a ceramic oven, called a *tonir* in Armenian. This oven rested on a floor that had been carved from the clayey bedrock of the Kasakh Valley (fig. 2). The oven, a drum of robust ceramic more than 5 centimeters thick, rested on a ring of stones that were embedded in this clay bedrock; the clay beneath the oven was reddened from a history of fires. The walls of the *tonir* were reinforced with large potsherds (including some featuring applied decoration) laid against its walls and affixed with earth or unbaked clay. The oven appears to have been built to be used while kneeling (on a partial stone platform, which contained the oven's flue) or standing; there are widespread attested comparanda to this form from ancient Anatolia and the Levant (Mulder-Heymans 2002; Parker 2011) as well as many examples from the medieval period (see among others in Anatolia, van Loon 1978, pp. 43–44, pls. 66A, 70, 72–73, 74B, 75A, 102C; and, for examples from the late medieval Caucasus, see Hajafov, Huseynov, and Jalilov 2007, p. 29).

To the south of the oven feature were found a number of pit features (fig. 3). One of these was a shallow, flat lens with a round area of burnt clay in its center. We found a fragment of a large vessel resting in situ along the edge of this depression, suggesting that perhaps a clay vessel had been inverted over the soil and filled with coals. Another, larger pit extended over a meter into the bedrock, cutting into the contemporary groundwater.



Figure 2. The completely excavated trench HB1

AMBROYI VILLAGE

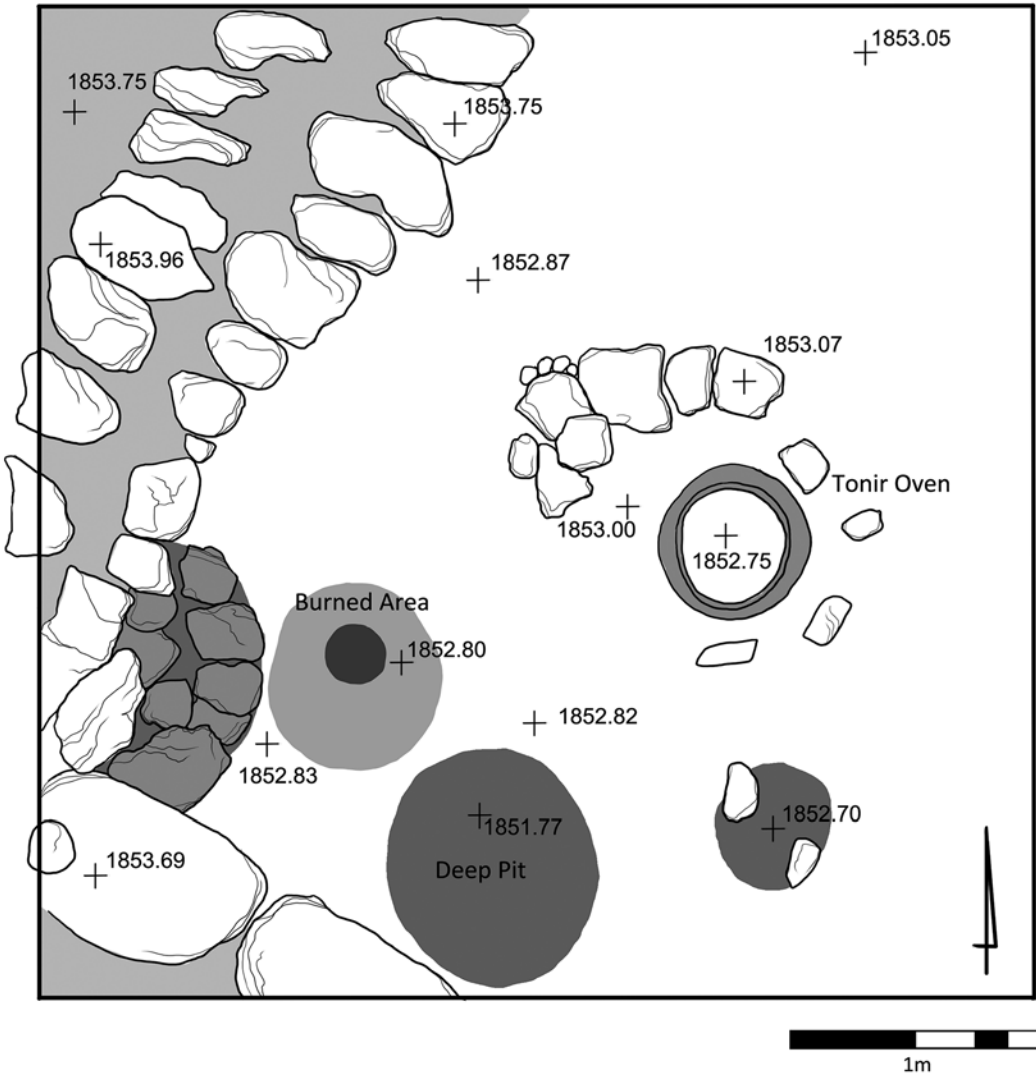


Figure 3. Plan view of the finished excavations, Unit HB1

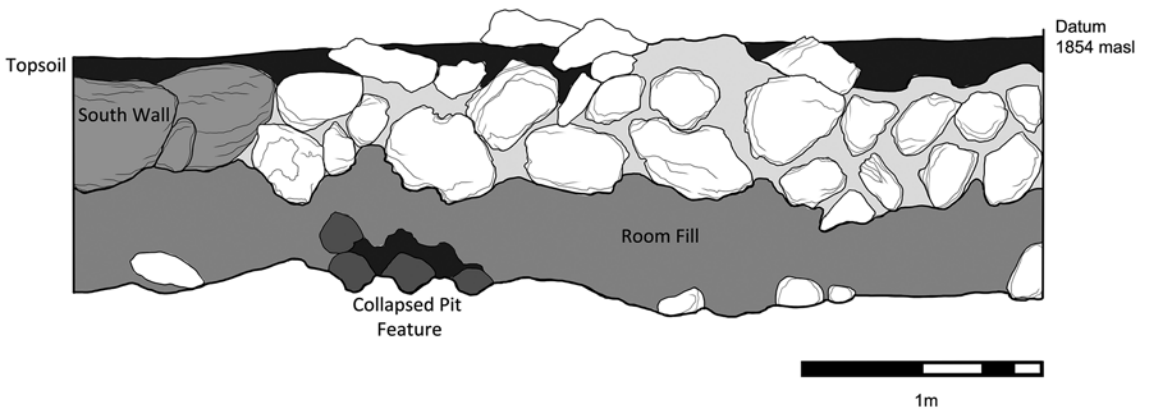


Figure 4. Elevation of the western baulk profile of Unit HB1



Figure 5. Sgraffiato ceramics from soil level HB1.17, just above the bedrock floor levels

The pit was filled with the same homogenous soils as the rest of the room, indicating that it was empty when the room collapsed (fig. 4). Likewise, the *tonir* was filled not with layers of ash but with a homogenous and continuous fill, suggesting that it was cleaned out before being packed with soil. These observations suggest to us that the structure was deliberately abandoned in a series of acts including the filling of the room with soil and carefully placed stones.

The fill soil contained ceramic artifacts and small finds, all of which dated generally to the thirteenth to fifteenth century. The excavation team recovered red ware ceramics, including many large jar fragments, bowls, cups, and pitchers. Fragments of glazed ceramics were also found; these primarily had red bodies and light slips with monochrome or polychrome splash glaze. Green, blue, purple-brown, and yellow glazed fragments were recovered. A number of the monochrome sherds featured geometric sgraffiato decoration (fig. 5). Also found were two small red clay monochrome glazed vessels with everted flat rims. These were both coated in purple-brown glaze and were perhaps used as saltcellars (fig. 6). Earlier examples of such saltcellars were found on the citadel of Dvin (Kalantaryan et al. 2008, tablitsa XXI).

Small finds from the excavation included three iron nails and several fragments of obsidian. In the debris around the *tonir* were recovered two bronze pins, one of which has a decorated head (fig. 7). These pins may have been fasteners or personal implements. Ten fragments of drawn glass bracelets were found from different contexts throughout the soil fill (fig. 8). These bracelets were made from dark blue glass and were either plain or had twisted decoration. Parallels to these bracelets have been found in the late medieval contexts at Dvin, as well as at other sites (Ghafadaryan 1952; Kalantaryan et al. 2008, tablitsi XL–XLIII).

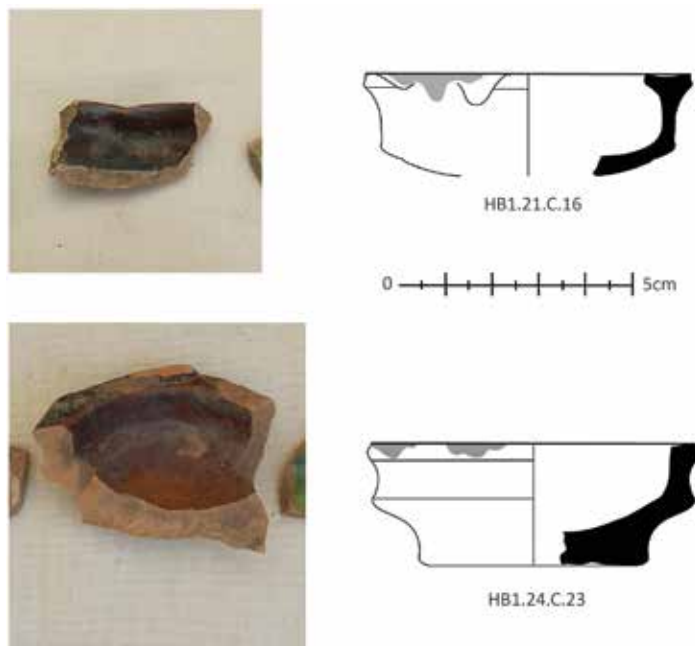


Figure 6. Small glazed vessels (saltcellars) from the lower fill levels

AMBROYI VILLAGE

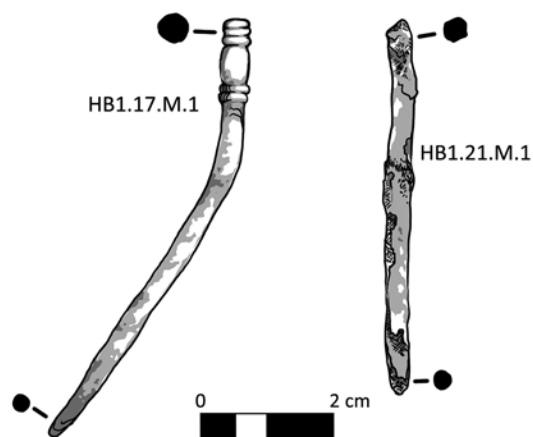


Figure 7. Bronze pins found near the tonir



Figure 8. Fragments of blue glass bracelets from the room context at Hin Bazarjugh

Discussion

The results of the 2013 excavations confirmed occupation of the village at Hin Bazarjugh during the thirteenth century and perhaps into the fourteenth century. Our work also indicated that the area of settlement south of Arai village called Ambroyi was variously occupied perhaps as late as the seventeenth century, suggesting that people moved up the mountain slopes. This possible movement is corroborated by the implication that the house excavated in unit HB1 was deliberately filled and abandoned, perhaps as its owners (and/or their neighbors) moved to a different living place.

The material evidence found in the excavations provides information about the social economy of the village. The majority of the ceramic materials found in the unit were probably made locally: they featured coarse red clays and micaceous and obsidian inclusions familiar from the unglazed red ware pottery found at the caravanserai (Franklin 2014a). Several bowl rims were found that are similar to forms from the caravanserai, and also to ceramics from Teghenyats Vank (Sargsyan 1990; Babajanyan and Mirijanyan 2013). The glazed ceramics, with their aforementioned red clay bodies and colored glazed exteriors, are most similar to vessels produced to the south at Dvin — but it is also possible that they were produced at another contemporary town such as Ashtarak or even Ushi (excavated by Babayan in 2005). Similar connections are suggested by the glass artifacts, which seem like just the kind of object to be carried up the highway by traders.

Further research at Hin Bazarjugh and throughout the Ambroyi area will continue to explore these possible relationships between the people living in the village, travelers staying in the caravanserai, and the wider medieval world. Specifically, we are interested in tightening our understanding of the chronology of the village, so that we can know how life in this part of the Kasakh Valley may have been affected by the Mongol invasion and other historical events. The historical chronicle of Kirakos of Gandzak implies that under the Ilkhanids the Kasakh Valley was still a pleasant place for a king to stop and rest; was it still a hospitable landscape for farmers and shepherds? We will be interested to see if the instance of abandonment seen at HB1 indicates a larger pattern, or if the picture of life was more complex. Also,

one carved *khatchkar* (cross-stone) was located and drawn in 2013, some distance from our excavations. We will continue to explore the extent of medieval remains at Ambroyi and to contribute knowledge of mortuary practice as well as domestic life into our conceptualization of the site. Of superlative significance was the confirmation of medieval archaeological remains in this part of the Kasakh Valley that were previously little-known: we have excited not only our own academic interest but also the curiosity of local inhabitants, who began to have an increased awareness of the stones beneath their fields.

Acknowledgments

This project owes an enormous debt to Dr. Pavel Avetisyan, the director of the Republic of Armenia National Academy of Sciences Institute of Archaeology and Ethnography; without his support, the work would have been impossible. We likewise give great thanks to Gil Stein, director of the Oriental Institute at the University of Chicago. The authors would like to thank Boris Gasparyan for providing early data about monuments in the Kasakh Valley, and Mr. Edik Petrosyan, mayor of Arai village, for his hospitality.

Notes

¹ This site is thought to be in the contemporary locale of Vardenut, where a castle contemporary with the Vachutyans has been excavated by the RA NAS Institute of Archaeology and Ethnography (Karakhanyan and Melkonyan 1989, pp. 80–82; 1991, pp. 111–12).

² A quasi-folkloric tradition associated with mothers and sons; see Petrosyan 2011.

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ÇADIR HÖYÜK

Gregory McMahon

The Çadır Höyük site is located in the Yozgat Province of central Turkey. As was reported in 2012, I became the director of the project in 2010 after Ronald Gorny's retirement from archaeology the previous year. We remain delighted that the Çadır project continues to operate under the auspices of the Oriental Institute. We are also thrilled to have increased the number of University of Chicago graduate students participating on the project from three in 2012, to four in 2013, and five in 2014! Already participating on the project in 2012 were Sarah Adcock, Josh Cannon, and Stephanie Selover; in 2013 we were fortunate to add Tony Lauricella to the team, and this year we have benefitted tremendously from the contributions of Susan Penacho. In addition, we have two University of Chicago alums who are vital members of the project: Madelynn von Baeyer, now pursuing her PhD at the University of Connecticut; and Jon Clindaniel, now working on his doctoral degree at Harvard. All these students have made critical contributions to the project, as reported below.

June through August 2013

We continue to be pleased that Hasan Şenyurt remains the director of the Yozgat Museum, the regional museum that oversees our work. In the 2013 season we benefitted from the help of two government representatives, Süleyman Can and Bahar Hasırcı. We also welcomed our new assistant director, Dr. Emre Şerifoğlu, who is pursuing a much-needed study of landscape



Figure 1. Josh Cannon at Çadır Höyük

use and settlement size during the occupational periods of the site. The season began on June 17 and continued until August 10 for an eight-week season. During the season we partially or fully opened a total of fourteen 10 × 10 meter trenches. These spanned the Late Chalcolithic (mid- to late fourth millennium BC) to the final century of the Byzantine occupation (early eleventh century CE). Three trenches explored our prehistoric/Late Chalcolithic occupation, one of which was run by Josh Cannon, who is working on a dissertation that includes Çadır's second-millennium ceramic assemblage (fig. 1). Josh worked in LSS 3, which was first opened in 2000. This trench has always been a mystery to us given that it is firmly in the Late Chalcolithic area and is full of ceramics and architecture dating to the latter half of the fourth millennium BC. However, the northeast quarter of this trench is a significantly disturbed area, first featuring a large Iron Age pit (excavated in 2001) and then a host of jumbled stones and soft fill full of Hittite ceramics, excavated by Josh in 2012. In 2013 Josh was able to solve the mystery for us. He revealed the stone foundation of a Hittite structure, possibly a silo or a stable, that had been set deep into the Late Chalcolithic occupation. This was likely a tall structure that disrupted much of the earlier occupation there; this area was also heavily used by the Iron Age residents. This structure was left in place for our return in the 2014 season.

To the west of Josh's trench are SES 1 and SES 2, where our Burnt House and Courtyard, and the courtyard/hearth complex (reported on in 2012) are located. Our two supervisors there revealed two interesting rooms in the phase below the courtyard/hearth complex. These rooms, dated to the later fourth millennium, are apsidal in form; they measure approximately 2.5 meters from the top of the apsidal curve to the opposite end of the room, and roughly 1.5 meters across (fig. 2). One has a mudbrick platform in the apsidal curve that may have served as furniture. Each had an exterior hearth and storage area associated with the room. So far, these types of rooms appear to be unique to Late Chalcolithic settlements on the plateau. The poor quality of the mudbrick construction and thin walls suggest that these may represent a fairly ephemeral occupation between periods when this area of the site was more robustly occupied by the permanent Çadır residents.

Farther up the southern side of the mound, Stephanie Selover (fig. 3) supervised two trenches, USS 9 and USS 10, which have offered us an excellent view of the Early Bronze I (ca. 3000–2900 BC) occupation at Çadır Höyük. In addition to a significant "city" wall, reused in later Hittite times, Stephanie has carefully revealed what seems to be a massive industrial complex located just outside this Early Bronze Age wall. Small storage rooms, very large



Figure 2. Two Rooms in the Burnt House

ÇADIR HÖYÜK

ovens or furnaces, and well-plastered floors speak to an active economy functioning at Çadır Höyük in the Early Bronze I period. Unfortunately for us, residents left little in the way of material culture to indicate just what activities they may have undertaken in the area. However, due to Stephanie's efforts we now have a much better understanding of the nature of the Early Bronze I occupation at Çadır, which was only minimally represented in the lower southern trenches. It is clear that the upper reaches of the mound were heavily occupied in the early third millennium BC, and we hope to discover more about the Early Bronze Age settlement in future seasons.



Figure 3. Stephanie Selover at one of the trenches of the southern mound

On the eastern side of the mound we have the majority of our second-millennium occupation. In previous seasons, including 2012, we exposed a large Hittite (1600–1400 BC) casemate defensive wall that is over 2 meters in width. In 2013 University of Chicago alumnus Jon Clindaniel supervised a trench intended to expose more of the casemate wall. Initially the vast jumble of stones and decayed mudbrick made no sense to us until the latter part of the season when it finally took shape as a Hittite tower. The tower was in poor shape due to erosion and later robbing of the stones, but it offers enough of a footprint for us to determine that the architectural pattern matches that found at other medium-size Hittite sites featuring defensive walls with in-built tower structures. Due to Jon's excellent work it is clear that Çadır was home to a substantial Hittite occupation. The goal now is to expose as much of the occupation inside the city wall as possible in the coming seasons.

We had another architectural surprise in our Iron Age trench on the upper southern slope (USS 4) under the supervision of Dr. Jennifer Ross (Hood College), the project's associate director. The USS 4 trench is in a very important area in that it will give us an unbroken chronological and cultural sequence documenting the Çadır resident's experience during the final centuries of the Hittite empire, including its collapse (late second millennium BC) into the Early Iron Age (late second/early first millennium BC) when the Hittite imperial structure had collapsed. We hope to document how residents at settlements such as Çadır Höyük weathered the rocky decades prior to the Hittite collapse and the post-imperial centuries when economic and political restructuring took place. The USS 4 area, as well as other trenches on the mound, will provide these data. Dr. Ross has already documented the Early Iron Age occupation, which consists of abrupt changes in the material culture including the building of circular rather than rectangular houses, handmade rather than wheel-made pottery (the latter more common in the Hittite and Middle Iron Age periods), and changes in the composition of our metal tools (perhaps reflecting changes in trade routes). At the end of the 2013 season the USS 4 trench was beginning to offer more standard (in Hittite times) rectilinear architecture, which we believe heralds the Late Bronze Age and Hittite occupation within the trench.

The Byzantine occupation of the site was quite extensive and has been revealed on both the mound summit and out on the northern terrace. On the latter we have uncovered a do-



Figure 4. Tony Lauricella opening a new trench on the mound summit

mestic complex that in its latest iteration, in the ninth to eleventh centuries, may have served as a farmhouse for several families or one extended family. In its earlier phase, perhaps the fifth or sixth century CE, it may have been more of a manor house in the style of a Roman villa, belonging to the Byzantine elite who was the steward of the region and for whom the farmers worked the lands. At some point in the five or so centuries following its earliest form it fell into some disrepair and was converted into housing for the farmers who may once have served the resident owner of the lands. Our work in the terrace trenches in the 2013 season was mainly devoted to documenting the building sequence from the latest eleventh-century

occupation to the earliest form. Radiometric dating undertaken in the off-season attests that the earliest use of the terrace was certainly as early as the fifth century and may extend back to the fourth century CE. Excavations in the 2014 season are intended to expand our exposure in this area.

We asked Tony Lauricella (fig. 4) to open a new trench on the mound summit designed to better expose the only extant Byzantine tower so that we might better understand the construction of both of the tower and the defensive wall. He did an excellent job on this task, and we were able to determine that a rather unique construction technique was used. First, thick branches or small trees were stripped and laid horizontally at irregular inter-



Figure 5. A view of the defensive wall and the circular tower

ÇADIR HÖYÜK

vals, between 10 and 25 centimeters apart; these were then mortared into place in approximately 25 centimeters of a mortar base. Upon this construction head-sized stones were mortared into place to create a defensive wall and a circular tower (fig. 5). The wooden supports were likely used to create a stable base on the edge of the mound, and may have aided a Byzantine population who suddenly felt the need to build a substantial wall in an age of increasingly common attacks from a Seljuk threat to the east. Tony also discovered that the Byzantine defensive wall appears to rest almost directly on a Late Iron Age set of architecture which requires further investigation in the 2014 season.



Figure 6. Sarah Adcock at Çadır Höyük

Our lab/work rooms are very busy during the day with specialists working on our lithics (Jeff Geyer, Hood College), archaeobotanical remains (Madelynn von Baeyer), and of course, Sarah Adcock, who is pursuing her PhD work on the Late Bronze/Iron Age archaeozoological samples (fig. 6). Sarah delivered a paper at the November 2013 American Schools of Oriental Research conference on her findings thus far, which mirrors the types of economic changes in the Early Iron Age period noted above (that is, abrupt shifts in the post-Hittite exploitation practices). Sarah's work is a critical part of understanding this pivotal period in Anatolian history as it was experienced at Çadır Höyük.

There is no doubt that our 2013 season was an excellent one, in large part due to our outstanding team. We made tremendous strides toward better documenting and understanding the many periods represented at the site. The successes of the 2013 season created great anticipation for the arrival of the 2014 season.

June 2014

We arrived in Turkey on June 11 and were able to begin work at the site by June 14. As of the writing of this report we have been in the field for one week. We are fortunate to have a wonderful government representative, Hüseyin Toprak, working with us this year. In addition to the Chicago students mentioned above, we have been extremely fortunate to have Susan Penacho with us before she departs for her season at Kerkenes (ca. 9 kilometers to the northwest of Çadır Höyük). Susan has been assisting in our continued mapping of the mound, trenches, and various architectural features and is helping us to developing some innovative photogrammetry of some of our more substantial extant architecture. We are delighted that Kerkenes will be starting their season very soon but we are indeed sorry to lose Susan!

Most of the trenches noted above have been reopened this season. The first few days were spent cleaning, and excavations commenced approximately four days ago. Most of the trenches are already offering promising results. The coming five weeks of excavation will most certainly provide us with a host of information to report on in 2015.



Scott Branting

Ten years have passed since I returned to the Oriental Institute as the new director of CAMEL. At the time, CAMEL consisted of two old computers in a small basement room and a folder of CDs containing around 300 satellite images and some field notes. It had served as the incubator for the work of four graduate students working under Tony Wilkinson, each of whom has flourished in the years since graduating. However, CAMEL has always had the potential to reach many, many more people with its unique blending of satellite imagery and other forms of geospatial data together with research into the ancient and modern Near East. Ten years ago I set out to expand upon Tony's vision and to grow CAMEL into the center that it is today.

The cornerstone of my vision for CAMEL is to make the geospatial collections of the Oriental Institute as freely and widely available as is possible within the bounds of copyright law. This includes the legacy of generations of scholars who have come before us, who painstakingly collected and developed important and unique datasets, maps, and aerial photographs. Along the corridors of the Oriental Institute have walked pioneers in aerial photography



Figure 1. A portion of a 1910 map of the Middle East, Map V of Henrici Kiepert's Formae Orbis Antiqui, showing the area of modern Syria, northern Iraq, and southern Turkey that is sadly in the news so frequently today. This map is one of thousands in the CAMEL collections that have been scanned and georectified by our staff and volunteers to match their appropriate coordinates on the earth's surface

CAMEL



Figure 2. A portion of a 1967 US Air Force Operational Navigation Chart from the CAMEL map collections entitled Gulf of Oman. It shows the Strait of Hormuz and bears an interesting warning concerning flights over Iran

and the implementation of satellite images to fieldwork. They worked alongside researchers, architects, and surveyors who spent their careers on the ground in countries across the Middle East, bringing to light its past through world-class field research. To keep their work inaccessible to all but the few who can find it among the paper records of the Oriental Institute would be a great travesty. CAMEL has grown to play a critical role in making their work accessible and available in digital formats to current and future generations of scholars, while at the same time bringing into the Oriental Institute the wealth of new data and geospatial technologies that have exploded over the past two decades. CAMEL serves as a repository for these new data and technologies, as well as a source of expertise and vision in these areas for researchers in the building and our colleagues around the world.

With this vision in mind, and a growing range of expertise imparted through the training of new generations of students, CAMEL has grown its collections of digital data from those 300 images to just under 20,000 items. This includes scanning and georectifying the entire collection of maps from the Research Archives' collections, expanding enormously the scanned collection of declassified US spy satellite images and georectifying them, digitizing collections of current and retiring scholars' geospatial data and notes from within and outside the Oriental Institute, and entering into cooperative agreements with colleagues and government agencies to acquire collections of data and imagery. The sixty-six times growth in the collections, almost all of which we can make freely available to people around

the world who ask and need this data for their research or studies, has massively expanded the outreach of CAMEL. Instead of benefiting a handful of people affiliated with the Oriental Institute, we are annually fielding hundreds of requests from people around the world. At the same time, we are enabling and facilitating research across the Middle East by doing tasks that would be impossible or excessively time consuming for the individuals or teams to have done on their own. CAMEL has become a key center for geospatial data access among scholars of the Near and Middle East.

Over this ten-year period, CAMEL has also taken a lead role in expanding the technological capabilities of the Oriental Institute. The laboratory has grown from two old computers in the small basement room to twelve computers across three rooms, nine of which are available for use by everyone using or visiting CAMEL. Through grants received by CAMEL, we've been able to expand the capabilities of the Oriental Institute by purchasing a large-format scanner and new large-format plotter. The plotter has gone on to see extensive use, not only for field projects, but also by the Museum in printing out most of their exhibit displays and large promotional material. It has led to significant cost savings over outsourcing these printing needs. The scanner has seen enormous use, not only in scanning the maps from the Research Archives, but also in scanning the large-size plans and illustrations from research projects past and present. As the Oriental Institute embarks on the lengthy task of digitizing the archives, this scanner will see many more years of work. In addition, CAMEL, with its need for large amounts of data storage for its digital collections, also took the lead role in bringing terabytes of secure offsite storage space to the Oriental Institute. Prior to this, backups of individual computers were left to each user, and data was lost due to hardware malfunctions. With the Oriental Institute Archive (OIA) space on University servers, we have enjoyed years of secure backups to meet individual users' and projects' needs as well as the expanding data storage needs brought on by digitization efforts across the Oriental Institute.

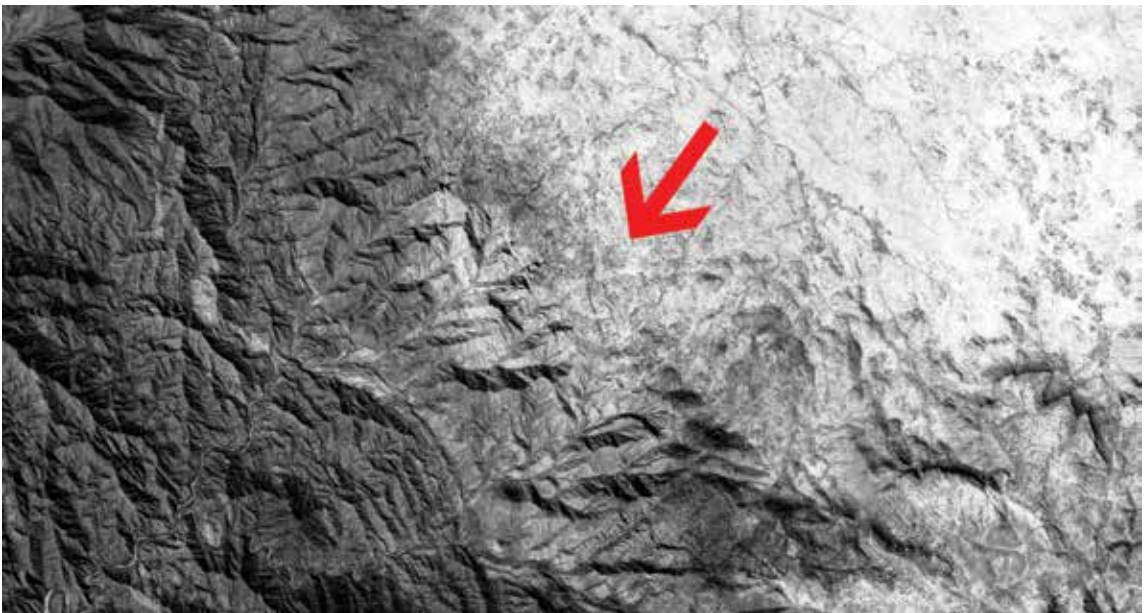


Figure 3. A portion of one of the thousands of declassified US spy satellite images in the CAMEL collections taken over Al Fara in Saudi Arabia in December 1967. The city is marked by the arrow

CAMEL

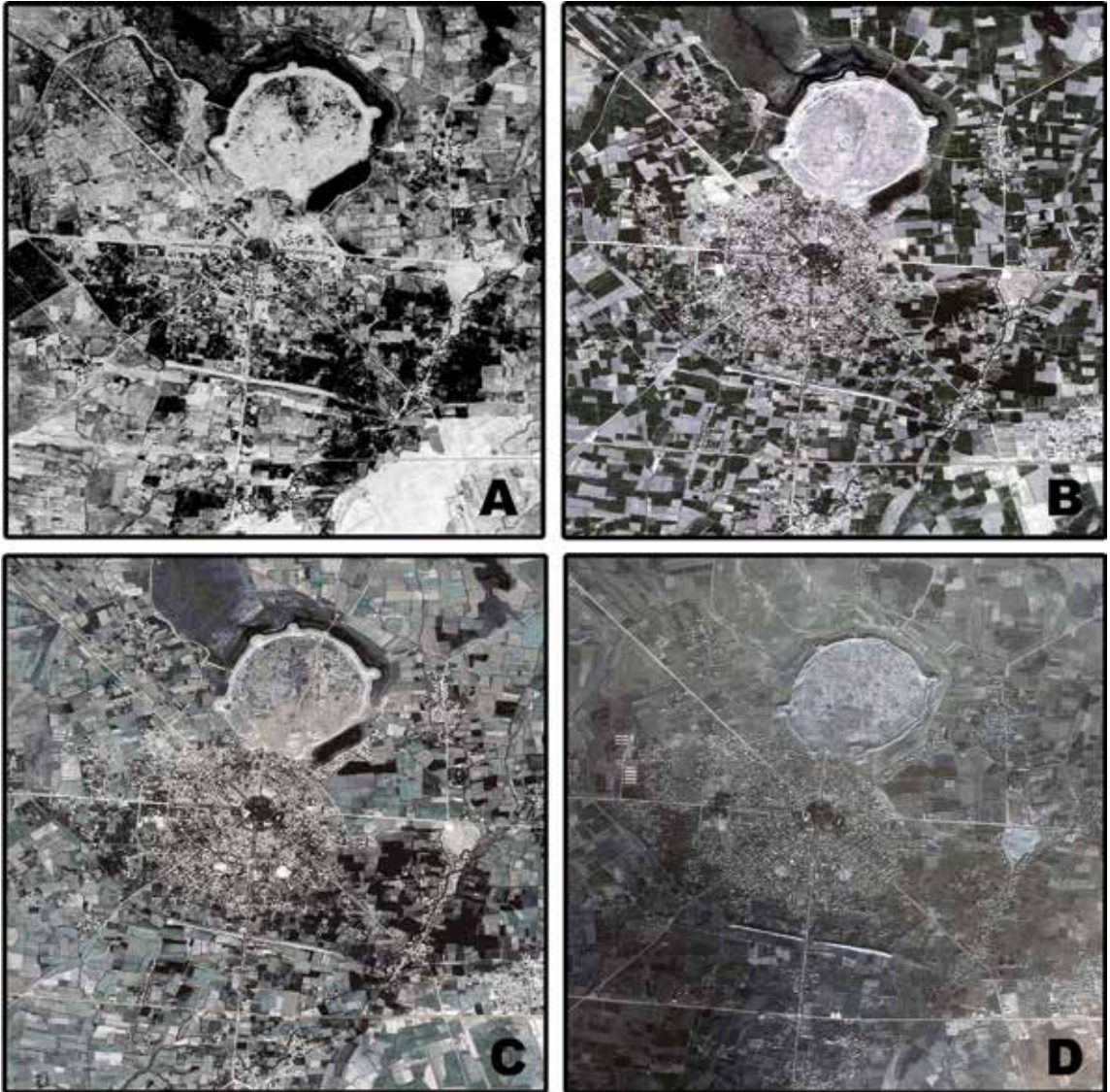


Figure 4. A crucial time series of images taken over Balkh (ancient Bactra) in northern Afghanistan between 1968 and 2012 that formed part of the inaugural year of the cultural heritage automated monitoring project. The city was an important center of both Buddhism and Zoroastrianism and became a capital of Greco-Bactria after its conquest by Alexander the Great. During the medieval period, Balkh was destroyed by Gengis Khan and was expanded under the Timurids. The round citadel (in the upper part of the imagery) and segments of the city wall (to the south of the town) are visible in each image. Image A is a portion of a declassified spy satellite (CORONA KH-4a) taken July 1968, B is a Digital Globe Quickbird satellite image taken April 2006, C is a Digital Globe WorldView 2 satellite image taken June 2010, and D is a WorldView 2 satellite image taken January 2012

Finally, CAMEL has significantly expanded its outreach and training programs during the past ten years. We've hosted dozens of scholars from around the world: from faculty members on leave from other universities, to postdoctoral scholars and predoctoral students. They were drawn to CAMEL by the opportunity to work with its collections, beyond the usual requests for our data that we freely deliver to people remotely, as well as to receive specialized training in the application of geospatial technologies to their research. Some

stayed for a day or two, others for months or even years. We were delighted to meet each of them and to enable their unique research. At the same time, CAMEL partnered on several occasions with the Public Education and Outreach Department of the Oriental Institute to expand our knowledge and expertise into outreach with the Chicago Public Schools. We successfully received grants for developing and implementing outreach programs and curriculums combining STEM subjects and technologies with archaeology as a powerful tool to reach elementary and junior high school students. We are very grateful for the opportunities that this collaboration with the excellent staff and volunteers in the Public Education and Outreach Department afforded. It has both broadened CAMEL's impact and outreach while also exciting new generations of future university students.

This past year has been a continuation of this ten-year trajectory of development in CAMEL. We expanded the CAMEL collections by over 400 images, including the purchase of 252 declassified US spy satellite images from the 1960s and 1970s that together cover the entirety of Afghanistan. These, along with an additional 1,420 of these declassified images, comprised the corpus of 1,672 spy satellite images that were painstakingly georectified by our loyal students and volunteers. This work is a continuation of our efforts to make these important images freely available to researchers and students in an already georectified form, one where the images are stretched to match the coordinates on the earth over which they were originally taken. Researchers can then forgo days of preparatory work by directly importing the images into GIS software and immediately comparing them against more modern satellite images or data that they have just collected in the field.

By acquiring declassified imagery for the entirety of Afghanistan this year, we were also able to begin a project by which CAMEL will monitor the state of cultural heritage in the country. Complementing this work, CAMEL took advantage of a sale on modern Digital Globe satellite data to purchase 167 images, many of them from Afghanistan. We were then able to make use of a time series of satellite images, starting with the 1960s' spy satellites and continuing through successive Digital Globe images from the last decade, in order to start to catalog damage to sites across Afghanistan from warfare or looting. CAMEL even began the process of developing a new protocol for automating the monitoring of this destruction of archaeological sites across the Near East, a significant advance that will yield important benefits to monitoring cultural heritage not just in the region but also around the world.

A final accomplishment in this busy year was my writing of the next IMLS grant for the Integrated Database Project, which will, among other tasks, see the importation of all of CAMEL's data into this online database that links the diverse collections of the Oriental Institute. Making CAMEL's collections available online for immediate download by individuals around the world has always been an ultimate goal of my vision of CAMEL. Time was also spent this year undertaking all the preparatory work necessary for this important transition. Detailed schemas of the existing database, which we started creating just over nine years ago and have been using ever since, were developed. Screenshots of each portion of the existing database were collected. We also spent time discussing the specifics of the transition with the IDB project manager, Angela Spinazze, and making decisions on the tables and fields to bring across and the look and feel of the new interface. All this hard work should set up a relatively easy transition for the new CAMEL director to be able bring to fruition, over the next two years, this vision for the new CAMEL portion of the online Integrated Database.

Acknowledgments

As I have said every year for the past ten years, CAMEL would never have been able to achieve all that it has without the dedicated hard work of our team of staff, students, and volunteers. The accomplishments of CAMEL are a tribute to their dedication and efforts. This year, Elise MacArthur and Susan Penacho continued to serve in their capacities as associate directors of CAMEL. Adam Zeidan served as the student supervisor, while Karl Kuehner served as our volunteer supervisor. Student assistants this year were: Neil Backus, Jessica Jarvinen, Caroline Quinn, and Edward Fernandez. Anthony Lauricella and Josh Cannon worked with us as assistants on the Afghanistan cultural heritage monitoring project. Our dedicated CAMEL volunteers this year were: Larry Lissak, Emilie Sarrazin, Sasha Rohret, and Nicole Herzog. Thank you all. It has been a pleasure to work alongside you, and all of your predecessors, during these ten years of such remarkable achievement.

CHICAGO DEMOTIC DICTIONARY (CDD)

François Gaudard and Janet H. Johnson

This year the staff of the Chicago Demotic Dictionary consisted of Janet Johnson, François Gaudard, Jonathan Winnerman, and Kate Lockhart; Brian Muhs and Robert Ritner were consulted regularly. Oriental Institute docent Larry Lissak continued helping us by scanning photographs of various Demotic texts as well as documents from Wilhelm Spiegelberg's papers and notebooks which are in our collection. The original plan of this project, to prepare a supplement to the first published glossary of the stage of the Egyptian language and script known as Demotic (Erichsen's *Demotisches Glossar*, published in 1954), is now almost complete after approximately forty years.

During the past year, Jan and François focused on taking care of the remaining details of the Dictionary. Among other things, they both proofread the letter S (540 pages) as well as the Days (47 pages), Months (61 pages), and Numbers (316 pages) files; the PDF files of these entries were posted online on April 23 and June 16. It is now possible to download for free all the files of the completed Chicago Demotic Dictionary from the Oriental Institute website with two exceptions: "Text Information" and "Abbreviation Authors" with Bibliographical Information, which provide bibliography, text abbreviations, and basic information about every text cited in the Dictionary; they are still being checked by Jonathan and Kate, and we hope to have them ready to post by the end of 2014.

The next step of the project will be the conversion of the Word files and online PDFs into a searchable online database (eCDD). This database will not only reproduce current Dictionary pages, but it will also allow independent queries able to take advantage of all the categories of information included in the CDD (e.g., earliest or latest attestation of a word or group of words, provenience of texts including a word or phrase, provenience of texts displaying an unusual writing of a word or phrase, words falling into specific categories such as magical name or astronomical or astrological terms, citations from specific texts by column and line number or by lexical entry). The searches will be possible in Demotic transliteration or in translation into English or ancient Greek, Hebrew, or Aramaic. This search capacity, especially, will enhance the accessibility and utility of the CDD for scholars and others interested in the history and cultures of the ancient world. To achieve this, the CDD staff is working with Sandy Schloen and Miller Prosser, who run OCHRE Data Service (see the *Research Support* report), in order to design the database format and oversee the transfer of both text and image data from the current PDF/Word documents to the database. Students will be hired to carry out the actual data transfer. A preliminary step is the conversion of the existing files and fonts to the Unicode standard, so that they can be easily maintained and integrated into the OCHRE database. This task has proven to be more complicated than first anticipated, however, because of the number of specialized fonts used by the CDD. Not only has the Dictionary used customized versions of standard fonts, but it has also employed separate Demotic, Coptic, Hieroglyphic, Greek, Semitic, and transliteration fonts. In order to expedite the conversion process, Jonathan created Excel spreadsheets for each font that list each character's old input code and its corresponding input according to the Unicode standard. Once this was completed, the OCHRE staff created a program that will convert the

existing Word documents automatically to the new Unicode font. By the beginning of June, the program has been extensively tested, and conversion of the first file, namely, the Y letter file, is already in progress.

We hope that, once completed, this database, designed to be available for free on the web, will encourage even more scholars, students, and other interested parties to investigate for themselves the vast range of cultural and linguistic material that is available through the study of Demotic texts. As those of you who have read the *Oriental Institute Annual Report* over the years know, this material ranges from religious texts through scientific texts and literary texts to documentary material including personal letters, tax receipts, legal and economic documents, graffiti, and inscriptions on statuary and stelae, including, for example, the Rosetta Stone (http://www.britishmuseum.org/explore/highlights/highlight_objects/aes/t/the_rosetta_stone.aspx).

We would like to thank all of our colleagues worldwide who regularly have sent us their useful comments and suggestions or have provided us with various references in order to improve the Dictionary. We are grateful to all of them and in particular to Eugene Cruz-Uribe, Mark Depauw, Elisabeth Veena, Frank Jørgensen, Friedhelm Hoffmann, Richard Jasnow, Joachim Friedrich Quack, and Kim Ryholt. We would also like to acknowledge the support and help of several Oriental Institute staff who deserve our thanks, especially Thomas Urban and Leslie Schramer, respectively managing editor and editor of the Oriental Institute Publications Office, as well as Paul Ruffin and John Sanders, our current and recently retired IT support specialists.

At the end of June, François took the opportunity of the completion of the original Dictionary project and our switch from Dictionary creation to conversion to online searchable database to step down from his position as the associate editor of the CDD in order to focus on his own research. He began working on the CDD as a graduate student in 1996. Shortly after he received his PhD in 2005, he was hired as a full-time research associate after an international search. He was formally named associate editor in 2013 after having served effectively in that position for many years. He has literally “carried” the Dictionary for many years, writing and checking entries, researching problematic words, preparing scans and hand copies, and supervising the work of the student employees. François, his wealth of knowledge, his friendliness, his excellence as a member of a team — all of these will be sorely missed. After working with him and relying on him for eighteen years, Jan will miss him deeply, but we all wish him the best as he travels his new road. He will remain affiliated with the Oriental Institute as a co-founder and co-editor of the Mummy Label Database (MLD) (see separate report) and as a research associate.

CHICAGO HITTITE DICTIONARY AND ELECTRONIC HITTITE DICTIONARY (CHD AND eCHD)

Theo van den Hout

After the publication of our third fascicle of the Š volume last summer things have gotten back to normal again at the CHD. Except for the older Hittite conjunction *šu* “and,” which is being written by junior editor Petra Goedegebuure, everything between *šua-* and *šulu-*, *šunt-*, and the end has been edited by Theo van den Hout and some of it by Harry Hoffner as well. This means that for next year the relatively few remaining entries should be written and the missing parts edited. A publication date for the final part of Š by no later than 2016 is thus realistic.

Since almost all entries starting in T have already been written in first draft and we do not want to get ahead (U/W, Z) of ourselves too much, we have started a new project: the updating of the earlier letters in our online dictionary, the eCHD. When in 1979 the CHD started publishing, founders Hans Güterbock and Harry Hoffner decided to start with the letter L and to move forward from there to the end of the alphabet before turning their attention to A through K. They based their decision on the fact that the Munich-based *Hethitisches Wörterbuch* had just begun (1975–) churning out the first installments of the letter A. Although we always had been and still are committed to create a full dictionary from A to Z, the field was not waiting at that moment for two duplicating projects, however different they were in their approach. This proved to be a very wise decision: as opposed to A, the L words were relatively few with not very many difficult words and as such it was an ideal letter to start such a massive undertaking. Projects like the CHD evolve over decades and we learn as we go along. By now CHD volume L is well over thirty years old and it shows: we have gradually changed our format and style and we tend to be more exhaustive. But more importantly, over those thirty years thousands of new texts have been found and published: texts with new words, texts with known words but with new spellings, new forms, and new meanings. Also, scholars have produced three decades more of text editions, historical, literary, and linguistic studies. In the pre-digital era projects would wait until the completion of their project before they could start working on supplements, addenda, and corrigenda. But since we now have the online CHD we can do this earlier. In this way, the eCHD and the printed edition will start deviating from each other and users can find the latest on an entry by consulting the online version.

The idea is that, as usual, junior editors Richard Beal and Oğuz Soysal prepare first versions of these revisions, judging what needs to be added, changed, and corrected. In a second phase senior editors van den Hout and Hoffner will establish a final draft with the help and input of our outside consultants. Instead of the final phase of reading paper proofs we will now do everything online and regularly announce when a new version has been posted. At first we will probably proceed letter by letter but, as this new project moves on in time and finally catches up with the letter we are working on, we can keep the entire Dictionary updated on a regular basis wherever considered necessary.

Oğuz Soysal spent much of his CHD time on the study of new volumes of cuneiform text editions, the Keilschrifttexte aus Boghazköi volumes 51, 55, 56, and 58, exploring for words

and attestations that we can still add to the entries we are currently working on. Also, as part of his duties in the CHD Project, he prepared transliterations of 170 hitherto unpublished cuneiform fragments in the range between Bo 9536 and Bo 9736.

Richard Beal finished writing the *-šmaš* (“(for) you all,” “for them”) article for the final Š volume, transliterated KBo 46, and edited as well as reference-checked *šu*-words.

This past year we had several students assisting in filing new texts. After KBo 47, volumes KBo 42, 43, and 46 are now being processed under the continued expert guidance of graduate student Oya Topçuoğlu. Oya also continued to collaborate with the Oriental Institute Research Archives regularly to keep our Hittite Bibliography project up to date based on new acquisitions. Josh Cannon, another graduate student, continued his work for us in the past year. Josh became a proud father of twins this spring and took his comprehensive exams, but we still hope to continue to benefit from his invaluable services to the Dictionary. Joining Josh were two undergraduates, Sabrina Hsieh and Phoebe Allardice. Both Sabrina and Phoebe majored in Hittite and Anatolian languages: Sabrina wrote her BA thesis on Hittite queens and Phoebe on food and nutrition, especially bread, in Hittite society. Both graduated with honors this past spring and we are very grateful for all their work on the CHD!

Working on the eCHD, grad student Seunghee Yie continued her work on linking bibliographic references in the Dictionary to the online bibliography, bringing their number up to 1,941!

We also greatly benefited from the work of two volunteers, Shirlee Hoffman and Kristen Fanning. Shirlee had already started the previous year but Kristen was new. Interested in doing work for the Oriental Institute using her linguistic skills, Kristen came to us with a BA from DePauw University with a major in Latin and a minor in history in November. At the CHD she worked very hard on our bibliographic database, advancing it significantly by cleaning out our ever-growing bibliography. She went through close to 5,000 entries, correcting typos, inserting diacritics, and completing missing bibliographic information. Fortunately for her (but less so for us!), Kristen found a job in the spring and no longer had time for CHD work: we are very grateful, however, for everything she did and we wish her all the best in her new job and future endeavors!

Shirlee, meanwhile, finished cleaning up our offprint collection in the spring and went on to write what will be an English insert in an originally German kit for people interested in experimenting and playing with cuneiform. The package contains a small brochure in German with an introduction to cuneiform writing, a sign list, a piece of synthetic “clay,” and a stylus. With the new English insert the kit should now be much more accessible to a general English-speaking public!

From Doshisha University in Kyoto, Japan, came this year Professor Ada Taggar-Cohen as Visiting Professor. She is working on an edition of a text known as an initiation ritual for a Hittite prince with a commentary and interpretation. She has used our files extensively and discussed the text with van den Hout.

On January 19 Frances Güterbock passed away. She was the widow of Hans Güterbock, co-founder of our Dictionary. After the death of her husband in 2000 Frances kept a vivid interest in the CHD and the Güterbock family remain ardent supporters. At their request it was suggested that instead of flowers people send contributions to, among other good causes, the CHD. We are truly grateful to the family and Frances will always remain in our memory!

EASTERN BADIA ARCHAEOLOGICAL PROJECT: WISAD POOLS, JORDAN

Yorke M. Rowan

Pioneering research programs of survey and excavation in eastern Jordan by Betts and Garrard during the 1970s and 1980s led to the recognition that human groups occupied the steppe and arid environments during the Late Neolithic, even if limited to small, thinly spread groups. These fundamental research programs, however, were small relative to the large area of the steppe and arid zones. The Eastern Badia Archaeological Project is a joint project initiated in 2008 between Whitman College and the Oriental Institute that examines two regions in the Black Desert of eastern Jordan. These two regions are located in the southern extent of the eastern panhandle, close to the border with Saudi Arabia. Both regions are now arid desert utilized by a few Bedouin families during the wetter winter months, accessible in part due to deep wells created by the government.

In the first region, the Wadi al-Qattafi, basalt-capped mesas rise about 40–60 meters above the surrounding wadi floor. One site in particular, Maitland's Mesa, is the focus of our research in that region and was reported in the *Oriental Institute 2012-2013 Annual Report*. The other region, Wisad Pools, was most recently investigated in 2013 (fig. 1). Located approximately 107 kilometers to the east of Azraq and 17 kilometers north of the Saudi Arabian border, the area around the pools includes hundreds of structures that have never been documented archaeologically. Like the mesas along Wadi al-Qattafi, Late Miocene basalts dominate the landscape, covering limestone formations and interspersed with short, shal-



Figure 1. Map of eastern Jordan

EASTERN BADIA ARCHAEOLOGICAL PROJECT

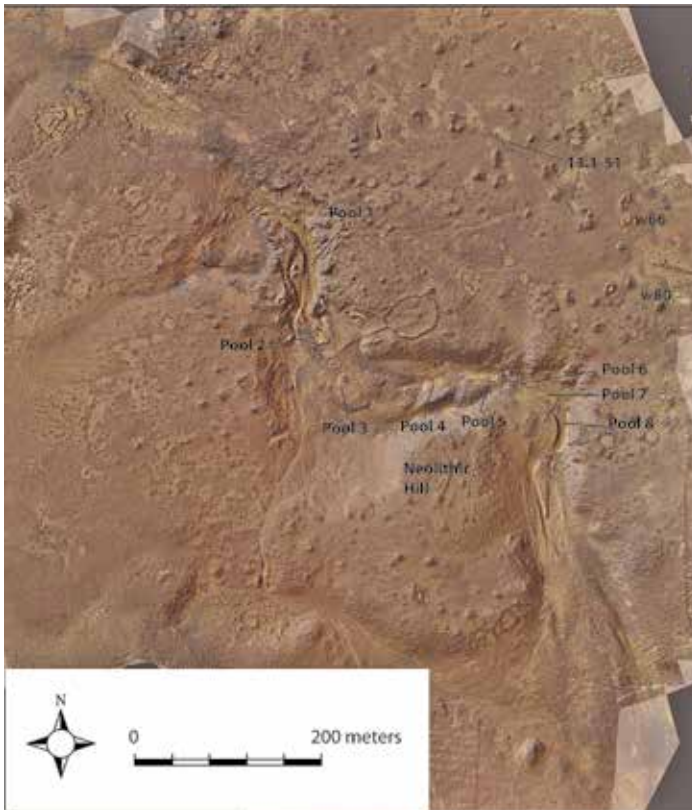


Figure 2. Orthomosaic of the Wisad Pools central area (map by A. C. Hill and W. Abu-Azizeh)

low wadis and *qe'an* (mudflats, or playas). One wadi forms a series of natural basins that collect runoff rain water into a series of approximately nine pools extending from the edge of the basalt to the nearby *qa'* after a vertical drop of only about 12–14 meters.

For several kilometers surrounding the pools, sites dating from the Epipalaeolithic to the early first millennium CE were noted (fig. 2); corrals and other larger structures are more apparent, particularly near the pools. In an area of approximately one square kilometer around the pools, there are hundreds of structures constructed of the rectangular and irregular local basalt, with density decreasing farther away from the pools. The outline or plan of these structures is often difficult or impossible to identify, and thus their dating and

function are equally difficult to surmise without excavation. Based on construction techniques and remains found in looters' backdirt, the largest of these structures are tower tombs, similar to those found atop the basalt-capped mesas along Wadi al-Qattafi. In addition to these massive towers, smaller lower mounds are common. Large, possibly multi-chambered complexes are also found, and some are in close proximity to the long chains or "tails" of smaller (1 × 2 × 1 m) chambers, also similar to that found along the southern edge of Maitland's Mesa (see Rowan et al. 2011). Interspersed among these collapsed structures other features include pathways or low walls that continue for dozens of meters, platforms (ca. 2–4 m in diameter), and small to large enclosures that may reflect dwellings or storage facilities. Our initial assumption was that many of these mounds, chambers, and towers were mortuary in nature, with various features and installations that may or may not be associated with the more substantial structures.

Dating these structures is difficult. Surface artifacts are generally rare, primarily limited to scatters of lithic debris and tools that date to the Epipalaeolithic, Pre-pottery Neolithic, or Late Neolithic. In a few places, Late Neolithic and Epipalaeolithic flint tools and debitage are more dense, such as what we have termed "Late Neolithic Hill," a promontory near a concentration of the pecked rock art (discussed below) where Epipalaeolithic cores, tools, and debitage are dense and overlapping with clusters of Late Neolithic chipped stone artifacts. Most of the expanse between structures, however, includes only general debitage and

occasional tabular scraper fragments that suggest a late prehistoric date that could be Late Neolithic, Chalcolithic, or Early Bronze Age.

In order to understand the function and dating of these collapsed structures, we excavated our first structure (W-66) at Wisad Pools during the 2011 season. Selected because it was apparently undisturbed and unlooted, with the collapsed large basalt blocks suggestive of a roof, W-66 included basalt slabs a meter in length and half a meter in width, such that several people were necessary to move one. Adjacent to the eastern side of the structure was a lower, curvilinear platform paved with relatively small (ca. 30–35 cm) basalt cobbles. The top of the stone rubble was almost two meters above the surrounding ground surface. Several phases of occupation were detected, with some periods of abandonment likely. The earliest phase represented by a sub-circular single cell preserved patches of gypsum plaster in the floor. This earliest floor, perhaps 35 centimeters below the original ground surface, included an elliptical plaster basin set into the floor on the western side. Charcoal samples taken from this plaster were dated by accelerator mass spectrometry (AMS) to 7690 ± 40 BP (6600–6460 cal BC), supporting the Late Neolithic date suggested by the material culture. In the center, a large basalt pillar (ca. 1 m in height, 44 × 30 cm thick) functioned as a roof support (fig. 3).

Constructed of basalt slabs stacked into relatively straight sections, creating angled interior wall lines; additional stones above these were apparently corbelled toward the center of the room. We believe that these then relied on the central pillar. Many of the corbelled slabs were large, over a meter in length, and some must have weighed more than 200–300 kilograms. Based on the height of the central pillar and the low corbelling, we must assume



Figure 3. Central pillar, alcove, and plastered basin in structure W-66 (photo by G. Rollefson)

EASTERN BADIA ARCHAEOLOGICAL PROJECT

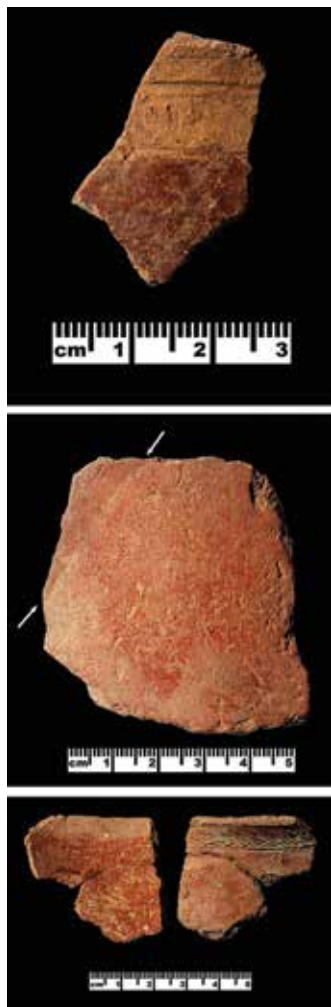


Figure 4. Vessel fragments from W-66 and W-80 (photos by G. Rollefson)

this was a low roofed structure in which the occupants had to crouch or crawl. On the northern side of the structure, an alcove measuring ca. 1.50 × 0.85 meters was plastered repeatedly, at least four times, creating a surface ca. 25–40 centimeters above the surface level of the main room.

Artifacts found in this room included over forty arrowheads, primarily transverse and Haparsa forms (Rollefson et al. 2011). Grinding slabs and handstones were also common and include a cache of eleven pestles ranging from 10 to 25 centimeters in length. Finally, a red-painted, handmade sherd with herringbone incisions represents a Yarmoukian vessel fragment (fig. 4), complementing the radiocarbon date and arrowheads. This evidence all points to a Late Neolithic date for this structure, which served a domestic rather than funerary function.

In the effort to determine whether this was an anomaly, another possible tomb was selected for excavation in 2013. Located approximately 100 meters south-southeast of W-66 was another large collapsed structure with many large basalt slabs. Unlike W-80, this structure included a later, rather hastily constructed tomb atop an earlier structure. Slabs were placed atop one another in columns, rather than overlapping, and openings between stones were large and frequent. No interior chamber construction or roof was apparent, and it seems likely the body was placed inside of the chamber. Unfortunately, the bones were very poorly preserved, and possibly disturbed by later burrowing animals. Diagnostic artifacts were lacking, with only two cowrie shell beads and a very small tubular carnelian bead found in the general fill. Construction of the tomb was placed on top of the collapsed structure for added elevation. Below this poorly constructed tomb of unknown date, a corbelled dwelling was excavated. Only the southern section was excavated during 2013 (the northern half will be our goal during 2014).

After removal of many basalt slabs, an area of rough leveling was created with basalt slabs. This appeared to be a rough division of the collapsed building, possibly reuse by later visitors. Below this, at least two major areas were discerned. The main room (ca. 4.0 m east–west; 2.90 m from south to the section) in W-80 included interior walls made of upright vertical slabs; along the interior of those slabs a bench or narrow (ca. 40 cm) platform was constructed of flat basalt slabs. A section through this bench-like construction indicated that an earlier similar feature was part of the original interior. To the west of this main room, an alcove area (ca. 1.5 m in diameter) also had multiple levels of basalt slab pavements, at least three, with traces of gypsum plaster (figs. 5–6).

Farther to the west, on the exterior of the building, an oval space (2.2 × 2.7 m) was delimited by a low line of upright stones forming a semicircular enclosure. In the center of this “porch” area, a large basalt slab with a central pecked depression (ca. 20 cm in diameter, 5 cm deep) served either as a working surface and shallow mortar, or possibly was reused as a pole support for a tent. Whether or not there was a doorway from this “porch” area into the structure was unclear by the end of the 2013 season.



Figure 5. View of W-80 after initial clearance of rubble from southern face (photo by A. C. Hill)



Figure 6. View of W-80 after excavation (photo by Y. M. Rowan)

EASTERN BADIA ARCHAEOLOGICAL PROJECT



Figure 7. Small stone installation constructed against face of external arc (photo by Y. M. Rowan)

A “fence” of upright basalt slabs with a double line of basalt pavers divided this “porch” from a larger enclosed area demarcated by a low line of upright slabs. This area, possibly paved, joins the north side of the structure. Approximately midway along this arc (fig. 7), a small stone installation is built on the exterior, with a small standing stone (ca. 32 cm in height) at the center of the open arc created with a few other stones.

A rich array of artifacts attests to the intense use of the building, possibly through a long period of time. These artifacts included evidence for stone tool manufacture (nearly 400 flint cores were recovered), grinding slabs, pestles, and beads. More than 300 arrowheads (primarily transverse types) attest to an emphasis on hunting (fig. 8), which is supported by the predominance of wild species such as gazelle and onager (Rollefson et al. in press, table 1). Other flint tools included borers, drills, notches, denticulates, tabular scrapers, and knives. The cortical tools (tabular scrapers and knives; fig. 9) may have derived from sources in the Jafr Basin, or the recently documented flint mining area near ar-Ruwayshid, about 100 kilometers to the north of Wisad Pools (Müller-Neuhof 2013). Two decorated sherds parallel Yarmoukian types; a few other non-diagnostic sherds were also recovered. Three radiocarbon dates range from 6590–6580 cal BC in the earliest excavated level, 6000–5840 cal BC from a middle level, and 5710–5610 cal BC from the latest dated stratigraphic unit.

Another aspect of the Wisad Pools project is the methodical documentation of the rock art. During the 2013 field season, the pecked rock art near the pools was the subject of mapping and recording (Rowan and Hill 2014). Approximately 450 petroglyphs concentrate around the pools, primarily pools 5–8. Most of the pecked rock art is figurative (ca. 78%), primarily horned animals such as ibex, kudu, and oryx, although a few humans are also represented. The other identifiable petroglyphs are either structures (ca. 19%) or geometric



Figure 8. Transverse arrowheads (photo by G. Rollefson)



Figure 9. Cortical tools (photo by G. Rollefson)

(ca. 3%); representations of structures seem to exclusively represent “kites,” the long, low walls leading to enclosed areas and thought to have functioned as hunting traps.

Documenting the extent and typologies of the Wisad Pools petroglyphs is an important part of the larger research program to understand not only when the site was intensively occupied, but also how it functioned in prehistoric economic and pastoral systems. Photography and photogrammetry as part of the data collection process allows us to integrate the petroglyphs into the wider research program. Our spatial analysis of the petroglyphs is still underway, but part of this recording process included experimental ways to record rock art in the blinding desert light, which makes traditional photography difficult and time consuming. For each glyph we identified, three types of data were collected. Each glyph had a spatial coordinate recorded using either a Canon GPS-enabled camera or the total station; each had an entry in a field-generated database for basic figurative elements (e.g., type, subtype, orientation, style of pecking, nearby or associated figures, and any other notes or features). Finally, each was photographed at least once. In addition, several representative examples were recorded in a variety of ways, including several recorded using high-resolution 3-D photogrammetry. For these, local ground control points were recorded using a total station; overlapping photographic sets were then taken of the entire boulder on which the petroglyphs were pecked. These photo sets were then used to create geo-reference 3-D models

EASTERN BADIA ARCHAEOLOGICAL PROJECT

using Agisoft PhotoScan Pro. These models can then be exported as two different types of data, either orthophotographs or digital elevation models (DEM). Orthophotographs eliminate the distortion of regular photographs and allow real world measurements; DEMs are a grid of data that allow us to maximize the natural topographic features that may influence the petroglyph design and enhance the visibility of anthropogenic features.

A traditional tool to highlight subtle topography of small objects is raking light; a strong light source at low angles draws out subtle relief by casting long shadows. Raking light can be used to document some petroglyphs at Wisad Pools, but 3-D modeling is a more robust tool because field recording is more efficient and a variety of post-processing techniques can then be applied. Figure 10 shows four views of the same petroglyph, of the type we refer to as “geometric.” The first view (a) shows a single image taken at night using raking light. A remote flash is fired above and behind the subject, highlighting the detail of the geometric pecking that is not visible in a daylight photograph of the same feature (see d). However, this technique can potentially mask important features. The other two images show visualizations of the same petroglyph based on a 3-D model built from twenty-eight photographs of the rock. In (b) the shape of the carving is depicted in false color from a principal component analysis (PCA) of sixteen different shaded models of the rock, incorporating the key differences from different possible light sources, including angles that would replicate (a). In (c), the direction of light on the rock is unimportant because the shape is being detected through local changes in slope rather than the direction of light.

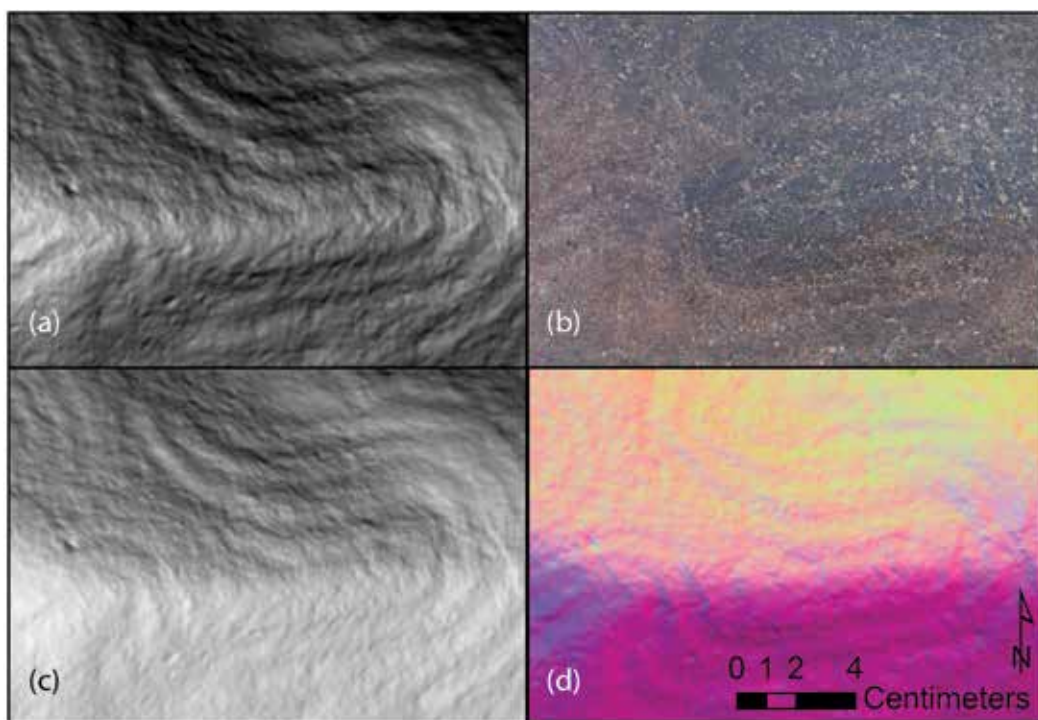


Figure 10. Geometric petroglyph; (a) raking light taken with flash at night; (b) depicted with false color from principal component analysis of sixteen different shaded models; (c) slope differences; (d) daylight photograph (photos and processing by A. C. Hill)

Constructing a photogrammetric model is a more robust way of highlighting topography than traditional photographic methods because it can be accomplished in a variety of lighting conditions, requires no special flash or other equipment, and provides more ability to visualize shape. Moreover, the 3-D model is built from many overlapping photographs, which can include close-up, high-resolution detail shots, producing a very high-resolution result. These techniques of recording and post-processing the Wisad Pools petroglyph assemblage are discussed in a recent article by Rowan and Hill (2014).

The proximity of petroglyphs around the pools would reflect where animals came to water, and hunters to hunt. Although we cannot date the petroglyphs, the rarity or absence of later motifs, such as camels, guns, and horses, suggests that much of the pecked rock art dates to earlier periods. At the same time, the interest in species such as oryx and ibex should be reflected in the faunal assemblage if they date to the Late Neolithic. Preliminary sorting suggests that the species dominating the Late Neolithic faunal assemblage are gazelle and wild onager, yet neither is represented in the faunal profile of W-80. Does this mean that the petroglyphs date to a different period? Or could the more familiar animals be those that are less interesting to peck on the rocks? Without dates for the rock art, simple explanations will be difficult.

Although limited in scale, these excavations and survey results provide surprising new insights to the late prehistoric situation in the eastern desert, a perspective that reinforces the earlier discovery of a Late Neolithic domestic structure at Maitland's Mesa (see *Oriental Institute 2012-2013 Annual Report*). Contrary to our initial assumption, the concentrations of structures at Wisad Pools and along Wadi al-Qattafi may not, in fact, be primarily related to mortuary rites. We cannot demonstrate that all these structures are contemporaneous or functionally similar, but the density of buildings near the Wisad Pools indicates that a much larger population occupied the Black Desert than previously imagined. The investment in building large structures utilizing massive heavy slabs argues against brief or temporary occupation, although some seasonality of residence seems probable. Why people spent time in this area also requires greater scrutiny; transhumant pastoralism seems possible, yet preliminary assessment of the faunal remains from W-80 suggests that primarily wild species were exploited rather than domesticates. The quantity of arrowheads supports the primary role of hunting in subsistence. At the same time, the extensive pounding and grinding equipment suggests some reliance on plants, although whether wild or domesticated species remains to be discovered.

Taken together, these suggest a much larger population in the badia than previously believed. Given the extremely arid conditions that currently prevail, and the bleak prospects for pastoralists during most of the year, we assume that different environmental and climatic conditions existed during later prehistory, specifically the Late Neolithic. In the future we hope to work with geomorphologists to determine whether or not sediments in the local playas or on the site might reveal evidence for topsoil now absent. If topsoil disappeared during the intervening millennia, grasslands that could support herds of wild animals, provide vegetation for herders, and even allow limited expedient agriculture may have existed. An entire Late Neolithic population may have occupied the Black Desert that previously was virtually invisible.

EASTERN BADIA ARCHAEOLOGICAL PROJECT

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EPIGRAPHIC SURVEY

W. Raymond Johnson

On April 15, 2014, the Epigraphic Survey, in cooperation with the Egyptian Ministry of State for Antiquities Affairs/Supreme Council of Antiquities (MSA/SCA), completed its ninety-six-month field season in Luxor; Chicago House's activities ran from October 15, 2013, through April 15, 2014. Projects in Medinet Habu included epigraphic documentation, conservation, and restoration work in the small Amun temple of Hatshepsut and Thutmose III, the Domitian Gate, the Ramesses III southern well, the Medinet Habu blockyard, and a conservation student training program. All work was funded by a grant from USAID Egypt. Documentation work continued at Luxor Temple, TT 107, and Khonsu Temple. A new digital documentation program was inaugurated and a digital drawing manual composed for electronic publication.

Medinet Habu

MSA inspectors who worked with us at Medinet Habu this season included Miss Soaad Mahmoud Galal Mohamadin, Miss Hanaa Mamoud Mohamed Soliman, Miss Eman Haggag Yousef,



Figure 1. Johannes at work in the stone yard, December 19, 2013, Medinet Habu (photo by Ray Johnson)

EPIGRAPHIC SURVEY



Figure 2. Sue and Margaret working on the Medinet Habu small Amun temple Pinedjem inscription using a “Companion” drawing tablet (photo by Ray Johnson)

Mrs. Zeinab Aly Mohammed, Miss Essraa Mohamed Mohamed Mohamed, Miss Salwa Fathalla Hassan, and Mr. Atito Mohamed Hassan.

Epigraphy

Small Amun Temple

Documentation continued for the full six-month season this year in the Small Temple of Amun, focusing on the recording of materials in the ambulatory and on the façade, destined for publication in *Medinet Habu X*, along with the late additions to the temple and marginal inscriptions, to appear in *Medinet Habu XI*. The epigraphy was supervised by senior epigrapher J. Brett McClain, and the epigraphic team consisted of epigrapher Jen Kimpton, senior artists Sue Osgood and Margaret De Jong, and artists Krisztián Vértés and Keli Alberts. Thanks to the efforts of the artists and epigraphers at the site, all but four of the remaining enlargements for *Medinet Habu X* were corrected, revised, and approved by the Field Director, so that it is now possible to plan for the completion of all materials for that volume within the next field season (i.e., by spring 2015). *Medinet Habu X* will contain the documentation of the following portions of the temple:

- the façade (including the Eighteenth Dynasty decoration as well as all later revisions of the decorative scheme)
- the pillars of the Thutmosid peripteros (including the interior and lateral pillar faces, but excluding the exterior Ramesses III decoration)
- the interior architraves of the Thutmosid peripteros

Work on facsimile drawings for *Medinet Habu XI* has occupied the bulk of this season. This volume is planned to consist of the following elements:

- the exterior scenes and texts added to the temple under Ramesses III (to be published primarily in photographs)
- the marginal inscriptions of Pinedjem
- the columns, gateway, and blocking stones of Achoris

The following volume, *Medinet Habu XII*, will contain the publication of the bark shrine, while the Kushite pylon, chapels of the God's Wives of Amun, and the later monuments will appear in subsequent volumes. The publication scheme outlined above will continue to guide our prioritization of the work in upcoming seasons.

What follows is a breakdown of the drawings that have passed through the following stages of the Chicago House process:

Penciling completed:	17
Inking completed (incl. summer 2013):	32
Collation completed:	2
Transfer Check completed:	4
Director Check completed:	11

Epigraphers Tina Di Cerbo and Richard Jasnow continued their digital facsimile documentation and collation of the Late Period graffiti in the small Amun temple northern annex, southern Ptolemaic gate, and the Ramesses III mortuary temple roof.



Figure 3. Yarko Kobylecky photographing fragments in the Medinet Habu blockyard (photo by Ray Johnson)

EPIGRAPHIC SURVEY

Blockyard Documentation

Another ongoing component of the recording work at Medinet Habu has been the documentation and processing of fragmentary material from the precinct, now securely stored in the new Medinet Habu blockyard. Initiated in the 2007–08 season, the blockyard project continued throughout this season, resulting in the photography and preliminary documentation of additional inscribed sculpture and relief fragments. Staff photographer Yarko Kobylecky conducted the photography assisted by registrar Ellie Smith and photography assistant Gharib. Members of the team are now undertaking analysis of specific fragment groups, and two articles concerning material from this corpus are currently in press; it is envisioned that the study and publication of the fragments will continue to be a core component of our work at the site in seasons to come. Thanks to Oriental Institute Museum Archivist John Larson for his long-distance assistance in this process.

Western High Gate

A new initiative this year has been the documentation of the sandstone fragments of the destroyed western High Gate at the back of the Medinet Habu complex that was pendant to the intact, eastern High Gate at the front. This project, left unfinished after initial excavations in 1932, will ultimately involve epigraphic recording, conservation, and restoration of the structure. Since the architecture and decoration of the western High Gate has remained almost wholly unpublished since its discovery, it is intended that a future volume in our Medinet Habu series will be devoted to the presentation thereof.

Coordinated by epigrapher Jen Kimpton, the project this season took several phases. The first involved creating databases to record the miscellaneous inscribed blocks and frag-



Figure 4. Western High Gate block, Nubian battle scene (photo by Ray Johnson)

mentary remains of the destroyed gate, one for use on-site in the field. The other major task was to establish a system for recording the positions of the blocks and fragments that were to be included in the catalog. The position of each block was recorded (1) by assigning them coordinates in Üvo Hölscher's grid system (used in the *Excavations of Medinet Habu* volumes), and (2) by indicating the blocks with their newly assigned numbers in "general view" photographs taken from multiple perspectives.

The survey of the western High gate (WHG) material began on January 15, 2014. Each block was first assigned a number (continuing the MH block series established for blocks and fragments in the Medinet Habu blockyard) and the following information is entered into the database: Hölscher grid coordinates, location area, material, dimensions, condition, number of decorated surfaces, type of decoration, at least one field photo, whether it belongs to the WHG, whether it has been reused, the architectural features associated with it, and a brief description of the content of the decoration. In some cases isometric notes are also recorded. When a block has more than one decorated surface, each surface is given its own record in the database, and the block number is appended with a capital letter (A, B, C, and so on as necessary). Each block is then photographed digitally from various angles, and the final two digits of its newly assigned number are chalked onto a broken surface. Finally the block is located and labeled on the area photographs in which it appears.

Summary

Total of blocks/fragments cataloged:	177
Total new records in database:	212
Total of photographs taken with camera:	923
Total of photographs taken with iPad:	232

The Domitian Gate

This season marks the fourth season in our Medinet Habu Domitian Gate restoration work. Four years ago we noted that the first century AD sandstone gate of the Roman emperor Domitian, reassembled by George Daressy from scattered blocks in the late nineteenth century behind the small Amun temple, was in danger of collapse due to groundwater salt decay of its foundations. After consultation with the MSA/SCA, conservator Lotfi Hassan, stone mason Frank Helmholz, and our structural engineer, Conor Power, it was decided that the gate had to be completely dismantled in order to properly replace the foundations with new sandstone, specially damp-coursed against any future groundwater problems. Permission was granted by the MSA/SCA to begin that work in 2011, and dismantling began then.

This season master mason Frank Helmholz and the Chicago House workmen cut and shaped nine new replacement blocks for courses four and five of the gate, with five more blocks started. All of the new sandstone was quarried from Gebel el-Silsileh, the source of the ancient stone. Courses two and three — old and new stones — were mortared into place and those courses completed. Courses four and five were positioned in place without mortaring to check the fit. The remaining blocks from the gate are stored on platforms to the north of the gate and were documented, condition-assessed, and consolidated this season by the conservation team headed by Lotfi Hassan. Frank and assistant Johannes Weninger and their Egyptian stone team will finish cutting and shaping new stone blocks that will replace some of the missing blocks next season, and it is hoped that most of the gate will be back in place by April 2015. Another decaying Roman-period gate from the time of the Roman emperor

EPIGRAPHIC SURVEY



Figure 5. Medinet Habu, Ramesses III mortuary temple (background); Domitian Gate restoration (foreground) (photo by Ray Johnson)

Claudius outside the Medinet Habu eastern enclosure was stabilized and photographed this season and will be dismantled and brought into the Medinet Habu precinct for restoration next season.

Medinet Habu Blockyard Conservation

The conservation team supervised by senior conservator Lotfi Khaled Hassan assisted by Nahed Samir Andraos continued conservation, consolidation, and display of fragmentary material in the new, protected blockyard built by Chicago House against the southern Ramesses III enclosure wall. This season as part of our USAID funding, we also sponsored a conservation-student training program for six students: Safaa Saad Mohamed, Sekina Mohamed Orabi, Hanni Mahmoud Hassa, Nehad Badri, Doaa Mohamed Hassan, and Magda Hasaan Abo Al Hagag Al Taher. The training program focused on the Domitian Gate, the Medinet Habu blockyard, and the Ramesses III southern well, and provided the students with their first hands-on field experience.

Domitian Gate. The students were taught to assess and document damage and alteration on the sandstone blocks of the gate, using Adobe Photoshop and coded graphics as a first step before conservation. Conservation measures included (1) mechanical cleaning of all block surfaces, (2) consolidation with acrylic resin of the paint layers and smaller decayed areas, (3) consolidation of the larger areas of decay with ethyl silicates, and (4) filling of gaps and cracks using hydraulic mortar and stone powder. In addition, two sections of broken stone block number 37 were reunited with fiberglass dowels and epoxy resin.



Figure 6. Conservation of Medinet Habu southern well blocks, March 2014 (photo by Ray Johnson)

Blockyard. (1) Mechanical cleaning and desalination of selected stone blocks inside the blockyard using brushes and due to weather conditions (rain water), which brought a lot of salts to the surface; (2) poulticing techniques for extraction of salts using sepiolite and distilled water; (3) moving of selected granite blocks for cleaning and presentation; and (4) conservation and treatment of two previously restored sandstone blocks inside the blockyard (removing old cement and iron dowels).

Southern Well of Ramesses III. Restoration and reassembly of shattered sandstone blocks from the upper courses of the well, adversely affected by groundwater salt decay and removed by us several years ago for conservation.

The students successfully completed the program on March 15, 2014, and received certificates in the Chicago House Library followed by a special lunch.



Figure 7. Medinet Habu conservation team on graduation day, March 15, 2014: Medinet Habu conservator Nahed Samir Andraos, Medinet Habu conservation supervisor Lotfi Hassan, senior epigrapher J. Brett McClain, Ray Johnson, Nehad Badri, Doaa Mohamed Hassan, Safaa Saad Mohamed, Magda Hassaan Abo Al-Hagag Al-Taher, Sekina Mohamed Orabi, and Hanni Mahmoud Hassa (photo by Frank Helmholz)

EPIGRAPHIC SURVEY

***TT 107, Theban Tomb of
Nefersekheru***

The Epigraphic Survey's short season at TT 107, the Theban Tomb of Amenhotep III's Malqata Palace steward Nefersekheru, began on February 4 and concluded on February 27, 2014. Our work was supervised by MSA Inspector Mr. Mahmoud Aly Abd el-Aty.

Sue and Margaret returned to the site to make final checks on their inked enlargements of the tomb façade in advance of bleaching. Thereafter, Sue remained on site to digitally document the limestone relief fragments found in the court, most of which relate to the in-situ reliefs on the façade. During the same period, Brett began collation of the available facsimile drawings, which for this year were those of the texts on the polyhedral column.

All of the remaining enlargements for TT 107 will be available for collation beginning in October 2014, and finishing these collations will be a primary goal of the 2014–2015 field season. It is hoped that it will be possible to continue the archaeological and conservation work on the site as well. Special thanks to Priscilla (Peppy) Bath for her generous support of this work.



Figure 8. TT 107 (photo by Ray Johnson)



Figure 9. Brett collating a pillar in TT 107 (photo by Ray Johnson)

Luxor Temple

Projects at Luxor Temple ran from December 12, 2013, until April 12, 2014, and included documentation of Roman-period frescos in the Imperial Cult Chamber; conservation, restoration, and maintenance of the blockyard and open-air museum; documentation of architectural blocks from the Basilica of St. Thecla in front of the Ramesses II eastern pylon; documentation of Ptolemy I blocks reused in the church; a condition study of the Luxor Temple structure; and site management discussions with the Luxor Temple inspectors. The documentation and conservation work was partly funded by a grant from USAID Egypt.

Our work at Luxor Temple this year was supervised by MSA Inspectors Mr. Walid Abdel-Rahman, Mr. Medhat Ramadan, Mr. Ahmed Shawky Saady Ahmed, and Mr. Omar Yousef Mohammed.

Documentation

Imperial Cult Chamber Facsimile Drawing

This season we continued the full facsimile documentation of the Late Roman fresco paintings in the Imperial Cult Chamber (Room V). Chicago House artist Krisztián Vértés spent one month of the 2013–2014 season at Luxor Temple, from January 22 to February 20, facsimile documenting the third century AD Roman-period frescos, south wall, east side, upper section. Continuing the documentation process that was started a year ago on the northeastern wall depicting the emperor's courtiers, the initial drawing of the largest preserved area of the fresco is now completed. Krisztián finished pencil drawings on three photo enlargements in situ (shot and developed by Yarko), covering all the human figures remaining on the wall for digital inking over the summer. There were further preparations made for next year's work, examining the lower sections of the same wall for documentation purposes. The drawing



Figure 10. Krisztián penciling Roman frescos at Luxor Temple (photo by Ray Johnson)

EPIGRAPHIC SURVEY

process was based on a modified Chicago House technique specifically invented by Krisztián for these particular wall paintings, applying a certain pencil texture over the areas where pigment is preserved. The goal of this initiative is the definitive publication of the frescos added to this chamber during the First and Second Tetrarchies.

Thecla Church and Blockyard Projects

As part of the Thecla Church and blockyard project coordinated by Chicago House architect/artist Jay Heidel (and kindly funded with a gift from Nassef Sawiris), two 3-meter granite pilasters reused in the Thecla Church sanctuary from a doorjamb of Thutmoses III (split in half) were digitally inked by Jay and collated by Brett this season; one piece is stored along the Sphinx Road in front of Luxor Temple and the second is stored in the eastern blockyard, north end (immediately to the south of the Abul Haggag Mosque). The main focus of the work this season in the Luxor Temple blockyard was the digital penciling of a corpus of fragmentary material from the reign of Ptolemy I used in the sidewalls of the Thecla Church, dismantled by the Egyptian Antiquities Organization in 1960. Thirty-nine sandstone fragments containing parts of the “Bentresh” monumental inscription were penciled, and work was begun on an additional forty that are a small part of the second group related to the first group by various characteristics.

The first group of text blocks were initially recognized by former Epigraphic Survey director Lanny Bell as being a monumental version of a text preserved on what is known as the Bentresh stela now in the Louvre in Paris, a historical inscription describing events from the



Figure 11. Jay digitally penciling Bentresh blocks at Luxor Temple, March 2014 (photo by Ray Johnson)

reign of Ramesses II. Robert Ritner has been working on the translation and analysis of the material with the Epigraphic Survey. The second group of blocks, offering scenes of Ptolemy I, is related to the first by style, paleography, and surface treatment. All the fragments in these two groups appear to be from the same building of Ptolemy I, and the second group contains royal and divine figures of varying sizes performing offering rituals as well as architectural fragments such as cornice fragments and the abacus of a column (the square part at the top just below the architrave). To date, 158 fragments have been identified as belonging to this set of Ptolemy I material, which together with the thirty-nine text blocks makes a related set of 197 fragments altogether. Work on this set of fragments will continue next season.

Another important part of the blockyard management and study as a whole is the maintenance of a careful system of information management for tracking the thousands of fragments in the Luxor temple blockyard and keeping up with their physical condition, their location, and at what stage they are in the process of study, documentation, and conservation. This year Jay supervised the creation of a new FileMaker Pro database for the fragments in the blockyard to enhance the management of the information related to the material (with input by Jen Kimpton, Tina Di Cerbo, and Andrea Dudek). The design of the database was finished this season (thanks to Andrea!), and the data entry for the 3,000–4,000 numbered fragments in the blockyard is about half complete. After this initial data entry is finished, this database will be an ever-expanding system to accommodate all of the new fragments we will add to the system in the future as well as to keep track of the ones in the process of study and publication. In addition to the database, a map of the location of each numbered mastaba/platform is being prepared to help those working with the fragmentary material locate the mastaba on which a desired fragment is stored. Field measurements have been taken for the creation of this map that will be produced over the summer.

Luxor Temple Structural Condition Study

In March structural engineer Conor Power, P.E., spent several days at Luxor Temple doing his annual assessment of the Luxor Temple structure. On March 11 Conor checked the three plumb bobs that Chicago House set up on the south side of the east pylon and determined that there was no discernible movement of the pylon during the last year. He also checked the calibrated telltale monitoring device installed over a crack on the west side of the eastern pylon at the top of the interior stairs and determined that there were no signs of any movement during the past year. This means that the MSA/USAID dewatering program for Luxor and Karnak temples, activated in 2006, is effective and doing its job. The foundations of the temple are now dryer and stable.



Figure 12. Conor and Mohamed checking calibrated telltale, Ramesses II pylon, March 2014 (photo by Ray Johnson)

EPIGRAPHIC SURVEY



Figure 13. Hiroko supervising installation of “hospital” mastaba new cloth and roof copy (photo by Ray Johnson)



Figure 14. Newly installed “do not climb” signs for the walls of the Amenhotep III court (photo by Ray Johnson)

Conservation

Conservator Hiroko Kariya worked at Luxor Temple this season between January 26 and March 26, 2014. She undertook her annual condition survey of the blockyard and blockyard open-air museum and performed small-scale consolidation where needed. Minor friable spots in about forty display groups/fragments were consolidated with a 2–3 percent Paraloid B-72 in acetone/ethanol (1:1) solution. Some losses in the inscribed faces of two Amenhotep III blocks at the south end of the blockyard were filled with weak lime mortar. Prior to filling, the loss areas were consolidated/isolated with 2–3 percent B-72 in acetone. In addition to replacing the canvas fabric covering our protective storage tents or “hospital mastabas” (Mastabas 79, 89, and 94), over 300 fragments were cleaned, photographed, and briefly condition-checked for future evaluation of the new protection materials.

Site management. This season Hiroko initiated a discussion with the temple inspectors regarding site management of the blockyard and open-air museum areas. As of March 2014, there are sixty-four inspectors at Luxor Temple alone (over thirty were hired post-revolution). Meetings were set up with the inspectors assigned to us during the course of the season, as well as the temple directors, Mr. Sultan Eid and Mr. Gamal Husein, to discuss site sustainability and maintenance, especially in the open-air museum, while we are present during the winter and when we are away during the summer. Based on the discussions, a simple trial program was created for the off-season, a collaboration between the MSA temple staff and Chicago House. Each lamp and lamp stand was numbered in western and Arabic writing with a permanent marker (#1–36) and a map was created to find a location of each lamp. A package including a simple checklist in English and Arabic, a suggestion notebook, a map of the open-air museum and Chicago House staff contact information was provided to the inspectors. The checklist will be used during regular walk-throughs by the inspectors. If necessary, they will contact the Chicago House administrative staff, who will send a person to fix or deal with a problem, such as broken lights. In addition, Hiroko supervised the construc-

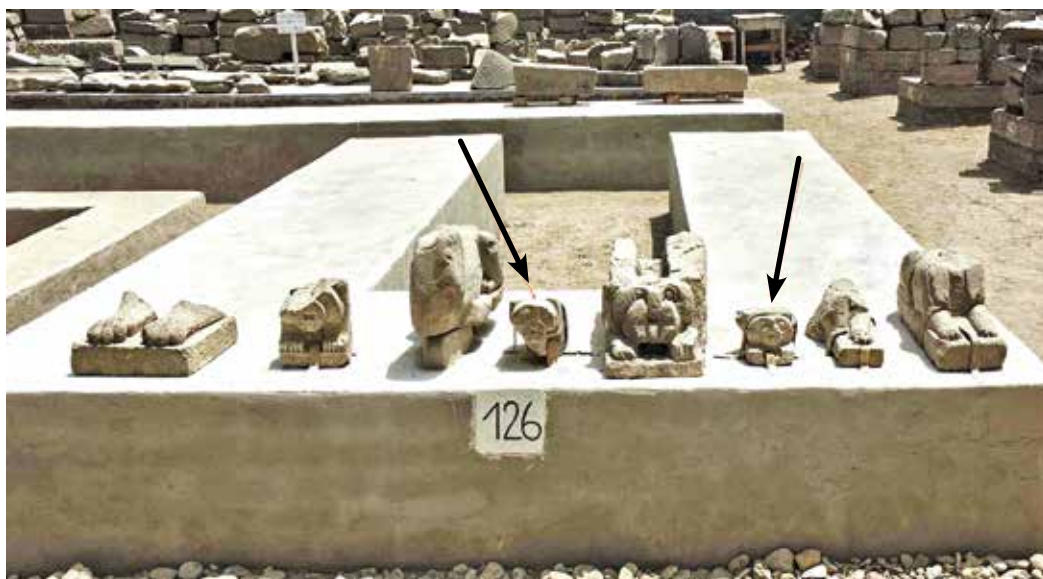


Figure 15. Luxor Temple — mastaba 126 with missing Coptic lions (photo by Ray Johnson)

EPIGRAPHIC SURVEY

tion of several “do not climb” signs for the walls of the Amenhotep III court that run along the blockyard on the eastern side of the temple, to help visitors understand that climbing on the ancient stone walls is not allowed. In May, Hiroko presented the blockyard conservation work at the 42nd meeting of the American Institute for Conservation (AIC) in San Francisco.

Blockyard theft. On Tuesday, April 8, 2014, I am saddened to report that two small limestone Coptic “lions” in the Epigraphic Survey Luxor Temple blockyard open-air museum display were discovered by the Luxor Temple Antiquities Ministry authorities to be missing from their mounts. They were displayed on mastaba 126 in the center of the blockyard display area, part of two mastaba/platforms that display ancient Egyptian animals in sculpture and relief. Both “lions” were bolted to the platform with aluminum bands and were in a section of the blockyard that is usually well guarded and in full view from all sides. The purpose or use of the Coptic “lions” (or cats) is not known, but they may have been set into mudbrick walls and used to support wooden beams, or in some cases might have supported lamps. So far the two objects have not been recovered.

Khonsu Temple, Karnak

The Epigraphic Survey’s season at Khonsu Temple began on January 20, 2014, and continued through the end of the 2013–2014 field season. The focus of this season’s work was the documentation of reused blocks among the pavement stones of the Hypostyle Hall, these being temporarily exposed by ARCE’s project of repairing the floor. Our work was supervised by MSA Inspectors Mr. Haytham Mohammed Saad el-Din, Miss Asmaa Mostafa Rabea, Miss Shaimaa Mohammed Mahmoud Mohammed, Mr. Peter Fady Hanna, Miss Amira Fawzy Ali Ibrahim, and Miss Aisha Mohamed Montasser Ahmed.

In-situ Reused Blocks

The paving stones of the Hypostyle Hall yielded ten reused blocks bearing decoration; four of these were inscribed on two sides. All the blocks were drawn (with the exception of KhF0374,

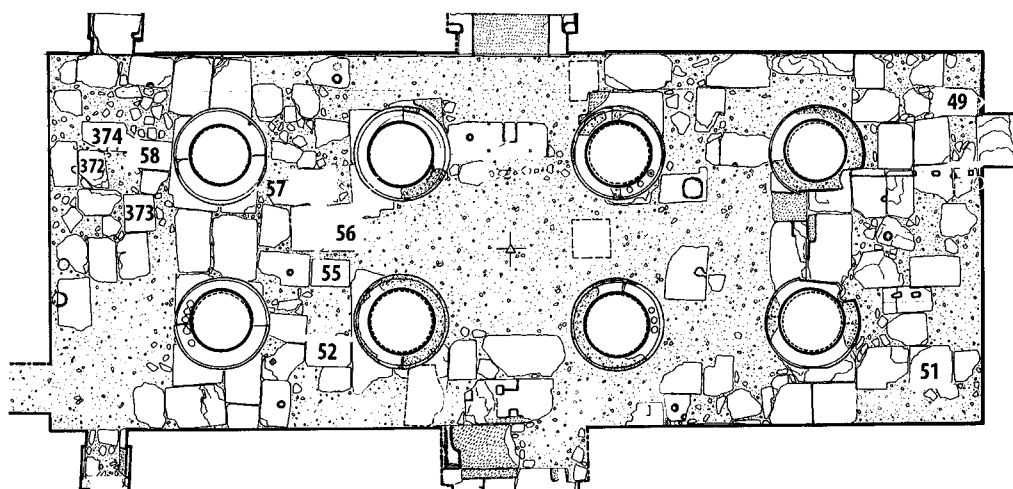


Figure 16. Plan of the Hypostyle Hall showing positions of the reused blocks documented this season. Architectural plan by Françoise Traunecker



Figure 17. MSA Inspector Peter tracing wall relief, coached by Keli (photo by Keli Alberts)

which cannot be recorded until cleaning and conservation efforts are rendered), resulting in thirteen drawings — all of which were produced by Keli Alberts, collated by Jen Kimpton, and director-checked by Ray. All decorated surfaces were photographed by Yarko and his assistants; isometric drawings were also made for these blocks by Jen.

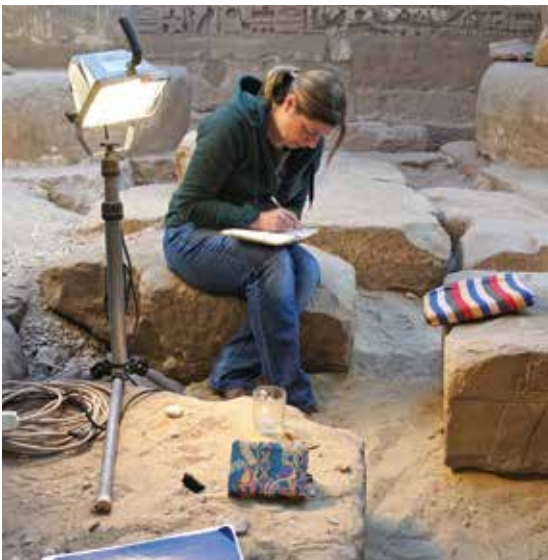


Figure 18. Jen collating in the Hypostyle Hall at Khonsu Temple (photo by Ray Johnson)

In addition to the work in the Hypostyle Hall, Keli also continued our campaign to document reused materials in the walls of the temple by drawing KhF0344A in Room 11. This drawing is rendered on two drawing enlargements and includes not only the underlying Eighteenth Dynasty carving, but also the later Ramesside inscribed and painted decoration. The same will be done for KhF0345 (directly above KhF0344A).

Of the ninety-three fragments recorded during the season, fifty-three of them required drawings; a total of fifty-six drawings (three of the fragments possessed two inscribed surfaces) were produced, collated, and director-checked. Keli Alberts drew forty-eight of these; one was produced by our

EPIGRAPHIC SURVEY

inspectors Al-Shaimaa Mohamed Mahmoud Mohamed and Peter Fady Hanna, and seven were drawn by Jen Kimpton.

Summary

Completed tracings/penciling

In-situ material: 14

Loose fragments: 56

Total: 70 drawings, 69 of which were director-checked

Chicago House

Digital Inking Program and Digital Epigraphy manual

In order to make accessible to our colleagues in the fields of Egyptology and archaeology the digital epigraphic recording techniques that we have developed over the last two seasons, now a permanent part of our program, Chicago House Egyptologist/artist Krisztián Vértés has authored a ground-breaking technical, "how-to" manual. I am pleased to announce it is now available for free download in both PDF (through the Oriental Institute Publications webpage) and iBooks format. Krisztián has led the way in designing our new digital program and this exhaustive 200-page document, entitled *Digital Epigraphy*, presents the background and principles of the Chicago House Method, followed by a detailed, step-by-step guide to replicating the Survey's recording methodology — including our drawing conventions —



Figure 19. Krisztián experimenting with digital inking using Wacom drawing tablet (photo by Ray Johnson)

in digital form, and with new digital tools. Beginning with the basic configuration of the Wacom drawing tablet and Macintosh computer system, the manual continues with in-depth instructions on the use of basic and advanced Adobe Photoshop functions and techniques to produce digital facsimile drawings of wall reliefs that preserve and even improve upon the quality and accuracy of the Survey's traditional pen-and-ink drawings. Accompanied by extensive illustrations and hyperlinked instructional and explanatory video clips, it is hoped that *Digital Epigraphy* will prove a useful reference for any expedition desiring to apply this level of computer technology to the problems of field documentation, making available to our colleagues the experience Chicago House has gained over the past two years of experimentation and development. Special thanks to Dr. Margie Fisher and the Women's Board of the University of Chicago, whose generous support has allowed the inauguration of this exciting new chapter in the history of the Epigraphic Survey.

The Marjorie M. Fisher Library, Chicago House

The Chicago House Marjorie M. Fisher Library opened for the season on October 28, 2013, and closed on April 9, 2014, under the direction of librarian Marie Bryan assisted by assistant librarian Anait Helmholz. Because Marie was delayed for a month, assistant Anait capably supervised the opening and running of the library until Marie's arrival in mid-November. Added to the collection this year were 143 titles (149 volumes), of which 55 were monographs/books, 65 were journals, 20 were series volumes, and 3 were parts of sets. Forty-one of these were gifts from thirteen individuals and institutions. Anait repaired 214 volumes during the season.

Physical conversion of records from the old Chicago House system to the Library of Congress classification system is now complete, thanks to the assistance of Oriental Institute Visiting Committee member Andrea Dudek in November/December. During her three-week stay Andrea finished converting 170 titles/211 volumes. At the end of the season Tina and the workmen successfully shifted the Chicago House Library books to their new locations. Sincerest thanks and congratulations to Marie, Anait, Andrea, Tina, and library volunteer Gina Salama! Gina was a huge help in the library this season. Additional thanks must go to our colleagues Mohammed Heragi and Ahmed Temerik for their donations of many PDFs of scanned articles and books.

The Tom and Linda Heagy Photographic Archives

This season Chicago House Tom and Linda Heagy Photographic Archives registrar Ellie Smith assisted photographer Yarko with the field photography, registered twenty-three new large-format negatives taken by Yarko primarily at Khonsu Temple (numbers 21571–21593). She assisted Yarko in the scanning of some of our more fragile books, and diligently scanned 2,175 photographs, dictionary cards, hand copies, and notes (thank you, Ellie). Tina continued to update the Photo Archives data storage and backup systems (including our LaCie 5 network system), scanned more Jacquet archives slides, labeled 165 large-format negatives, and started scanning the old Chicago House guest books. Archivist Sue Lezon worked with Tina on data storage, continued to optimize images for the Jacquet and other archives/databases, and assisted in the upgrading of the Photo Archives database to FileMaker Pro 12. Yarko continued our ongoing photography of blocks and sculpture fragments at Medinet Habu, reference photos of the Claudius gate outside of Medinet Habu, condition-reference photography at Luxor

EPIGRAPHIC SURVEY

Temple, and in-situ reused blocks at Khonsu Temple. He also produced photographic drawing enlargements for the art team; bleached inked drawings for collation; and coordinated the blueprinting process with assistant Gharib. Alain and Emmanuelle Arnaudies worked in the Photo Archives from March 15 to 29 with Tina and Sue on the Jacquet database, created a new 35 mm slide database for Ellie, and continued to enter data on the master database from the Epigraphic Survey's Medinet Habu and Luxor Temple documentation work.

Chicago House

Sincerest thanks as always to Tina, who opened, cleaned, and later closed the house this season and dealt with the myriad maintenance and upkeep issues. This fall before we arrived she and the workmen replaced a section of the driveway behind the house, and finished completely redoing the kitchen, with new plumbing installed, a new tile floor, repainting, and staining of the woodwork. The place looks terrific and is functioning even more smoothly now. Sadly, we lost one of our beloved kitchen crew this season, cook Ibrahim Elias, who succumbed suddenly to heart failure on his way to Chicago House on the first day of work. A big, burly, but gentle man, with a ready smile, he was always on hand, arriving at 5:00 a.m. every day to start up the kitchen activities. We will miss him very much. During the season Tina supervised the construction of an extension to our eastern enclosure wall, over the garage and workshop area, over which now towers the new Luxor Telephone Office. All of the construction work is now done by our own workmen, several of whom are gifted builders and bricklayers. While we didn't have as many visitors through as usual, it was still a busy season for guests and colleagues passing through our doors. On November 18 Dr. Rosario Pintaudi, director of the Istituto Papirologico "G. Vitelli" of the University of Florence, Italy, and also director of the Sheikh Abada/Antinoupolis mission (where Jay works a few weeks each winter), took a break from building a new guard house at Sheikh Abada, traveled to Luxor with MSA inspector Fathi Awad, and stayed with us at Chicago House for a few pleasant days. From December 3 to 5 we were pleased to help host the visit of acting US Ambassador, Chargé d'Affaires David Satterfield on a review of USAID, ARCE, and Chicago House projects in Luxor. ARCE director Gerry Scott, ARCE associate director John Shearman, the Chicago House team, and I had much to show him, and the conversations, on site and at Chicago House, were stimulating and lively. Over Christmas and New Year's our friends, former Egyptian Museum director Dr. Wafaa El-Saddik and husband Azmy El-Rabbat stayed with us over the holidays and brightened them considerably. We hosted several on-site reviews for USAID Egypt friends, including Sylvia Atalla, during the course of the season — always a pleasure!

* * *

The Epigraphic Survey professional staff this season, besides the director, consisted of J. Brett McClain as senior epigrapher; Jen Kimpton, and Christina Di Cerbo as epigraphers; Boyo Ockinga and Susanne Binder as archaeologist/epigraphers (from afar); Margaret De Jong and Susan Osgood as senior artists, Krisztián Vértés and Keli Alberts as artists; Julia Schmied as blockyard supervisor (long-distance this year); Jay Heidel as architect/artist; Yarko Kobylecky as staff photographer; Susan Lezon as photo archivist and photographer; Elinor Smith as photo archives registrar and photography assistant; Carlotta Maher as assistant to the director; Essam El Sayed as finance manager; Samir Guindy as administrator; Samwell Maher as administrative assistant; Marie Bryan as librarian; Anait Helmholtz as assistant librarian;

Frank Helmholz as master mason; Johannes Weninger as mason; Lotfi K. Hassan as Medinet Habu conservation supervisor; Nahed Samir Andraus as conservator at Medinet Habu; and Hiroko Kariya as Luxor Temple conservator. Alain and Emmanuelle Arnaudès worked on the Chicago House Digital Archives database; Conor Power worked as structural engineer; and Girgis Samwell worked with us as chief engineer.

We would like to thank the Egyptian Ministry of State for Antiquities/Supreme Council of Antiquities for an excellent collaboration this season: especially to Dr. Mamdouh el-Damaty and Dr. Mohamed Ibrahim, current and former Minister of State for Antiquities Affairs respectively; Dr. Mustafa Amin, SCA Chairmen; Dr. Mohamed Ismail and Dr. Hany Abu El Azm, General Directors of Foreign Missions respectively; Dr. Adel Hosein and Dr. Ali Asfar, Heads of the Pharaonic Sector for the SCA respectively; Dr. Abdel Hakim Karrar, General Director of Luxor; Ibrahim Soleiman, Assistant General Director of Luxor; Dr. Talat Abdel Azziz, Director General of Gurna and the West Bank; Dr. Mohamed Abdel Azziz, General Director for Gurna; Mr. Sultan Eid, Director of Karnak and Luxor Temples; Mr. Gamal Mohamed Mostafa Husein, Director of Luxor Temple; Dr. Amin Ammar, Director of Karnak; and Mme. Sanaa Ahmed Ali, Director of Museums in Upper Egypt. Sincerest thanks go to all the inspectors with whom we worked this season, listed above, site by site. Finally, very special thanks must go to USAID



Figure 20. Chicago House staff, 2014 (photo by Yarko Kobylecky and Sue Lezon)

EPIGRAPHIC SURVEY

Egypt for the grant that has funded the better part of the documentation, conservation, and restoration work outlined above.

It is another pleasure to acknowledge the many friends of the Oriental Institute whose generous support allows Chicago House to maintain its documentation, conservation, and restoration programs in Luxor. Special thanks must go to U.S. Embassy Chargé d'Affaires the Honorable David Satterfield; to former American Ambassador to Egypt, the Honorable Anne Patterson and David Patterson; former American Ambassador to Egypt the Honorable Margaret Scobey; Cynthia Whittlesey and Andrew Mitchell, Cultural Affairs Office of the US Embassy; Mary Ott, director of the United States Agency for International Development in Egypt; and former USAID Egypt directors Walter North, Jim Bever, Hilda (Bambi) Arellano, Ken Ellis, and Bill Pearson; Curt Ferguson and Coca-Cola Egypt (Atlantic Industries); Dr. Marjorie M. Fisher; David and Carlotta Maher; O. J. and Angie Sopranos; Misty and Lewis Gruber; Nassef Sawiris; Mark Rudkin; Dr. Barbara G. Mertz†; Daniel Lindley and Lucia Woods Lindley; Eric and Andrea Colombel; Piers and Jenny Litherland; Dr. Fred Giles; Tom Van Eynde; Jean Jacquet; Marjorie B. Kiewit; Nancy N. Lassalle; Tom and Linda Heagy; Shafik Gabr, ARTOC Group, Cairo; Judge and Mrs. Warren Siegel; Barbara Breasted Whitesides and George Whitesides; Miriam Reitz Baer; Andrea Dudek; Beth Noujaim; James Lichtenstein; Jack Josephson and Magda Saleh; Priscilla (Peppy) Bath; Charlie Secchia; Emily Fine; Nan Ray; Anna White; Janet and Karim Mostafa; Waheeb and Christine Kamil; Caroline Lynch; Polly Kelly; Howard and Diane Zumsteg; Louise Grunwald; Lowri Lee Sprung; Andrew Nourse and Patty Hardy, Kate Pitcairn; Drs. Francis† and Lorna Straus; Dr. William Kelly Simpson; Dr. Ben Harer; Dr. Roxie Walker; Tony and Lawrie Dean; Mr. Charles L. Michod, Jr.; Kitty Picken; Howard Hallengren; Bonnie Sampsell; Anita and Solon Stone; Richard and Mary Grey; Alice Sgourakis; Mr. and Mrs. Robert Schloerb; Thad and Diana Rasche; Dr. Gerry Scott, Kathleen Scott, Mary Sadek, Amira Khattab, and Jane Smythe of the American Research Center in Egypt; Dr. Michael Jones of the Egyptian Antiquities Conservation Project; and all of our friends and colleagues at the Oriental Institute. I must also express our special gratitude to the Egyptian Ministry of Antiquities and Heritage (formerly the Egyptian Ministry of State for Antiquities [MSA]); USAID Egypt, British Petroleum, the Getty Grant Program of the J. Paul Getty Trust, LaSalle National Bank, Mobil Oil, Vodafone Egypt, and the World Monuments Fund (and especially Robert W. Wilson†) for their support of our work. Sincerest thanks to you all!

ADDRESSES OF THE EPIGRAPHIC SURVEY

October through March:

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Arab Republic of Egypt
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fax (011) (20) (95) 238-1620

April through September:

The Oriental Institute
1155 East 58th Street
Chicago, IL 60637
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fax (773) 702-9853

GIZA PLATEAU MAPPING PROJECT

Mark Lehner,
Ancient Egypt Research Associates (AERA)

Introduction to Season 2014

After a study season in 2013, we resumed fieldwork from January 31 to May 30, 2014, east of the Khentkawes Town (KKT) in the Silo Building Complex (SBC) on the eastern bank of a small basin. We have cleared the northern side of this basin; the southern remainder lies under a modern road and cemetery (fig. 1).

The Khentkawes Town and SBC were only part of a zone of settlement along the low southeastern base of the Giza Plateau (fig. 2). The basin is no doubt the westernmost reach of a larger ancient canal basin, now deeply buried to the east of the Sphinx and Khafre Valley Temple.



Figure 1. Area KKT-E+ (east of the Khentkawes Town) with the Silo Building Complex, foreground, during season 2012. Our protective sand covers the western edge of the basin, which in 2012 filled with groundwater, and the upper Khentkawes Town and causeway leading to the chapel cut into the southeastern corner of her monumental tomb. The pyramids of Khafre (right) and Menkaure (left) rise in the background. View to the west

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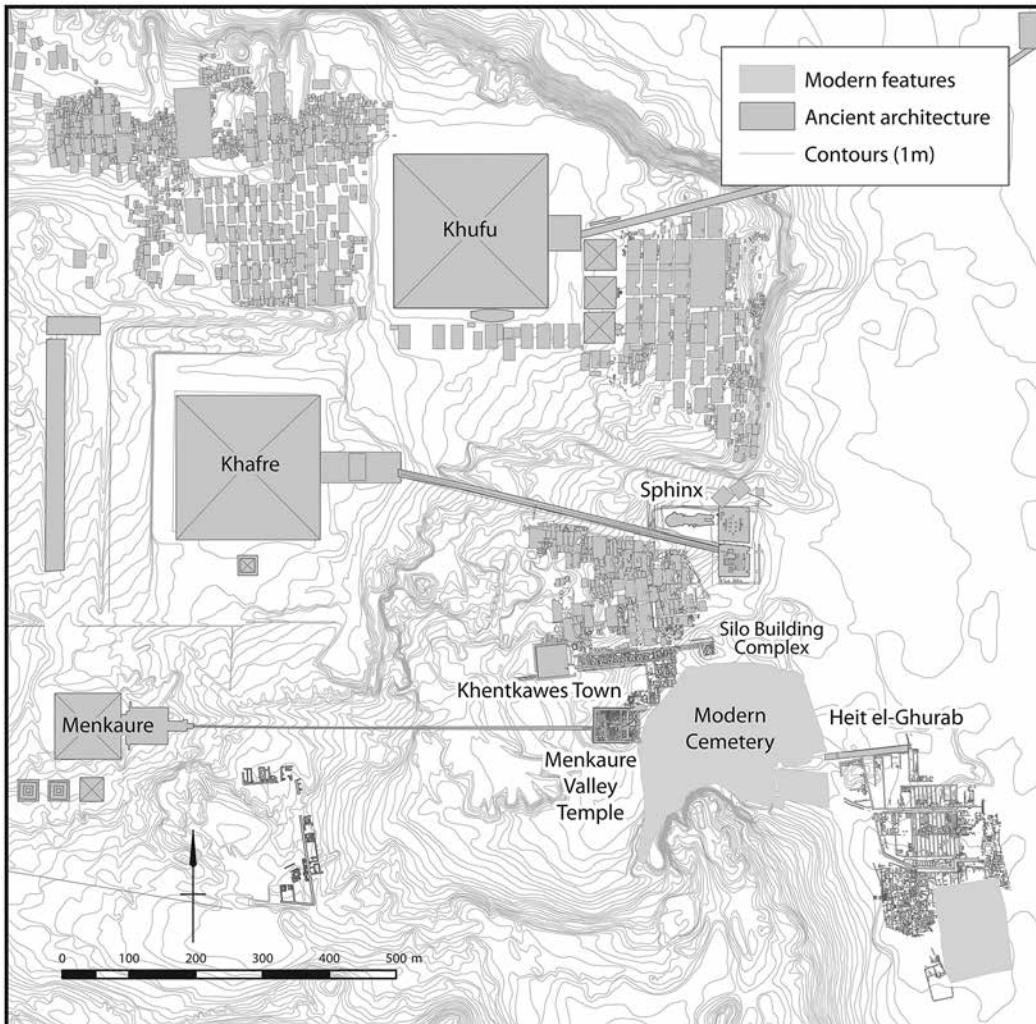


Figure 2. The Giza Plateau, showing the locations of KKT, the Menkaure Valley Temple, and the settlement of Heit el-Ghurab (illustration prepared by Rebekah Miracle from AERA GIS)

The small basin was part of the route from the Khentkawes chapel in the southeastern corner of the queen-mother's monument to the valley floor. Anyone who came to the end of the causeway corridor, which ran 150 meters through the upper town, could turn south or north to descend lateral ramps built against the vertical bedrock face of an old quarry. The southern ramp let onto a terrace around the basin. The northern ramp delivered one to stairs that descended onto the terrace or to the western end of a higher corridor that turned east and ran another 40 meters along the northern side of the basin (figs. 3–4). We found these structures and the basin between 2007 and 2009.¹ The combined lower layout extends east of the limits of Selim Hassan's 1932 excavations of the KKT upper town.

The walls of the eastern end of the corridor frame a small niche (a *bowab's* chamber?) against the wall that encloses the Silo Building Complex, so named because it includes a storage chamber with five round silos that were probably granaries. Just before the niche, a large limestone threshold on the north marked a monumental doorway through the once-

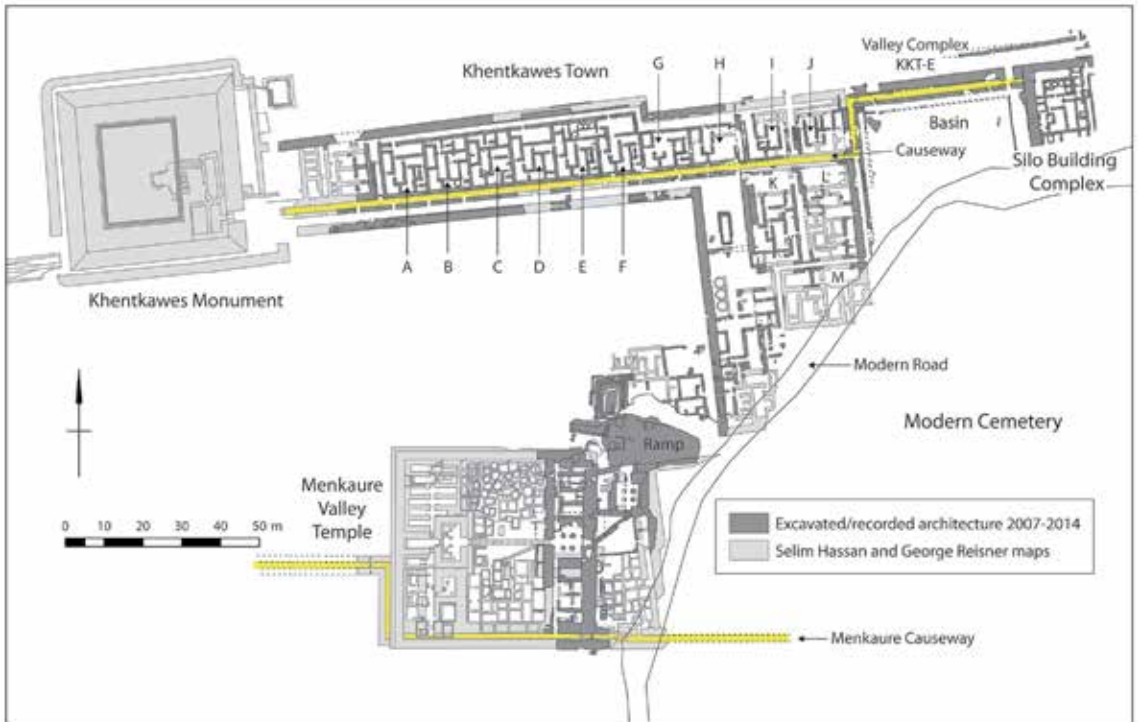


Figure 3. Map showing the location of the Khentkawes basin and the SBC in relation to the Khentkawes Town and funerary monument and the Menkaure Valley Temple (illustration prepared by Rebekah Miracle from AERA GIS)

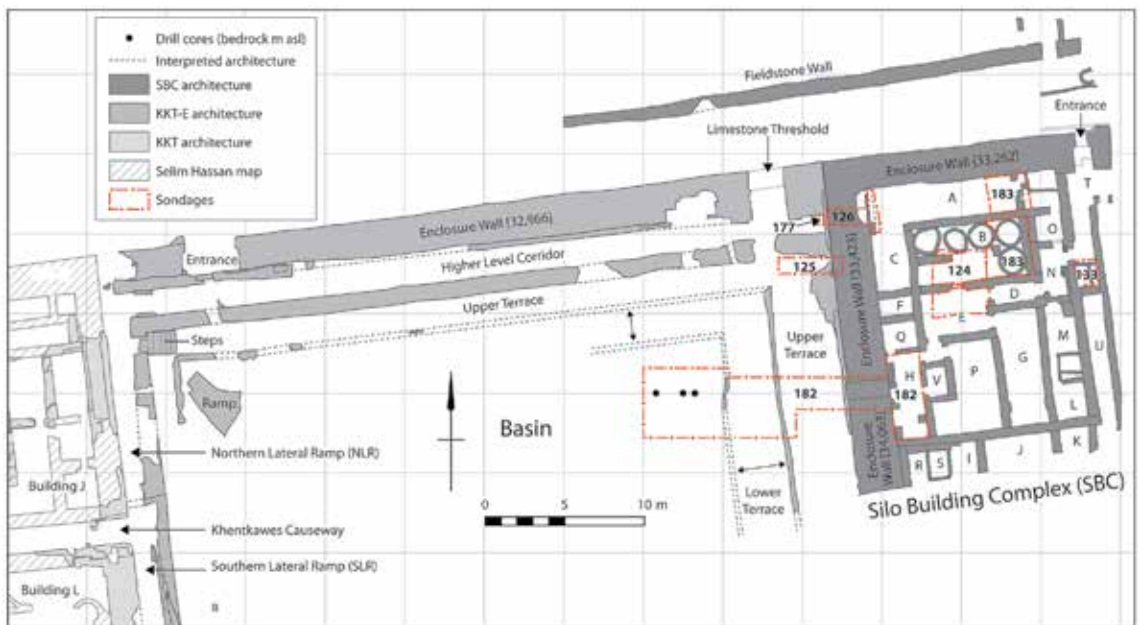


Figure 4. The KKT-E Valley Complex and Area KKT-E+ (illustration prepared by Rebekah Miracle from AERA GIS)

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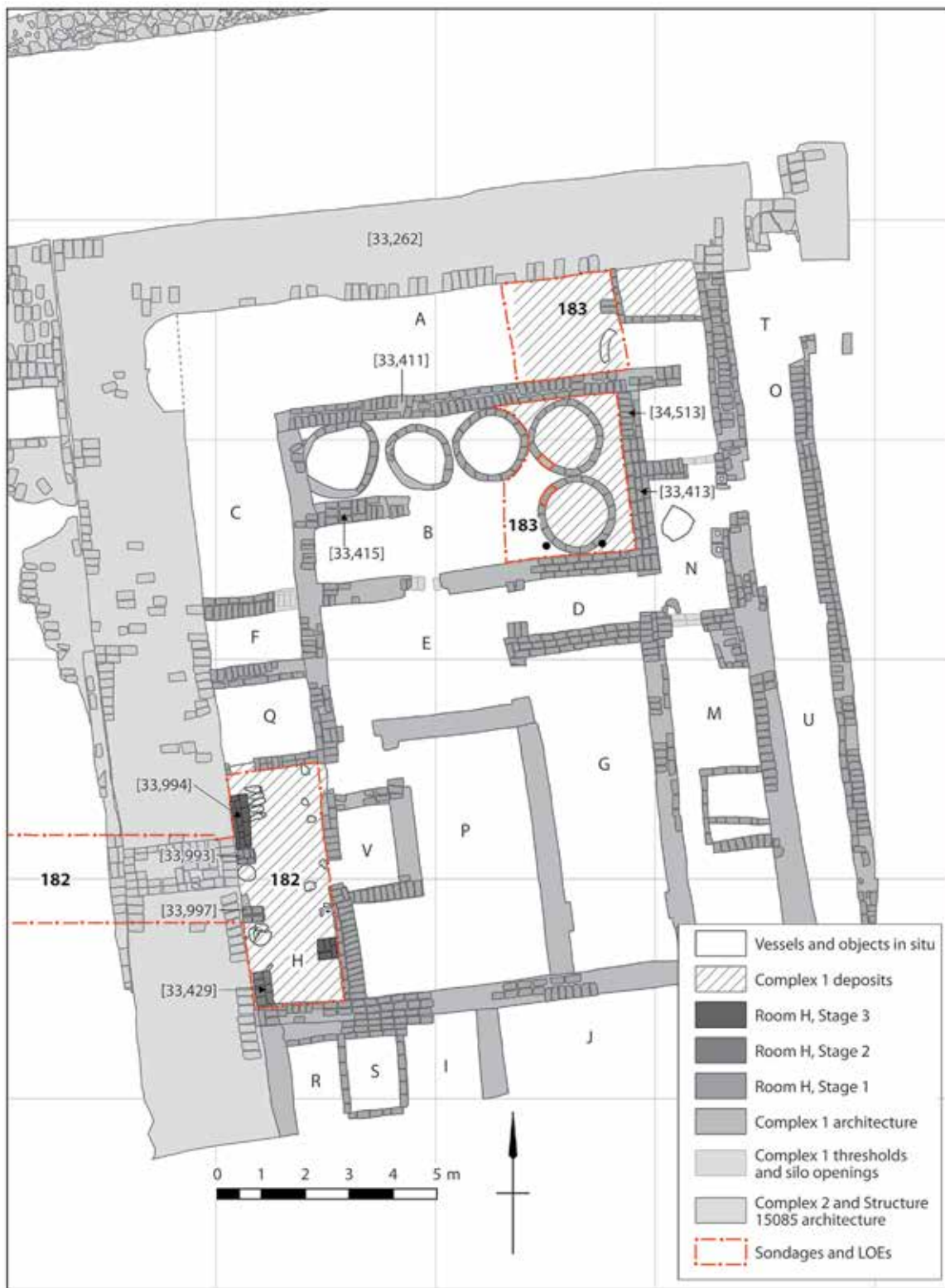


Figure 5. The Silo Building Complex (Structure 15,085, Complex 1) during the Fifth Dynasty (illustration prepared by Rebekah Miracle from AERA GIS)

massive northern basin wall. This entrance (fig. 4) gave access across the corridor down into the basin.

In 2012 we found the five silos and evidence that the long chambers on the north (fig. 5, A–C) and east (L–M) were bakeries. Food storage and production made sense at this location. People could deliver grain to the SBC via the basin, process it into flour and bread (and maybe beer), then take the food as offerings up the corridor and northern lateral ramp ramps and through the causeway to the queen’s chapel.

But we thought we had a problem for this idea: the thick corridor walls and niche abutted the wall enclosing the SBC. The corridor was clearly built later than the SBC enclosure. This made it appear that the basin, which the corridor helps frame, was also built later than the SBC enclosure. The older enclosure wall appeared to screen off the SBC from the basin and from the Khentkawes corridor, weakening the idea that this storage and production center served the Khentkawes I memorial.

When we found a clay sealing impressed with the title “Overseer of the Pyramid, Great One of Khafre” between Horus names of Niuserre, who was king in the mid-Fifth Dynasty some eighty-five years later than Khafre, we thought the older enclosure might delimit Khafre’s pyramid town.² The Niuserre sealing, sealings of other Fifth Dynasty kings, the pottery, and the stratigraphy indicated that the SBC was built in the Fifth Dynasty. Its walls abut interior sides of the older enclosure walls.

Season 2014 Questions

Prior to season 2014, AERA team members met in workshops led by Richard Redding to carefully plan sondages 182 and 183 (figs. 3–4) that would address specific questions about access between the basin and the SBC and about the ritual and economic functions of the SBC over time. To address these questions the team analyzed a range of freshly excavated material culture before the end of the season.

Within two weeks of the end of work, Ana Tavares, Daniel Jones, Freya Sadarangani, Hanan Mahmoud, Mohsen Kamel, Rabea Aissa, Hussein Rikhaby, Ali Witsell, John Nolan, Sherif Abd el-Monaem, Nermeen Shaban Aba Yazeed, Rodayna Bayoumy, Richard Redding, Claire Malleson, and Emmy Malak submitted a preliminary report on the results of the 2014 excavations and analyses for publication in the forthcoming issue of the *Bulletin de l’Institut française d’archéologie orientale* (BIFAO).

While I draw on their report for results and illustrations, I intend to address a broader issue pertinent to our 2014 results: the structural-stratigraphic relations between the SBC and the Khentkawes complex, and the implications for and ritual-economic relations.

Earlier Layout: Framing an Open Working Basin

We now realize that the basin must have existed before it became part of the lower approach up into the Khentkawes Town. This reverses the idea that the enclosure around the SBC pre-dates the creation of basin itself.³

Buildings older than the Khentkawes Town framed the basin on the east and west (fig. 6). On the east bank we now have the SBC enclosure wall. On the higher bedrock terrace to the west, Buildings I, J, K, L (see fig. 2) also existed before they became incorporated into the eastern “foot” of the L-shaped Khentkawes Town (Lehner et al. 2011, pp. 147–53). These

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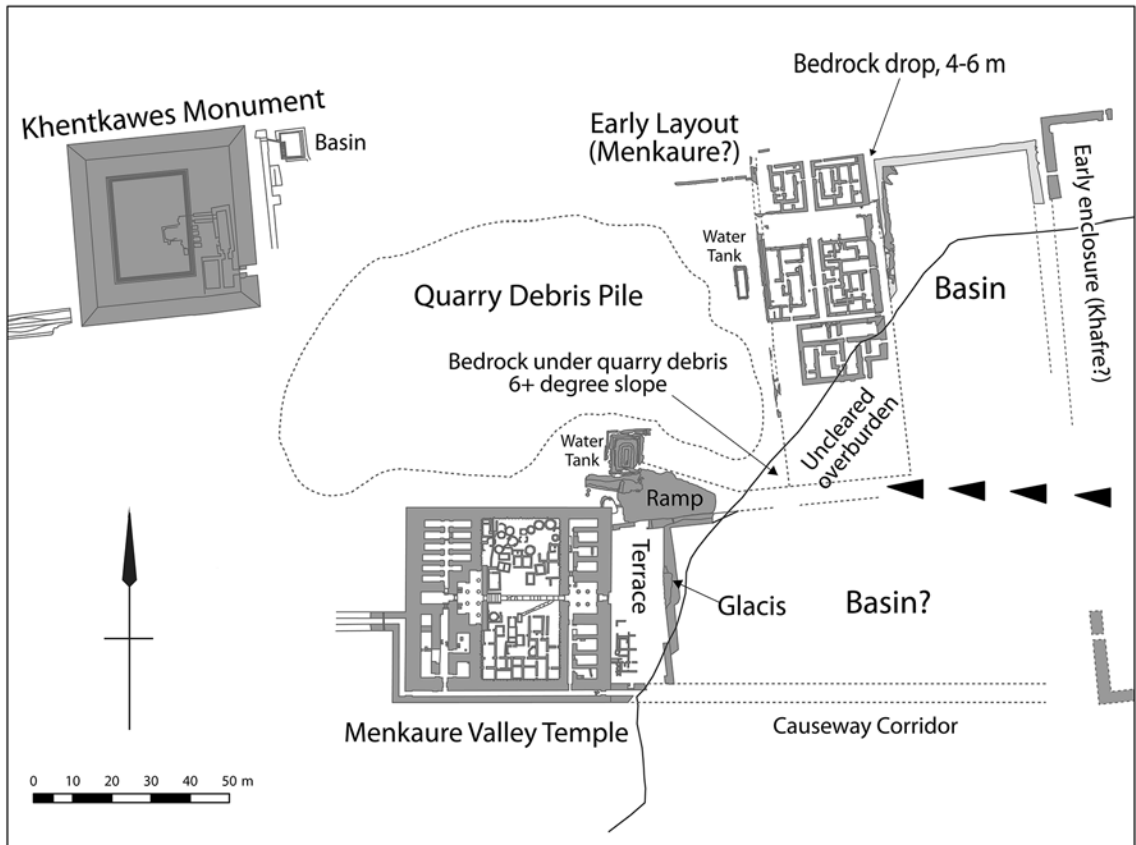


Figure 6. Map showing the early layout east and west of the basin, the Khentkawes Monument, and the Menkaure Valley Temple. The L-shaped basin may have served as a small harbor inlet for both the Khentkawes complex and the Menkaure Valley Temple (illustration prepared by Rebekah Miracle from AERA GIS)

buildings might have housed people and activities associated with the project to build Menkaure's pyramid complex (fig. 6).

Having started his valley temple only 30 meters to the south of this early block of structures, Menkaure's workers might have used the basin to bring building supplies for work on the king's pyramid complex. The basin probably extended as a reversed L-shaped harbor, as projected in figure 6. We have to guess because 6 to 8 meters of sand and a modern road and cemetery cover the southern part. Officials who stayed in buildings I, J, K, and L may have accounted for deliveries of supplies, labor, and produce. Workers could have delivered supplies up a very broad ramp sloping up to the northeast corner of the Menkaure Valley Temple.⁴

This Old Terraced Basin

Our sondages 125 in 2012 and 182 in 2014 gave us cross sections that showed how builders formed the eastern bank of the basin by dumping layers of limestone quarry debris ("limestone crush"). They spread a bedding of sand, on which they built the SBC enclosure wall, 2.60 meters (5 cubits) thick, leaving a gap for access, 1.10 meters wide between the enclosure and the basin (fig. 7).

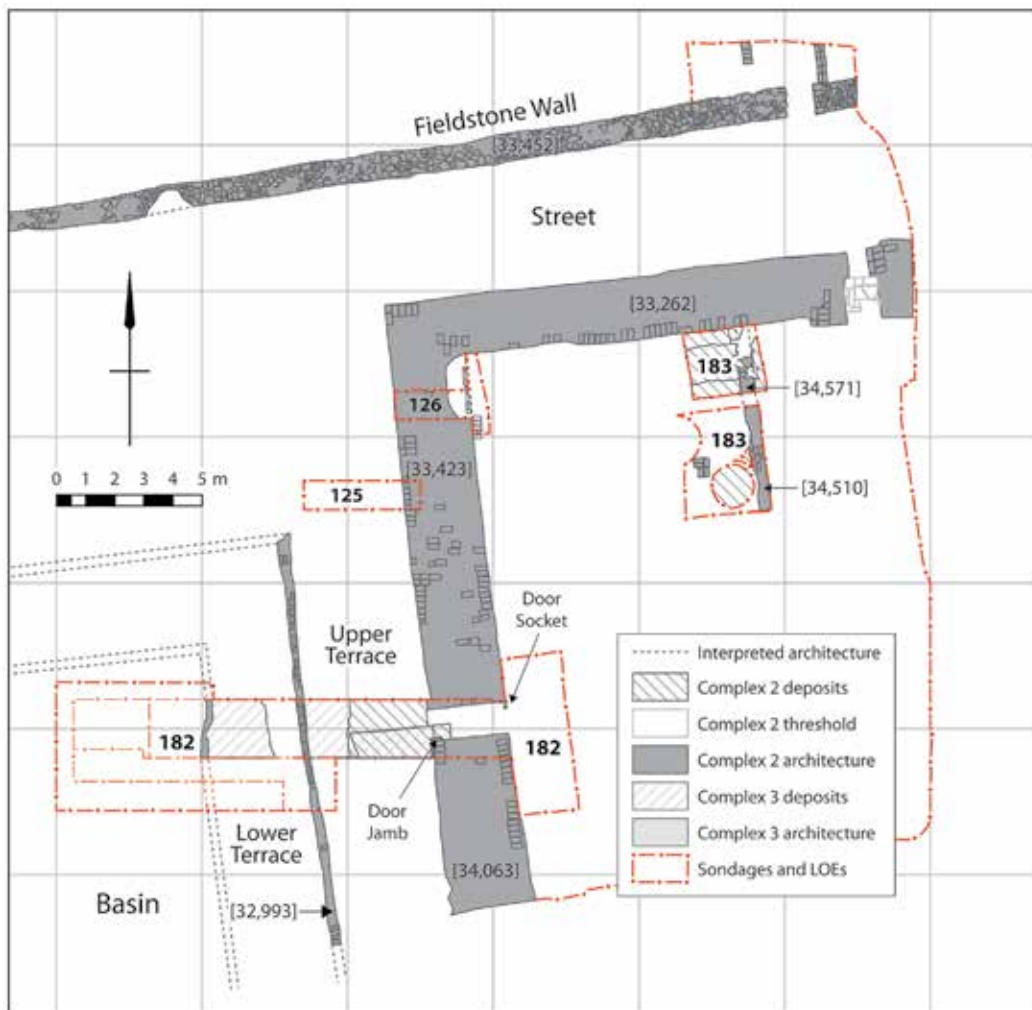


Figure 7. The early enclosure, Terraces 1 (upper) and 2 (lower) and the northern fieldstone wall (map by Rebekah Miracle from AERA GIS)

The eastern doorway opened from the older enclosure onto a terrace that once extended between 4.13 and 4.31 meters. Already in 2011 we mapped the eroded remains of the mudbrick casing (32,993), the width of a single brick, which once rose vertically to form the eastern edge of the terrace (fig. 8). We found this same mudbrick casing in the northwest corner and on western side of the basin. The builders probably intended the terrace to be 8 cubits (4.20 m) wide.

This season we found the remains of a lower mudbrick casing (34,544) that once delimited a second terrace, 1.00 to 1.13 meters lower than the upper terrace. The silt-plastered surface of the lower terrace remains for only a meter from the base of the upper casing. For convenience, I refer to these planes as Terrace 1 (upper) and Terrace 2 (lower), which leaves open the possibility of finding yet a third, lower terrace. Terrace 2, like Terrace 1, eroded into a slope cut through the foundation material of limestone quarry debris (fig. 8). In the exposure of our Sondage 182 the lower casing appears to jog (fig. 7), probably due to its col-

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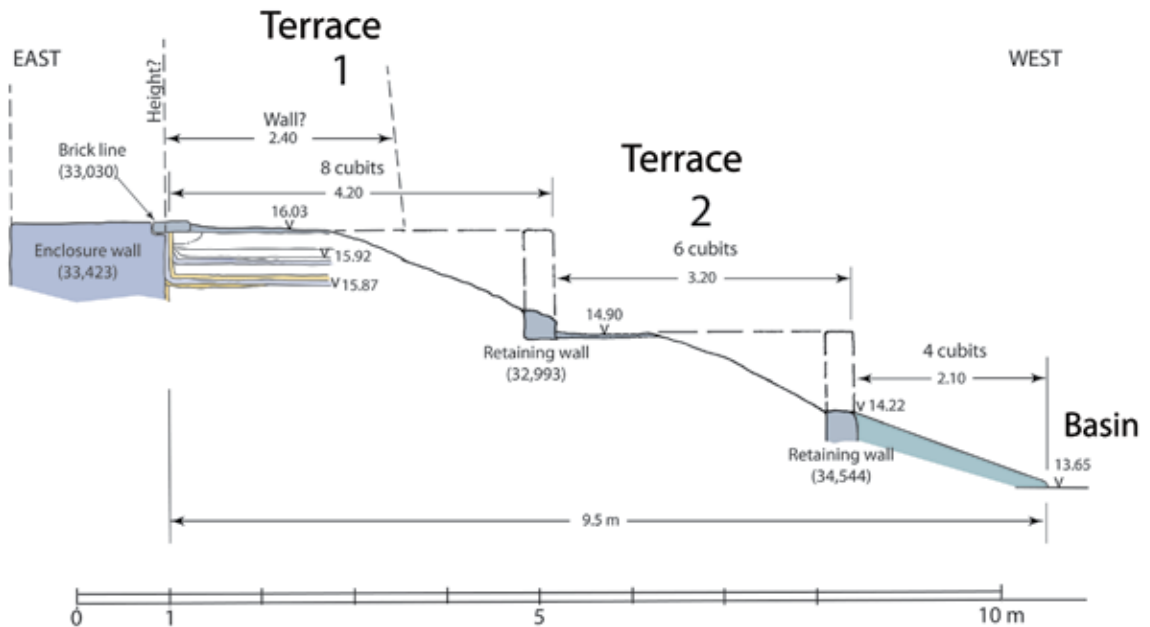


Figure 8. Reconstruction of the two terraces evidenced in Sondage 182 on the eastern side of the Khentkawes basin. Prepared surfaces against the enclosure wall (33,423) of the Silo Building Complex suggest the open terrace functioned in an earlier phase when this wall was plastered, and a later phase contemporary with the structures that Khentkawes builders made when they incorporated the basin into her memorial tomb complex (based on a sketch by Dan Jones)

lapse and slipping, so that Terrace 2 ranges from 3.10 to 3.44 meters in width. The builders probably intended a width of 6 cubits (3.15 m).

For convenience we have called the single-brick terrace linings “retaining walls.” Only one brick thick, they could not have retained loose debris. They are really casings or linings of limestone debris so compact that it held like cement. The builders laid the bricks to form the linings into a vertical face they cut into the compact debris

When we excavated the west and north sides of the basin in 2009–2011, we had no inkling of a lower terrace because the groundwater prevented us from excavating deep enough. With lower groundwater in 2014, Dan Jones extended his 2011 cross-trench on the west side of the basin and found the surface of the lower terrace. He could not extend deep enough to find the cased outer edge. But we are now reasonably certain the two stepped terraces extended on all three known sides. We are not certain that builders created the two terraces at the same time they built the SBC (Complex 2) enclosure wall, but we think it is likely.

Continuity and Change

We do not know what preceded the SBC within the “SBC enclosure wall,” but in the northern end of our 2014 Sondage 183 (figs. 3, 5, 6), we did find one north–south mudbrick wall of the pre-Fifth Dynasty phase (“Complex 2”),⁵ as well as evidence of baking, indicating a continuity of function. The wall (34,510), about half a meter thick, ran under the eastern silos and under the northern wall of Room B (figs. 4, 6), which had been had been built directly upon

the wall of the earlier phase, after it had been cut down to the floor or foundation level of the main SBC phase (“Complex 1”; fig. 5).

When they removed the later ashy deposits and floor in the northern end of Sondage 183 in Space A (fig. 5), Rabee Eissa and Hussein El-Rikaby found the continuation of the wall (designated 34,571) of the older phase. Belonging to this earlier phase, they also found in a rectilinear spread of ash with circle patterns against the base of the northern enclosure wall. The ash pattern must mark an egg carton-shaped pit for baking bread in pots set into hot embers such as we found in bakeries in the Heit el-Ghurab (“Workers Town”) site.⁶ The heat from baking destroyed the plaster and scorched the bricks of the enclosure wall. Another baking pit showed as a spread of ash against the southern wall of space A, which is the northern wall of the silo chamber. Heat from baking also scorched the face of that wall.

It is clear that people used these baking pits before the silos were built. They continued to bake in Space A until the final occupation phase in the mid-Fifth Dynasty, evidenced by the uppermost layer of dark ash, a very large quern stone, and a bin built into the northeast corner over the latest floor (fig. 5). In a “make-up deposit” below and in the floors of the silos the team found Fourth Dynasty pottery and a Menkaure sealing, which could suggest that the silos were built already before the end of the Fourth Dynasty. The north wall of the silo chamber (B) might likewise have been rebuilt or remained from the earlier phase.

We see here a continuity of function over time, perhaps eighty-five years or more. But during this time, circulation and access changed. With those changes, the allocation of produce and personnel to the nearby royal endowments may have also changed.

Back on Terrace 1, inhabitants used the doorway through the SBC western enclosure for a short time only before they blocked it with mudbrick. Collapsed marl plaster (34,477) and the weathered west face of the wall suggest some time passed before workers next resurfaced the wall and Terrace 1 with a mud render (34,473) and thick marl plaster (34,472). In his stratigraphy of Sondage 183, Dan Jones (2014) ascertained that workers again raised the level of Terrace 1 on a later occasion. First they spread limestone 10 centimeters thick and coated the new surface with a whitewash (34,468) that “lips up” over the prior marl plaster (34,472) on the wall.

It is my impression, following *Indizienkette*, that when workers twice raised and repaved the terrace, they had not yet incorporated into the Khentkawes valley complex the basin and the older structures east and west. However, I believe they may have already built the thick wall (32,966) enclosing the northern side of the basin, which we know existed before builders added the parallel wall to form the corridor (fig. 4).

The north basin wall (32,966) linked the upper buildings (I, J, K, L, and M) with the lower enclosure that came to contain the SBC. With the doorway through the western wall (33,423 + 34,063) of the lower enclosure blocked, people must have entered the basin at the eastern end of the north basin wall through a doorway, 2.26 meters wide, marked by the large limestone threshold (fig. 4).⁷ From here a ramp set at an angle might have given access down onto Terrace 2 and into the basin. We have yet to excavate a mass of limestone and silty debris in the lower part of the northeast corner of the basin. This mass might prove to be the remains of a ramp, a counterpart to the lowest ramp we found in the northwest corner of the basin.⁸

Modifications for Khentkawes

It was the third and highest re-surfacing of Terrace 1 that in 2011 and 2012 I took for the residue of a thick eastern enclosure wall of the basin, which, had it existed, would have been built against and parallel to the thicker SBC enclosure wall, making “enclosures back to back.”⁹

When we exposed the eastern bank of the basin in 2011, we mapped a thin, broad patch of silty mudbrick material (34,270) over a 10-centimeters thick bed of crushed limestone (34,461). While not certain, it now seems likely this is a third re-surfacing of Terrace 1. The brick material is either an intentional render or deterioration from the adjacent wall. Some whole, articulated bricks and the crushed limestone layer suggest it remains from a pavement.

I believe that workers laid down this third, highest surface of Terrace I at the time they incorporated the basin and the upper block of buildings into the Khentkawes complex. At this time they also made the northern corridor and the northern lateral ramp leading up to the Khentkawes causeway. At this time the Khentkawes Town came into being.

A single line of brick stretchers (33,030) along the base of the western wall of the SBC enclosure (figs. 4, 6) ties the creation of the Khentkawes Town to the creation of the corridor. Masons must have laid the brick line, like a street curb, before they made the corridor running along the north side of the basin. The bricks are laid into a cut out of the lower side of the SBC enclosure wall (fig. 8), making us wonder if it might not have been reduced to this level at the time.

Builders made the corridor, 1.60 meters wide, by adding a thick accretion onto the southern face of the northern basin wall (32,966) and by making a parallel wall on the south. At the western end, the corridor turned and continued up the northern lateral ramp to the eastern end of the Khentkawes causeway where they narrowed the entrance of the older block of buildings to 1.60 meters, the width of the causeway on its run to the queen’s chapel 150 meters up the slope.

In effect, from its eastern end, the queen-mother’s causeway corridor now turned 90 degrees north, and turned to run the east as the corridor. Menkaure’s causeway corridor, also 1.60 meters wide, turns 90 degrees south at his valley temple, and then turns again to run east along the southern side of his valley temple (fig. 3). This is one of many indications that the Khentkawes Town and the Menkaure pyramid complex were finished in mudbrick within the same few years, most probably by Menkaure’s successor, Shepseskaf.

The far eastern end of the Khentkawes corridor is badly eroded, but enough traces remain to see the corridor wall stopped at a straight edge, leaving a gap for the access down into the basin from the entrance through the north basin wall (fig. 4). The corridor wall continues on the other side of the gap, where it abuts the line of single brick stretchers (33,030) and the SBC enclosure wall. The brick stretchers run at the back of the (porter’s?) niche, which was framed between the corridor wall and the thickened, massive eastern end of the north basin wall (32,966) (fig. 4). Masons must have laid the brick line (33,030) before they built the corridor at the same time as most of the upper Khentkawes Town. On Terrace 1, the brick line lies flush with, and was laid down nearly contemporary with, the third and highest re-paving of Terrace 1.

Extending the corridor as they did, Khentkawes I’s builders must have intended to connect to the SBC enclosure because it stored grain and processed it into bread and beer as offerings. To bring produce into the Khentkawes corridor people would have to exit a doorway at the eastern end of the northern wall of the older enclosure (figs. 4-5), move through

a broad street defined on the north by a fieldstone wall, and then enter the corridor via the doorway marked by the limestone threshold at the eastern end of the north basin wall. From here the corridor + causeway could have served, in effect, to tube-feed the queen-mother's tomb and chapel, 190 meters up the plateau.

Of course, we know not what kinds of routes and accesses run from the SBC enclosure to the east, and whether they might turn north toward the Khafre Valley Temple. Further excavation in this direction, through 6 to 8 meters of a sand overburden, may tell.

Provisioning a Pyramid Town: State and Village

Analysis of material from 2012 and 2014 confirms two aspects of pyramid towns that Egyptologists construe from tomb titles, royal decrees, and the papyrus archives of the Abusir pyramid temples.¹⁰ After the royal house moved away for building pyramids elsewhere, the settlements of priests and service personnel attached to pyramid temples functioned as “normal” villages, where people fended for themselves. On the other hand, the residents enjoyed exemption from obligatory labor and tax on their property and at least partial, perhaps sometimes token, provisioning from the royal house and exchange with other pyramid temples.

On the state-supported institutional front, the SBC appears to have served as a combination house, office, grain store, and bakery from the late Fourth Dynasty to the reign of Niuserre in the mid-Fifth Dynasty. Its central layout shows similarities to the modular houses of the upper Khentkawes Town, especially Building E.¹¹ It might have been part of the institution that texts refer to as *pr-šn*, the “House of Shena,” meaning something like “commissariat.” The Per-Shena stored, processed, and prepared foodstuffs as well as other materials. Large plantations, estates, households, and temples could possess a Per-Shena.¹²

Sealings from the SBC certainly testify to state attention. While they have not yet found the term, *pr šn*, John Nolan and Ali Witsell have documented from our limited excavations more than seventy-five formal sealings “of office” bearing the names of the Fifth Dynasty kings Userkaf, Sahure, Raneferef, and Niuserre as well as Fourth Dynasty Menkaure from the earlier deposits. Two sealings bear the name of Niuserre's pyramid, “Enduring are the Places of Niuserre,” attesting to the exchange between pyramid temples that we know from the Abusir Papyri. Many peg-and-string sealings must derive from official opening and closing of the apertures we found on the silos for removing grain. John and Ali documented sixty-nine “blanks,” dabs of clay prepared for sealing, and forty-three “recycle/discards,” sealings that did not work and were reused or thrown away, indicating that this was a “working environment for multiple steps of the sealing process.”¹³ People sealed on-site, and did not just break sealings on containers and documents that came in from elsewhere.

The sealings emphasize the office aspect of the SBC. Flora and chipped stone show the site was provisioned with already processed material. Claire Malleson finds low taxa diversity and few remains of chaff and weeds, suggesting that the grain came into SBC storage cleaned of its chaff, a labor-intensive process which, if emmer, involves pounding with mortar and pestle. Richard Redding's study of the lithics (chipped stone) showed mainly finished tools of imported chert or flint, and only one small core, suggesting the tools were manufactured elsewhere.

The pottery also suggests official, ritual service. Fragments of miniature “votive” vessels account for 20.9 percent of the pottery from the mudbrick collapse, while stands, some

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Figure 9. Hedgehog boat fragment from the Silo Building Complex, limestone (photo by Ali Witsell)

excavations, may also reflect local village culture (fig. 9). Ana Tavares points out that “hedgehog ships” have been interpreted as “private votive objects found in temple contexts and indicative of popular beliefs.”¹⁴ People at Elephantine deposited hedgehog boats at the local Satet temple. In our site, the Khafre and Menkaure valley temples were the local temples, and the foci of pyramid towns we have only partially uncovered. Again, the SBC is only part of a settlement that continues east under thick sand.

Kings kept alive the endowments for the memorials of these Giza kings for some eighty-five years (to the reign of Niuserre). The SBC was clearly part of a state-supported endowment. (So far, we know of no sealings of Khentkawes I. Nor is her name known from any source other than her titles etched into the granite doorjambs and false doors from her chapel.) It appears from the sealings and pottery that the SBC stopped functioning, went to ruin, and became covered by sand already by the Sixth Dynasty. People could not sustain life in the pyramid village, at least not at the SBC. After a time of abandonment, Sixth Dynasty kings renewed the exemptions, and so the pyramid town of Menkaure revived, now clustered in his valley temple. We found evidence that people also returned to and rebuilt parts of the Khentkawes upper town. But they did not rebuild the lower Khentkawes valley complex¹⁵ or the SBC. The valley complex and lower town lay ruined and buried under a thick blanket of sand, well before the end of the Old Kingdom.

Notes

¹ *Oriental Institute 2009–2010 Annual Report*, pp. 52–56.

² *Oriental Institute 2011–2012 Annual Report*, p. 61, fig. 12.

³ The view that I expressed in as in the *Oriental Institute 2011–2012 Annual Report*, p. 60.

⁴ The broad ramp is illustrated in the *Oriental Institute 2009–2010 Annual Report*, pp. 57–58, figs. 18–20.

⁵ The team numbers “complexes” top down, so that Complex 2 is older than Complex 1. This leaves the possibility for deeper, older complexes while being somewhat counter-intuitive.

⁶ *Oriental Institute 1991–1992 Annual Report*, pp. 60–66.

complete, account for 60 percent of the pottery from the fill between the silos and the eastern wall of Space B.

On the village front, while the overall sample of animal bone is small, Richard Redding notes that pig bone is most abundant. Pig is a village animal that can be fed waste organics, produces numerous offspring, and yields high-calorie meat. However, the residents did consume cattle. In the 2012 sample Redding found a preponderance of thirty-one forelimb fragments to four hindlimb fragments, suggesting the first choice of forelimbs commonly shown in tomb scenes of butchering.

Objects used in weaving and fishing again suggest normal domestic life. The limestone end of a hedgehog boat, perhaps the most outstanding object from our 2014

⁷ *Oriental Institute 2011–2012 Annual Report*, p. 62, fig. 13.

⁸ *Oriental Institute 2009–2010 Annual Report*, pp. 53–54, figs. 15–17.

⁹ *Oriental Institute 2011–2012 Annual Report*, pp. 58–59, figs. 8, 9, 13.

¹⁰ I have used the summaries in the preliminary report that the team prepared for publication after the 2014 season.

¹¹ *Oriental Institute 2009–2010 Annual Report*, pp. 49–52; 2011–2012, pp. 64–66.

¹² Papazian 2012, pp. 75–79.

¹³ John Nolan and Ali Witsell, forthcoming.

¹⁴ A. Tavares and E. Malek, unpublished report “Grinding Tool Typology, Heit el-Ghurab” citing Kemp 2006, p. 119, fig. 40, p. 127, fig. 44.

¹⁵ Lehner et al. 2011, pp. 172–79.

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JERICHO MAFJAR PROJECT

Donald Whitcomb

After three intensive seasons of excavations at Khirbet al-Mafjar near Jericho, new information and discoveries have become a significant trove that demand a redefinition of the old monument of Qasr Hisham. With this in mind, Dr. Hamdan Taha, my co-director and the Director of the Department of Antiquities and Cultural Heritage, suggested we stop digging and start publication. We have a team of Palestinian archaeologists and students who have lived, worked, and studied this magnificent site with archaeologists and students from Chicago (and elsewhere). I was reluctant to lose this momentum, not to mention the promise of new discoveries. I suggested a compromise — no digging, but surveying using new technologies. Hamdan was intrigued and agreed. Two perfect investigators could lead us into this world of modern research, Dr. Andrew Creekmore and his wife, Dr. Eleanor Moseman (fig. 1). Andy had been a student of Gil Stein and has worked with him in Syria; he came highly recommended. What seems important in remote sensing is above all experience, in setting up the survey fields, quality control over the work, manipulation of the data, judicious



Figure 1. Andy and Ellie using the ground-penetrating radar in remote survey, area 1 (RS 1)

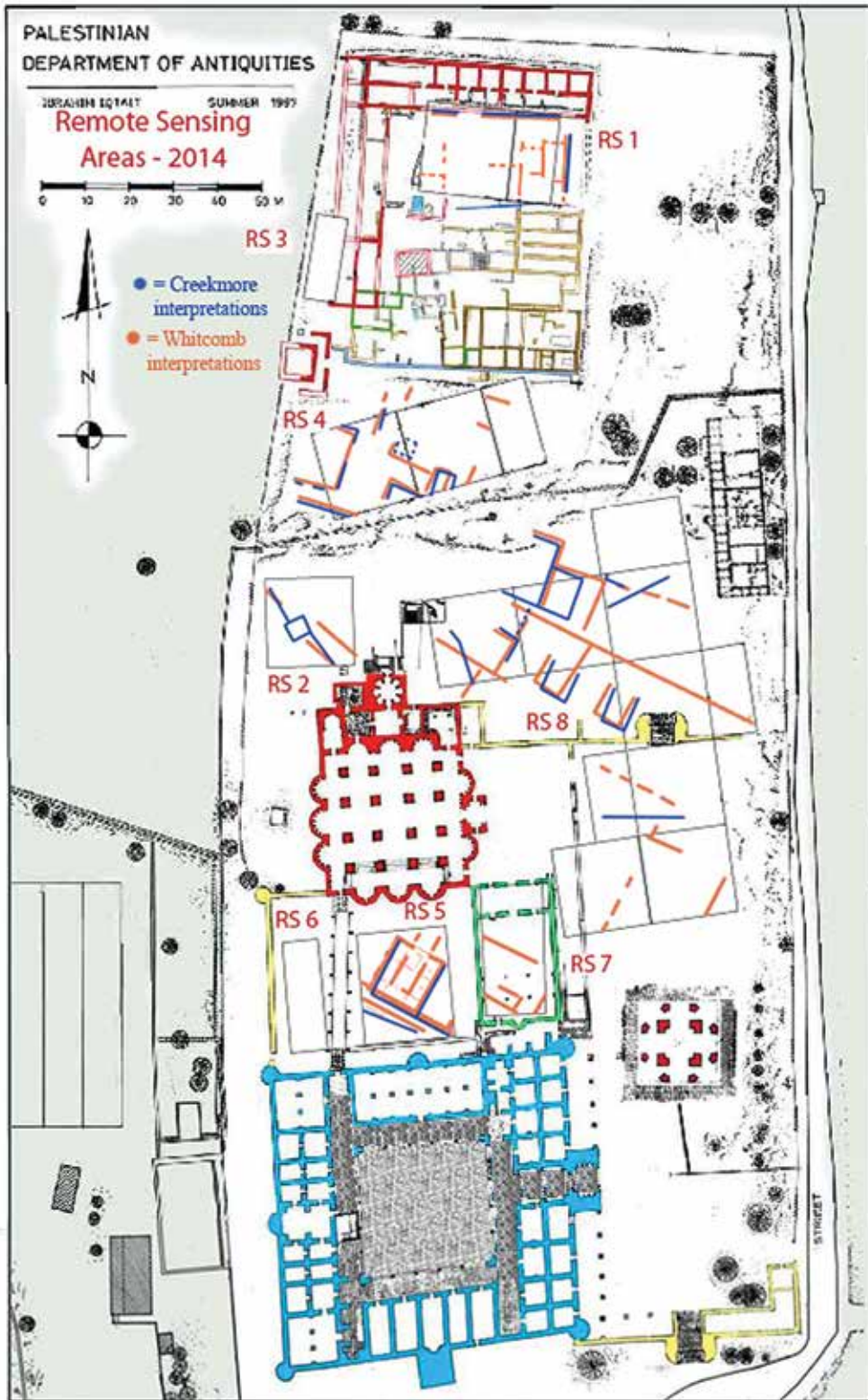


Figure 2. Remote-sensing areas investigated in 2014, with preliminary interpretations

JERICHO MAFJAR PROJECT



Figure 3. Andy using the magnetometer in RS 5, above the garden house

interpretations (see below), and not the least, manipulating five large and suspicious containers of electronic equipment through customs (and back again). The following report is a preliminary description of the efforts and results of the 2014 season.

We began by setting up fields for survey. The team consisted of Jihad Yasin, Awni Shawamra, Bassam Helmi, Basem Shqair, Ignacio Arce, and my student, Michael Jennings, all “old hands” from previous seasons. There was some adjustment (less so for a younger, new member of the department, Imad Doudeen); we began by walking around picking up stones and especially the smallest fragments of metal

(for the magnetometer) (fig. 2). Gradually we all joined in the process of dragging the machines across the ground; the magnetometer carried at a steady pace (fig. 3), while others moved guide ropes; the resistivity meter with its probes shoved into the often hard ground (fig. 4); and most difficult, the ground-penetrating radar dragged across the ground while followed by an instrument-laden reader (fig. 5). The evenings were filled for Andy and Ellie checking their instruments and crunching the data. By the end of the second week, Andy could show some walls appearing in the middle area, between the palatial complex to the south and the agricultural estate, or northern area. He also found time to give a presentation on the remote-sensing techniques to Hamdan and the Palestinian and Chicago team. This information led to increased participation by all in this systematic recording on this site.



Figure 4. Ellie and Basam using the resistivity instrument in RS 8



Figure 5. Andy and Jehad with ground-penetrating radar

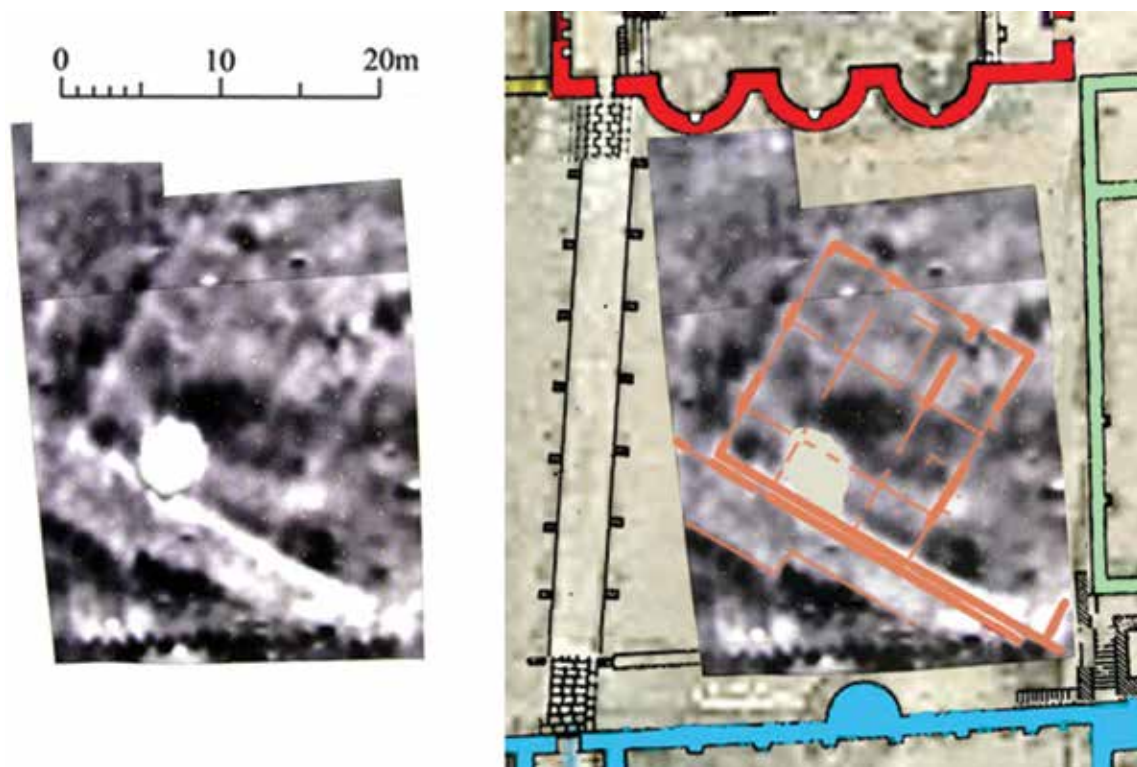


Figure 6. The garden house, RS 5, original magnetometer reading (left) and interpretation (right)

The results are very positive, showing clear evidence of sub-surface structures in virtually all the areas studied. With his careful eye of experience, Andy has offered measured interpretations (fig. 6, blue lines), while I offer a more expansive, and wishful (as Andy comments), set of hidden structures (fig. 6, orange lines). For a first example, the Red Building of the northern area (the *day'a*, or estate) has a central area that was never excavated and was assumed to have been an empty courtyard. Both Andy and I agree that north and east walls of the peripheral rooms are clearly visible. I would suggest that resistivity readings indicate walls in the eastern half that may continue the buildings under the stables; likewise, there may be some walls north of the large cistern on the east. The difficulty in excavating the northern area is that most of the buildings were already excavated in the 1960s. We have been re-excavating these structures, hoping for information in partial excavations and in the baulks left behind. The indications from RS 1 (remote survey, area 1) are that undisturbed buildings remain to be investigated.

The middle area (or *wasit*) lies between the northern estate and the southern palatial complex, a broad expanse divided by a modern irrigation channel (through which water flows twice a week). RS 4 was north of the channel in which we see a large building and possible street on the western side and further structures with the same northwest-southeast orientation. This was clear from the ground-penetrating radar (GPR) and was repeated in RS 8, south of the channel. We agree that the GPR reveals a series of isolate rooms that I would assemble into longer walls of building complexes. The same or a very similar wall orientation seems to continue in this massive assemblage of walls and buildings. Curiously,

JERICO MAFJAR PROJECT

as we scanned this area with instruments, Jihad Yasin (fig. 4) pointed out lines of stone walls visible on the surface; we had walked over the area a hundred times, never expecting that it was full of structures.

The third grouping of remote-sensing areas might be called the garden or *bustan*, east and south of the new north gate and wall, that is, within the grounds of the palatial complex. RS 8 continues south of the new gate, where Andy notes a road or drain leading from the audience hall entrance. The area is badly disturbed from previous landscaping, but I imagine a number of wall lines in the northern and eastern sections. RS 7 lies within the mosque, which had been heavily damaged. The GPR shows the two northern walls and a line of columns along the western side. A massive reflection in the sanctuary (*haram*) area seems misplaced and might be a mass of fallen materials. The magnetometer readings show a very different story: more wall lines that suggest a structure running beneath the mosque.

These wall lines beneath the mosque seem continuations of a very clear building, perhaps the most exciting discovery of the season. RS 5 lies between the north wall of the palace and the south wall of the audience hall (fig. 6). The magnetometer revealed a massive wall, or doubled walls, running across the south part of the area at an angle. In the center is a rectangular building, ca. 15 × 14 meters, with a central courtyard and rooms around each side, except across the possible northern entrance. This new house stands within an area that was presumed to have been a garden, next to a porticoed walk crossed by the Caliph. This “garden house” seems so perfectly central to the later(?) buildings surrounding it, that it would seem to have a special importance. The house seems part of the walls under the mosque and also associated with the larger building complex in the *wasit* or middle area to the north.

Thus the 2014 project that began as an exercise of almost idle curiosity now stands as an enormous quandary. In the first place, the Umayyad palatial complex is clearly a separate occupational phase; likewise, the northern agricultural estate of the Umayyad and especially Abbasid periods are a distinct phenomenon. An immediate and normal interpretation would be that we have evidence of a new, earlier period of occupation. The first problem is a lack of evidence for such an antecedent period. After our three seasons of excavations, and Baramki's thirteen seasons of digging (and he was looking for — and well-familiar with — Byzantine, Roman, and earlier materials), nothing has been found of these likely phases. There is the possibility that this new phase might be very early Umayyad in date. This follows from a late reference that the region was developed by Sulayman ibn Abd al-Malik, before his brother Hisham imposed his palace and estate on the site. Nevertheless, the first question must remain, why the different and apparently dominant building orientation?

The famous monuments of Khirbet al-Mafjar are elegant testaments to Umayyad architecture and art, studied and enjoyed by generations of scholars and visitors. The excavations of the Jericho Mafjar Project have added an unexpected yet intriguing complexity to the full history of Qasr Hisham. Each season leaves us with yet more questions, exciting questions that may be answered only with more digging.

JERICHO MAFJAR: HISHAM'S PALACE SITE AND MUSEUM PROJECT

Jack Green

A brief report on the preliminary stages of the project to reinstall the site museum at Khirbet al-Mafjar (Hisham's Palace), Jericho, can be found in the Museum section of the *Oriental Institute 2012-2013 Annual Report* (p. 193), which reported on our January 2013 site visit. The project was completed in May 2014, resulting in a fully installed site museum with approximately 150 objects displayed in seven display cases, with three installations, eleven graphic panels, and a video slide show. In addition, sixteen new graphic panels were installed on the archaeological site for visitors.

Preparations and Skype meetings began in summer 2013, followed by a physical consultation visit in October 2013 by Jack Green and Erik Lindahl of the Oriental Institute Museum. Meetings and site visits with stakeholders of the Hisham's Palace site and museum project took place over a one-week period in Nablus, Ramallah, and Jericho within the Palestinian Territories. The visit was highly beneficial for us as we were able to meet and discuss details of the project with staff of the Ministry of Tourism and Antiquities (MoTA) and the Department of Antiquities and Cultural Heritage (DACH), the architects (Midmack) and exhibit designers (Al Nasher), and to assess proposed display-case materials, dimensions, specifi-



Figure 1. The Hisham's Palace Museum prior to object label installation and the opening, late May 2014 (photo by Maher Barghouti)

HISHAM'S PALACE SITE AND MUSEUM PROJECT

cations, and potential manufacturers. The Museum and Site project was managed by the Non-Governmental Organization DAI (Development Alternatives, Inc.) as part of the Compete Project, a USAID-funded initiative to build economic sectors within the West Bank and Gaza, including tourism. The Oriental Institute Museum's role as consultants for DAI on the project, in close collaboration with Jericho Mafjar Project co-directors Hamdan Taha (DACH) and Donald Whitcomb (Oriental Institute), was to develop and provide an overall concept for the museum, interpretive content for the site and museum panels, advice and expertise on various aspects of the project, as well as provide labor and materials for making mounts for objects.

Over the following months, preparations were made on the content, then integrated into graphic panels beautifully designed by Abed Ramadan of Al Nasher. English DACH-approved text was translated into Arabic by Nour Merza and Osama Abu Eledem of the University of Chicago and subsequently edited and reviewed by DACH staff. Thanks also go to Anthony Lauricella and Tasha Vorderstrasse of the University of Chicago for assistance with object labels. Display-case designs were developed jointly between Al Nasher and Midmack, and subsequently built by a bathroom and kitchen company outside Ramallah. These sturdy, customized cases utilize laminated safety glass and steel frames, and are faced with durable Corian marble panels. The conservation and object registration component of the project was provided by DACH staff. We are grateful for the support of DACH conservator Mohammed Diab, Director of Museums Feras Aqel, and Curator of Hisham's Palace Elham Alama.

The site visit for object installation took place between May 12 and May 24. Our exhibits installation team from the Oriental Institute Museum was made up of Jack Green (chief curator), Erik Lindahl (lead preparator), and Brian Zimerle (assistant preparator). Brass and acrylic mounts prepared in advance over a two-week period in Chicago by Erik and Brian and were modified further within the Jericho Mosaic Workshop at Hisham's Palace. In addition to DACH staff already mentioned, especially DACH Director Dr. Hamdan Taha, we are extremely grateful for the support of Ihab Daoud, Jihad Yasin, and Eyad Hamdan. During the hot days and long evenings we worked through the mounts, gradually installing the museum objects and making final edits to the object labels. We are especially thankful to mosaic restorer Imad Doudeen for all his help (see fig. in Whitcomb's *Individual Research*), as well as for the tea, coffee, and good humor he provided during our stay.



Figure 2. Donald Whitcomb giving a tour of the museum during the opening, May 28, 2014 (photo by Maher Barghout)

This new museum opened to the public on May 28, 2014 (fig. 1). Although Jack Green, Erik Lindahl, and Brian Zimerle were unfortunately unable to attend the official opening due to scheduling constraints, Donald Whitcomb represented the Oriental Institute (fig. 2). The opening was officiated by the Minister for Tourism and Antiquities for the State of Palestine,

Rula Ma'ay'a, and the Mission Director of USAID for the West Bank and Gaza, R. David Harden.

The museum itself features bilingual graphic panels and thematic displays. These include, in the north section of the gallery, an introductory museum panel presenting a time line and maps that situate the site over time and space; a panel about Palestinian archaeologist Dimitri Baramki and his contribution to the early excavations in the 1930s; a display entitled "Ceramic Traditions," which utilizes Baramki's pottery sequence from the late Umayyad to Ayyubid periods (ca. AD 750–1250); a display about the economic role of the site as an agricultural estate; a display about hospitality and entertainment drawing upon vessels related to food and drink; and objects of daily life, including coins, personal ornaments, and

cosmetic implements. In the museum's central and south section, there is a focus on architecture and elaboration, including a reconstructed cupola (dome) from the audience hall's diwan and a niche from the facade of the audience hall. Many fragments of carved stucco figures of humans, animals, and vegetal and geometric friezes are presented in one large display case. Graphic panels provide information on wall paintings and mosaics of Hisham's Palace, supported by a video slide show. Lastly, a "touchable" exhibit consisting of fragments of building materials is presented in a display entitled "Building Hisham's Palace."

The site panels were printed on ceramic tile (fig. 3), seen as the most durable option for the site, and incorporated into a new visitor route. New panels that have not been previously available to the public include: "The Grape Press," "The Northern Area Mosque," "The Stables," and "The Abbasid House." New walkways to complement the new site signage were in the process of being completed.

The site of Khirbet al-Mafjar is a popular tourist destination as well as a key site for Palestinian school children and families. Visits to the site are part of the school curriculum, and therefore all children visit the site as part of their history education. A focus on public and curricular education is yet to be fully integrated into the new site and museum, although there is an intention to integrate this element in the future. The current improvements to the site and museum already enhance visitor's understanding and appreciation of the importance of Jericho's rich cultural heritage for years to come. In addition, the benefit to the local economy in terms of tourism is obvious. With more to see, this will encourage greater interest and investment in Jericho as a cultural destination for visitors. Overall, the Oriental Institute's involvement in this project shows how excavation and research is just one element of archaeological fieldwork. Cultural heritage management, museums, and community archaeology are also an essential part of preserving, displaying, and learning about the past.



Figure 3. Installed ceramic-printed site panel for the Abbasid Stables in the Northern Area of the site (photo by Jack Green)



KERKENES DAĞ PROJECT

Scott Branting

The past year was the first in two decades that we were not physically in the field at Kerkenes Dağ. Yet the year was hardly uneventful. It was a year of political intrigue and high-level diplomacy. It was a year in which new collaborations and connections were formed and old ones renewed, which will sustain the research of the project for decades to come. It grew out of a chaotic transition of project directors, starting in 2012, as a team with no previous experience at the site used political connections to work there. It has ended in 2014 with a return to the field and a renewed vision of a bright future of research at this important ancient city.

The true strength of the project over these past twenty years has been the breadth and diversity of our collaborations. Universities, researchers, and students from across Turkey and around the world have participated and contributed to the pioneering methods employed by the project. The results achieved have not only been archaeological, but also have been in partnering areas of ethnography, ecology, and sustainability studies. Teamwork has long been a hallmark of archaeological fieldwork, but with a site the size and scope of Kerkenes Dağ it is absolutely essential. Initially, the primary organizations involved in the project were the British Institute of Archaeology in Ankara (BIAA) and Middle East Technical University (METU) in Ankara. The University of Chicago has been involved at Kerkenes Dağ since I joined the project in 1995, reprising its initial survey and excavations at the site in the 1920s under the direction of H. H. von der Osten and Erich Schmidt. The University of California, Berkeley, was a partner for several years in the early 2000s, while other partner institutions such as Istanbul Technical University (ITU) and Abdullah Gül University (AGU) in Kayseri have joined more recently. Going forward, our partnerships with ITU and AGU will be broadened and deepened as we jointly move forward with all aspects of our ambitious research program.

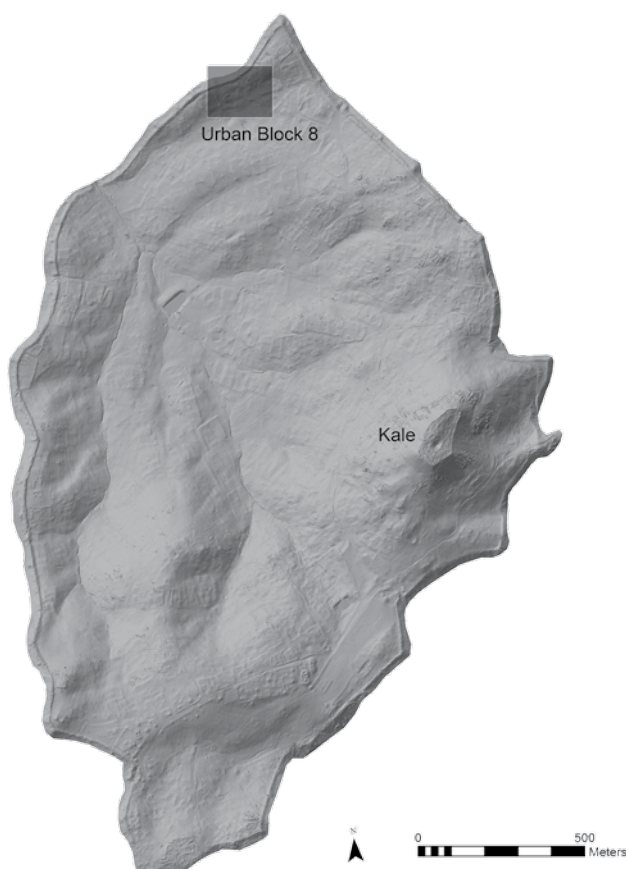


Figure 1. Map of Kerkenes Dağ showing Urban Block 8, the site of future work intended to better understand the people that lived in this important late Iron Age city



Figure 2. The central portion of the city as seen in September 2011 from Digital Globe's WorldView 2 satellite. This is one of the time series of satellite images of the city acquired in 2013 to monitor changes to the site from space

Typifying the politics and diplomacy that characterized this year was an interesting invitation that I received while in Ankara in May 2013. I had arrived in Ankara from Chicago a week earlier to meet with our collaborators and the General Directorate that oversees archaeological excavations in Turkey, in order to press our permit application during a particularly critical part of the lengthy process. Returning to my room after a long day of meetings and a late dinner, I found an odd e-mail purportedly from the vice president of the United States, or at least his office, on my computer. I went to bed that night almost certainly convinced that it was some sort of e-mail scam. Calls to the American Embassy and the American Research Institute in Turkey (ARIT) the next morning revealed, to my amazement, that the e-mail was legitimate. The Turkish prime minister was visiting Washington, D.C., and our efforts had led to an invitation being issued to me to join the state luncheon for the prime minister, hosted by the Vice President Biden and the secretary of state. I was left with seventy-two hours to schedule a flight back to Washington, D.C., from Ankara and to find appropriate attire along the way. The luncheon proved invaluable to our political efforts to press for the archaeological permit. The sudden and unforeseen arrival of the invitation was quite emblematic of how fortuitous events and assistance from all quarters worked together to lead us through this very difficult period. Things were never easy, but they all worked together beautifully in the end to help reach our goal of returning to Kerkenes Dağ.

Yet while the permit was in limbo during this year, aspects of the project continued unabated. One consequence of the uncertainty over the permit at Kerkenes Dağ was the presence of a looters' hole discovered in late 2012 near the area that we were working in 2011. While it was just a small area of illegal excavation, certainly not on par with the larger-scale looting of tumuli in the area that has been increasing over the past decade, it was certainly troubling to see. We therefore took the opportunity in 2013 to acquire multiple satellite

KERKENES DAĞ PROJECT

images of the site in order to monitor from space any additional looting at the site. Thanks in large part to a fortuitous sale on satellite imagery that the Digital Globe company was running at the time, we were able to use the funds set aside for the Kerkenes Dağ monitoring project to also procure satellite images of the looted tumuli fields. Both efforts will form an important baseline survey against which we can continue to vigilantly monitor the area and hopefully assist the local museum and police to curtail future looting across the region. Work also continued during this year on the publication of the results of prior years of survey and excavation. Two monographs were submitted to the Oriental Institute for publication and a third is well underway.

While political events sometimes prevent the best laid plans of archaeologists, years like this also afford an opportunity to strengthen collaborations and reassess future goals. Ahead of us lie many more years of work, and an ambitious program of excavation within the urban blocks of the city in order to better understand the people and households that inhabited it and the range of activities that they undertook in their daily lives. Renewed excavations within one of the most interesting urban blocks, Urban Block 8, are scheduled to start in a few weeks. The thrill of discovery will soon blunt the disappointment of a lost year in the field. While at the same time, the connections made during this difficult year and the ties to collaborators that were strengthened will help form a stronger foundation for the entire project moving forward.



Figure 3. A view of the city in early June looking north from its southernmost extents. The large hill to the right of center is the site of the later Byzantine Kale marked in figure 1

Acknowledgments

Even in the absence of excavation, the project would not have been able to move forward without the financial support of our sponsors and the dedication of our team, who awaited word until the very last minute, ready to excavate if the opportunity had presented itself. Specific thanks for their good advice and continuous support throughout this year go to Dr. Elif Denel, Director of the American Research Institute in Turkey (ARIT) in Ankara, Dr. Lutgarde Vandeput, Director of the British Institute at Ankara (BIAA), and to numerous colleagues in the archaeological community in Turkey. A very special thank-you for their steadfast support and hospitality go to Yardımcı Doçent Dr. Sevil Baltalı Tırpan at Istanbul Technical University and to Professor Dr. Nur Ufralioğlu, Doçent Dr. Burak Asiliskender, and Yardımcı Doçent Dr. Nilüfer Yöney from Abdullah Gül University in Kayseri.

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MARJ RABBA

Yorke M. Rowan and Morag M. Kersel

In 2013, excavation at Marj Rabba, the first site in a series of investigations of the Galilee Prehistory Project (GPP), was intended to be the final season. However, the continued excavation of Room 1, first recognized in 2012, includes stone walls preserved over 1 meter in height, an associated storage area with an in situ mace-head, architectural modifications, and multiple phases. By the end of the 2013 season this area was unfinished. A decision was made to mount a small, shorter season with an “elite” crew of experienced excavators in the summer of 2014 in order to investigate completely Room 1 and the associated structures, courtyard, and phases. After briefly recounting the results of the 2013 season, the following report focuses on two recently published articles and one scheduled to appear in September 2014 on detailed aspects of Marj Rabba — animal husbandry, geophysical survey, and archaeology from the air.

Background

The Chalcolithic period sees the beginnings of socioeconomic differentiation, long-distance trade in prestige goods, specialized craft production, public ritual architecture, and possible evidence for the first emergence of hierarchy and political leadership. In the southern Levant, the fifth and early fourth millennia BC (the Chalcolithic period, or the “Ghassulian,” after the type site of Tulaylat al-Ghassul) receive considerably less scholarly attention than the Neolithic period or the later biblical ages. Yet not long after the fundamental changes of the Neolithic Revolution, major cultural and demographic changes occurred during this period. With the expansion of Chalcolithic villages in size and number, horticulture and the secondary products of animals played increasingly important roles in the economy. Craft production exhibited great technological expertise and investment, with materials procured over medium to long distances, and innovative techniques arose, from stone working to copper metallurgy. Mortuary practices also became more diverse, with a dramatic but uneven increase in associated status goods. The causes for these dramatic shifts remain obscure, as does the degree of social complexity.

Thomas Levy proposed a new model for the Chalcolithic period in the southern Levant. Challenging earlier conceptions of life during the period, he posited that chiefdoms — hierarchically arranged, ranked societies — were first organized in response to a need for “risk management” of increasingly scarce resources, and to lessen conflict over resources, particularly between transhumant pastoralists and agriculturalists. In this model, the adaptive role of culture in response to environmental conditions is emphasized. Others, disagreeing with this model, theorize that Chalcolithic society was relatively egalitarian. Much of this debate relies on evidence collected from excavations at a few sites, primarily in the northern Negev, southern Jordan valley, and Golan. Unlike those regions, knowledge of life in the Galilee during the Chalcolithic is extremely limited. For example, we have no radiocarbon dates for a Chalcolithic settlement in the Galilee, nor do we have an architectural plan. Yet

one of the richest burial caves, in terms of human remains and ossuaries, was discovered accidentally with a bulldozer during roadwork in Peqi'in, a village in the Upper Galilee. Peqi'in Cave included the remains of hundreds of individuals and a range of ossuaries far more richly decorated than any found in Levantine prehistory. In addition to the elaborately decorated ossuaries, copper implements and an ivory figurine were recovered; pottery vessels included some probably originating in the Golan.

The burial cave at Peqi'in was a surprising discovery not only because of what was found, but *where* it was found: archaeologists knew of many secondary mortuary burials in ossuaries dated to the Chalcolithic, but these were found along the coastal and piedmont zones of central Israel and the occupied territories. Did people come from distant areas, or did Peqi'in serve as the burial ground for people living in nearby settlements? Was this a regional burial site for different communities across the Galilee or from farther away? The dearth of published excavations in the Galilee makes these questions difficult to address.

The Galilee Prehistory Project is broadly designed to address these and other questions by examining the dramatic changes in the relationship of villages, mortuary sites, and the lives of people living in the Galilee during late prehistory. More specifically, the goal is to examine material culture and biological data such as botanical and faunal remains from the Galilee for comparison with other regions of the southern Levant in order to better understand the livelihood and intra- and inter-regional connections of the inhabitants.

Excavations and survey of the site of Marj Rabba (Har ha-Sha'avi, west) constitute the initial phase of the Galilee Prehistory Project. Marj Rabba is a previously unknown Chalcolithic site located in the lower Galilee, near the modern town of Sakhnin, just one kilometer north of the Roman-period site of Yodefath. Marj Rabba provides a unique opportunity to gain insight into the developments that took place in a village site occupied exclusively during the Chalcolithic. The excellent architectural preservation, rich material culture, and substantial faunal assemblage makes this an essential site for understanding aspects of social complexity and ancient economy, setting a baseline for future comparisons to other Chalcolithic sites within the Galilee and beyond.

Marj Rabba 2013 Season

The site of Marj Rabba is a late prehistoric settlement in lower Galilee, dated roughly to the Chalcolithic period (ca. 4500–3600 BC). Situated on active agricultural land and a recently planted forest, Marj Rabba is located in a region of Israel with a Mediterranean climate and clay-rich soils that is more suitable for agriculture than nearby arid areas such as the Negev of southern Israel. As previously discussed in Oriental Institute annual reports, the site features circular and rectilinear stone foundations in at least three different building phases, exposed over five seasons (2009–2013) of excavation.

During the fifth excavation season at Marj Rabba, conducted between July 15 and August 16, 2013, our largest team of twenty-four students, interns, volunteers, and professionals gathered to continue investigations. Our team included Professor Michael Homan of Xavier University, Louisiana, who brought two students to join the team. Students from the University of Chicago, the University of Puerto Rico, the University of Connecticut, Pomona College, and UCLA all participated enthusiastically in the excavations, analysis, field trips, and lectures. Repeating the success of the 2012 season, we continued our collaboration with the Rowe-Clark Math & Science Academy in Chicago. Rowe-Clark instructor Maggie Culhane and

five students joined us for seminars at the Oriental Institute during the spring and then made the trek to Israel for the excavations.

In the post-excavation period Anneliese Marty and Jessica (Tovah) Kadish (fig. 1), Metcalf interns from the Center for Jewish Studies at the University of Chicago, assisted in putting together the final report for the Israel Antiquities Authority — a 365-page behemoth.

Intended to be our final excavation season, the focus was to explore the earliest phases of building and occupation, particularly the exposure of the rectilinear architecture and related surfaces visible below the curvilinear stone features (silos?) removed in previous seasons. This area was affected by rebuilding episodes that probably utilized building stone from earlier structures. For example, w174A, a north-south wall fragment (fig. 2), was probably the eastern wall to rectilinear building in squares C1-D1. The continuation of that wall, where it would have joined the northern wall (w7) is now missing, and may have been robbed for later building projects. A few smaller pits were discovered against the southern face of w7. To the south, w194 probably formed a corner with the east-west wall (w120), which is parallel to the northern wall (w7). In the western areas of that room, bedrock begins to appear, some of which may have been incorporated in wall constructions. A later pit cuts the southwestern corner of the room.

To the east, rectilinear Room 2 is formed by three walls (203A, 208A, 217A) but is missing the western wall. Near the entrance in the north wall, a small posthole or cupmark is located



Figure 1. University of Chicago interns (left, Tova Kadish; right, Ani Marty) working on post-excavation at the W. F. Albright Institute for Archaeological Research, Jerusalem

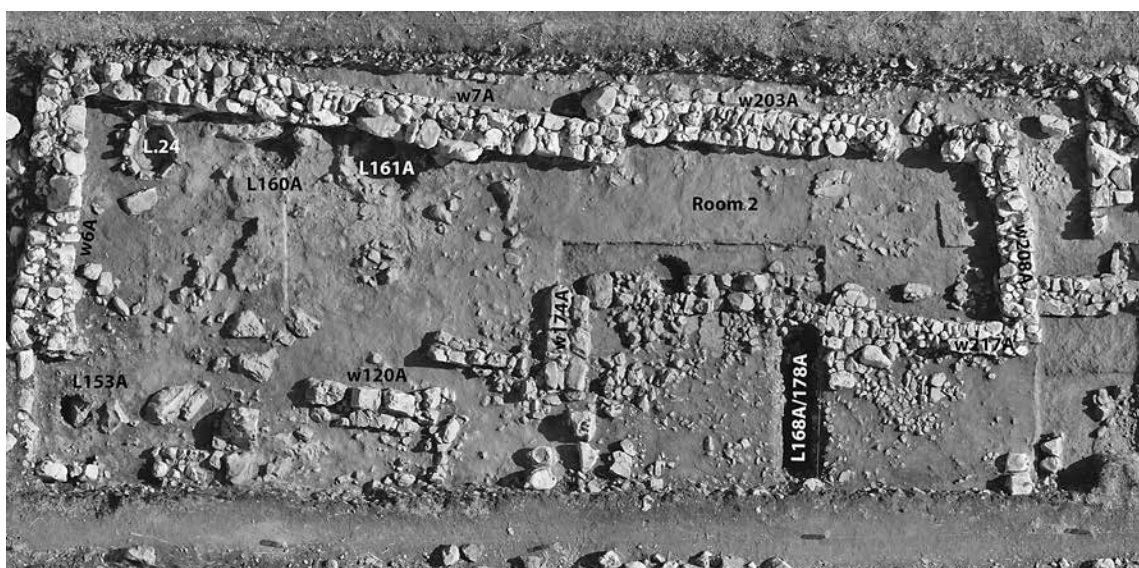


Figure 2. Area AA

MARJ RABBA

in the floor near eastern wall 208A. On the southern side of wall 217A, an unusual feature of large flat slabs (w186A) may have been part of a platform or working space.

Farther to the east, in Area BB, the relatively greater depth of deposition was notable, as was the dense concentration of rubble. A profusion of wall fragments between Areas AA and BB demarcates multiple rebuilding episodes (fig. 3); these are cut by a builder's trench on the west face of the well-built and well-preserved w904B. This stone wall, preserved over 1 meter in height, forms the western wall of Room 1. Formed by walls w315B, w928B, and w922B, this room may in fact be a modification of a larger building formed by the continuation of the roughly parallel longer walls (w368B, 928B). The entrance to Room 1 was blocked off, and a circular stone feature (L.392B) built in front. The access to the storage space (L.398B) also was intentionally blocked; a complete stone mace-head was placed in the storage bin. In order to complete this area, this room and the open space (courtyard?) to the east will be the primary focus of excavations during the 2014 season.

In Area CC, a surface (L.594C) was contemporaneous with the fragment of a corner formed by walls w567C and w566C (fig. 4). Associated with these walls were at least two pavement layers (L.580C) created with flat limestone; in places it appeared that the stones may have been set on a thin layer of sediment. On top of the stones a hard mud plaster was periodically added or repaired. In places this surface was so hard that only a pick would break the crust. Small amounts of degraded white plaster were visible, along with charcoal inclusions, within the mud matrix. A surprising number of small mud-plaster pits ("cupmarks")



Figure 3. Area BB



Figure 4. Area CC



Figure 5. Densely packed cattle bones in pit L.559C, Area CC

and other pits were associated with this area; many were extremely hard, similar to the rock-hard surfaces.

A final feature was unusual. A distinct concentration of animal bones was identified protruding from the eastern section of Area CC. A small square was opened and the topsoil removed to expose the densely packed bones (fig. 5). Over 400 bones were recovered, and with the exception of one goat phalanx, all were cattle bones, an extremely high relative frequency in contrast to the overall faunal assemblage. Representing at least two cows, this deposit appears to be the result of a feasting event.

Yorke in Jerusalem for the Year

Yorke was awarded a National Endowment for the Humanities Fellowship at the W. F. Albright Institute of Archaeological Research (AIAR) for 2013–2014 in order to carry out analysis for the publication of the research at Marj Rabba. After five seasons of excavation, intensive survey, and geophysical research (magnetometry and ground-penetrating radar), all the excavated material is currently held in a dry, secure storage facility at the AIAR campus in Jerusalem. Yorke's residence at the Albright was essential for the quick analysis and sustained focus on publication of this key Chalcolithic site. While based in Jerusalem, Yorke was able to facilitate the study of the archaeological material from Marj Rabba for the other specialists (animal bone, GIS, pottery, small finds, ground stone, and survey); at the same time he coordinated photography and illustrations. During his stay at the Albright Institute, study was enhanced by the addition of Hebrew University Rothberg International School interns Gabby Borenstein (Columbia University) and Blair Heidkamp (Wooster College).

Preliminary Reporting: Three New Publications

Geophysical Prospection

1. T. M. Urban, Y. M. Rowan, and M. M. Kersel (2014). "Ground Penetrating Radar Investigations at Marj Rabba, a Chalcolithic Site in Lower Galilee, Israel." *Journal of Archaeological Science* 46: 96–106.

In *Oriental Institute 2011–2012 Annual Report*, the preliminary results of the geophysical prospection carried out with Thomas M. Urban of the University of Oxford during the 2011 field season were presented. This year, the results of that research were published in the *Journal of Archaeological Science*. Two methods, magnetic gradiometry and ground-penetrating radar, were employed at the site in order to further define the extent of subsurface features to the south, north, and east of the current excavation area. The site is comprised primarily of limestone architectural features, the physical properties of which differ from the local soils in which the features are situated. Because of these disparities in electrical and magnetic properties between target and matrix, our team was able to successfully locate and define a number of features non-invasively.

Marj Rabba features shallow limestone structures situated in a terra rossa matrix. Terra rossa is generally considered unsuitable for carrying out ground-penetrating radar (GPR) studies due to weak signals, particularly within the relatively high-frequency range most often used in archaeological GPR surveys. The small stones scattered across the landscape and in the subsoil aggravate the weak signals and can also obscure the archaeological fea-

tures buried below the ground. Despite the dense concentration of stones above and below the ground at Marj Rabba, GPR was successful. The selection of a somewhat lower antenna frequency (250 MHz) than is typically recommended played a large role in the success of the survey. In the article, we argue that using the lower antenna frequency and close transect spacing (the width between the lines that the GPR equipment is dragged over the surface of the site) resulted in well-delineated architectural features. The GPR survey at Marj Rabba revealed a number of potential archaeological features in each survey area, thereby confirming the surface survey and expanding the known bounds of well-preserved architecture just below the ground surface. Most features detected appear to be architectural remains, which are likely related to the excavated Chalcolithic structures, the only ancient architecture found at the site to date.

In the article we also contend that GPR can be used successfully as a coarse reconnaissance method where dense data collection is not possible or practical, as is the situation in the olive grove at Marj Rabba. Archaeologically, the settlement scale and complexity shown by these results indicates that Chalcolithic villages are not only present in the Galilee but, despite poorer preservation, are extensive and architecturally sophisticated like roughly contemporaneous settlements in other regions. In combination with excavation results, the structures detected with GPR at Marj Rabba provide the largest plan of an early Chalcolithic settlement in the Galilee.

Pigs at Marj Rabba

2. M. D. Price, M. Buckley, Y. M. Rowan, and M. M. Kersel (2014). "Animal Management Strategies during the Chalcolithic in the Lower Galilee: New Data from Marj Rabba." *Paléorient* 39/2: 183–200.

How people herd, hunt, and house their animals during the Chalcolithic is a fascinating aspect of the period. As people transition from hunters and gatherers to an increasingly sedentary lifestyle, analyses of animal management strategies provide important insights into subsistence economies and sociopolitical structures. In the recently published paper in *Paléorient*, Marj Rabba faunal analyst Max Price (Harvard PhD candidate and former University of Chicago undergraduate), biologist Mike Buckley (University of Manchester), Yorke, and Morag combine kill-off patterns, metrical data, and artifactual data in comparison with other Chalcolithic sites in the region in order to explore regional differences in animal husbandry during this crucial period of socioeconomic change.

Increasing social differentiation and economic specialization are hallmarks of the Chalcolithic period in the southern Levant and some of the most important sources of economic specialization were animal products, particularly the secondary products of sheep, goats, and cattle. Secondary products include things like wool, milk products, and animal traction, anything that does not involve the primary product of meat. It is often difficult to detect secondary products in the archaeological record — typically only indirect evidence is available. An element of secondary products during the Chalcolithic was the utilization of cattle for traction, probably to maximize the production of grain. Analyses of the cattle remains indicate that the animals were involved in traction-related activities. These characteristics, coupled with the large proportion of sickle blades and the numerous circular structures at Marj Rabba, possibly grain silos, suggest an emphasis on grain production. The faunal, architectural, and archaeobotanical evidence all support the conclusion that grain was intensively

cultivated beyond subsistence needs at Marj Rabba. Cattle would have provided an important source of labor for intensifying cereal production.

In the article we conclude that at Marj Rabba, in contrast to Chalcolithic sites in the northern Negev and at the type site of Tulaylat al-Ghassul, there were very few specialized animal management strategies. In addition to the increased production and management of grain and other edible elements, Chalcolithic farmers were diversifying their use of secondary products. We argue that although villagers exploited secondary products, the inhabitants concerned themselves primarily with keeping their livestock populations secure from disaster and unpredictable loss — the people of Marj Rabba emphasized risk-minimization.

An integral aspect of the article is the discussion of pigs. Domestic pigs were an important resource at some sites during this period, but nearly absent at others. Up until now scholars have largely ignored the significance of swine husbandry in the southern Levant. Pigs do not provide secondary products, but they play an important role in the investigation of the evolution of complexity. At Marj Rabba, pigs were present in abundant proportions despite the possible difficulty of accessing water (we have yet to understand the early water management strategies at the site).

The differences between faunal patterns in the northern Negev, Golan, Jordan River valley, and Galilee regions point to a highly diverse animal economy in the southern Levant during the Chalcolithic. The faunal data from Marj Rabba suggest a combination of animal management strategies, reflecting regional distinctions in economic specialization. Different regions began intensively exploiting domestic animals for different reasons.

Archaeology from the Air

3. A. C. Hill, Y. M. Rowan, and M. M. Kersel (in press). “Mapping with Aerial Photographs: Recording the Past, the Present, and the Invisible at Marj Rabba, Israel.” *Near Eastern Archaeology*.

In previous *Oriental Institute Annual Reports* (2011–2012, 2012–2013), Yorke and Morag reported on the use of drones and other types of aerial photographs in order to holistically document the site. Aerial photography in archaeology is not a new phenomenon, but recent technological developments have allowed for increased precision and real-time rendering of archaeological facts on the ground. Over the five seasons at Marj Rabba, we used a variety of tools to record the site, the excavations, and the landscape. Along with traditional plan and section drawing, digital and paper record-keeping, we use satellites, historical aerial photographic archives, fixed-wing unmanned aerial vehicles, rotary-wing unmanned aerial vehicles, poles, and terrestrial handheld photography, and photogrammetry, all in the quest for a comprehensive record of our work

In this *Near Eastern Archaeology* article we discuss mapping the archaeological landscape with varied aerial photographs and tools. New and innovative photographic technologies and software for post-processing allow us to communicate better the results of field research to professionals and the larger public.

MUMMY LABEL DATABASE (MLD)

François Gaudard*

Following the launch of the Mummy Label Database CSIC¹ website and Oriental Institute webpage last year,² the editors and collaborators of the project continued to work on expanding and improving the functionality and comprehensiveness of the database.

This year, the staff of the project consisted of the editors of the Mummy Label Database, namely, Sofía Torallas Tovar (CSIC, Madrid/University of Chicago), Raquel Martín Hernández (Universidad Eclesiástica San Dámasco), Klaas A. Worp (Leiden University), and François Gaudard (University of Chicago), as well as our collaborators, Sergio Carro (CSIC, Madrid), Alberto Nodar Domínguez (Universitat Pompeu Fabra, Barcelona), Alba de Frutos García (CSIC, Madrid), Marina Escolano Poveda (Johns Hopkins University, Baltimore), María Jesús Albarrán Martínez (Institut de recherche et d'histoire des textes and Centre national de la recherche scientifique, Paris), and Irene Pajón Leyra (CSIC, Madrid).

The most important development this year involved completing the final technical adjustments to the MLD, which could be accomplished thanks to our collaboration with Inèrcia bcn. Our main challenge was to create a text field in XML, which ultimately will allow the text of the mummy labels to be searchable, both in Greek and in transliterated Demotic. We aim to get this function working by the end of 2014. Also, Alberto Nodar Domínguez has recently applied for funding from the program Recercaixa (Catalunya) in order to develop this aspect of the project further.

Sofía, Raquel, and François met several times throughout the year to discuss various aspects of the project. On May 30, Sofía participated in the conference *Transposición de modelos paganos en el Cristianismo primitivo: religión, rituales y magia* at the Fundación Pastor in Madrid, presenting a paper called “Costumbres funerarias egipcias en transición: momificación y Cristianismo,” and on June 4, she gave a lecture titled “Muerte en el Nilo: Textos y contextos funerarios en el Egipto grecorromano,” at the Museo Arqueológico Nacional, in Madrid. François contacted several museum collections in order to investigate and identify new mummy labels to include in the database. He would like to take this opportunity to thank Professor Geoffrey T. Martin very much for having the kindness to make inquiries on behalf of the MLD at the various museums he visited and for taking the time to help us in our search. Special thanks also go to Jean-Luc Chappaz, chief curator of the Archaeology Department of the Musée d'Art et d'Histoire in Geneva, as well as to Imogen Gunn, collections manager of the Museum of Archaeology and Anthropology in Cambridge, for their helpfulness and time.

The following publications by team members, which are related to the project “Death on the Nile” and to the MLD, have been published, or are in press, forthcoming, or in preparation:

- François Gaudard, “On a Disputed Aspect of the God Seth,” to be published in a festschrift honoring a colleague (forthcoming).
- François Gaudard, “A Demotic-Hieratic Mummy Label in the Museu de Montserrat.” In *Mélanges offerts à Ola el-Aguizy*, edited by Fayza Haikal. Bibliothèque d'Étude. Cairo: Institut français d'archéologie orientale, 2014 (in press).

MUMMY LABEL DATABASE

- Raquel Martín Hernández and K. A. Worp, “‘Goldfinger’ on a Leiden Mummy Label?,” *Bulletin of the American Society of Papyrologists* 50 (2013): 255–60.
- Raquel Martín Hernández and Sofía Torallas Tovar, “Unpublished Greek Mummy Labels from the British Museum,” *Zeitschrift für Papyrologie und Epigraphik* (in preparation).
- Sofía Torallas Tovar, “Egyptian Burial Practice in a Period of Transition: On Embalming in Christian Times.” In *Mapping Knowledge: Cross-Pollination in Late Antiquity and the Middle Ages*, edited by Charles Burnett and Pedro Mantas-España, pp. 129–40. Series Arabica Veritas 1. Córdoba: Oriens Academic-CNRS-The Warburg Institute, 2014.
- Sofía Torallas Tovar and K. A. Worp, “An Interesting Mummy Label in Leiden,” *Zeitschrift für Papyrologie und Epigraphik* 187 (2013): 230–32.

The editors of the MLD would also like to thank the Spanish Ministry of Science and Innovation (MICINN) for awarding them a grant,³ and all of their colleagues worldwide for their suggestions and help with references, as well as Paul Ruffin and John Sanders, at the Oriental Institute, for their technical support.

Notes

* For details on this joint project of the Instituto de Lenguas y Culturas del Mediterráneo y Oriente Próximo, Centro de Ciencias Humanas y Sociales - CSIC, Madrid, and of the Oriental Institute of the University of Chicago, readers can consult the *Oriental Institute 2008–2009 Annual Report*, also available online in Adobe Portable Document Format (PDF) [<https://oi.uchicago.edu/research/projects/mummy-label-database-mlld>].

¹ Consejo Superior de Investigaciones Científicas, Madrid.

² For details, see the *Oriental Institute 2012–2013 Annual Report*, also available online in Adobe Portable Document Format (PDF) [<https://oi.uchicago.edu/research/projects/mummy-label-database-mlld>].

³ Grant ACI-PRO-2011-1132.

THE NEUBAUER EXPEDITION TO ZINCIRLI: THE FIELD SEASONS OF 2012 AND 2013

David Schloen

The Oriental Institute's Neubauer Expedition to Zincirli in Turkey, which is directed by David Schloen, began in 2006 and completed its eighth consecutive summer field season in August 2013. For two months each summer, a large multi-national team digs at the site with the assistance of workers hired from local villages. Zincirli (pronounced "Zin-jeer-lee") is the modern Turkish name of the 40-hectare (100-acre) ruin mound in the Gaziantep province of

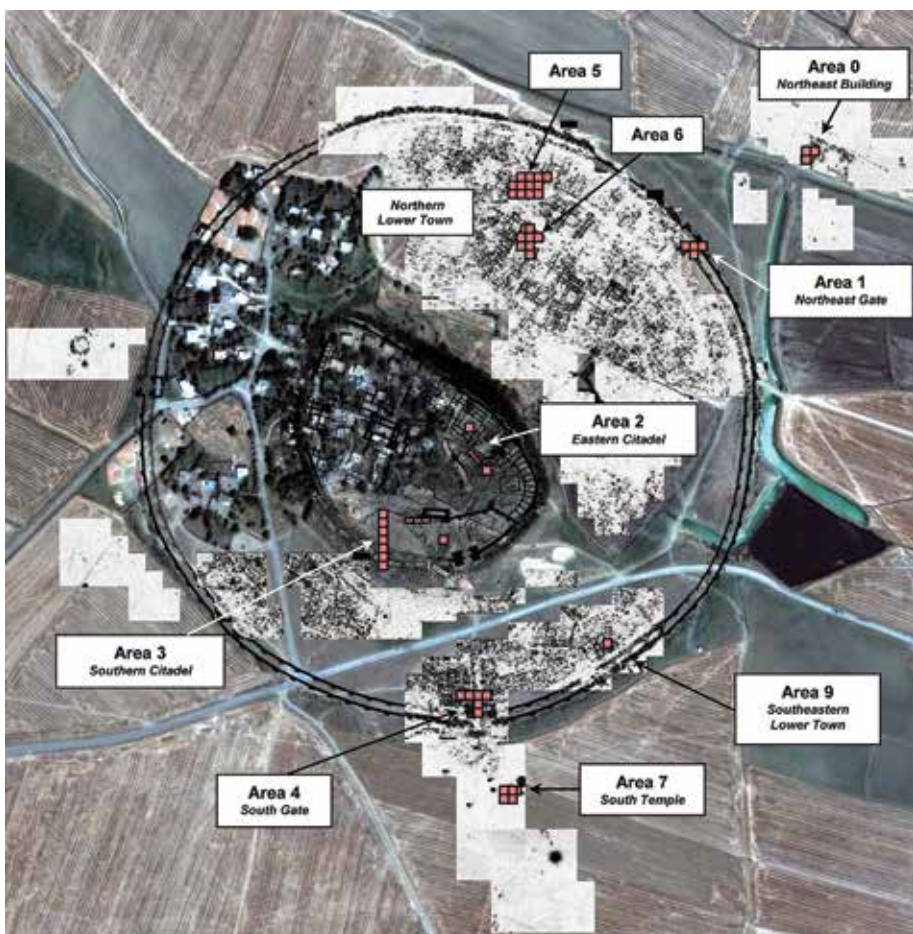


Figure 1. Excavation areas at the site of Zincirli in Turkey, where the Oriental Institute's Neubauer Expedition has been working since 2006. The 10 x 10-meter excavation squares are shown in pink, superimposed on a plan of the Iron Age city walls, which in turn is superimposed on a satellite photo of the modern site. Buried buildings detected by a geomagnetic survey are shown in black and white

THE NEUBAUER EXPEDITION TO ZINCIRLI

southeastern Turkey that contains the remains of the Iron Age city of Sam'al — the capital of an Aramean kingdom that flourished from about 900 to 700 BC and then became a province of the Neo-Assyrian empire. This archaeological project is made possible through the generous financial support of the Neubauer Family Foundation and has also received substantial funding from the National Endowment for the Humanities, the Social Sciences and Humanities Research Council of Canada, and the Wenner-Gren Foundation. The field seasons of 2012 and 2013 were devoted to large-scale excavations in several different areas of the site (fig. 1).

The 2012 Season

The 2012 field season at Zincirli took place from August 20 to October 13 with an academic staff consisting of fifty-three archaeologists and archaeology students, ranging from undergraduate beginners to professionals with decades of experience. In addition, we hired more than seventy workers from local villages. We excavated a total of 1,200 square meters in six different locations on the site, continuing the work begun in earlier seasons and expanding into new excavation areas. The largest subgroup of the expedition staff were the field supervisors who supervised the digging and recorded the finds. This subgroup included thirty-four archaeologists and archaeology students at various stages of their studies. The other main subgroup of academic staff were the specialists who examined and analyzed the finds, including four pottery specialists, one object registrar, two illustrators, one photographer, one object conservator, one animal bone specialist, one stone tool specialist, and one surveyor. We also employed a Turkish camp manager and a cook to take care of housing and feeding our large team. We were able to recruit an excellent multi-national team from several leading universities in the United States, Europe, Israel, and Turkey (e.g., the University of Chicago, Johns Hopkins University, Cambridge University, Free University of Berlin, University of Pisa, Tel Aviv University, Haifa University, and Bilkent University in Turkey). The project team included fifteen Americans, fifteen Turks, seven Italians, five Germans, three Israelis, three British, one Canadian, one French, and one from the Netherlands.

Our excavations in 2012 were mainly focused in Areas 5 and 6 in the Northern Lower Town; in Area 3 on the Southern Citadel; in Area 2 on the Eastern Citadel; and in Area 4 near the South Gate of the ancient city (fig. 1). In these excavation areas we extended and deepened the exposures achieved in previous seasons and found many more walls, floors, and artifacts dated to the latest phase of Iron Age (ca. 730 to 600 BC). One of the most interesting discoveries was the foundation of a well-built temple in the south-citadel area in Area 3 (fig. 2). It was mostly empty and the statue of the god was missing, so we do not know who was worshipped there. But now we understand much better a few artifacts that were found in an earlier excavation season in the same area, especially a stone offering tray decorated with carvings of rams' heads and tails (fig. 3). This tray showed evidence of burning, showing that it was used in sacrifices to the god who was venerated in this temple.

In other areas of the site, a number of interesting small artifacts were recovered, such as a Neo-Assyrian bronze brooch shaped like a hand (fig. 4), which was probably worn by an Assyrian soldier and by its style and shape demonstrates his cultural affiliation. But the most important discovery, in terms of our understanding of ancient history and the economic and social structure of Iron Age kingdoms, is what we did not find. Contrary to our expectations, deep probing in various areas of the site during the 2012 season failed to detect any architecture built earlier than about 750 BC. There were many buildings constructed in the final



Figure 2. Temple foundation in Area 3 (shaded in blue; the eastern half is unexcavated)

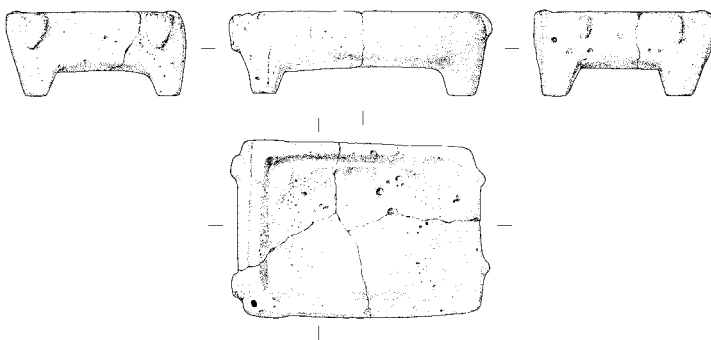


Figure 3. Stone offering tray decorated with rams' heads and tails

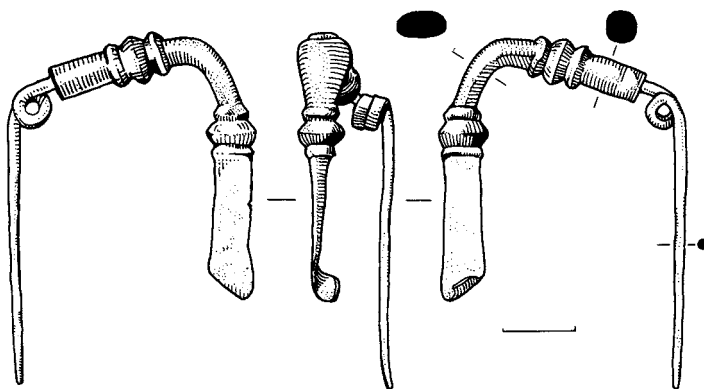


Figure 4. Neo-Assyrian fibula (brooch) in the shape of a hand

phases of the city's life after 750, as shown in our geomagnetic survey, which revealed their buried stone foundations (see fig. 1). But before this time the "lower town" occupying more than 30 hectares (75 acres) within the outer walls was left empty. The fortified zone that archaeologists had long assumed was a walled city containing thousands of people was free of buildings for more than a century after the outer walls were built — perhaps being used only seasonally to house a migratory population or serving as a large royal estate with fields and gardens spread around the central royal citadel (the 3.2-hectare/8-acre upper mound), which was for some reason protected by massive outer walls.

The 2013 Season

The 2013 field season at Zincirli took place from June 30 to August 24 with an academic staff consisting of sixty-eight archaeologists and archaeology students — our largest team to date. In addition to the academic staff, we hired more than eighty workers from local villages to excavate a total of 1,500 square meters in various locations on the site. The team was delighted to be able to host our supporters, Joseph Neubauer and Jeanette Lerman-Neubauer, who visited us in Turkey and witnessed the excavations in progress (fig. 5).

The largest subgroup of the expedition staff were the excavation supervisors who supervised the digging and recorded the finds. This subgroup included forty-four archaeologists

THE NEUBAUER EXPEDITION TO ZINCIRLI



Figure 5. Joseph Neubauer and Jeanette Lerman-Neubauer (middle row, third and fourth from left) and members of the 2013 expedition team at the mountain-top site of Nemrut Dağ in Turkey, northeast of Zincirli

and archaeology students at various stages of their studies. The other main subgroup were the specialists who examined and analyzed the finds, including four surveyors (for mapping excavated features and finds), three pottery specialists, two animal bone specialists, two object registrars, two illustrators, one photographer, one object conservator, one metal specialist, and one database manager. We also employed a Turkish camp manager and a cook to take care of housing and feeding our large team. Once again, we were able to recruit an excellent multi-national team from several leading universities in the United States, Europe, Israel, and Turkey, including the University of Chicago, the University of Pennsylvania, the University of California at Berkeley, Dartmouth College, Wake Forest University, Cambridge University, Oxford University, University of Rome, University of Pisa, Free University of Berlin, University of Freiburg, Tel Aviv University, and three different universities in Turkey. The expedition staff included twenty-two Americans, sixteen Turks, eleven Italians, seven Germans, four British, two French, two Israelis, one Canadian, one Korean, one Chinese, and one from the Netherlands.

In 2013, we expanded the excavation trenches we had opened in earlier seasons in order to obtain more data concerning the history and economy of the ancient kingdom of Sam'al, whose royal capital was at the site of Zincirli. We expanded our excavations in Area 2 on the Eastern Citadel; Area 4 near the South Gate of the ancient city; Area 6 in the Northern Lower Town; and also in "Area 0," a large Assyrian building located outside the city 100 meters north of the Northeast Gate (fig. 1). In these excavation areas we extended and deepened the exposures achieved in previous seasons and found many more walls, floors, and artifacts dated to the Iron Age II and Iron Age III (ca. 900 to 600 BC). This added considerably to our

knowledge of the city's history and the economic and social impact of the Neo-Assyrian empire during this period, when this empire was also having a dramatic impact on the biblical kingdoms of Israel and Judah a few hundred kilometers to the south.

One of the most interesting discoveries of 2013 was an ancient inscription on a piece of lead, written in the Luwian language using the Anatolian hieroglyphic script (fig. 6). Luwian is an Indo-European language related to Hittite that was spoken in the region of Zincirli during the period of the Hittite empire, which ruled the area from 1340 to 1180 BC, and for hundreds of years thereafter, when Luwian-speakers from central Turkey remained in the area as rulers and administrators. According to experts on this language at the Oriental Institute, the lead strip contains a list of names and may have been an administrative document. Lead inscriptions of this type are known at other sites but they are quite rare (and easy to miss if one is not careful during the process of excavation), so this discovery adds another valuable example of great interest to Luwian specialists.



Figure 6. An inscription written on a strip of lead in the Luwian language using an Anatolian hieroglyphic script



Figure 7. Expedition team member Robert Schloen with the remote-controlled quadcopter ("drone") to which a small camera was attached to take aerial photographs used in mapping the excavation areas with the aid of photogrammetry software

The 2013 season was also an opportunity to experiment with new archaeological field methods; in particular, the use of a remote-controlled quadcopter (or "drone") to take large numbers of aerial photographs for the purpose of automatically combining these photos into a mosaic using photogrammetry software that creates a highly accurate orthorectified and georeferenced image, from which detailed plans of the excavated areas could be traced. This method is a big improvement on older and more labor-intensive methods of site-mapping. It proved to be a great success at Zincirli after we solved a few technological and workflow issues and integrated the procedure into our existing excavation and data-recording procedures. The youngest member of the team, 16-year-old Robert Schloen, was in charge of piloting the quadcopter and processing the aerial imagery, which other students then digitized to make the detailed maps (fig. 7).

THE NEUBAUER EXPEDITION TO ZINCIRLI



Figure 8. Members of the 2013 academic staff of the Neubauer Expedition to Zincirli in the walled garden of our dig house

After several years of excavation, the expedition has accumulated a remarkable body of archaeological evidence that sheds light on the ancient culture and economy, thanks to the generous support of the Neubauer Family Foundation and the hard work of our many team members (fig. 8). The detailed analysis and publication of this evidence is ongoing and the 2014 summer season will be devoted to studying and publishing the accumulated finds.

NIPPUR AND BEYOND

McGuire Gibson

As reported last year, we turned over to the Oriental Institute publications process the manuscript for the Inanna Temple report. As is the rule, the manuscript was sent out for a reading and evaluation by an outside expert, and it has been accepted for publication. The authors, primarily Richard Zettler, Karen Wilson, and Jean Evans, may want to make some final changes, but there is every chance that this much-anticipated report will be out in a year or so. I have lately turned my attention to other Nippur manuscripts, and I expect to make major progress on them in the coming year, when I will have a reduced teaching load.

Given the news that assaults us each day, with very destructive warfare occurring in Syria and Iraq, where we have major archaeological projects in stasis, the importance of published site reports takes on far greater significance. Such reports lay out the basic stratigraphic ordering of layers in the site, showing what is earlier and what is later, as well as the architecture exposed in those layers. The painstaking finding of objects and the precise recording of their findspots within that architecture not only allow us to suggest functions of rooms and buildings, but also to give a firm dating for the appearance of those artifacts. It is on the basis of such excavated objects that art historians can establish some anchoring pieces on which to trace the evolution of style. In future, such anchors are going to have a much greater role in scholarship because there is looting of ancient sites around the world on a scale that is unprecedented, and the trade in illicit antiquities is booming. The damage to Iraqi sites has been severe for almost two decades, although the pace has been abating in the past few years. But now, it has been reported that ISIS and other insurgents in Syria have been selling antiquities to support themselves, and they are now in northern Iraq. We are seeing satellite images showing systematic looting of sites in Syria, on a scale that matches the worst that was done in Iraq. For instance, the classical site of Apamea in Syria had no signs of looting in 2011 but in late 2013 it was a landscape of holes (fig. 1). You can bet that the international trade in antiquities has a lot more Roman glass and coins for sale these days.

We have no idea what is happening to our own site of Hamoukar in northeast Syria, although I did get word that our expedition house was broken into and robbed months ago. The objects from Hamoukar, a remarkable early city site, were stored in the museum of Deir ez-Zor. We have no information on the condition of the museum, nor whether or not the objects were taken to Damascus before the fighting grew intense. But we have seen TV footage of the town of Deir ez-Zor, and the damage to buildings is enormous. That war has now spilled over into Iraq, but so far we are hearing nothing about the destruction of ancient art, for instance the Neo-Assyrian relief slabs and statues, but we are not made confident by the images of the destruction by hammer of an Assyrian statue in the Museum at Raqqa in Syria. There is footage of the demolition of Shiite mosques in Mosul and Tell Afar in northern Iraq, but so far the major archaeological sites of Nineveh, Nimrud, and Khorsabad (which the Oriental Institute dug in the 1930s) seem to be untouched. With any period of chaos, however, people will take the opportunity to dig, hoping to find something that they can sell. Northern Iraq, which has been relatively free of looting when compared to the south, may be entering a period of major damage to sites.

NIPPUR AND BEYOND



Figure 1. Google satellite images of Apamea, Syria, in (top) 2011 and (bottom) 2013

In March, I was in the Iraq Museum in Baghdad, and I saw that the greatly augmented staff was well on its way to reinstalling all the museum halls, with labels in Arabic and English. The more spectacular objects, such as the Nimrud Queens' gold and the Ur Royal Cemetery treasures, were not on display, but there were still extraordinarily important artifacts in the cases. I saw a lot of familiar items that had been dug up at Nippur.

During the past thirty-four years, the movable objects in the museum cases have been removed and put in storage vaults several times. In 1991, just before the bombs fell in that war, most of the artifacts were put into storage vaults, leaving only the large-scale reliefs and other items in place. Then, in the late 1990s, they were partially displayed again, only to be taken down again in 2003. Finally, in 2014, they were coming up into the light of day once again. With any movement, artifacts stand a very good chance of being damaged, and with each transfer, valuable information can be lost, because the explanatory labels tend to be misplaced. Maybe the present crisis will pass and the objects will remain in place, but there is a very real possibility that they will once more go into hiding. If so, think how badly the museum staff will feel, having worked so hard and long to get the objects on display. Some of these men and women came to the Oriental Institute or the Field Museum for training in conservation and museum management a few years ago. We are, thus, reminded that behind all the losses of material objects, there are also human lives and aspirations at stake.

ORIENTAL INSTITUTE-NATIONAL MUSEUM OF AFGHANISTAN PARTNERSHIP AND CULTURAL HERITAGE PROTECTION WORK: 2013–2014 REPORT

Gil J. Stein

The Partnership and Its Goals

2013–14 saw the completion of the second full year of cooperation between the Oriental Institute (OI) and the National Museum of Afghanistan (NMA). This three-year project, funded by the US Department of State and specifically the US Embassy in Kabul, forms an important part the Oriental Institute’s commitment to protect the damaged and highly vulnerable cultural heritage of Afghanistan. The OI-NMA Partnership has been assisting the museum by working with its staff to develop a bilingual objects-management database, conduct a full inventory of the NMA’s holdings, make conservation assessments for the objects, and train the NMA staff in artifact curation procedures. Our overall goal is to develop the database, inventory, and expertise of the staff of the National Museum to the point where they will be able manage the inventory database independently, while developing a fully functioning National Museum for Afghanistan as a way to preserve the rich heritage of this country

The OI component of the partnership consists of the “Chicago team” (Gil Stein, Steve Camp, Jack Green, and Laura D’Alessandro), and the “Kabul team” led by Field Director Michael Fisher (fig. 1). During the year, the Kabul team under Mike’s field direction consisted of Catherine Heim, Jamie Frasier, and Olivier Bordeaux as registrars, while Federica Griffi served as conservator. We also worked with an international team of specialist consultants who assisted us in the inventorying of individual periods or collections. At the US State Department, our key partners are Dr. Laura Tedesco, the Cultural Heritage Program Manager at the Office of Press and Public Diplomacy, responsible for Afghanistan and Pakistan, while the State Department’s financial management of the grant is overseen by Grachel Humphries. In Kabul, our principal partner is Dr. Omara Khan Massoudi, Director of the National Museum, along with his staff of curators, conservators, registrars, and photographers. Local logistical support for our project is provided by ACHCO (a Kabul-based non-governmental organization that specializes in cultural heritage projects in Afghanistan).



Figure 1. The OI-NMA Partnership team, November 2013: (left to right) Front row, Mike Fisher, Jolyon Leslie (ACHCO), Hakim. Back row, Steve Camp, Gil Stein, Bilal, Catherine Heim, Sattar, Samad, Jamie Frasier

Progress of the OI-NMA Inventory

Our inventory team consists of a conservator, an OI staff registrar, and a staff member of the National Museum, who together enter the description of each object in both English and Dari. The objects are measured, labeled with an inventory number, and photographed. The digital photos are linked to each inventory record, along with any older paper documentation (if present).

By July 2014 the OI-NMA partnership had inventoried over 27,000 objects. Mike Fisher and his colleagues have now completed the inventory for eleven of the storerooms, storage areas, and galleries whose holdings span all key periods in Afghanistan's history. It is still difficult to know for certain, but we estimate that 85 percent of the objects stored on the grounds of the National Museum have now been inventoried. This is an extremely impressive achievement. We have every reason to believe that — as long as the political and security situation in Kabul remains stable — we should be able to complete the inventory on schedule at the end of the third year, in summer 2015.

During the past year, the infrastructure of the museum itself has vastly improved. With support from the US Embassy in Kabul, a new exterior wall, protected parking areas, and secure entrances were designed and built by talented Afghan architects and engineers Zabihullah and Ruhollah Majidi. Their innovative design used native stone construction techniques and preserved the museum's beautiful rose garden in a way that enhances the security of the museum while maintaining an open, welcoming atmosphere and viewscape for visitors. Best of all, the design allows for the eventual construction of an entirely new, fully secure museum building on the grounds. Hopefully this will be the next stage in the growth and development of the National Museum.

Once the project passed its halfway point, in keeping with our overall plan, our team began to increase its emphasis on objects conservation. This is important for the collections as a whole, but especially as it relates to the estimated 5,000 coins in the National Museum's collections. As metal objects, the coins are especially vulnerable to corrosion and need to be stabilized to ensure their long-term survival. At the same time, they need to be cleaned in order to allow our team members to document them properly for the inventory (figs. 2–3).



Left: Figure 2. Conservator at the National Museum cleaning coins mechanically rather than through the use of chemicals. Chemicals remove corrosion, but if improperly used can potentially damage the coins

Above: Figure 3. Coins at the National Museum (left) before and (right) after cleaning

OI-NMA PARTNERSHIP AND CULTURAL HERITAGE PROTECTION WORK

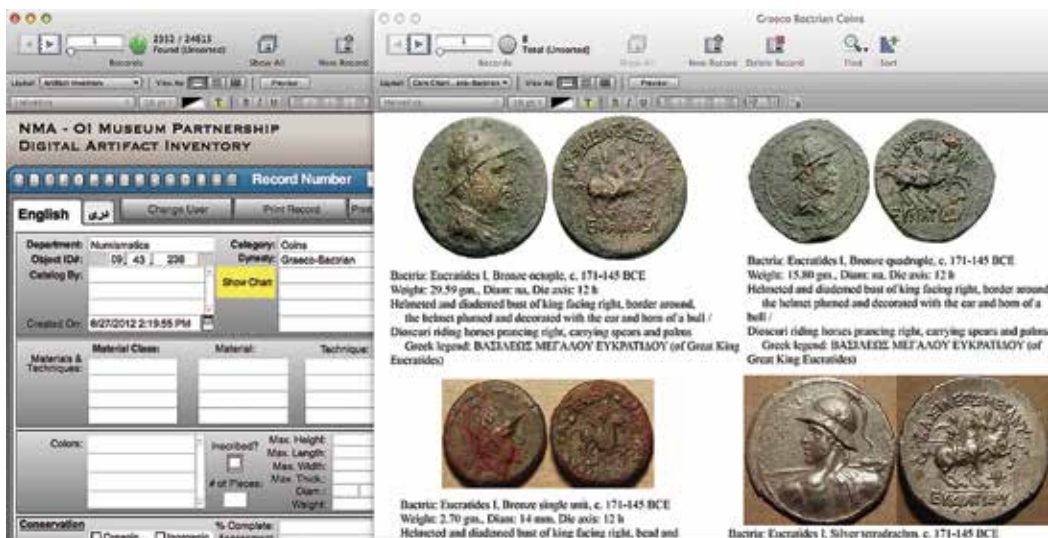


Figure 4. Screen shot of the OI-NMA inventory database showing a drop-down catalog of different coin types to aid the registrars in identification and description (photo courtesy of Michael Fisher)

Italian conservator Federica Griffi joined the team in spring 2014 to focus on coin stabilization and mechanical (as opposed to chemical) cleaning. Federica worked in close cooperation with the staff of the National Museum, such as Mr. Abdullah Hakimzadeh, who in 2007 had been trained in the US at the Oriental Institute by Head Conservator Laura D'Alessandro and her staff. In tandem with the conservation work, Mike Fisher added new functionalities to the database, including built-in illustrated catalogs of Afghan coins from different periods, as a way to speed up the recording process and make it more reliable (fig. 4). We also added barcodes to our object labels as an additional improvement in our documentation and curation. Recording the coins also requires a registrar with specialized numismatic skills. We have been fortunate indeed to recruit as our new registrar Olivier Bordeaux, a doctoral student trained by one of the world's leading authorities on Indo-Greek and Greco-Bactrian numismatics, Dr. Osmund Bopearachchi of the French Centre National de la Recherche Scientifique (CNRS). With both conservators and a numismatic specialist, we have been able to make major progress in conserving and inventorying the coins of the museum.

A second key aspect of conservation involved the delivery and installation of shelving, as a part of museum infrastructure necessary for the long-term storage of irreplaceable archaeological objects. Through Herculean efforts by OI Executive Director Steve Camp and Head of Museum Conservation Laura D'Alessandro, we were able to get a second 40-foot container shipment loaded with museum-grade steel shelving shipped via Pakistan and delivered to the National Museum. The shelving is now being assembled and installed in the museum storerooms. With twenty-three storerooms, this is an enormous undertaking, and we anticipate sending a second container with the remainder of the shelving in the coming year.

As the work of the partnership progresses, it becomes clearer than ever that our database inventory is valuable not only as a tool for museum curation, but also as a research resource. One particularly nice example concerns the inscriptions from the Kushan-period site of Surkh Kotal. These inscriptions, dating to the mid-second century CE, are some of the earliest known examples of writing in the native Bactrian language (related to the modern

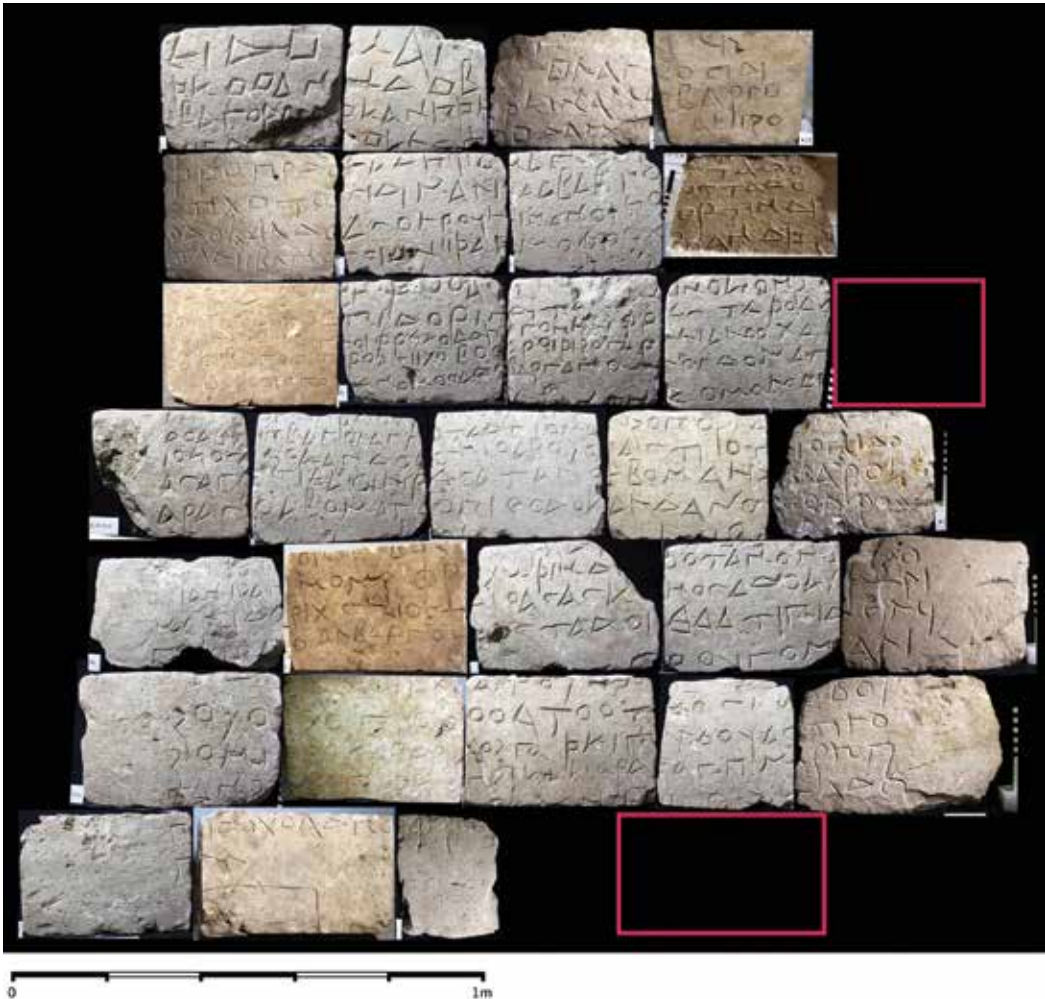


Figure 5. Photo-mosaic of Surkh Kotal Inscription SK4. Dating to the Kushan period in the second century CE, this is one of the earliest known inscriptions in the Bactrian language. The red rectangles indicate missing parts of the inscription

Pashto language of Afghanistan). The Bactrians developed their writing system by adapting the Greek script with the addition of several letters to express sounds not found in Greek. The “Great Surkh Kotal Inscription,” as it is known, exists in three copies, two of which were inscribed on multiple building blocks. The inscriptions had been carefully excavated by the French Archaeological Mission (DAFA), were fully published, and were stored in the National Museum. A key question had been whether or not these inscriptions had fully survived the horrific looting that took place during the Afghan civil war of the early 1990s. Our Kabul team described, photographed, and inventoried the stone blocks of the inscription. We were able to use this complete recording to create a digital photo-mosaic of the inscriptions (fig. 5) and determine to our great relief that the inscription was almost completely intact, with only a very small number of missing (presumably looted) inscribed blocks (shown as red outlines in fig. 5).

In addition to inventorying and conservation, a third key element of the OI-NMA Partnership involves the training of the museum staff. During the past year, we brought in a series

of consultants such as Charles Kolb (recently retired from the National Endowment for the Humanities) and Zahir Yusufzai. Dr. Kolb had worked with one of the great pioneers of Afghan archaeology, Louis Dupree, as the project ceramic expert on the path-breaking excavations at Aq Qupruq. He worked in the storerooms with our Kabul inventory team to help identify key objects from the Aq Qupruq excavations and conducted training seminars on ceramics for the staff of the museum (fig. 6). Similarly, Dr. Yusufzai conducted an extremely useful training seminar on the early Buddhist art of Afghanistan. Finally, Mike Fisher began a series of intensive training tutorials aimed at teaching fundamental aspects of database design to a select group of four curators and staff members of the National Museum. Our goal is to train our Afghan colleagues so that this core group will be able to manage and troubleshoot the operation of the database inventory once the three-year partnership is completed.



Figure 6. Charles Kolb conducting a ceramics workshop for the staff of the National Museum (photo courtesy of Michael Fisher)

Cultural Heritage Projects in Afghanistan

Preservation of cultural heritage lies at the heart of the OI-NMA Partnership's work in Afghanistan. As part of that focus, in summer 2014 we had the extraordinary good fortune to be able to visit the Bamiyan valley in central Afghanistan to learn about ongoing heritage protection projects in this region. Straddling a key trade route through the Hindu Kush mountains, the Bamiyan valley is a fertile swath of green fields and villages surrounded by the harsh, barren mountain landscape. Bamiyan is the former home of the two largest standing statues of the Buddha (53 m and 38 m tall), carved during the third to fifth centuries CE into giant niches in the red sandstone cliffs that bound the valley (fig. 7). All around the two enormous niches were the grottoes and cells of the Buddhist monks who populated the monasteries of the Bamiyan valley for 800 years. In an act that shocked the entire world, the Taliban deliberately destroyed these two enormous statues just six months before the 9/11 attacks of 2001 (fig. 8). To the Taliban, these majestic monuments were "idols" and anathema. Now, only the ghost outlines of the Buddhas can barely be discerned in the gigantic carved niches, towering over the shattered boulders, as all that survives from these collapsed masterpieces of Buddhist art (figs. 9–10).

We were shown around Bamiyan by UNESCO conservator Bert Praxenthaler, who is responsible for the stabilization and preservation of the monuments there. Bert described the work that his team is doing to prevent further damage to the niches and grottoes and explained the complexities of the ongoing debate about whether or not we should attempt to re-assemble or reconstruct one of the two destroyed Buddhas. We also visited other key archaeological sites and monuments in the Bamiyan valley such as Shahr i Gholghola ("the City of Screams"; fig. 11) and the cliff-top red-stone fortress of Shahr i Zohak (figs. 12–13), both destroyed in 1221 CE by Genghis Khan, who massacred all their inhabitants. Bert's



Figure 7. The 53 m (ca. 174 feet) tall larger standing Buddha at Bamiyan, showing the state of preservation before its destruction by the Taliban (note figure at bottom for scale)

OI-NMA PARTNERSHIP AND CULTURAL HERITAGE PROTECTION WORK



Figure 8. The demolition of the Bamiyan Buddhas by the Taliban on March 21, 2001



Figure 9. The OI team in front of the empty niche that once held the larger standing Buddha of Bamiyan. UNESCO conservators have erected scaffolding inside the niche as part of their efforts to stabilize it and prevent further collapse



Figure 10. Stone and plaster fragments of the larger Bamiyan Buddha in storage at the site. There is an ongoing debate about whether it is feasible or desirable to attempt to reconstruct one of the demolished Buddhas

OI-NMA PARTNERSHIP AND CULTURAL HERITAGE PROTECTION WORK



a



b



c

Figure 11. (a) Shahr i Gholghola (“the City of Screams”), the medieval Islamic city near the niches of the Bamiyan Buddhas. Destroyed in 1221 CE by Genghis Khan, Shahr i Gholghola is now the focus of a UNESCO-sponsored project to stabilize the architecture using traditional materials and techniques (b-c) (mudbricks [left] used to repair ancient wall [right])

OI-NMA PARTNERSHIP AND CULTURAL HERITAGE PROTECTION WORK



Figure 12. The imposing cliff-top fortress of Shahr i Zohak was built as early as the Hephthalite period (“White Hun” period, fifth century CE) to guard the entrance to the Bamiyan valley. The city was destroyed in 1221 by Genghis Khan

conservation team has been using traditional building materials and techniques to stabilize the Islamic-period architecture of Shahr i Gholghola as part of the broader preservation efforts in the valley. Our entire visit to Bamiyan was a sobering reminder of the fragility and vulnerability of Afghanistan’s unique and irreplaceable cultural heritage. At the same time, the combined efforts of both Afghans and the international community to preserve this heritage are deeply inspiring and underscore the value of the work that our partnership is carrying out at the National Museum in Kabul. We are looking forward to continuing and completing this work in the coming year.

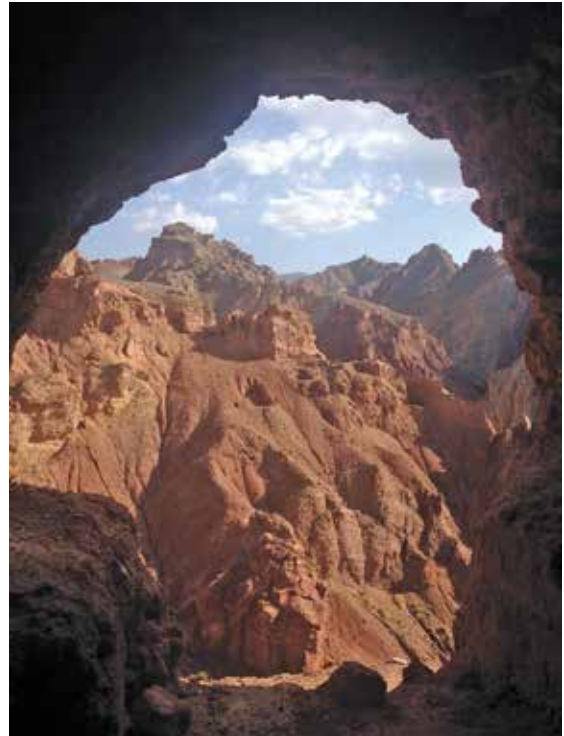


Figure 13. View from the citadel of Shahr i Zohak over the spectacular mountain landscape around the city

ORIENTAL INSTITUTE NUBIAN EXPEDITION (OINE) PUBLICATION PROJECT

Bruce B. Williams and Lisa Heidorn

We note with sadness this year the passing of George Scanlon, who directed the major excavation at Qasr el-Wizz. Having worked also at Gebel Adda, he went on to undertake the large-scale excavation at Fustat, the original city that became Cairo, and had a distinguished career as professor of Islamic art and archaeology at the American University in Cairo. In 2009 he was awarded a medal by the government of Egypt for his contribution to the Aswan High Dam salvage campaign. Publication of his excavation at the monastery of Qasr el-Wizz will make a major contribution to the history of Christian culture and especially monasticism in northeastern Africa.

The year 2013–2014 has been an eventful one for the OINE publication project. Each of its four major parts has interesting news, and there have been some exciting discoveries. Major challenges lie ahead, but the most significant general development has been the arrival of two major sources of support to add to the grant from the Michaela Schiff Giorgini Foundation to support architectural presentation of Serra East fortress. The Shelby White and Leon Levy Program for Archaeological Publications awarded a grant that joins a grant from the American Research Center in Egypt's Antiquities Endowment Fund to support work on the Napatan fortress of Dorginarti and the medieval Christian town at Serra East. We expect that these will enable enough drafting, photography, architectural drawing, and research to see these projects through to completion.

Projects of this size have help from many directions and this year has been no exception for OINE. Lawrence Lissak is continuing with his invaluable aid, now photographing many objects for the museum catalog. Margaret Romm has joined us to help sort out a mass of scanned drawings Lisa Heidorn made some time ago.

Dorginarti. Lisa Heidorn

I have almost finished the chapter analyzing the pottery from the fortress of Dorginarti, and this work will have implications for both the cultural and social history of Lower Nubia.

The pottery includes Egyptian wheel-made vessels, which reflect the northern orientation of the fort's soldiers and their lines of supply (fig. 1). Such vessels constitute the majority of the pottery from the earlier and later levels at Dorginarti, with many of the large containers made of a marl clay fabric associated with clay sources in Upper Egypt, where the jars were filled with provisions (fig. 2).

In addition, the presence of handmade pottery at Dorginarti reveals that the Kushites inhabiting the fortress were using handmade cooking vessels similar to those that had been used to identify the Nubians working for the Egyptian administration in earlier Middle and New Kingdom Egyptian forts (fig. 3). In the case of Dorginarti, however, it is the Kushite conquerors of Egypt themselves who built and managed the fortress, beginning in the latter part of the eighth century BC.

ORIENTAL INSTITUTE NUBIAN EXPEDITION



Figure 1. Upper Egyptian marl jar
OIM E49570



Figure 2. Egyptian silt jar



Figure 3. Nubian cooking pot

The decorative technique of the pots and bowls is, however, distinct from the earlier second-millennium handmade repertoire. The forms clearly represent an indigenous population that either inhabited the Second Cataract region or came from somewhere outside the Egyptian cultural sphere. Similar forms – with the distinctive pattern burnishing and incised rim decoration – have been found to the north at Qasr Ibrim and at Napatan sites in the Debba Bend, more than 500 kilometers to the south of the Second Cataract, and at the Napatan fort of Gala Abu Ahmed, in the Wadi Howar far to the southwest in the Western Desert (fig. 4).

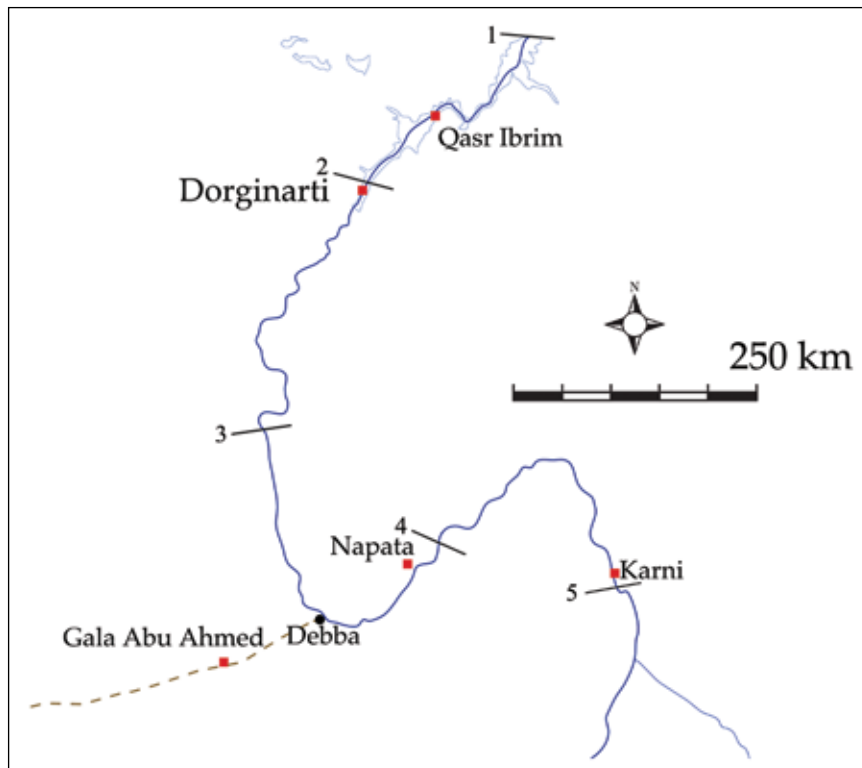


Figure 4. Map of related sites in Sudan. Numbers indicate the cataracts

The Kushite army contingents who used the fortress were composed of people from Nubia, Egypt, and possibly also the Mediterranean. They used northern wheel-made ceramic types for their everyday activities, but they also employed handmade forms, including a large number of cooking pots and serving vessels.

I have also undertaken a thorough study of the architecture, a task that has been made easier because of the existence of the accurate records and sketches produced by James Knudstad, who excavated Dorginarti. The final plans will be drawn in the coming year. Distinguishing the different phases of rebuilding apparent in the enclosure walls, residences, and official buildings will clarify whether the fort was occupied sporadically or continuously over the course of its lifetime. Frequent reconstructions may indicate the former. The pottery from Levels III and IV shows no appreciable chronological differences to identify any settlement pattern from different periods.

The general layout and architecture of the Level III–IV fortress of Dorginarti indicate a clear military function, similar to that of the earlier Middle and New Kingdom Second Cataract forts. There are bastions along the wall situated closely enough together to protect bowmen from enemy fire; there are gates with flanking bastions and access to the rampart atop the wall; there are remnants of parapets to protect archers; and there is a protected stairway to the Nile for the provision of water. This fortress was a functioning military outpost and not a mere symbol of power.

The topographic and geographic situation of the fortress on the steep northern banks of the island, with about 400 meters separating it from the western shore of the river, makes it clear that its primary function was to guard the open river channel running west of the island and the western shore beyond. Boats plying the river would have had to stop here to unload or reload goods and/or passengers before or after they navigated the rocky rapids of the cataract, especially when the river level was low. The boats themselves might have been portaged overland between navigable water channels, as happened much earlier along the Middle Kingdom slipway built at Mirgissa, only 16 kilometers to the south. A similar overland portage of goods and boats was used by the British, Egyptian, and Canadian military forces in the vicinity of Wadi Halfa during their excursion up the Nile to aid Major-General Gordon against the Mahdi in 1884–1885.

The metallurgical study of the crucible and tuyère fragments from Dorginarti is currently underway at the University College London facility in Qatar, under the direction of Martina Renzi, Thilo Rehren, and Edgar Pusch.

Serra Fortress. *Bruce Williams*

By December, Nadejda Reshetnikova had completed a reconstruction of James E. Knudstad's survey and created annotated archaeological-architectural plans for the Middle Kingdom fortress and later New Kingdom buildings, including some eighteen figures and a major plan (to be two very large fold-out plans in OINE 11). All the elevation points have been included and all the notes about deposits and details of structures to allow the reader to see both visual and descriptive information together. In the PDF file they are layers so that the user can choose the type of information presented (fig. 5).

Serra Fortress deposits were a major source of seal impressions, various lumps of clay used to seal documents and containers that offer extremely valuable information about the flow of information, goods, people, and control in ancient societies (fig. 6). While the sealings

ORIENTAL INSTITUTE NUBIAN EXPEDITION

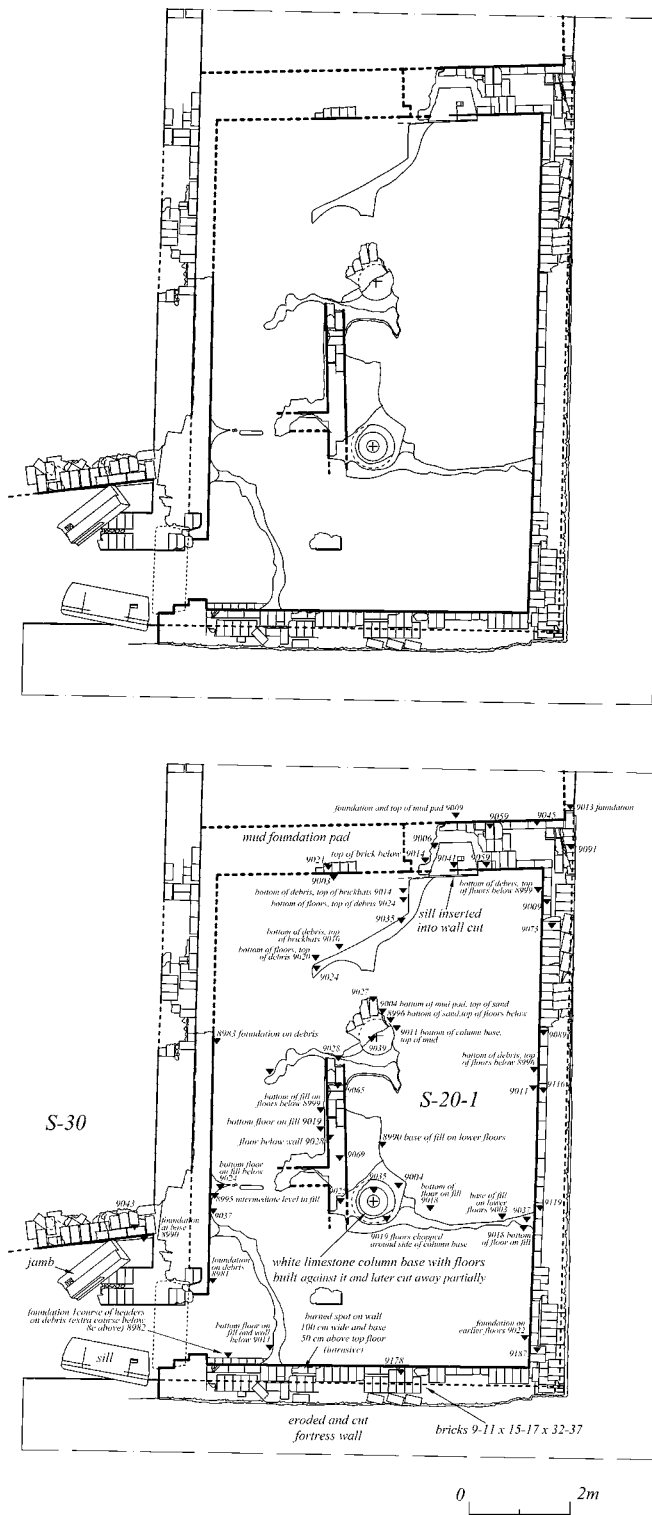


Figure 5. Serra S20-1 New Kingdom reception hall with a door frame of inscribed for Senwosret III shown as loose blocks beside the door. Top: plan without notes; Bottom: annotated plan (Nadejda Reshetnikova)



Figure 6. Serra sealing of the late Twelfth Dynasty from Serra East fortress, Field number 2S 535a. Left: the seal impression; Right: the back of the sealing, showing impressions of two pegs and cords

of Serra East had been studied, new information and ideas developed in the last two decades made a re-study highly desirable. Susan Penacho and Kathryn Bandy, advanced graduate students in NELC, undertook and completed this work with the resulting discovery of many dozens of new seal types, including new persons and institutions, while also identifying what each seal was used to secure — a bag, a peg, or a document.

Cerre Matto, the Christian Town at Serra East. *Bruce Williams*

The town of Cerre Matto, unlike so many archaeological sites, was very much three dimensional, including buildings with two and more stories, despite centuries of damage. The architectural part of the project has been correspondingly challenging, but a substantial part of a new annotated archaeological architectural plan is now complete. This is being made to correspond to the plan of Serra Fortress in scale as well as information, because the town actually used the fortress walls — already almost three thousand years old — partly for defense, partly for structural support, and even for raw material. We expect to augment the plans and drawings with a large number of photographs to give the reader of this publication a strong visual experience of the town and the texture of its structures (figs. 7–8).

Archaeology can be full of surprises and coincidences, and they occurred this winter. Nadejda had been engaged by Tim Kendall to work at Gebel Barkal in the town of Kareima, Sudan. She arrived in January to find that Serra's architect in both seasons and dig director from 1963 to 1964, Jim Knudstad, was also going to be there! This offered her a chance to meet and work directly with the architect who had originally planned both Serra East and Dorginarti. It just so happened that I was staying in Kareima at the same time, working with Artur Obluski at the monastery of Ghazali. So, with the kindest encouragement from both directors, Tim and Artur, Jim, Nadejda, and I were able to have not just a reunion, but a day-long working session that gave us new insights into the Serra/Dorginarti excavation.

ORIENTAL INSTITUTE NUBIAN EXPEDITION

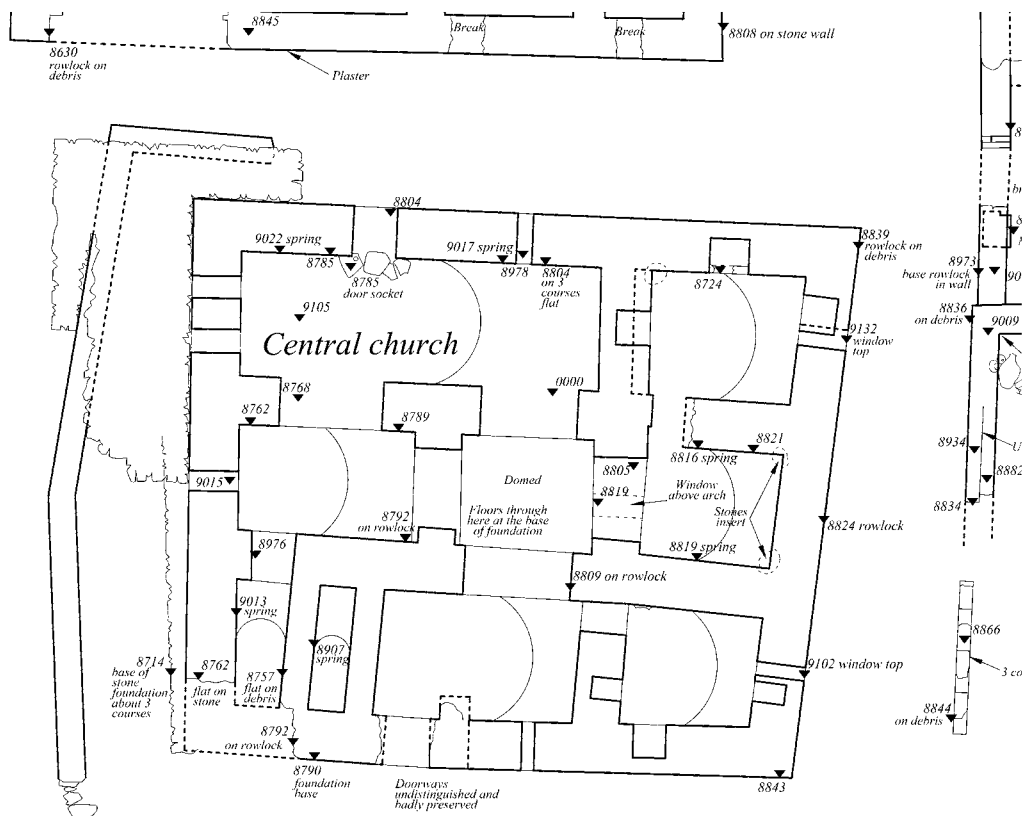


Figure 7. The ground floor of the Central Church, annotated plan (Nadejda Reshetnikova)

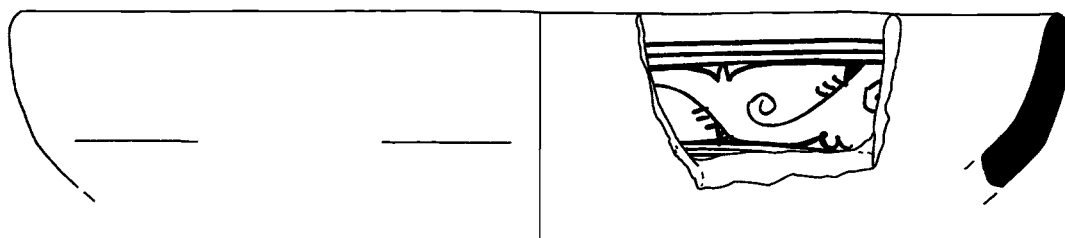


Figure 8. A major challenge is the illustration of Christian-period painted pottery, which appears individually unique as seen in this drawing. Top: bowl sherd OIM E37421 as photographed; Bottom: the sherd as drawn by Carol Meyer

Cerre Matto, Wall Paintings and Inscriptions.

Alexandros Tsakos and Dobrochna Zielinska

During the last year, the texts from Cerre Matto have been almost fully identified and the study of the contents of the fragments on parchment, stone, pottery, and painted plaster is very much advanced. The highlight of this year's work was the identification of an inscription painted on a tablet held by the enthroned figure of Christ from the sanctuary of the Central Church (fig. 9). It contains the introductory verses of the Gospel of John in Greek. This is one of the very rare instances in which Greek was used in the town of Cerre Matto and it represents a tradition of using Greek in the liturgy most probably even after it had ceased to be used in Egypt. Otherwise, Greek, Coptic (found mainly on stelae), and Old Nubian (found mainly on manuscripts), were the languages in use. This is also the only inscription recorded from the wall paintings.

Although the churches originally had many wall paintings, those that remained were neither numerous nor well preserved. The best-preserved decoration was in the Central Church, where two representations show elements that are characteristic of the iconographical program of Nubian churches. As mentioned above the sanctuary was decorated with the standard apse composition in its abbreviated form. This was the Christ in Majesty accompanied by the Apostles. Elsewhere in Lower Nubia (Nobadia), this variant of the apse decoration is known from churches at Sonqi Tino of the tenth century and Abd el-Gadir of the thirteenth century, and it was most probably an adaptation of the complete composition made to fit the relatively small dimensions of the sanctuaries in such churches.

In the niche of the eastern wall of the northern pastophorion (prothesis) there is a representation of Christ of a type that dates after the ninth century, when at least three types of Christ representations (as known to date) began to occupy this specific wall in Nubian churches. The painting was very badly preserved but one can see that the robe of Christ was decorated with the eye-motif (fig. 10). This type of representation of the Christ allows us to identify the composition as that of Christ consecrating wine in the frame of the Liturgy of the Presanctified Gifts.



Figure 9. Tablet in the hand of Christ from the sanctuary of the Central Church. The inscription is from John 1:1. It reads: εν αρχη ην ο λογος και ο λογος ην προς τον θεον και θεος ην ο λογος; In the beginning was the Word, and the Word was with God, and the Word was God

Qasr el-Wizz. Artur Obluski, Katarzyna Danys-Lasek, Dobrochna Zielinska, and Alexandros Tsakos

The Qasr el-Wizz project is approaching its final stages. We are very happy to bring to a wider audience ground-breaking results which will surely meet the high standards of pre-

ORIENTAL INSTITUTE NUBIAN EXPEDITION



Figure 10. Christ from the northern pastophorion of the Central Church with eyes shown on the robe. Photograph digital editing

the medieval kingdom in Lower Nubia. It was built at the dawn of the Christian civilization in Nubia in the sixth century CE. Afterwards, it was rebuilt several times, firstly after the union between Nobadia and Makuria (the kingdom in northern Sudan just south of Makuria), when it obtained a layout typical for the Makurian church architecture. Later alterations adjusted the church to a new role, as a monastic church that had become a place of commemoration for an important local saint: This was, perhaps, Apa Dios or Dioskoros, to whom the monastery was dedicated.

Analysis of the iconography and the style of the wall paintings in combination with the plaster typology and architectural rearrangements permitted us to date the rebuilding of the church to around the turn of the eighth century. The painted decoration on the walls the northwestern corner of the church are similar to the murals from the so-called Paulos Cathedral in Faras, which dated to the year 707 CE (fig. 11).

Almost three thousand ceramic objects have been organized into an exhaustive cata-

vious volumes in the Oriental Institute Nubian Expedition publication series. The monastery and its dependencies were excavated by Harry S. Smith, Keith Seele, and George Scanlon during the 1960s. Scanlon's results were published, in part, in two preliminary reports in the *Journal of Egyptian Archaeology* in 1970 and 1972. In the course of the current project, we studied about three thousand potsherds, about two hundred textual finds, and dozens of fragments of plaster with painted decoration. We also analyzed afresh the architecture of the monastic complex and the neighboring cemeteries. The publication will include unpublished material from not only the Oriental Institute excavations but also work of Harry S. Smith, thanks to him and the Egypt Exploration Society.

Studies renewed for the present project proved that the monastic church is one of the earliest, if not the earliest known and preserved church in Nobadia,

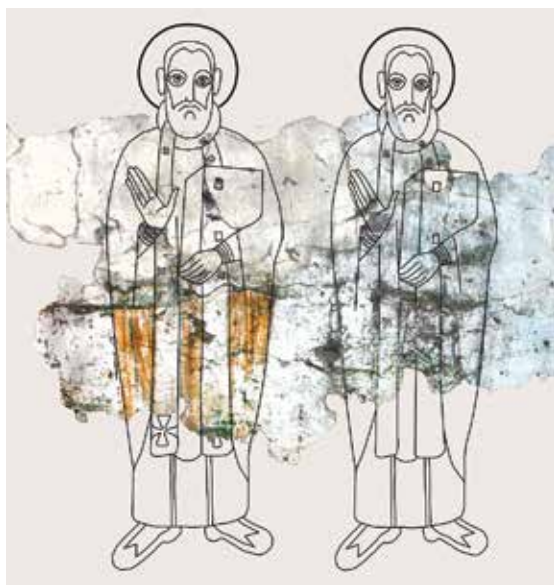


Figure 11. Two saints painted on a wall, restored from parts of their robes (Dobrochna Zielinska)

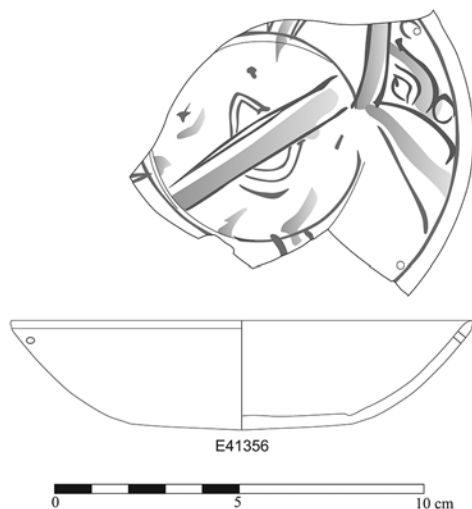


Figure 12. Pottery bowl from Qasr el-Wizz OIM E14536 (Katarzyna Danys-Lasek)

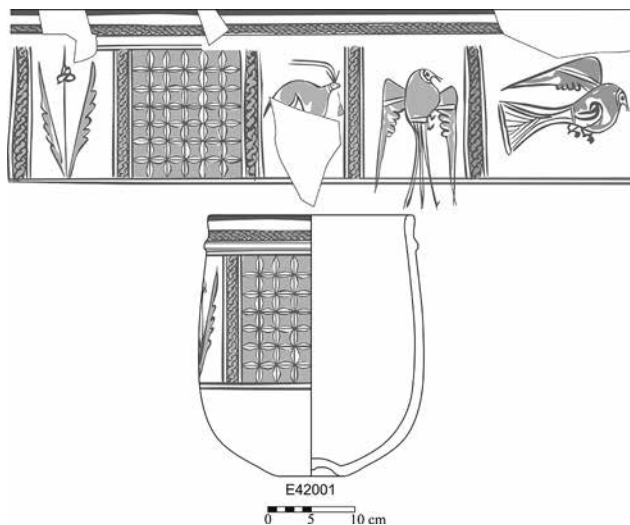


Figure 13. The well-known painted pottery vase OIM E42001 from Qasr el-Wizz (Katarzyna Danys-Lasek)

log. Progress in the scholarship on both Nubian and Egyptian pottery allowed us to carry out the study of ceramics anew, including macro-morphology, fabrics, and decorations. The finest example of Qasr el-Wizz pottery is an incomplete plate produced at a southern Egyptian workshop with decoration that combined influences, both Nubian and Egyptian, with strong inspiration from glazed pottery of Splashed Wares manufactured in Iran during tenth century (fig. 12). Imported vessels from middle and northern Egypt, the eastern Mediterranean, and the kingdom of Alwa, the southernmost Nubian Kingdom, found at Qasr el-Wizz are evidence for the eclectic character of Nubia-mingling elements of Mediterranean and African civilizations.

The study of the texts found at the monastic site, even in their fragmentary state, offer us very interesting insights into the monastic life. First, we now know some of the names of the monks who inhabited Qasr el-Wizz, for example, ΔΙΟΣ (Dios), ΔΙΟΣΚΟΡΟΣ (Dioskoros), ΙΩΑΝΝΗΣ (Ioannes), and ΛΑΖΑΡΟΣ (Lazaros). Reading the text preserved on a terra-cotta funerary stela, we learn the name of a hegoumen (the abbot) ΙΩΑΝΝΗΣ (Ioannes) of the monastery Apa Dios or Dioskoros, which can be most probably identified as the monastery at Qasr el-Wizz.

One of the most interesting finds is a documentary manuscript from Wizz. This is a list of land properties with estimations of the annual output expected from these properties. We thus get an insight into the economic activities of the monks living at Qasr el-Wizz as well as into the territory in which the monastery of Apa Dios/Dioskoros had properties and where it exercised some sort of authority that went beyond the spiritual mandate natural to a monastery.

Further light upon the spiritual world in which our monks lived is shed by another manuscript preserving a previously unknown work about Shenoute, the renowned abbot from Upper Egypt and founder of Sahidic (Upper Egyptian Coptic) literature.

PERSEPOLIS FORTIFICATION ARCHIVE (PFA) PROJECT

Matthew W. Stolper

The PFA Project's emergency priorities — to make a comprehensive record of the Archive and to distribute the record gradually and promptly — were shaped by a legal crisis that put the future of the Fortification tablets themselves in doubt. A recent U.S. District Court ruling in the case offers grounds for guarded optimism.

The Project's *Annual Report* for 2010–2011 already showed guarded optimism in saying that “the goal of a comprehensive record of the Archive [was] within reach.” As Robert Browning's Andrea del Sarto (fig. 1) said “Ah, but a man's reach should exceed his grasp, or what's a heaven for?” Heaven can wait, but the court's ruling also offers an occasion to consider how the Project's grasp measures up now against its reach, that is, to assess what the Project has accomplished and reflect on the future of the Archive.

To begin with, Project workers continued to extend its grasp during the past year, compiling and processing the growing record of the Archive's tablets, texts, and seals in ways that will be familiar to followers of previous reports.

During the summer of 2013 students supported by a timely grant from the Roshan Cultural Heritage Institute assisted PFA Project editor Mark Garrison in recording the immense



Figure 1. Andrea del Sarto (self-portrait, left); Robert Browning (by M. Gordigiani, right) (both images via Wikimedia Commons)



Figure 2. Recording seals on Aramaic Fortification tablets: Project editor Elspeth Dusingberre verifies and completes collated drawing

and still-growing corpus of seals on Persepolis tablets. The grant supported both students from Chicago (Tytus Mikołajczak [NELC] and Emily Wilson [Classics]) and students from elsewhere (Christina Chandler [University of Colorado], Erin Daly [Notre Dame University], and Katherine Livingstone [University of Minnesota]). It also allows Chandler and Daly (who are about to begin PhD programs at Bryn Mawr and Chicago, respectively) to continue their Project work during the summer of 2014.

Garrison and student workers recorded seals on another 230 of the unpublished documents with Elamite texts first edited by the late Richard Hallock (PF-NN), yielding identifications of more than 160 new seals (PFS). They expect to process the last ca. 500 of these documents during the summer of 2014. They also documented seals on about seventy-five more uninscribed tablets (PFUTS), yielding identifications of more than 100 more new seals. Working with Garrison and Project editor Elspeth Dusingberre (University of Colorado), Wilson reviewed and updated online records of the seals on the monolingual Aramaic tablets (PFATS). Dusingberre updated the catalog of PFATS (fig. 2) to include impressions on eighteen newly identified tablets (yielding identifications of another twenty new seals), made final pencil drawings of about 195 seals, and final inked drawings of about twenty-five. All told, she has identified almost 600 distinct legible seals specific to the Aramaic tablets (PFATS), about sixty others also found on Elamite tablets (PFS), and about forty others also found on uninscribed tablets (PFUTS).

Of around 3,200 analytically legible seals that Garrison, Dusingberre, and student workers have identified until now, about 2,000 appear on Elamite tablets; the balance are divided about evenly between Aramaic tablets and uninscribed tablets. The wide range of style,

PERSEPOLIS FORTIFICATION ARCHIVE

quality, compositional elements, motifs, and themes of these seal images often presents a combination of general similarities and specific differences that makes it tricky to identify individual seals, especially when impressions are damaged or incomplete. As the corpus grew, the thematic typology that Garrison and Margaret Cool Root developed when only about 1,100 such images needed to be classified was no longer detailed enough to facilitate finding particular known seals or comparanda for new seals. As last year's *Annual Report* mentioned, Garrison developed a new, detailed, and robust typology. Student workers read through the seal card fiches that are the primary visual documentation of seal imagery, to restructure the file according to the new typology; they checked to ensure that all seal numbers were accounted for; they checked that defunct seal numbers had been purged; and they reviewed or revised the sketch drawings for legibility. Using their results, student worker Megan Kruse (Trinity University) restructured the thematic typology and entered or updated the newly specified thematic types for entries of each of the seals for display in the Online Cultural and Historical Research Environment (OCHRE) (fig. 3).

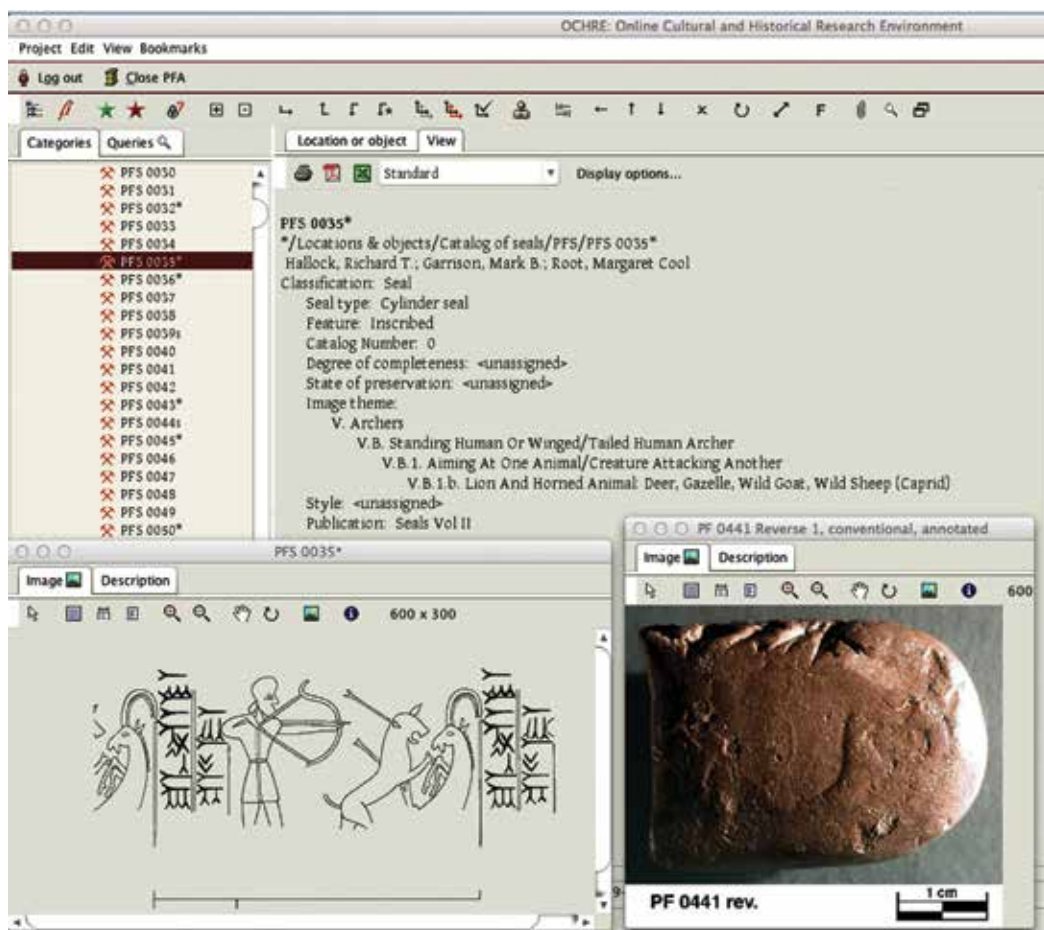


Figure 3. Constructing the whole image and breaking it down: OCHRE display of inscribed seal PFS 0035*, showing four-level thematic classification, collated drawing, and photograph of one of the preserved impressions of the seal. Compare the two-level thematic classification illustrated in the *Annual Report for 2010-2011*, p. 109, figure 7



Figure 4. Editing Aramaic epigraphs: Project editor Annalisa Azzoni uses a false-color, high-resolution image to help read a partially preserved Aramaic text in ink

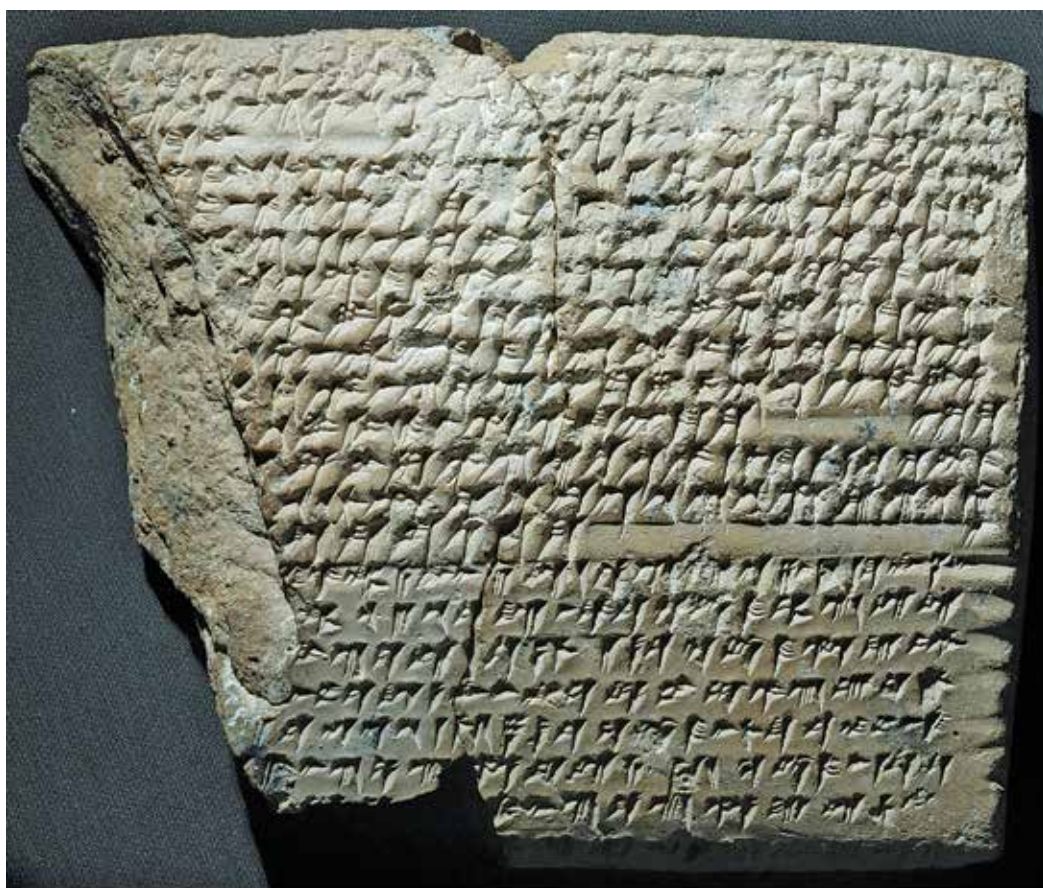
Project editor Wouter Henkelman re-collated more Elamite texts from Richard Hallock's *Nachlass* on tablets in Chicago as well as Elamite texts on tablets that were returned to Tehran in 1953. By now, Henkelman has collated ca. 2,700 tablets — or, as he calculates it, almost 3,300 texts (recording single transactions) and entries (in serial registers of single transactions) and he has re-collated almost 2,000 of these texts and entries to produce final, extensively corrected editions of them. Combined with final seal identifications and seal drawings, linked to images captured by other PFA Project workers, and provided with new translations and notes now in preparation, these readings will be the basis of definitive electronic and hard-copy publications of these documents. These authorized editions will discharge part of the responsibility that the Oriental Institute undertook when the PFA was entrusted on loan in 1936.

Similarly, Project editor Annalisa Azzoni (Vanderbilt University) continues to compile and edit the Aramaic components of the PFA for authoritative publication. During the last year she recorded fifteen more monolingual Aramaic tablets and fragments (PFAT) for a running total of 832, and eighteen newly identified Aramaic epigraphs (PFAE) on tablets bearing Elamite texts for a running total of 258 (fig. 4). What makes these terse, troublesome texts more consequential than their large numbers is their archival context. The PFA as a whole establishes the intimate connection of these Aramaic records with institutions that also recorded their operations in other languages and scripts. Traces of this polyglot and polygraphic environment appear not only in the many Aramaic transcriptions of Iranian and

PERSEPOLIS FORTIFICATION ARCHIVE

even Elamite words or names, but also in oddities of grammar that seem to arise not from ignorance but from language interference. This observation, developed in Azzoni's paper at last May's conference on the PFA and the "imperial signature," could probably not have been accurately interpreted if the Aramaic tablets had been considered as a separate epigraphic corpus, apart from the integrated context of the PFA Project. Within that integrated context, it is possible to see in traits of Persepolis Aramaic some of the socio-historical circumstances that are also reflected in traits of Persepolis Elamite.

I sifted through about 800 boxes of tablets and fragments to select new items for conservation, image capture, cataloging, and editing, in a third and perhaps penultimate triage (fig. 5). I entered first-draft editions of about 150 more Elamite texts and fragments in OCHRE, for a running total of about 1,450 draft editions of previously unedited Elamite texts (Fort.). Combined with the texts that Hallock published in 1969 and the texts that Henkelman is editing for final publication, this brings cumulative Elamite corpus to ca. 6,250 documents and fragments, ca. 8,000 or more texts and entries, with at least a few hundred more tablets to come.



Fort. 1290-102+2177-101 Obverse



Figure 5. Re-examining the fragments: a rare join between two fragments of an extraordinary text. Spaces in the text mark off sections in question-and-answer form. Change in the appearance of the signs indicates partial drying of the tablet during a pause in writing the text



Figure 6. Probing the material support of the Archive: conservator Simona Cristanetti scans a Persepolis Fortification tablet with the portable X-ray fluorescence apparatus

Sifting the boxes builds a backlog of work for conservator Simona Cristanetti, who was been working part-time on PFA Project materials since May 2013. She completed treatment of another thirty-six tablets, with about 100 more awaiting attention. The meticulous work of successive PFA Project conservators has cleaned and stabilized almost 1,200 tablets since 2006.

Laura D’Alessandro, Alison Whyte, and Cristanetti began a trial of the Bruker Tracer III-SD portable X-ray fluorescence device (pXRF) to identify clay composition of Fortification tablets (fig. 6), described in more detail elsewhere in this *Annual Report*. The pilot sample will look for distinctive material signatures of documents thought to have been made at Persepolis and from documents thought to have been brought to Persepolis from other places in the region. If the trial leads to clear results and a feasible workflow, it will be possible to add another dimension to the Project’s comprehensive record of the PFA, by connecting the material evidence of the tablets with the places named in the texts, on the one hand, and with samples from local clay sources, on the other.

Staff turnover continued to slow image capture during 2013–2014 and the completion of the Project’s third grant from the Andrew W. Mellon Foundation after March 2014 compounded the effect. Graduate student Ami Huang (NELC) trained undergraduate Theo Kassebaum (Anthropology) and graduate Jane Gordon (NELC) in making, editing, and uploading conven-

PERSEPOLIS FORTIFICATION ARCHIVE

tional digital images of Elamite documents (fig. 7), and they processed about 120 tablets. In the high-quality imaging lab, postdoctoral workers Ben Thomas and John Nielsen and student workers Edward Fernandez and Teagan Wolter (both CMES) and Sarah Rowlands (Classics) made about 3,000 BetterLight scans of almost seventy tablets and fragments with Aramaic texts and about 5,500 Polynomial Texture Mapping (PTM) sets of about 830 objects, mostly uninscribed, sealed tablets. Student workers Bekir Gurdil, Clair Shriver, and Kristin Butler at the University of Southern California, and Ameer Genova (History) and Robert Marineau (NELC) at Chicago, post-processed about 3,000 PTM batches of about 325 items. Our partners at InscriptiFact (<http://www.inscriptifact.com>), Marilyn Lundberg and Leta Hunt, uploaded more than 3,200 processed PTM batches to the staging server prior to release, documenting about 350 tablets. Currently public on InscriptiFact are almost 2,800 Persepolis Fortification tablets and fragments — almost all of previously unpublished kinds — presented with about 18,000 PTM images and about 26,000 BetterLight scans.

Longtime PFA postdoctoral project manager Dennis Campbell, now on the faculty of history at San Francisco State University, continues to work part-time for the Project. Postdoctoral worker John Nielsen (about to join the faculty of Bradley University in autumn 2014) and graduate student Teagan Wolter continued much of Campbell's work of formatting Elamite texts for display in OCHRE, supported by student workers Özgün Sak (History) and Seunghee Yie (NELC), and by Douglas Graebner (Art History) who tagged photographs to link them sign-by-sign to editions. They entered 475 new Elamite texts, most of them belonging to large, complex, lacunose and time-consuming text-types. OCHRE Data Services (ODS) data specialist Miller Prosser and ODS director Sandra Schloen produced a set of automated text-processing routines — wizards — to streamline lexical analysis and parsing of Elamite vocabulary and identification of personal names and geographical names in Elamite texts. Graduate student worker Tytus Mikołajczak developed an Achaemenid Elamite cuneiform font that will allow parallel display of tablet photographs, transliterations, and conventional hand-copied sign-forms; revision will include updates to the extant Achaemenid Elamite syllabary and sign list, and OCHRE implementation still needs some debugging (fig. 8). About 5,500 editions of Elamite texts are now entered in OCHRE, about 3,800 of them public, almost all glossed, parsed, with linked seal information and attached images and a linked glossary that has more than 3,900 lemmata.

The Project weblog (<http://persepolistablets.blogspot.com>) maintained by Charles E. Jones (now the Tombros Librarian for Classics and Humanities at Pennsylvania State Univer-



Figure 7. Photographing more Elamite tablets: Ami Huang at the photo station

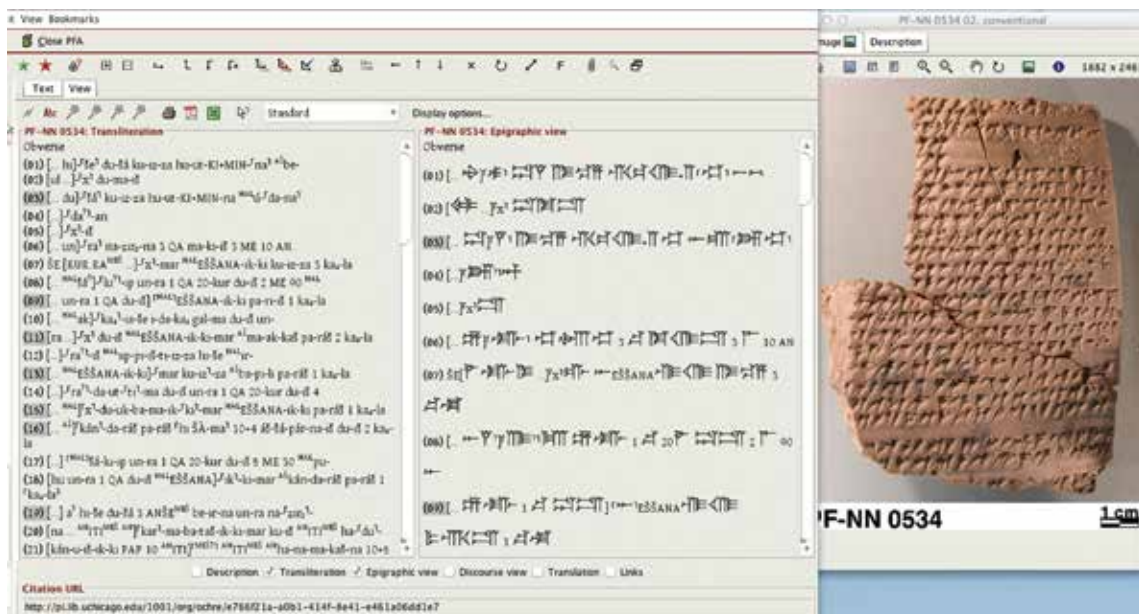


Figure 8. Viewing an Elamite text in three aspects: roman-character transliteration, cuneiform-character representation, and photographic image. Glitches in the cuneiform font include the representation of the logogram for “king” (transcribed as EŠŠANA) and the representation of numerals

sity), with thirteen new postings in the last year, was viewed more than 5,600 times by more than 4,300 unique viewers. The associated newsfeed has ninety-one subscribers.

Notable among ten more PFA-related public lectures and papers at academic meetings during the last year were invited presentations by Henkelman and Garrison at a colloquium on Achaemenid religion at the Collège de France, Paris, in November 2013 (audio and video at <http://www.college-de-france.fr/site/jean-kellens/seminar-2013-11-08-15h25.htm>); my presentation, also at the Collège de France in November 2013, on the Achaemenid Elamite tablet fragment from Kandahar illustrated in last year’s *Annual Report* (audio at <http://www.college-de-france.fr/site/john-scheid/guestlecturer-2013-11-04-17h00.htm>); and Prosser’s presentation on applying OCHRE to managing digital imaging, archaeological and philological data at the International Congress on the Archaeology of the Ancient Near East in Basel, Switzerland, in June 2014. Notable among PFA-related articles submitted during the last year are Garrison’s “The Figure in the Winged Disk in Persepolitan Glyptic: Select New Evidence” (Abdi [ed.], n.d.); Henkelman’s “On the Road: The Travel Files in the Persepolis Fortification Archive” (Ma and Tuplin [eds.], n.d.); and Garrison and Henkelman’s “Sigillophobe Suppliers and Idiosyncratic Scribes: Status, Administrative Profile and Glyptic Behavior of Storage Managers in the Persepolis Fortification Archive” (Dusinberre and Garrison [eds.], n.d.); and an issue of the digital/hard-copy magazine *Persian.ology*, edited by long-time Project friend and critic A. J. Cave, devoted to a description and appreciation of the PFA Project, its work and consequences (<http://www.magcloud.com/browse/issue/732422>). Of potentially greater long-term significance are Henkelman’s intensive introductory classes on the language and structure of the PFA given in Europe (Münster, Paris) and Iran (Tehran, Shiraz), which prepare a younger cohort for informed use of the rich data in the PFA.

PERSEPOLIS FORTIFICATION ARCHIVE

All told, until now the Project has made about 15,000 BetterLight scans of about 1,100 objects (including 800 Aramaic tablets and 300 Elamite tablets), and about 41,000 PTM sets of about 4,900 objects (including almost 3,000 uninscribed tablets, 820 Aramaic tablets, and more than 1,000 Elamite tablets), and more than 82,000 conventional digital images of about 6,750 Elamite tablets. Adding the 32-image sets of raw and intermediate TIFF files produced by PTM capture and processing raises the total to about 3,000,000 distinct images. Between 10,000 and 11,000 items have been recorded with one or more kinds of image, about half of them with very high-quality images. OCHRE now has records of some form — ranging from mere stubs that name and classify items to fully populated editions with linked images — of more than 11,000 fragments; records — ranging from mere identification to final editions — of more than 8,000 texts; and records of about 12,500 seal impressions, made by about 3,700 distinct seals, each impression identified by tablet surface and linked to seal identifications. So, returning to the matter of measuring reach and grasp, this comes creditably close to accomplishing the first of the Project’s overall goals, compiling a comprehensive record of the PFA.

Miller Prosser finished a long hunt for all of these files in many volumes and subdirectories of the dedicated Project server (OIPFA) maintained by Humanities Computing, and transferred all of them to new server space provided by the University Libraries’ Digital Library Development Center (DLDC), where they are backed up to library and industry standards and maintained permanently. This accomplishes another of the Project’s goals, making the comprehensive record a permanent record.

High-quality images of more than 2,700 tablets and fragments available on InscriptiFact and public OCHRE records of texts and seals on more than 4,000 tablets and fragments are long steps toward the other goal, making the record fully and freely available, but a large fraction of the data compiled until now needs more processing to be distributed in useful forms, and more editing and clean-up to be published in definitive forms by the Project editors. In the next few years, the emphasis of the Project must move from salvage to consolidation, from recovery to presentation and analysis.

A spur to this shift is the ruling handed down in late March by the U.S. District Court in the lawsuit over possession of the PFA and other Iranian items (http://www.nacua.org/documents/Rubin_v_IslamicRepublicofIran_032714.pdf; discussion at <http://culturalheritagelawyer.blogspot.com/2014/04/the-law-cited-by-plaintiffs-does-not.html>). District Judge Robert Gettleman’s memorandum and order concludes:

The court recognizes the tragic circumstances that gave rise to the instant action, but finds that the law cited by plaintiffs does not offer the remedy they seek. ... [N]one of the statutes cited by plaintiffs provide a basis for the attachment and execution against any of the artifacts in the Persepolis [and other] collections.

That is, the side of the Oriental Institute, the Field Museum, and the Islamic Republic of Iran won the case — almost. The plaintiffs have filed an appeal, so the legal situation is not yet resolved. But if this summary judgment is upheld on appeal the Oriental Institute will make plans to restore the tablets and fragments of the PFA to Iran, perhaps beginning in two or three years.

Judge Gettleman’s order refers to the Oriental Institute’s obligation to return the Persepolis tablets “after the academic study is complete,” and to a 2004 agreement by the Oriental Institute to return the tablets “gradually and soon.” In practical terms, to be sure, only a

gradual return can be envisioned. A large element of the PFA Project's agenda for the coming years will be to review, clean up, and complete its records, in order to enable a phased return of groups of tablets that meet the criterion of complete study. A corollary will be to prepare versions of Project data — images, editions, and catalogs — to accompany the tablets as they are returned, so that the final custodians of the tablets in Iran will not have mere objects that are the remains of Achaemenid Persia, but will also have tools that enable the contents of the objects to express and reveal the life of Achaemenid Persia.

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SUREZHA, KURDISTAN

Gil J. Stein and Abbas Alizadeh

Introduction: The Origins of Towns and Social Complexity in Northern Mesopotamia in the Chalcolithic Period, 5300–3500 BC

The Chalcolithic Age from 5300 to 3100 BC is the time when the world's first urban civilization developed in Mesopotamia. This development took place in several stages. In southern Mesopotamia, these are best known through the Ubaid and Uruk periods and their associated material cultural styles. Most of what we know about the origins of towns in the Ubaid period, and the origins of cities in the Uruk period, derives from excavations in southern Mesopotamia, the land of Sumer, at sites such as Eridu, Ur, and Uruk/Warka. However, archaeologists still know very little about the development of towns and cities in northern Mesopotamia and especially in Iraqi Kurdistan, because, until recently, so few scientific excavations have been done in these regions. Although we have developed a good initial



Figure 1. Map of Chalcolithic northern and southern Mesopotamia, showing the location of Surezha east of the Tigris River on the Erbil plain in the Kurdistan region

picture of the Ubaid period in much of Mesopotamia and have started to develop an understanding of the post-Ubaid periods, the last twenty years of excavations in northern Syria and southeastern Turkey have made it clear that these areas had distinctive local cultures which interacted closely with southern Mesopotamia in the Ubaid and Uruk periods, but still retained their own material culture styles and traditions. We also know that southern Mesopotamian cultural influences on northern Mesopotamia (northern Iraq, northern Syria, and southeastern Turkey) were not continuous, but instead were stronger in some periods, and weaker in others. Thus, for example, we now can see that there was a period from 4500 to 3700 BC (after the Ubaid, and before the Middle Uruk period), when there was very limited interaction between southern and northern Mesopotamia. At these times we can clearly see the predominance of local (non-Ubaid and non-Uruk) cultures in the northern and eastern parts of the Mesopotamian world.

To recognize the existence of these local cultures and to better investigate their role in the development of social complexity, archaeologists have developed a locally based chronology for northern Mesopotamia. The equivalences between northern and southern Mesopotamia are summarized in table 1.

Table 1. Comparison of chronologies for southern Mesopotamia (the Ubaid and Uruk sequences) and northern Mesopotamia (the Late Chalcolithic or LC 1-5 sequence)

<i>Dates BC</i>	<i>Southern Mesopotamia</i>	<i>Northern Mesopotamia</i>
3400-3100	Late Uruk	Late Chalcolithic 5 (LC-5)
3700-3400	Middle Uruk	Late Chalcolithic 4 (LC-4)
3850-3700	Middle Uruk (first cities in South)	Late Chalcolithic 3 (LC-3) (first cities in North)
4200-3850	Early Uruk	Late Chalcolithic 2 (LC-2)
4500-4200	Terminal Ubaid?	Late Chalcolithic 1 (LC-1) (begins ca. 4800 BC in Kurdistan)
5300-4500(?)	Ubaid 3-4 (first towns in South)	Ubaid 3-4 ("Northern Ubaid") (first towns in North)
5800-5300	Ubaid 1-2	Halaf Chogha Mami Transitional Samarra

There is a great need to understand the role of Iraqi Kurdistan in the development of urban civilization during the Chalcolithic period from 5300 to 3100 BC. The Surezha excavations investigate the key periods of the origins of towns and later cities in northern Mesopotamia. Our plan is to define the chronology and cultural developments of the Ubaid, Late Chalcolithic 1, Late Chalcolithic 2, and Uruk periods in this important region. We use the Late Chalcolithic 1-5 sequence to track these developments for northern or upper Mesopotamia in order to recognize the fact that cultural developments were not identical between the north and the south.

Site Description

The ancient site of Surezha is a mounded settlement with an area of approximately 31 hectares, located next to the modern village of Surezha, approximately 20 kilometers south of the modern city of Erbil/Hawler on the Makhmur road (fig. 1). The UTM coordinates of the site are: N. 399555.0694, E. 3984361.1196. The elevation of the top of the high mound is 349 meters above sea level. The ancient site consists of three parts: (a) the high mound, (b) the terrace, and (c) the lower town. The small conical-shaped high mound measures approximately 188 meters northwest-southeast and 150 meters southwest-northeast, with an area of approximately 2.8 hectares (fig. 2). The high mound stands 16 meters above the terrace. The base of the high mound is surrounded by a terrace on all sides. The terrace is about 2 meters high and slopes gradually down over a distance of approximately 70 meters to the lower town, which extends out from the terrace in all directions. Part of the lower town lies underneath the modern village of Surezha to the north and east.

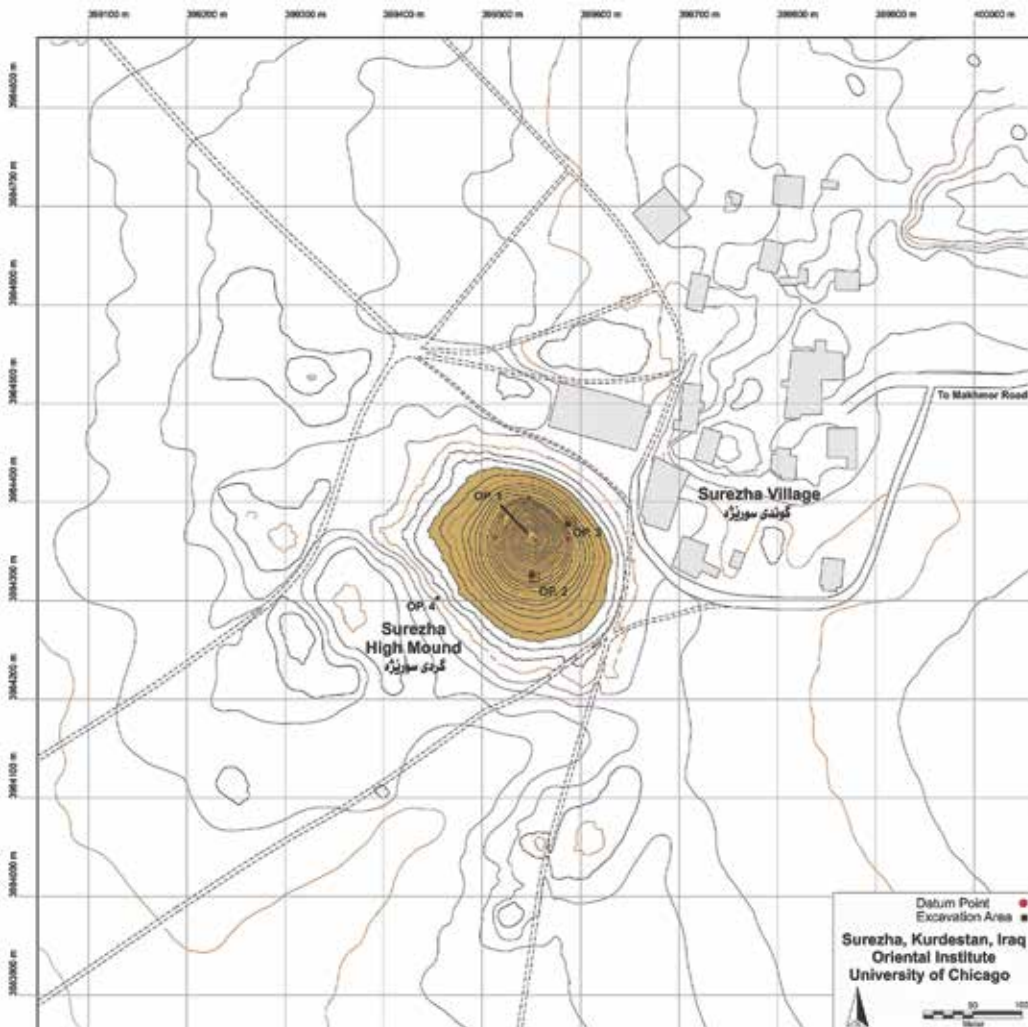


Figure 2. Topographic map of Surezha

Surezha was first identified and recorded as Site 27 by Harvard University's Erbil Plain Archaeological Survey (EPAS) in 2012. We want to express our appreciation to the survey director Jason Ur, who brought the site to our attention as having Chalcolithic ceramics from the Ubaid period. Our Oriental Institute team (Gil Stein, Abbas Alizadeh, Mehdi Omidfar, and Loghman Ahmadzadeh) re-visited the site that same summer of 2012 and our surface collections confirmed that Ubaid, Late Chalcolithic 2, and Uruk ceramics were present there. We also established that the high mound at the site was almost exclusively Chalcolithic in date.

The Surezha excavations are conducted by the Oriental Institute of the University of Chicago. The first field season of excavations and laboratory analyses was carried out from August 19 to September 18, 2013. The staff of the 2013 Surezha Excavations consisted of Prof. Gil J. Stein (director of the Oriental Institute of the University of Chicago, co-director), Abbas Alizadeh (Oriental Institute of the University of Chicago, co-director), Loghman Ahmadzadeh, John Alden (University of Michigan), Henrike Backhaus (University of Applied Sciences-Berlin), Barbara Couturaud (University of Versailles, France), Hamid Fahimi (Free University of Berlin, Germany), Sam Harris (University of Chicago), Kate Lieber (registrar), Mehdi Omidfar, and Max Price (Harvard University). We employed as excavators fourteen workmen from Erbil, Surezha village, and other nearby villages. Two workers from Erbil worked with us to wash excavated potsherds in our laboratory at the Erbil Museum of Civilizations.

We wish to thank the General Directorate of Antiquities and Museums for the opportunity to undertake this project. We particularly thank the Kurdistan Regional Government (KRG) General Director of Antiquities and Museums, Mr. Mala Awat-Abu Bakr Othman, and the Assistant Director, Mr. Nader Abu Bakr, for their support and assistance. We are grateful for the administrative and logistical help of the Erbil Directorate of Antiquities and Museums, and its director Mr. Haider Hussein. In the first season of excavations at Surezha, our government representatives were Ghareeb Ismail, Rozhgar Rashid, and Pawan Kamal from the Erbil Directorate of Antiquities and the Erbil Museum of Civilizations. Financial support for the Surezha excavations came from the National Science Foundation (grant no. 0917904), the Oriental Institute of the University of Chicago, and the generosity of private donors, notably Mr. Harvey Plotnick. We also thank the Oriental Institute of the University of Chicago — especially Mr. Steven Camp — for administrative support for this project.

Goals for the 2013 Field Season

The 2013 field season had six main goals:

1. Develop a complete topographic map of the site.
2. Conduct controlled surface collections over the entire extent of Surezha in order to determine overall site size and the extent of occupation in different time periods.
3. Excavate a step trench down the west slope of the high mound to determine the stratigraphic sequence of the Chalcolithic occupation levels.
4. Excavate two 5 × 5 meter trenches to explore the Chalcolithic occupations on the east and south slopes of the high mound.
5. Excavate a 3 × 3 meter sounding in the lower town to determine the nature and date of occupation in that part of the site.
6. Field laboratory recording and analyses of the Chalcolithic ceramics in order to identify the characteristic pottery types for the main Late Chalcolithic periods.

Mapping

Three-dimensional (3-D) laser scan mapping of Surezha was conducted by a German-Iranian team from the Berlin-based surveying company Ingenieurbüro Gilan. The team established five permanent datum points on top of and around the main mound. Loghman Ahmadzadeh developed the final topographic map of the site (fig. 2).

Controlled Surface Collections

Henrike Backhaus conducted a program of controlled surface collections designed to determine the overall size of the ancient settlement of Surezha, and specifically how large the settlement was during the Chalcolithic period. One hundred and two collection units, mostly of 100 square meters, were collected in radial transects, grid transects, and additional individual units on the high mound, terrace, and lower town (fig. 3). In each sampling unit all ceramic sherds and chipped stone were collected, counted, weighed, and photographed, with special attention to the presence of Ubaid painted sherds and Late Chalcolithic chaff-tempered graywares as indicators of Chalcolithic occupation. In all, 33,578 sherds were processed, weighing about 342 kilograms. Thirty-three soil samples were taken as well for phosphate and other analyses to determine whether they derived from a settled area or fields outside of the site. To determine the size of the site, collection units were laid out in tran-

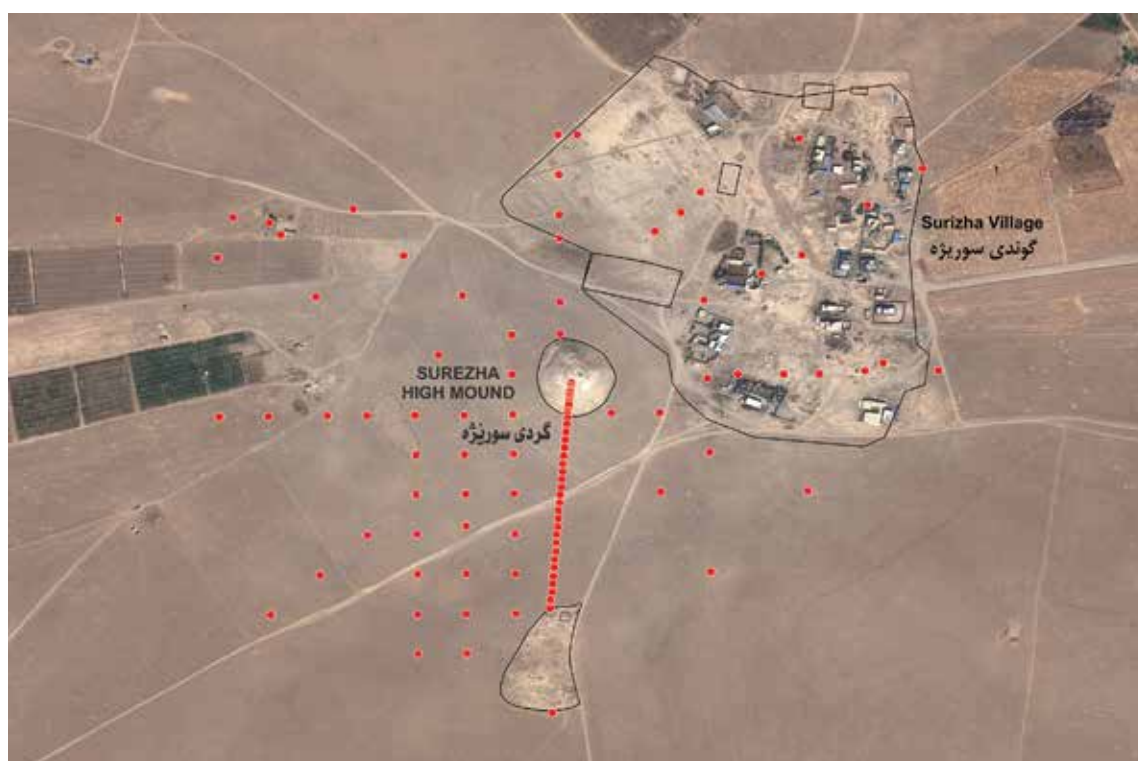


Figure 3. Satellite image of Surezha showing locations of controlled surface collection units. Surface ceramics and chipped stone pieces from controlled surface collections help to reconstruct the total occupied area of the site and its settlement history

SUREZHA

- Late Chalcolithic 2 (LC-2)
- Late Chalcolithic 1 (LC-1)
- Ubaid deposits were not reached in the 2013 season.

In all deposits, large numbers of ceramics were recovered — these are especially important to allow us to identify the characteristic local ceramic forms for each period. In the LC-3 layers (dating to the beginning of the fourth millennium BC), we recovered a stamp-seal impressed container sealing on unbaked clay with a geometric double-spiral design (fig. 5). In the underlying LC-2 occupation (dating to 4200–3850 BC), excavations uncovered a series of mudbrick rooms containing in-situ complete and largely complete ceramic vessels, including a double-mouthed jar (figs. 6–7).



Figure 5. Stamp seal impression (SR0097) with double spiral motif from LC-3 level of the Operation 1 step trench, dating to the early fourth millennium BC (corresponding to the early Middle Uruk period in southern Mesopotamia). Scale 2:1



Figure 6. Operation 1: group of four LC-2 complete ceramic vessels, including a large double-mouthed jar (SR0926)



Figure 7. Operation 2: double-mouthed jar (SR0926) from LC-2 deposits



Figure 8. Ubaid baked clay "mullers" from excavated LC-1 context in Operation 1 and from site surface

Excavations recovered more than 2.70 meters of deposits dating to the Late Chalcolithic 1 period. This period immediately follows the Ubaid period. Although we did not reach the Ubaid occupation levels that immediately underlie the LC-1 deposits, the increasing amounts of brown painted Ubaid pottery and worn Ubaid “mullers” (fig. 8) suggest that we are very close to the Ubaid levels and can expect to reach them in the next field season.

Operation 2 (Hamid Fahimi)

Operation 2 was opened as a 5 × 5 meter trench to explore the Chalcolithic deposits on the southern edge of the high mound in an area where Late Chalcolithic, Ubaid, and earlier Halaf pottery were all present on the surface. Immediately below the disturbed surface levels, excavations recovered intact mudbrick architecture, consisting of two small houses with multiple rooms and hearths dating to the LC-1 period (fig. 9). The two houses were separated by a narrow alleyway. One especially interesting discovery was a small carved stamp seal in the shape of a bird, with a crosshatched incised geometric design on the bottom (fig. 10). The 2013 excavations in Operation 2 ended in LC-1 levels. We anticipate reaching Ubaid deposits in the coming field season.

Operation 3 (Barbara Coutraud)

Operation 3 was opened as a 5 × 5 meter trench to explore the Chalcolithic deposits on the eastern edge of the high mound. Excavations showed that there were deep deposits of surface



Figure 9. Operation 2: LC-1 period architecture. two mudbrick houses with an alleyway running between them



Figure 10. LC-1 period bird-shaped stamp seal (SR0137) found in Operation 2, side view and crosshatched incised design on base. Scale: 2:1

wash, sometimes containing Uruk-period bevel-rim bowls, presumably washed down from their original contexts at the top of the mound. Bevel-rim bowls were also found in intrusive pits at the east edge of Operation 3. The slope wash deposits overlay a series of open areas or outdoor surfaces. One of these surfaces had a group of large vitrified plastered mudbrick fragments with curved interior surfaces. Based on the shape, plastering, and heat alteration, these seem to have been fragments of a collapsed kiln. Although these occupation surfaces were badly cut through by later pits, the ceramics in the deposits suggest that they date to the Late Chalcolithic 1 period (ca. 4800–4200 BC). Based on the presence of Ubaid ceramics on the modern ground surface around the trench, we anticipate reaching intact Ubaid deposits in Operation 3 in future field seasons.

Operation 4 (Max Price)

Operation 4 was opened as a 3 × 3 meter sounding designed to explore the nature of settlement in the lower town to the southwest of the high mound and terrace. The sounding extended down 2.80 meters and recovered occupation surfaces but with very little architecture and almost no ceramics. The latest occupation detected was a series of pits dating to the Ottoman period in the late eighteenth and early nineteenth centuries. The pits cut into a series of outdoor surfaces and one mudbrick wall stub that seems to date to the historic periods, probably the second millennium BC. Beneath these surfaces was a very clean silty deposit 1.5 meters deep, which may represent the long period when Surezha seems to have been abandoned after the Chalcolithic period. Beneath the silty abandonment layer in the lowest or earliest surfaces reached, the small number of badly damaged potsherds were chaff-tempered wares, apparently dating to the Chalcolithic period. Operation 4 showed that the lower town of Surezha was not very densely populated in either the historic or the Chalcolithic periods.

Laboratory Analyses

The Surezha project conducted laboratory work at the Erbil Museum from August 21 to September 18, 2013. The main areas of laboratory work were artifact processing, registration and documentation, ceramic analysis, and zooarchaeological analysis. Soil samples, radiocarbon samples, and obsidian samples were exported for analysis at laboratories in the United States, Germany, and France.

Registration: Artifact Processing, Registration, and Documentation

Kate Lieber and Sam Harris were the registrars responsible for processing, registration, and documentation. All information about these materials is entered into a computerized File-

Maker Pro 12 database designed for Surezha by Michael Fisher. The archaeological materials recovered by the Surezha excavations were assigned master registration numbers called “SR numbers” (SR = Surezha). The registrars and ceramicist John Alden supervised the washing and cleaning of all artifacts that came into the laboratory. After washing, the ceramics, chipped stone, and objects were photographed. The registrars made written descriptions and measurements of all the registered objects, and labeled each object with its SR number.

Obsidian Analysis

Twenty-five samples of excavated obsidian tools and production debris from Surezha were sent to the Centre Nationale de la Recherche Scientifique (CNRS) laboratory in Orléans, France, for analysis by Bernard Gratuze, Sophie Boucetta, and Lamya Khalidi. Chemical composition of the samples was conducted using Laser Ablation High Resolution Inductively Coupled Plasma Mass Spectrometry (ICP-MS). Comparison of the sample results with the geochemical profiles of known obsidian sources in the CNRS database determined that all derived from east Anatolian sources. Sixteen samples matched the well-known Nemrut Dağ source at the western edge of Lake Van. Another six samples matched the Meydan Dağ source at the northeast edge of Lake Van. Surprisingly, two of the Surezha samples derived from obsidian flows in the region of Sarikamish, to the north of Lake Van, and one sample matched the “3-D” source, an as-yet unidentified obsidian flow in the Van region. Together, the Surezha samples show the existence of a north-south trade route linking the Erbil plain with key obsidian source areas in eastern Anatolia during the Chalcolithic period. This is consistent with the evidence from other Chalcolithic sites such as Hamoukar and Brak in the Khabur plains, and Tell Nader near Erbil.

Ceramic Analysis

John Alden and Gil Stein conducted the ceramic analysis in 2013. We processed 396 bags of pottery; 93 of these were from the systematic surface survey of the ancient settlement, while the remaining 303 were excavated material from the four areas the project was investigating. We separated and photographed over 3,000 excavated ceramic sherds from the four operations for typological and chronological analysis. About 600 diagnostic ceramics were drawn. Our goals from these studies are to define the chronological periods when Surezha was occupied, to learn how the size of the ancient settlement changed over time, to understand how the people living at the site organized their daily lives, and to determine what kinds of social and economic contacts the people of Surezha had with other parts of Kurdistan, with southern Mesopotamia, and with neighboring regions of highland Iran.

In this first season of work, our most immediate goal was to understand the chronology of the sequence of occupations at Surezha. From the styles of the ancient pottery that have been found on the site, we know Surezha was occupied during part or all of the Halaf, Ubaid, Late Chalcolithic, and Uruk periods. In this year’s work, our primary focus was the excavation of the Operation 1 step trench, where we successfully excavated a series of deposits covering the LC-1 to the LC-3 periods.

Surface finds of baked clay mullers and ceramics indicate that there was a significant Ubaid occupation at Surezha (fig. 11). The ceramics recovered from the stratigraphic excavations at Surezha indicate that, after the Ubaid period, the material culture of the Chalcolithic occupation of the Erbil plain differed in significant ways from contemporaneous occupations in other parts of upper (northern) Mesopotamia such as the Tigris-Mosul region, the Khabur



Figure 11. Ubaid ceramics recovered as surface finds from Surezha

headwaters region, and the Balikh River valley in north Syria. Although in very general terms this region can be related to widely distributed Late Chalcolithic assemblages in the north, nevertheless, the LC 1–3 periods at Surezha are characterized by distinctly local ceramic assemblages. In the 2013 season we began the process of defining the typology of these local ceramic assemblages.

As an example, some of the most distinctive and diagnostic forms of ceramic decoration in the LC-1 period are incised chevron and zigzag patterns and deep, regular comb incised horizontal bands (fig. 12). These forms occur in association with devolved forms of Ubaid-derived painted wares and appear to be characteristic of LC-1 sites on the Erbil plain and immediately adjacent sites such as Makhmur and Gawra.

The Surezha ceramic sequence is thus a critical tool that will help archaeologists understand how the regional settlement system developed during this era of prehistory, and when and how the first cities in Kurdistan developed in relation to southern Mesopotamia.



Figure 12. LC-1 diagnostic ceramics on the Erbil plain: (top) note sherds with zigzag incision, deep combed-incised horizontal bands, and crudely painted, Ubaid-derived wares; (bottom) sherds with incised chevron decoration and deep comb-incised sherd

Site Chronology and Radiocarbon Dates

One of the most important results of our first season at Surezha is that we have begun to develop a locally based radiocarbon chronology for stratigraphically excavated ceramic assemblages on the Erbil plain in the Late Chalcolithic 1, 2, and 3 periods. Our excavations were able to recover and process sixteen radiocarbon samples from these assemblages and date them using Accelerator Mass Spectrometry (AMS — see fig. 13 and table 2). For the LC-3 and 2 periods, our dates are consistent with the chronology of these phases in other regions of upper Mesopotamia such as southeast Turkey, the Middle Euphrates, the Balikh Valley, and the Khabur plains. However, one of the most significant implications of the LC-1 radiocarbon dates is that the Ubaid period seems to have ended earlier on the Erbil plain than in other parts of the Ubaid interaction sphere. Six samples from two separate operations (1 and 2) are consistent in showing that the LC-1 period began about 4800 BC (if not before) — at least 300 years earlier in the Erbil region than the 4500 BC initial date when the LC-1 began in the Upper Khabur or the Balikh. Clearly this initial conclusion needs to be carefully investigated by further investigations at Surezha and hopefully at other sites in the Erbil region and neighboring zones. For this reason, the completion of the step trench and the recovery of the Ubaid-to-LC-1 transition at Surezha are primary goals for future field seasons.

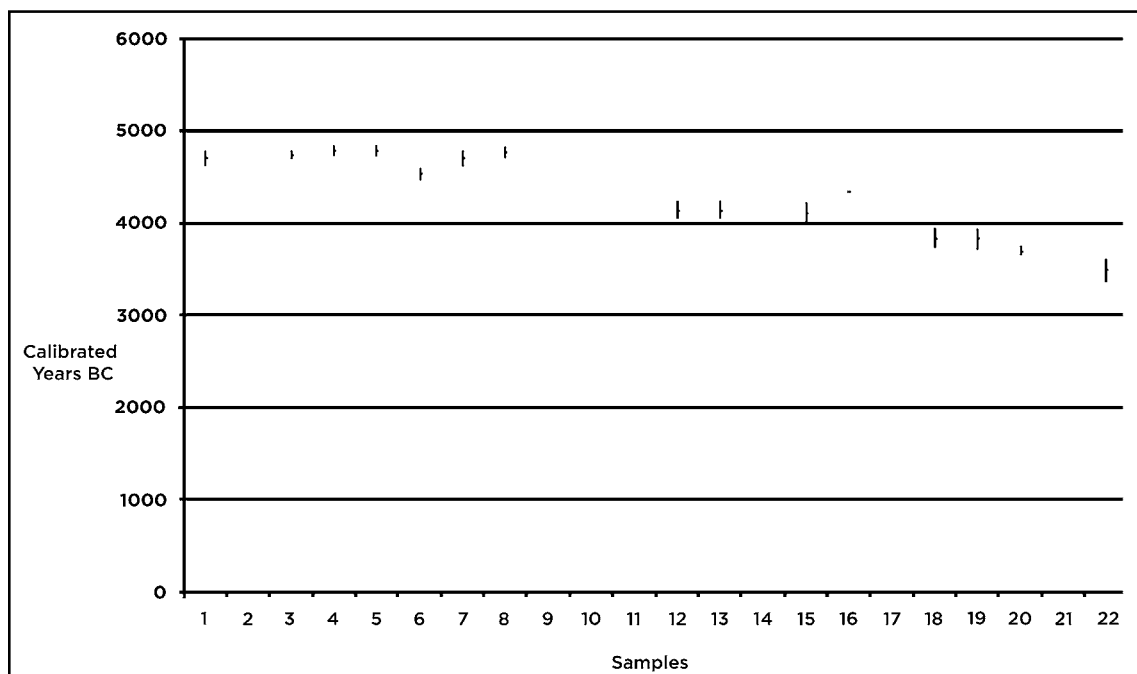


Figure 13. Surezha 2013 calibrated AMS radiocarbon dates for the LC-1, LC-2, and LC-3 periods

Table 2: Surezha 2013 radiocarbon dates

Beta No.	SR No.	Operation No.	Locus	Lot	Phase	Conventional Age BP	2 Sigma Calibration	Comments
360647	SR1025	1	56	62	LC-1	5850 +/- 30	4790-4680 Cal BC 4630-4620 Cal BC	—
360651	SR1402	1	60	66	LC-1	5860 +/- 30	4790-4690 Cal BC	—
360650	SR1243	2	35	65	LC-1	5920 +/- 30	4840-4720 Cal BC	—
360631	SR0182	2	7	19	LC-1 ?	5920 +/- 30	4840-4720 Cal BC	—
360632	SR0199	2	14	22	LC-1 ?	5700 +/- 30	4600-4460 Cal BC	—
360637	SR0753	2	14	23	LC-1 ?	5840 +/- 30	4780-4680 Cal BC 4670-4670 Cal BC 4660-4650 Cal BC 4640-4620 Cal BC	—
360638	SR0795	2	20	37	LC-1 ?	5890 +/- 30	4830-4810 Cal BC 4810-4710 Cal BC	—
360643	SR0924	1	46	54	LC-2	5320 +/- 30	4250-4040 Cal BC	—
360644	SR0932	1	44	55	LC-2	5310 +/- 30	4240-4040 Cal BC	—
360645	SR0935	1	44	55	LC-2	—	—	—
360646	SR0948	1	44	53	LC-2	5260 +/- 30	4230-4200 Cal BC 4170-4130 Cal BC 4120-4090 Cal BC 4080-3980 Cal BC	—
360636	SR0696	4	22	45	LC-2 ?	5470 +/- 30	4350-4320 Cal BC	—
360635	SR0093	1	26	37	LC-3	5040 +/- 30	3950-3750 Cal BC 3720-3720 Cal BC	—
360639	SR0880	1	32	43	LC-3	5020 +/- 30	3940-3860 Cal BC 3840-3840 Cal BC 3820-3710 Cal BC	—
360640	SR0881	1	32	43	LC-3	4910 +/- 30	3760-3740 Cal BC 3710-3640 Cal BC	—
360629	SR0062	1	14	27	LC-3 ?	—	—	—
360634	SR0675	4	17	35	LC-4 ?	4670 +/- 30	3620-3610 Cal BC 3520-3360 Cal BC	LC pottery and possible beginning of abandonment layer
360630	SR0064	1	14	27	Middle Bronze	3230 +/- 30	1600-1590 Cal BC 1530-1430 Cal BC	Second millennium
360633	SR0266	4	5	26	Ottoman	50 +/- 30	1700-1720 Cal AD 1820-1830 Cal AD	Pit with Ottoman pipe fragment

Conclusions and Directions for Future Research

The results of our first field season of excavations and surface survey suggest that Surezha can play a key role in defining for the first time a locally based Chalcolithic sequence of material culture and chronology for the Erbil plain. This is important because the Erbil plain east of the Tigris River had its own regional culture that was related to, but far from identical with the better-known cultural sequence of southern Mesopotamia. Our excavations and systematic surface collection surveys have established that the high mound at Surezha has an apparently continuous prehistoric Chalcolithic sequence extending back from the Middle Uruk period (equivalent to the Late Chalcolithic 4 period in northern Mesopotamia) back in time through the Late Chalcolithic 3, Late Chalcolithic 2, Late Chalcolithic 1, Ubaid, and Halaf periods. Excavations in 2013 reached LC-1 levels dating to the first half of the fifth

millennium BC. Surface finds of ceramics indicate that Ubaid and Halaf strata underlie the LC-1 deposits. We must also allow for the possibility that (as yet undetected) earlier Neolithic strata might be present in the earliest levels of the site, beneath the Halaf. The Surezha excavations thus have the potential to provide a radiocarbon-dated, locally based ceramic sequence that can serve as the foundation for regional studies of the Chalcolithic prehistory of the Erbil plain and adjacent areas.

The distributional density of surface ceramics from controlled surface collections have established the combined occupied area of the high mound, terrace, and lower town at approximately 27–31 hectares. Although some fourth-millennium ceramics were recovered in soundings at the base of the southwest terrace, most of the sparse lower town occupation dates to the second and first millennia BC, with sporadic re-occupations up through the Islamic and Ottoman periods.

Our results so far indicate that the Chalcolithic cultures of the Erbil plain interacted with northern and southern Mesopotamia in the Halaf, Ubaid, and Uruk periods, as evidenced by the presence of ceramic styles from these periods and cultures in the stratified sequence of Surezha. However, the material culture at Surezha retained a strongly local character, and Mesopotamian influences seem to have been sporadic — waxing and waning over time — rather than continuous and strong at all times at Surezha (and presumably the Erbil plain more generally).

We can see this best in the radiocarbon data, which suggest that Ubaid influences at Surezha ended several hundred years earlier than the fading of Ubaid influences in north Syria and even at sites such as Tepe Gawra XIII. At this latter site, we see Ubaid pottery along with ceramic types that we now can identify as LC-1, based on the Surezha excavations. This suggests that Ubaid influences on material culture were still strong at Tepe Gawra near Mosul around 4800 BC, even though Ubaid ceramic styles had by then already disappeared from contemporaneous sites on the Erbil plain such as Surezha, where they were replaced by distinctive, local LC-1 ceramic forms and styles.

This difference in contemporaneous ceramic styles between the Erbil plain and northern Mesopotamia in the early fifth millennium suggests that the Erbil region may have pursued different developmental pathways from those in the better-known regions of lowland northern and southern Mesopotamia.

In future field seasons, we hope to reach Ubaid and Halaf deposits in Operation 1, while expanding our exposures of LC-1 deposits in Operation 2 at the southern base of the high mound. As this work progresses, we plan to complete the close documentation and dating of the Surezha Chalcolithic sequence, while laying the groundwork to investigate the degree of sociocultural complexity on the Erbil plain in the Chalcolithic, and the ways that towns and cities first developed in this important region beyond the Tigris.

TELL YAQUSH

Yorke M. Rowan

The Early Bronze Age site of Tell Yaqush, Israel, is located in the upper Jordan valley just west of the Jordan River, across from the Early Bronze site of Tell esh-Shuneh (North) on the east bank of the Jordan. Yaqush lies near a major ford across the Jordan, at an ancient crossroads of trade and communication. The exceptional preservation of small finds and complete architectural units and floors spanning the Early Bronze I, II, and III (ca. 3500–2200 BC) makes it an essential site for understanding the cultural development of the region in this earliest “urban” period, both in terms of larger social and economic processes that affected the entire Near East and on the local level. The Early Bronze village at Yaqush was ca. 2.5 hectares (6 acres) in size at its maximum extent, in contrast to the much larger (ca. 20-hectare/50-acre) Early Bronze city of Beth Yerah (Khirbet Kerak) 10 kilometers to the north, providing a key comparative point to larger Early Bronze Age urban sites in the region.

Excavations at Yaqush were initiated by the late Douglas Esse, who specialized in the archaeology of Early Bronze Age Palestine and who directed substantial excavation seasons at the site in 1989 and 1991 on behalf of the Oriental Institute. The project was then interrupted by Esse’s tragic illness and death. David Schloen, Esse’s successor at the University of Chicago, directed a small four-week exploratory excavation in 1995 and a six-week, large-scale excavation season in 2000 in order to continue Esse’s project, but David’s own fieldwork focuses on other sites and on later periods. The Yaqush project therefore did not achieve the scale and duration initially planned by Esse. The four seasons of investigation at the site, however, yielded a large corpus of valuable and well-excavated material dating to the Early Bronze I, II, and III. This material and related field notes, plans, photographs, and drawings are now entrusted to Yorke Rowan, who has primary responsibility for the publication of a final report volume on the Oriental Institute’s excavations at Tell Yaqush.

In 2012, Yorke received a publication grant from the Shelby White and Leon Levy Program for Archaeological Publications for Tell Yaqush, which was renewed for a second year. Unlike many “legacy” excavations, the careful attention in the field to systematic recording, maximal retrieval methods, and comprehensive retention of finds by the teams put together by Esse and Schloen will facilitate the final publication. Although substantial effort is still needed to analyze and write up most categories of material culture, considerable progress has been made on various aspects of the publication. Final plans are already prepared. Much of the Early Bronze II and III pottery is illustrated and digitized, and other artifact illustrations are completed, including drawings of special finds and some flint tools. A fifty-page written summary of excavations on the summit and eastern mid-slope has been completed by Egon Lass (who participated in Esse’s excavations in 1989 and 1991), summarizing the excavated contexts and their stratigraphic relationships. This will provide the basis of the chapter on stratigraphy in the final report volume.

During his National Endowment for the Humanities Fellowship at the W. F. Albright Institute of Archaeological Research [AIAR] in Jerusalem, Yorke began coordinating and working with scholars on the material, now housed in a shipping container on the AIAR campus. A few years ago, all the excavated material was moved to this shipping container and dissolv-

ing bags, boxes, and labels replaced and organized on shelves. During the academic year, study of material was initiated. The Early Bronze (I) ceramics were studied by Yael Rotem, a PhD student at Tel Aviv University specializing in the Early Bronze Age, particularly in the Jordan valley. Approximately half of the botanical samples were shipped to the University of Connecticut for identification and analysis by Dr. Phil Graham and his students. A portion of the faunal remains were studied by Dr. Austin “Chad” Hill (Christian-Albrechts University, Kiel); the remainder will be studied in the United States. In addition, the ground stone and many small finds were studied by Yorke with the assistance of his intern, Blair Heidkamp (Wooster College).

These are the first steps to complete the remaining analyses and illustrations needed to produce a final publication, tentatively entitled “Tell Yaqush: Excavations of an Early Bronze Age Village in the Jordan Valley (1989–2000),” to be published in the Oriental Institute Publications series of the University of Chicago and edited by Yorke and David Schloen. In the years since excavations were conducted at Yaqush, a number of related sites have been published and a great deal of information about the Early Bronze Age has become available, to which the Yaqush results must now be added in order to complete the picture. A high-quality final publication will become an essential reference point for those interested in the southern Levantine developments during the Early Bronze Age. The publication of this well-preserved Early Bronze community will inject fresh data into the debate concerning how best to understand urbanism in the context of the southern Levant.

WRITING IN EARLY MESOPOTAMIA: EXPANDING THE DATABASE

Christopher Woods and Massimo Maiocchi

1. Introduction

The Writing in Early Mesopotamia (WEM) project endeavors to provide a comprehensive description of how the technology of cuneiform writing represented language. The project investigates early cuneiform from the perspective of both language — how sound and meaning are systematically expressed diachronically and synchronically — and semiotics — the graphic organization and history of the symbols that comprise the system. The scope of the project is the cuneiform written record from the invention of writing in the late fourth millennium BC (ca. 3300 BC) through the Old Babylonian period (ca. 1600 BC). While Sumerian writing is at the center of the project — Sumerian being in all likelihood the language for which writing was invented in Mesopotamia — the adaptation of the script to express Semitic (Akkadian and Eblaite) and the long-term interplay between these writing systems are major concerns. At the core of the project is an extensive database of spellings that is of central importance to the description of the writing system. The collection of this data is an endeavor that requires the systemic review, categorization, and analysis of thousands of texts written between the invention of writing and the end of the Old Babylonian period.

During the last year, the database of textual variants at the heart of the project has been vastly expanded. The work has proceeded on two fronts. On the one hand, we continued encoding morphological data belonging to the group of literary compositions known to modern scholars as the Decad — these were the first ten literary texts apprentice scribes would encounter in the scribal curriculum in the early second millennium BC. On the other hand, we implemented new features in order to perform advanced queries and produce summary reports, which provide synthetic overviews of the relevant data. The new additions present simple yet powerful tools to evaluate characteristics of the writing system, such as the tendency of ancient scribes to use logographic versus syllabic writings (see below §2), as well as the strategies to write phonemic clusters. The beta version of the database, including a selection of compositions, is expected to be freely available online by the end of the year, hosted on a dedicated server at the Oriental Institute. A Filemaker Server platform will allow users to remotely browse the database without the need of installing software.

2. The encoding of texts

In order to produce results that elucidate the writing system and Sumerian morphology, standard transliterations must be supplemented to include linguistic information. The goal here is to allow for grammatical queries. Although such encoding necessarily relies on a given understanding of particular linguistic features, care has been taken to create a flexible system, capable of producing results while minimizing assumptions about the features that are being investigated.

To facilitate the encoding process, a check-box system has been implemented that reduces the time needed for this operation, while minimizing the risk of typos. The same layout is used to perform queries, enabling the user to put multiple check-marks on the lexical and/or morphological entries of interest. As Sumerian is structurally agglutinative with a relatively complex verbal morphology, the available check-boxes are relatively numerous, yet the encoding process is readily mastered by users with a basic knowledge of Sumerian grammar. At present, roughly 13,000 lexical items have been encoded. The individual entries are first categorized on the basis of broadly defined lexical classes (verbs, adjectives, nouns, pronouns, numerals, etc.), and then linked to morphological information contained in dedicated fields. Importantly, this system makes it possible to search for morphological variants, so that, for example, a query regarding ablative infixes will produce the complete list of this morpheme in all of its attested written forms. The ability to generate results of this kind is necessary in order to produce a comprehensive description of the writing system and its historical development.

3. New features

After running some preliminary queries on an early version of the database, we concluded that it would be useful to extend its functionality and features. As the morphological encoding operates on the graphic level, interesting information can be retrieved from analyzing individual signs. For instance, one goal of our research is to investigate the degree of logography embedded in the writing system from a diachronic perspective. In order to do this, it is necessary to tokenize the transliterations, splitting every word into its constituent signs. This was achieved through use of a Perl script, which automatically populates a table of signs. Every sign therefore receives an appropriate identification number, as well as a word ID as a foreign key (an identification number shared between the sign and word tables), which is required to relate the two. Specific additions and enhancements to the database are given below.

3.1. Sign typology

The database recognizes three basic sign types within the writing system: logograms, syllabograms, and determinatives. This terminological distinction is rather loose, but is nevertheless adequate for our purposes, while facilitating the encoding process (note, for instance, that morphograms are not distinguished in the encoding because of the complexities involved). Syllabograms are further subdivided into syllabograms proper and syllabograms used in phonetic spellings of logograms, allowing the database to produce results that reflect this meaningful distinction. Additionally, the database distinguishes semantic and phonetic determinatives, and those signs that occur in personal names. Finally, a sign can be encoded as unclear (when a sign is physically present on a tablet, but its reading is difficult), or unknown (used for broken signs). A provisional chart showing the relative distribution of signs for the composition Shulgi A is shown in figure 1. Such charts, generated for a broad spectrum of texts, will reveal how the proportion of logograms and syllabograms varies through space and time.

3.2. *Matrixes*

The term matrix refers to the conventional display of literary compositions in such a way that only the composite text is given in full, while the individual texts are rendered using a series of conventions that reflect meaningful differences between exemplars. Matrices filter out redundant noise, facilitate the identification of variant spellings, which maybe regionally or diachronically motivated, at a glance. An example, again from the composition Shulgi A, is shown in figure 2. At present, matrixes are still a work in progress, but we expect to make progress in this area within the next couple of months.

3.3. *Variations in lexical texts*

Besides literary variants present in the Decad, the database now includes variants occurring in other corpora as well. Our focus in this area, to date, has been the variations in spelling exhibited in lexical lists. Although the significance of these variants for the project cannot be overstated, the encoding of all the entries occurring in the lexicographical tradition would represent an enormous undertaking. As a provisional measure, we have implemented this feature of the database using the entries provided by the ePSD (electronic Pennsylvania Sumerian Dictionary, <http://psd.museum.upenn.edu/>), providing links for checking references and readings. The IDs connected to the individual entries of the ePSD have been maintained in the new section of the WEM database. As is the case of other online repositories of transliterations, the information present in the ePSD although readily available requires further encoding to be of use to the WEM project. Therefore, two different sets of encoding protocols have been implemented: a first one to spot variations in the rendering of certain phonemes, and a second one to identify variations in the rendering of syllables.

3.3.1. *Phonographic variations*

The addition of phonographic and syllabographic variation tables represents a second set of data, which has not yet been related to the table of literary variants. Future implementations of the WEM database may link the data of both tables to the primary database.

The attestation of phonographic variation is often dependent upon the way we transliterate texts, which is typically conventional rather than reflecting the actual phonetic structure of a given word. The term phonographic is therefore used to stress the fact that the possible underlying phonetic structure of a given word is inherently embedded within a logo-syllabic system, which is still poorly understood. In other words, the phonemes that we are trying to isolate belong to syllables and are represented in writing by a sign or group of signs, the phonetic structure of which is often uncertain. With this caveat in mind, it is nevertheless of interest to consider the typology and distribution of phonographic variations. The data have been entered in a layout populated by a Perl script that is also responsible for generating Unicode cuneiform graphs for the individual signs composing the lexemes. This feature is especially useful for quickly isolating variations in spelling that are merely graphic (see fig. 3); distributions of this kind of variation are best appreciated in chart view (see fig. 4). Note, for instance, that the most common variation is the alternation $a \sim \emptyset$, which is explainable in most cases in terms of the presence or absence of the subjunctive morpheme *-a* in the written representation. The second most common is the $a \sim u$ variation, which is, on the other hand, largely explainable in terms of loanwords from Akkadian. Other variations are less frequent, such as the much-discussed $b \sim g$ alternation, which requires a more detailed description than can be given here.

3.3.2. Syllabographic variations

The variation in the use of certain sequences of syllables to express lexemes stands on more certain ground. The encoding uses conventions that renders each syllable for a given lexeme as either V, CV, VC, CVC, etc. (V = vowel, C = consonant, see fig. 5). This allows for queries about the syllabic structures of specific lexemes as well as the distribution of syllable-types across morphemes. Of particular interest are the variations within a syllable-type, such as the case of a CVC sign alternating with a CV-CV sequence, where the second syllable represents /C/, as in the case of the term gun_3 alternating with $gu-nu$, or in the case of more phonologically complex variations such as $\check{s}eg_5$ - $\check{s}eg_5/\check{s}i$ - $\check{s}i-ig$, $bir/bi-bi-re$, etc. The chart in figure 6 displays the relative distribution of the primary syllabographic variations encoded to date. One notes the above mentioned CVV/CV-CV variation, which is typologically common and deserving of an in-depth study.

3.3.3. Graphemic sign list

Still in its beta phase, this feature has been implemented with the goal of better understanding sign usage. The graphemic sign list is generated by a Perl script that is responsible for rendering standard transliterations as a sequence of sign names, breaking composite signs (known as *diri compounds*) into their relative components (see fig. 7). For instance, the graph NE is recognized not only for its representation of individual morphemes, but also as an element in *diri compounds*, such as $ERIM_2 = NE.RU$. The frequency of a graph as a constituent in these compounds is also given. This is the first step towards a better understanding of *diri compounds*, which will comprise a major avenue of research for the WEM project.

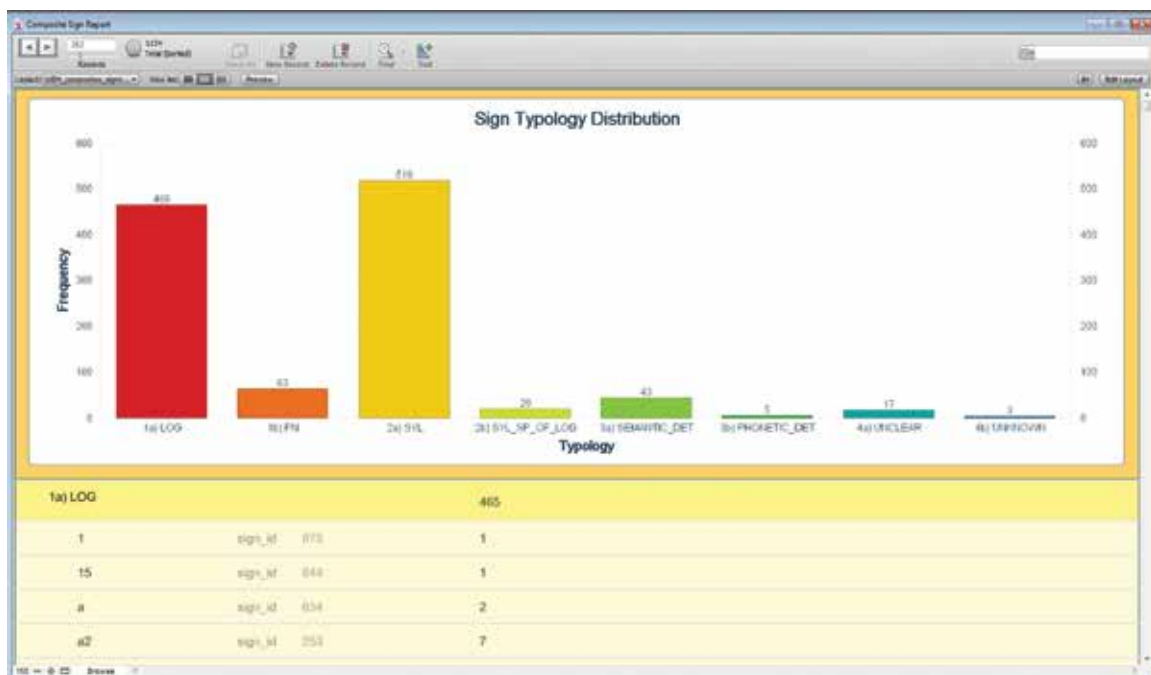


Figure 1. The distribution of logograms and syllabograms in the composition *Shulgi A*

WRITING IN EARLY MESOPOTAMIA

Shulgi_A

Orange = composite

1	lugal	-	me-	en	šag4-	ta	ur-	šag-	me-	en	W000213	
1	o	+	+	+	+	+	+	+	+	+	W000205	
1	+	+	+	+	+	o	o	o	o	o	W000204	
1	+	+	+	+	+	+	o	o	o	o	W000192	obv.1.1
1	o	o	.	?	?	o	o	o	o	o	W000191	obv.1'.1
1	o	o	o	o	o	o	o	o	+	+	W000190	obv.1.1
1	.	+	+	+	.	o	o	o	o	o	W000187	
1	o	o	o	o	.	+	.	o	o	o	W000185	obv.1.1
1	o	o	o	"na"	+	+	+	+	+	+	W000175	obv.1.1
1	o	+	o	o	o	o	o	o	o	o	W000170	obv.1'.1'
1	+	+	+	+	+	o	o	o	o	o	W000126	
1	+	+	+	o	o	o	o	o	o	o	W000122	
1	+	+	+	+	o	.	+	+	+	+	W000113	obv.1.1
1	+	+	+	+	+	+	+	+	+	+	W000112	

Figure 2. Matrix view

id_phonetics: PH00056

a/e/i

view on ePSD

	an-ti-ri2-gu7(mušen)	
	al-tar-gu7(mušen)	
	al-ti-ri2-gu7(mušen)	
	al-ti-ri2-gu(mušen)	
	al-de3-ri2-ga(mušen)	
cVc_var	cVc/cV-Vc(tar/ṭ-ri2);cVc/cV-Vc(tar/de3-ri)	
spellings	an-ti-ri2-gu7(mušen); al-tar-gu7(mušen); al-ti-ri2-gu7(mušen); al-ti-ri2-gu(mušen); al-de3-ri2-ga(mušen)	
citation_form	albrigu	
variation_typology		
notes		
meanings	wren	
akkadian_equivalents	diqdiqqu	
basic_meaning	WREN	
epsd_reference	http://psd.museum.upenn.edu/epsd/epsd/e295.html	

Ⓢ Ⓣ Ⓤ Ⓥ Ⓦ Ⓧ Ⓨ Ⓩ ⓐ ⓑ ⓓ ⓔ ⓕ ⓖ ⓗ ⓙ ⓜ ⓝ ⓞ ⓟ ⓠ ⓡ ⓢ ⓣ ⓤ ⓶ ⓷ ⓸ ⓹ ⓺ ⓻ ⓼ ⓽ ⓾ ⓿

Figure 3. Phonographic variants

WRITING IN EARLY MESOPOTAMIA

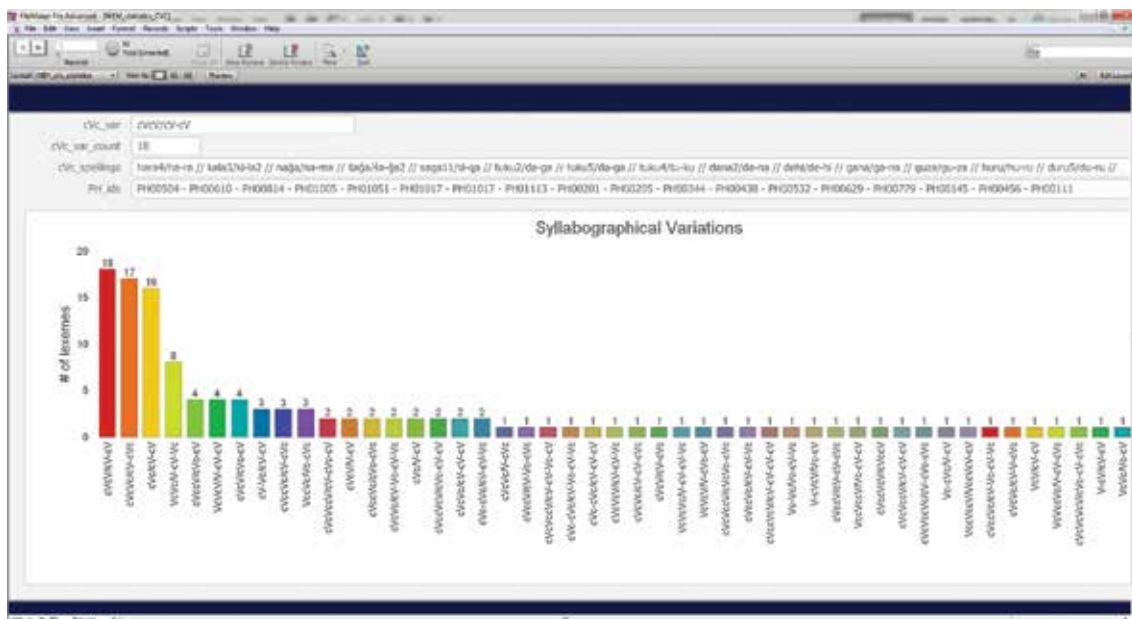


Figure 6. Chart showing syllabographic variations

sign_name							
NE							
sign_name	sign_freq	sign_reading/comp.	reading_freq	compound_freq	comp_rank	occurring_in_word	sorting word (in brackets, question marks, etc.)
NE	199	de3	77			*in2'-as/-gu10-'de3'	in2-nu/-gu10-de3
NE	199	de3	77			in2-ma-gu10-de3	in2-ma-gu10-de3
NE	199	de3	77			in2-ma-gu10-de3	in2-ma-gu10-de3
NE	199	de3	77			e2-ga2-ga2-de3	e2-ga2-ga2-de3
NE	199	de3	77			*i3'-ga2-ga2-'de3'	i3-ga2-ga2-de3
NE	199	de3	77			i3-ga2-ga2-de3	i3-ga2-ga2-de3
NE	199	de3	77			i3-ga2-ga2-de3	i3-ga2-ga2-de3
NE	199	de3	77			i3-ga2-ga2-'de3'?'-en'	i3-ga2-ga2-de3-en
NE	199	de3	77			i3-ga2-ga2-de3	i3-ga2-ga2-de3
NE	199	de3	77			i3-ga2-ga2-de3	i3-ga2-ga2-de3
NE	199	er1a2		29	2	i-er1a2-e	-er1a2-e
NE	199	er1a2		29	2	i-'er1a2'-e	-er1a2-e
NE	199	er1a2		29	2	i-er1a2	-er1a2
NE	199	er1a2		29	2	i-'er1a2'	-er1a2
NE	199	er1a2		29	2	*niq2-er1a2-1	niq2-er1a2-

Figure 7. Graphemic sign list (beta)

INDIVIDUAL RESEARCH

Richard H. Beal

Richard H. Beal spent his time updating, reference-checking, and copy editing articles for the fourth fascicle of the Š volume and the beginning of the T volume of the Hittite Dictionary. He has also been transliterating into roman script Hittite text fragments from the cuneiform of the hand copies produced by our German colleagues, then checking to see if anyone has worked on the fragment, and finally producing a dictionary card to be duplicated and filed by our student assistants. (Yes it's obsolete and cumbersome, but it's easier to write a dictionary article with cards than with computer files.)

Outside of office hours, he completed a review of Christel Rüster and Gernot Wilhelm, *Landschenkungsurkunden hethitischer Könige*. The purpose of the legal texts published in this volume was to document the Hittite king's conveyance of a number of plots of land (and often people attached to that land) from one owner to another. Generally the receiver is a man, but one grant is given to the wet-nurse of another female. Beal's review of a festschrift honoring British Hittitologist and leading expert on hieroglyphic Luwian David Hawkins appeared in the *Journal of the American Oriental Society* 133. Much of the second half of 2013 was spent editing, reading proofs, and preparing indices for a book that he co-edited with his wife, Oriental Institute alumna JoAnn Scurlock: *Creation and Chaos: A Reconsideration of Hermann Gunkel's Chaos Kampf Hypothesis*. This volume includes papers concerning Mesopotamian, Hittite, Hurrian, Ugaritian, Judahite, Greek, and Egyptian beliefs, which were originally given at the joint meeting of the Midwest branches of the American Oriental Society and the Society for Biblical Literature in February 2011. Department of Near Eastern Languages and Civilizations PhD and former Hittite Dictionary worker Dennis Campbell wrote a fine article on the Hurrians and Hesiod, showing how the king of the Hurrian pantheon Teššub was considered not just son of his deposed antepenultimate predecessor the skygod Anu, but also son of Anu's usurper, the male terrestrial god Kumarbi (who, since he swallowed Anu's sperm and subsequently bore Teššub, was called by the Hurrians Teššub's mother). Thus through this unusual filiation Teššub united the astral and terrestrial lines of gods in his person. This book has since appeared from Eisenbrauns. With one book out, considerable time in the first half of 2014 was spent reading page proofs for Scurlock's massive *Sourcebook for Ancient Mesopotamian Medicine*, to be published later this summer as number 36 in the series *Writings from the Ancient World* by the Society for Biblical Literature. This book will contain transliterations and translations of all types of Mesopotamian diagnostic and therapeutic texts.

Robert Biggs

Robert Biggs continues to serve (along with Marten Stol of Leiden) on the editorial board of *Die babylonisch-assyrische Medizin in Texten und Untersuchungen* published by de Gruyter in Berlin and now serves also on the editorial board of *Le Journal des médecines cunéiformes*.

INDIVIDUAL RESEARCH

His personal research in the past year has concentrated on texts of the Third Dynasty of Ur (late third millennium BC) and he has two articles accepted for publication. Due to faculty shortages in Assyriology, he was asked to teach a graduate course in fall 2013 and will teach another course in fall 2014.

Miguel Civil

The results of a personal project to investigate how the archaic cuneiform writing, originally used only for accounting and word lists, was adapted to represent full sentences in narrative texts were presented by **Miguel Civil** in an article in the *Journal of Cuneiform Studies* 65 (2013). He believes that there was a stage in which the scribes wrote down only the participants or arguments of the sentences, leaving out the predicate itself to be supplied by the “reader” in what could be called “information-by-allusion.” It is a strategy similar to saying “do you know the one about the fox and the grapes?” A secondary result establishes the existence of a legendary “Enmerkar cycle,” now mostly lost except for the King List, some passages toward the end of the Lugalbanda II epic, and the curious tablet AO2 6522, with Hurrian(?) glosses, published by Kramer in 1990. The themes of this cycle are the introduction of agriculture, contrasting with life in the marshes, and the brick construction of villages. A communication of Civil in the 2010 Madrid International Conference on Ur III texts has appeared in S. J. Garfinkle and M. Molina, eds., *From the 21st Century B.C. to the 21st Century A.D.* (Eisenbrauns 2013). It is a study on some of the linguistic innovations of the Ur III texts: are they purely graphic, or do they affect the language itself? A contribution to solve the mystery of how and where were trained the many hundreds of Ur III scribes is the subject of an article to appear in a forthcoming festschrift. Civil is presently working on a chapter on lexicography for an Assyriology handbook to be published by de Gruyter, and on several grammatical studies, including a study of the “five tongues,” the system devised by the native scribes to deal with synonymy and metonymy. Among Civil’s present preoccupations and investigations is the clarification of the status of literacy in Mesopotamian society. There is obviously an elite that, thanks to its literate education, keeps old traditions and knowledge alive (with the traditional word lists playing a role similar to the “sacred books” of other cultures), and controls the flow of goods and services (and with it the economic power). But was there some restrictive policy to keep Sumerian literacy away from certain social strata or ethnic groups, like perhaps the fourteenth-century AD Mongols forbidding Chinese to learn Mongolian?

François Gaudard

Since the original plan of the Chicago Demotic Dictionary (CDD) (see separate report), which he has worked on for eighteen years, has been completed, **François Gaudard** decided to step down from his position as the associate editor of this project at the end of June 2014, in order to focus more fully on his own research. He began working on the CDD as a graduate student in 1996, and shortly after he received his PhD, in 2005, he was hired as a full-time research associate following an international search. Gaudard will remain affiliated with the Oriental Institute as a co-founder and co-editor of the Mummy Label Database (MLD)

(see separate report), and as a research associate. He would like to take this opportunity to thank the Chicago Demotic Dictionary team — Janet Johnson, Jonathan Winnerman, and Kate Lockhart — as well as all the scholars and students who worked on this project since its beginning in the seventies.

This year, among others things, Gaudard proofread the letter S (540 pages), the last letter file of the Chicago Demotic Dictionary, and checked and proofread the Days (47 pages), Months (61 pages), and Numbers (316 pages) files. After so many years working to get the Dictionary complete and online, it has been very rewarding and satisfying for him to see all the Dictionary files finally available on the Institute website for free download. Throughout the year, Gaudard also worked on the Mummy Label Database (MLD) (see separate report).

On August 19 and 26, 2013, Gaudard was invited to record two filmed presentations for the Oriental Institute course Hieroglyphs Online, taught by Brittany Hayden, respectively titled “Introducing the Chicago Demotic Dictionary (CDD)” and “The Various Phases and Writing Systems of the Ancient Egyptian Language.” On January 16, 2014, at the request of the Honorable Graham Paul, Consul General of France in Chicago, Gaudard gave a tour of the Oriental Institute with a lecture on the Egyptian collection to the Chicago Consular Corps Ladies Club. In July 2014, he lectured on the evolution of the ancient Egyptian language and on the Chicago Demotic Dictionary for the University of Chicago Egyptology summer class Ancient Egyptian Language, Culture, and History, taught by Rozenn Bailleul-LeSuer.

As in previous years, Gaudard served as an editorial consultant for Egyptology articles published in the *Journal of Near Eastern Studies* and the *Journal of the Society for the Study of Egyptian Antiquities*. He has also been working on various articles, including the following ones, which have been published online, are in press, or are forthcoming:

- “Rosetta Stone.” In *Encyclopedia of Ancient Greek Language and Linguistics (EAGLL)*, edited by Georgios K. Giannakis. Leiden: Brill, 2013. [http://www.encquran.brill.nl/entries/encyclopedia-of-ancient-greek-language-and-linguistics/rosetta-stone-EAGLLSIM_00000529] (online and in press).
- “A Demotic-Hieratic Mummy Label in the Museu de Montserrat.” In *Mélanges offerts à Ola el-Aguizy*, edited by Fayza Haikal. Bibliothèque d’Étude. Cairo: Institut français d’archéologie orientale, 2014 (in press).
- “On a Disputed Aspect of the God Seth,” which will be published in the festschrift honoring a colleague (forthcoming).
- An article on a particularity of the camel, which will be published in the festschrift honoring a colleague (forthcoming).
- In addition, he continued to work on several of his long-term publication projects.

On a personal note, Gaudard was deeply saddened by the passing of his longtime friend and mentor Rodolphe Kasser, who served, among other things, as professor of Coptic studies at the University of Geneva from 1963 to 1998. One of the world’s leading Coptologists, he reformed the classification of Coptic dialects; he was also a dedicated and skilled archaeologist who directed excavations both in Egypt and in Switzerland. Rodolphe was not only an eminent scholar, but also a gentleman in the true sense of the word: his ethics and academic integrity served as a model which all young scholars could aspire to. He was committed and brilliant both professionally and personally, and as friend, his humor and kindness will be sorely missed.

Shortly after Rodolphe’s death, Gaudard was also grief-stricken and shocked by the loss of his good friend and colleague Harold Hays, whose excellent work on the Pyramid Texts

INDIVIDUAL RESEARCH

gave everyone new insights into these difficult religious compositions. A lecturer in Egyptology at Leiden University, a former cadet at West Point, and an epigrapher for the Epigraphic Survey, Harold was a hard worker and he impressed everyone he met with his sharp intellect and his mastery of so many subjects. Beyond his skills as an Egyptologist, he was instantly recognizable for his unmistakable wit and his zest for life. Both Rodolphe and Harold were treasured friends who will be missed greatly, but their memory will live on in their work and in the hearts of those who loved them.

McGuire Gibson

McGuire Gibson was in Baghdad twice during the past academic year. In September, he attended an Iraqi Education Fair, in which forty U.S. universities were speaking to 2,000 or more students with Iraqi government fellowships in hand. Most of the students were in engineering, sciences, or medicine, but there were a few who wanted to pursue doctorates in Humanities, including archaeology and cuneiform studies. Given the general decline in English language training over the past decade, it is difficult for these students to meet the high admissions requirements for our university, but it is important that we have a role in the training of the new generation of archaeologists and ancient language specialists in Iraq. At the Royal Ontario Museum in October, he appeared in a discussion with Matthew Bogdanos on *The Looting of the Iraq Museum: Ten Years After*. This program was an adjunct to a special exhibition of Mesopotamian artifacts from the British Museum, including whole walls of relief slabs from the palaces of Nineveh. In January, he participated in the annual meeting of the British Association for Near Eastern Archaeology (BANE), in which he gave the keynote address about Tony Wilkinson, whose great work in laying out the ancient landscape of the Near East was being honored by a full day of presentations, which will appear as a book later in the year. In March, he was once more in Baghdad, asked to come to negotiate on the possible establishment of The American Academic Research Institute in Iraq (TAARII), which he, as president of TAARII, had proposed to the Minister of Education in earlier visits. The hoped-for agreement was postponed by the flurry of activity related to the Iraqi elections, but it is anticipated that the facility will be approved at a future date. As of July 1, Gibson is no longer the president of TAARII, having come to the end of his term. He will still be the Chicago delegate to the board of TAARII, as he also will continue to be for the American Institute for Yemeni Studies.

Gene B. Gragg

The tool development phase of the AAMA project (Afroasiatic Morphological Archive — but still with almost exclusive emphasis on some forty Cushitic-Omotc languages) is approaching, asymptotically to all appearances, and initial release of its web interface.

In the past year we started migrating almost all of our programming and data representation to Clojure, a dialect of LISP implemented for the JVM (Java Virtual Machine), around which a very vigorous and creative user community has developed. As a LISP dialect, Clojure is very well suited for linguistic processing, and its seamless two-way Java integration pro-

vides easy access to the entire Java ecosystem. An offshoot of Clojure, Clojurescript, targets Javascript (and thus the browser) rather than the JVM; in the future, migrating from Objective-C to Clojurescript for our frontend would allow us to use one language for everything.

We have also adopted Clojure's EDN (Extensible Data Notation, <https://github.com/edn-format>) as our "official" data format, replacing XML. EDN, like the better-known JSON, format, is very simple and very well suited for morphological data; it will make it much easier for researchers to directly inspect and edit morphological data without specialized tools. At this point, all current morphological data can be consulted in the working repository (<https://github.com/gbagg/aama-data/>), a site which also houses preliminary command-line scripts and demos, documented in bin/README, which are prototypes of the graphic user interface which will be presented in some preliminary form in the coming year.

Finally, we have been exploring the use of cloud-based graph database service, Dydra (<http://dydra.com/>) as our database backend.

Jack Green

Jack Green had one volume published, in August: *Our Work: Modern Jobs — Ancient Origins*, the co-edited and co-authored (with Emily Teeter) Oriental Institute Museum Publication for the special exhibit of the same title (August 2013). Catalog essays were contributed for the Oriental Institute Museum Publication for the special exhibit In Remembrance of Me: Feasting with the Dead in the Ancient Middle East, edited by V. R. Herrmann and J. D. Schloen (April 2014). One *Oriental Institute News & Notes* article authored by Jack appeared over the past year: "Looting the Past: The Battle for Our Cultural Heritage" (no. 221 [2014]: 15–17). Work progressed on the Oriental Institute Museum Highlights publication with Emily Teeter, to be published in the coming year.

Jack published a chapter entitled "Social Identity in the Jordan Valley during the Late Bronze and Early Iron Ages: Evidence from the Tall as-Sa'idiyya Cemetery" within the conference proceedings *Studies in the History and Archaeology of Jordan* (vol. 11, [2013], pp. 419–29, Amman, Jordan). A version of this paper was presented at the American Schools of Oriental Research annual meeting in Baltimore (November 23), related to the author's continued research on this Late Bronze and Iron Age site in Jordan. A talk entitled "From Life to Death in Ancient Canaan and Israel" was given to the Chicago Archaeological Society in Evanston (December 8). Conference presentations included museum panel and workshop contributions on the topic of the Oriental Institute Museum and its display strategies at the Archaeological Institute of America meeting in Chicago (January 4) and the International Congress of the Archaeology of the Ancient Near East in Basel, Switzerland (June 10). Jack also gave a lecture at Northern Illinois University (NIU) entitled: "Looted Heritage and the Museum: The Role of Unprovenienced Objects in Museum Collections" on April 16. This was part of a two-day series of workshops and seminars at NIU on museums and collections. A research article entitled "Gender and Sexuality in Ancient Near Eastern Art" was submitted for publication in Blackwell's forthcoming *Companion to the Art of the Ancient Near East*, edited by Ann C. Gunter (Northwestern University). A well-attended public lecture on this topic was given at the Art Institute of Chicago for the Classical Art Society (February 20). Progress was made on the preparation (with Ros Henry) of a volume of letters and photographs of British Near East-

INDIVIDUAL RESEARCH

ern archaeologist Olga Tufnell. Long-term preparations continued on the Tell es-Sa'idiyeh Cemetery Publication Project.

Theo van den Hout

Besides his position as chair of the department of Near Eastern Languages and Civilizations (NELC) and his work for the Chicago Hittite Dictionary (CHD, see separate report), **Theo van den Hout** submitted an article for a memorial volume entitled “Zu einer Stratigraphie der hethitischen Totenrituale.” There he argues to distinguish several chronological layers in the numerous pieces that constitute the composition known as the Funerary Ritual for a Hittite King. Such an approach solves, he thinks, a number of problems in the traditional view that considers all fragments as reducible to a single unitary composition. Theo also contributed several longer entries to the *Reallexikon der Assyriologie* on “Tod” (Death), “Tutḫalija IV.” (a king), “Vergöttlichung” (apotheosis), “Versammlung” (assembly), “Wagen, -modell” (wheeled vehicles and models thereof), and “Waskuwatassi” (a deity).

In October Theo gave a lecture (“Writing for the Illiterate: Writing and Literacy in Hittite Anatolia”) at the Institute for the Study of the Ancient World (New York University) in New York, where he is a Senior Fellow. He was invited to give a presentation in Istanbul (“The Art of Writing: Remarks on the When and How of Hittite Cuneiform and Hieroglyphic Writing Technologies”) in May at the Workshop marking the retirement of Jürgen Seeher, previously director of the German excavations at Boğazköy. At the Oriental Institute he participated with a talk (“Coping with the Death of an Idea: Putting the Hittite King to Rest”) in the public symposium In Remembrance of Me on May 4 in connection with the opening of the accompanying exhibit.

The following publications appeared in print in the past year: “Zwei weitere Beamten-siegel aus Boğazköy,” *Zeitschrift für Assyriologie* 103, pp. 43–44 (with Rukiye Akdoğan); “Hitit Krallığı ve İmparatorluğu’nun Kısa Tarihi/A Short History of the Hittite Kingdom and Empire” in M. Doğan-Alparslan and M. Alparslan (eds.), *Hititler. Bir Anadolu İmparatorluğu/Hittites: An Anatolian Empire* (Tüpraş-Yapı Kredi Yayınları, Istanbul), pp. 22–45 (Turkish and English); “‘Two Old Tablets’: Thinking, Recording, and Writing History in Hittite Society” in K. Raaflaub (ed.), *Thinking, Recording, and Writing History in the Ancient World* (Wiley Blackwell, Chichester), pp. 169–86; “Death Binds: On Some Rites Surrounding Death in Ancient Anatolia” and catalog entry “Cuneiform Tablet: Fragment of the Hittite Royal Funerary Ritual” in V. Rimmer Herrmann and J. David Schloen (eds.), *In Remembrance of Me: Feasting with the Dead in the Ancient Middle East* (Chicago: The Oriental Institute), pp. 75–80 and 132; “Tempel. A. II. Philologisch. In Anatolien” in *Reallexikon der Assyriologie* 13, pp. 527–30. The contribution “Greek and Carian” in G. K. Giannakis (ed.), *Encyclopedia of Ancient Greek Language and Linguistics* (Brill Online, 2014) came out online and should be published in print next year.

Janet H. Johnson

Janet H. Johnson spent much of her time this year working on the Demotic Dictionary (see separate report). She completed several articles, one on Demotic grammar, one presenting

a variant interpretation of a Twenty-first Dynasty private letter, one on the range of personal property envisioned in Demotic “annuity contracts” (legal documents given by a man to his wife guaranteeing to support her and guaranteeing that their children would be his heirs), and one case study of women as property owner based on an archive from the Persian period. She also gave a number of lectures on women in ancient Egypt, one for the high school intensive Egyptian history/culture class held every summer, one on gender studies with emphasis on ancient Egypt for the MA orientation class in the fall, one on Egyptian materials in the Oriental Institute Museum for the new training class for Museum docents, one for the Museum’s gallery talks series discussing the cultural implications of the Oriental Institute’s Demotic annuity contract, and one on the Library of Alexandria for the Annual Hegeler Carus Seminar. She also served as a panelist in the day-long workshop “Taking the Next Step 2013–2014”; this workshop is organized annually by the College Programming Office to provide mid-range undergraduate students an opportunity to hear about different options available to them when they graduate. She also did Skype interviews about Egyptian history, language, etc., with two classes of fifth graders at the Science and Art Academy in Des Plaines and with an advanced placement history class at Carl Sandberg High School. She enjoyed attending the annual meeting of the American Research Center in Egypt, held this year in Portland, Oregon. She taught two new, for her, classes this year, on Ramesside historical inscriptions and less commonly read Old Kingdom autobiographical texts. She was delighted that three Egyptology students completed and defended their dissertations this year and is learning much about a wide range of Egyptological topics by reading chapters from students working for their degrees, several here at the University of Chicago (NELC and Anthropology) and one at the University of Warsaw.

W. Raymond Johnson

This year **W. Raymond Johnson** completed his thirty-sixth year working in Egypt, his thirty-fifth full year working for the Epigraphic Survey in Luxor, and his seventeenth season as Chicago House Field Director. On November 7, 2013, he gave the Amelia Edwards Memorial Lecture at the University of Bristol in Bristol, England, entitled “The Epigraphic Survey in Luxor: Current Activities.” On June 10 he presented a lecture entitled “Reconstructing the City of Akhenaten and Nefertiti: New Amarna Talatat Joins, Discoveries, and Surprises” at the Women’s Athletic Club in downtown Chicago as part of the Oriental Institute luncheon lecture series sponsored by Misty and Lewis Gruber. He used that occasion to announce a new project of the Epigraphic Survey, The Amarna Talatat Project, that focuses on the thousands of blocks from Amarna that were reused after Akhenaten’s death in building projects all over Egypt, even in Luxor. Ray’s ongoing re-examination of the known Amarna talatat material already has resulted in new joins and associations of blocks that are giving us significant new information about the types of scenes found at Amarna — some unknown until now — and what parts of the city they embellished. Publications this year include “A Fragment from the Reign of Tausret Reused at Medinet Habu,” co-authored with J. Brett McClain, *JARCE* 47 (2013), 177–86, and an obituary for Helen Jacquet-Gordon in the same *JARCE* volume (pages 1–8). Ray also published a reminiscence of our dear friend Dr. Barbara G. Mertz in the *Bulletin of the American Research Center in Egypt* (no. 203, Fall 2013): 60–61 as well as the 2014 *Chicago House Bulletin*.

Walter Kaegi

Cambridge University Press will publish a paperback edition of Kaegi's 2010 book *Muslim Expansion and Byzantine Collapse in North Africa* (late 2014 or 2015). He published an article that revised and updated an earlier publication of his: "The Frontier: Barrier or Bridge? Reconsiderations after Twenty-five Years of Scholarship," in *International Symposium Proceedings, Byzantium and the Arab World, Encounter of Civilizations*. Aristotle University of Thessaloniki. Thessaloniki, Greece (Thessaloniki, 16–18 December 2011) [published in Thessaloniki, 2013], pp. 15-32.

Three other papers of his were accepted this past year for publication in collective volumes: (1) "The Islamic Conquest and the Defense of Byzantine Africa: Campaigns and Conquests in Context, Reconsiderations," in press for publication in a collective volume for *Dumbarton Oaks: North Africa under Byzantium and Early Islam, ca. 500-ca. 800*, edited by Susan T. Stevens and Jonathan P. Conant (Washington, D.C.: Dumbarton Oaks Research Library and Collection, forthcoming). (2) He completed the essay "Byzantium in the Seventh Century," for the *Oxford Handbook of Maximus the Confessor*, edited by Pauline Allen and Bronwen Neil (Australian Catholic University), which was accepted, now in editing and production. (3) "Seventh-century North Africa: Military and Political Convergences and Divergences," is now in press for the German Archaeological Society in Rome (DAIRom) collective volume, edited by R. Bockmann and Philipp von Rummel.

He published several book reviews: Review of *Witnesses to a World Crisis*, by James Howard-Johnston, in *Journal of Near Eastern Studies* 72/2 (2013), pp. 64–67. Review of *Inventing Byzantine Iconoclasm*, by L. Brubaker, in *Speculum* 89 (2014), pp. 165–67. Review of *Land and Privilege in Byzantium: The Institution of Pronoia*, by Mark C. Bartusis, in online *The Medieval Review*, 14.04.04. His reviews of two volumes by Judith Herrin published by Princeton University Press appeared in the *Journal of Religion* vol. 94, no. 3 (July 2014) 383–86.

He continued to serve as editor of *Byzantinische Forschungen* and History bibliographer for the journal *Byzantinische Zeitschrift*. He served as co-director, University of Chicago Workshop on Late Antiquity and Byzantium (recently renewed for two more years, to the end of academic year 2016).

On 1 November 2013 he chaired a session at the annual meeting of BSANA (Byzantine Studies Association, North America), Yale University.

On 30 January 2014 he delivered a public lecture at Joint Session: Lumen Christi Institute, and Workshop for Late Antiquity and Byzantium. "North Africa's Transition from Christianity to Islam: Some Reconsiderations."

From 11 to 22 September 2013 he managed to visit selected important but difficult to reach archaeological sites in eastern and western Libya. By visiting eastern Libya (Libya Superior) he accomplished a life-long and long-term objective of visiting every province of the Late Roman Empire/Early Byzantine Empire ca. 400 CE, a total of 119 provinces.

On 19 February 2014 he served as visiting faculty member in a Committee on Social Thought course SCTH 34803 *Gibbon's Decline and Fall-2* [Social Thought 34803-2]. He discussed Edward Gibbon's coverage of Byzantine History, Chapters 48, 67-68, in his *Decline and Fall of the Roman Empire*.

He continued his contacts with Technical Services in the Social Sciences for recovery of audiotapes of his classroom lectures from the 1980s and 1990s.

Morag M. Kersel

Dividing her time between Amman and Jerusalem during 2013–2014, **Morag Kersel** used some of her research leave to work on the survey material, architectural plans, and maps from five seasons at Marj Rabba, part of the Galilee Prehistory Project (GPP), directed by Yorke Rowan. Analysis of the material stored in Jerusalem and the coordination of efforts on the comprehensive publication of the site was the focus of the collaborative effort with Yorke Rowan to publish the results of excavation and survey at Marj Rabba. During the year co-authored articles on aspects of Marj Rabba appeared in the *Journal of Archaeological Science* (ground-penetrating radar), *Paléorient* (animal management strategies during the Chalcolithic), and in the edited volume *Material Culture Matters: Essays on Archaeology in the Southern Levant in Honor of Seymour Gitin* (a summary of the first three seasons of excavation).

With Yorke Rowan, she presented the results of the 2013 field season at Marj Rabba at the annual meeting of the American Schools of Oriental Research in November. She mentored Anneliese Marty, University of Chicago undergraduate and Metcalf Scholarship intern, who presented a poster on the results of her research into the paleoethnobotanical remains from Marj Rabba at the American Schools of Oriental Research in November 2013.

In the fall of 2013 Morag was a discussant in a symposium at the Royal Ontario Museum, *Robbing the Cradle of Civilization: Preserving the Art and Archaeology of Mesopotamia*, organized by Clemens Reichel. The symposium examined, assessed, and discussed the state of cultural-heritage protection in the ten years since the ransacking of the Iraq Museum in the aftermath of the coalition forces invasion of Iraq. Together with Professor Patty Gerstenblith, Morag organized and participated in *Restitution and Repatriation: The Return of Cultural Objects*, at the Center for Art, Museum, and Cultural Heritage Law, DePaul University. This symposium addressed the underlying legal, ethical, and moral reasons, implications, and policies behind the return of cultural objects. In the spring of 2014 Morag was an invited participant in *Embedded! Archaeologists and Anthropologists in Modern Landscapes of Conflict*, a workshop held at the Middle East Studies Center, Brown University. She presented a paper on her ongoing research into law and archaeology in the Eastern Mediterranean.

During her research leave in Amman, supported by a grant from the American Center for Oriental Research and the Council of American Overseas Research Centers, Morag investigated the varied lives of Early Bronze Age (ca. 3500–3200 BC) pots from the Dead Sea Plain in Jordan (see <http://www.followthepotsproject.org>). In order to study these lives (as ancient grave goods, excavated artifacts, looted items, and modern objects in the antiquities market) she combined new technologies for recording and reconstructing the archaeological evidence of looted cemeteries, such as unmanned aerial vehicles (UAVs), with traditional techniques, such as ethnographic interviews with the various individuals associated with this mortuary landscape.



Kersel with an unmanned aerial vehicle

INDIVIDUAL RESEARCH

Aerial survey at the site of Fīfa utilized novel photogrammetric image post-processing to produce high-resolution digital elevation models (DEMs) of the site. A chronological assessment of looting at Fīfa will allow for the identification of new looting pits and determinations of whether any of the looter's holes had been revisited; if the looting was recent (indicated by fresh earth); and if there is a discernible difference in looting episodes. The continued mapping and groundtruthing of the landscape during the 2014 season, allowed for the conclusion that looters are revisiting looter's holes, there is ongoing recent looting, and there is a difference in looting episodes. This season of aerial site monitoring was the second of a five-year plan to revisit the site at the same time each year to investigate change over time and to assess the potential impact of the Jordanian Department of Antiquities' anti-looting campaigns and outreach programs.

Massimo Maiocchi

In the last year, **Massimo Maiocchi** kept working on the Writing in Early Mesopotamia (WEM) Project, expanding the text corpus and adding new features to the WEM database, in order to perform effective queries on both phonemic and morphemic levels. The beta version of it is planned to be freely available online by the end of the year.

In October 2013, Massimo took part in the Venice-Naples-North Kurdistan Project (VeNaNKu), which just started under the supervision of Lucio Milano (Ca' Foscari University, Venice) and Carlo Zaccagnini ("L'Orientale" University, Naples). The aim of the project is to achieve a better understanding of the history of the ancient Kurdistan region, with special focus on the late third and early second millennia BC. The available data for this period are scanty, but contemporary sources from southern Mesopotamia suggest that the region was politically important already before the rise of Assyria in the early second millennium BC. This year, the project focused on a preliminary survey of several sites in the areas of modern Erbil, Dohuk, and Sulaymaniyah.

In 2014, Massimo published the book review of *Seven Generations Since the Fall of Akkad*, by Harvey Weiss (Wiesbaden: Harrassowitz, 2012), which appeared in the *Journal of Near Eastern Studies* no. 73. He also submitted the article "A Sketch of Political History of the Early Tigridian Region," which will shortly appear in *Tigridian Region*, edited by P. Bieliński and E. Rova, *Associated Regional Chronologies for the Ancient Near East 5* (Turnhout: Brepols). The evidence discussed there and the preliminary results were anticipated in a brown bag lecture held at the Oriental Institute on November 13, 2013.

In addition, Massimo devoted some of his time to improve the EbDA database (Ebla Digital Archives: <http://virgo.unive.it/eblaonline/cgi-bin/home.cgi>), as associate editor. This is the most up-to-date electronic edition of thousands of Ebla texts, including literary, lexical, and administrative tablets.

In June, he started working on a paper titled "Women and Production in Sargonic Adab," which will be presented at the REFEMA (Rôle Économique des Femmes en Mésopotamie Ancienne) conference, held in Nanterre (France), November 5–7, 2014. Also, he is preparing an article on some remarkable features of early cuneiform writing, as part of the research project entitled Signs of Writing: The Cultural, Social, and Linguistic Contexts of the World's

First Writing Systems, led by Christopher Woods of the Oriental Institute and Ed Shaughnessy of East Asian Languages and Civilizations at the University of Chicago.

Gregory Marouard

During summer 2013, **Gregory Marouard** focused his work on the Edfu fieldwork season and, due to the cancellation of the 2013 season at Edfu, during fall 2013 he continued his work on the treatment of the Tell Edfu 2012 results. He published with Nadine Moeller a short overview of their last season and site management work at Edfu in *Oriental Institute News & Notes* 220: 3–9.

In January 2014 Gregory participated in the Society for the Study of Egyptian Antiquities symposium at Toronto “Pyramids: The Mountains of Pharaoh.” He presented a lecture entitled “A Provincial Pyramid: Recent Investigations at the Small Step Pyramid at El-Ghonemiya-Edfu.”

Between March and April 2014, Gregory conducted his fourth season at the harbor site at Wadi al-Jarf, the port site of Khufu on the Red Sea coast, as senior archaeologist. With his colleague Pierre Tallet (University Paris-Sorbonne), they published a short article, “The Harbor of Khufu on the Red Sea Coast at Wadi al-Jarf, Egypt,” in *Near Eastern Archaeology* 77/1: 4–14. About his work at Wadi al-Jarf, his paper had been accepted at the sixty-fifth American Research Center in Egypt meeting in Portland (April 2014). In addition, he gave an Oriental Institute members’ lecture about the “New Discoveries at Wadi el-Jarf: The Harbor of King Khufu on the Egyptian Red Sea Coast (ca. 2550 BC)” in early May.

In June 2014, Gregory participated in his ninth fieldwork season at the site of Buto in the western Delta region in order to prepare the publication of the archaeological results from the five-year fieldwork program carried out between 2007 and 2011. This monograph will be submitted for publication to the German Archaeological Institute (DAI) at the end of the current year.

As archaeologist Gregory also participated in the final season of the Institut Français d’Archéologie Orientale’s (IFAO) excavations at Abu Rawash. Directed by Yann Tristant (Macquarie University) since 2008, this project focuses on the elite cemetery dating back to the reign of King Den (First Dynasty, ca. 2950 BC). He also took the opportunity to visit some sites at Dahshur and in the Fayum area in order to prepare two further articles, which are currently in progress.

In July Gregory presented a joint paper with Nadine Moeller on the discovery of the Khayan sealings from Tell Edfu at the Vienna workshop on the Hyksos ruler Khayan, which was co-organized by Irene Forstner-Müller and Nadine Moeller.

He also completed another article, entitled “Maisons-tours et organisation des quartiers domestiques dans les agglomérations du Delta: l’exemple de Bouto de la Basse Époque aux premiers Lagides.” in Séverine Marchi (ed.), *Les maisons-tours en Égypte durant la Basse Époque, les périodes ptolémaïques et romaine* (Paris-Sorbonne, December 2012), *NeHet* 2 (2014): 105–33.

Gregory finished a brief article for the next issue (no. 45) of *Egyptian Archaeology* about his current research project at the site of Kom ed-Dahab, an extensive Greco-Roman settlement which he recently discovered in the eastern Delta by using satellite images.

INDIVIDUAL RESEARCH

He finally submitted a short chapter for the forthcoming third volume of the archaeological results of the IFAO excavations at Ayn Sokhna (Old and Middle Kingdom harbor site on the Red Sea coast).

Carol Meyer

Carol Meyer submitted to the Oriental Institute Publications Office the revised manuscript of Bir Umm Fawakhir 3 (OIP 140) in October 2013, and the revised galley proofs at the end of June 2014. This is the last of the final reports on six seasons of fieldwork at the fifth- and sixth-century AD gold-mining town at Bir Umm Fawakhir in the central Eastern Desert of Egypt. Current projects include a study of the early Islamic glass from Aqaba, Jordan. To date the finds from the 1986 and 1987 seasons have been entered on a FileMaker table, some 3,525 entries, several hundred sherds have been drawn, and a few dozen photographed. (Few categories of artifacts are easier to work with after being drawn than glass sherds, and few are harder to photograph, especially if heavily weathered.) All the new drawings will be incorporated in an expanded typology of Aqaba glass, a first for this region and era. Four more seasons of material remain, and the project has been expanded by an invitation from the University of Copenhagen, which has resumed the excavations at Aqaba, to include their glass finds with the Oriental Institute's glass finds in the final publication. Meyer hopes to join the Danish team at Aqaba in late fall to work through their material. Research continues on the early Roman to early Byzantine period glass from Tell Nebi Mend (ancient Kadesh) in Syria and the small corpus of glass from Serra East and Dorginarti in the Sudan. The latter will be part of the next Oriental Institute Nubian Expedition volumes, as will Meyer's drawings of a large number of artifacts and pottery vessels from Serra East.

Nadine Moeller

The fall season at Tell Edfu was unfortunately cancelled due to the political problems over the summer months but this allowed for some work on the excavation material here in Chicago. In November, the finished manuscript of Moeller's book, entitled *The Archaeology of Urbanism in Ancient Egypt – The Settlements from the Predynastic Period to the end of the Middle Kingdom*, was accepted for publication by Cambridge University Press. The book is now in the editing stages with the publisher.

During the month of January, Moeller taught a civilization course on ancient Egypt in Paris at the University of Chicago Paris Center for the Cairo Study Abroad program which had been moved there due to the insecure situation in Egypt. The students were nevertheless able to get some first-hand experience with the ancient culture through several museum trips to the Louvre and the British Museum.

In February, Moeller was invited to give three lectures on the excavations at Tell Edfu in California, to the Orange County and Berkeley ARCE chapters and the Egypt Exploration Organization of Southern California. She also participated in the Tenth Annual Oriental Institute Postdoctoral Seminar, presenting a paper on "The Early/Middle Bronze Age Transition in View of Evidence from Egypt during the Old Kingdom and First Intermediate Period." In

March, the article co-authored with Robert Ritner on the eruption of Thera and the Ahmose stela was published in the *Journal of Near Eastern Studies*, which has gained much scholarly interest. It discusses this unusual Egyptian text in relation to its possible link to the aftermath of the volcanic eruption.

Furthermore, Moeller presented a paper at the ARCE Annual Meeting, which was held in Portland, Oregon, this year. The title of the paper was “The state-founded settlement at Lahun: A Re-evaluation of the Role Town Planning in the Middle Kingdom.” In May, she gave a short lecture about how the Egyptian revolution has impacted archaeological fieldwork in Egypt as part of the one-day conference *Surveying the Field: Conducting Archaeology in the Middle East Today*, which had been organized by students of the Interdisciplinary Archaeology Workshop. Moeller has recently also started to work on the preparation of a Massive Open Online Course (MOOC) for the University of Chicago on Ancient Egypt and the Dynamics of Early Civilizations, which is planned to run some time early in 2015.

Brian Muhs

During the academic year 2013–2014, much of **Brian Muhs’** research related to his book project, *The Ancient Egyptian Economy*, which he submitted to Cambridge University Press in May 2014. He also completed three articles on subjects relating to the ancient Egyptian economy, namely “Money, Taxes and Maritime Trade in Late Period Egypt,” for the proceedings of *Heracleion in Context: The Maritime Economy of the Egyptian Late Period*, a conference at Oxford the previous year; “Property Title, Domestic Architecture, and Household Lifecycles in Egypt,” for the proceedings of the Oriental Institute Seminar *Household Studies in Complex Societies: (Micro) Archaeological and Textual Approaches*; and “A Loan Contract in Chicago from the Archive of the Theban Choachytes (Second Century BCE),” for a festschrift. Muhs submitted two book reviews, one of Peter F. Dorman and Betsy M. Bryan (eds.), *Perspectives on Ptolemaic Thebes*, Papers from the Theban Workshop 2006 (Occasional Proceedings of the Theban Workshop / Studies in Ancient Oriental Civilization 65. Chicago: The Oriental Institute, 2011); and the other of A. Monson, *Agriculture and Taxation in Early Ptolemaic Egypt: Demotic Land Surveys and Accounts* (P. Agri), (Papyrologische Texte und Abhandlungen 46; Bonn: Dr. Rudolf Habelt, 2012).

Three of his articles appeared this year, including “Greek and Demotic in the Roman Fayyum,” pp. 110–18 in J. G. Keenan, J. G. Manning, and U. Yiftach-Firanko (eds.), *Law and Legal Practice in Egypt from Alexander to the Arab Conquest: A Selection of Papyrological Sources in Translation, with Introductions and Commentary* (Cambridge: Cambridge University Press, 2014); “Temple Economy in the Nag’ el-Mesheikh Ostraca,” pp. 155–64 in M. Depauw and Y. Broux (eds.), *Acts of the Tenth International Congress of Demotic Studies, Leuven, 26–30 August 2008* (Orientalia Louvaniensia Analecta 231; Leuven: Peeters, 2014); and “Demotic Texts from Qasr Ibrim,” pp. 167–78, in J. van der Vliet and J. L. Hagen (eds.), *Qasr Ibrim, Between Egypt and Africa: Studies in Cultural Exchange* (NINO Symposium, Leiden, 11–12 December 2009) (Egyptologische Uitgaven 26; Leiden: Nederlands Instituut voor het Nabije Oosten; Leuven: Peeters, 2013). One book review also appeared, of A. Monson, *From the Ptolemies to the Romans. Political and Economic Change in Egypt* (Cambridge: Cambridge University Press, 2012), in the *Journal of Near Eastern Studies* 73/1 (April 2014), pp. 152–55.

INDIVIDUAL RESEARCH

Muhs gave a tour of the exhibition *When the Greeks Ruled: Egypt after Alexander the Great*, at the Art Institute of Chicago on December 19 for the James Henry Breasted Society, with curator Mary Greuel and conservator Rachel Sabino. He also gave a gallery talk on “Death and Taxes in Ancient Egypt” in the Oriental Institute Museum Joseph and Mary Grimshaw Egyptian Gallery on April 16. He taught courses on Egyptian history, literature, Middle Egyptian texts, and Coptic texts. For the Coptic texts course, he and the students read unpublished papyri in the Oriental Institute Museum collection.

Miriam Müller

Miriam Müller joined the Oriental Institute in September 2012 as the first two-year postdoctoral fellow. After organizing the Ninth Annual Oriental Institute Postdoctoral Seminar with the title *Household Studies in Complex Societies: (Micro) Archaeological and Textual Approaches*, in March 2013, she started working on the proceedings of the conference in summer and fall 2013. The volume with twenty articles on household studies in Mesopotamia, the Levant and Anatolia, Egypt including ancient Nubia (Sudan), the Mediterranean with Greece, the Aegean, and Italy, as well as an overview on recent developments in New World archaeology, is currently being reviewed and will be ready for print in late fall. In addition to the completion of the seminar’s proceedings, Miriam taught a graduate course in the Department of Near Eastern Languages and Civilizations in fall 2013 on the ancient capital of the Hyksos, Tell el-Dab’a/Avaris in Egypt where Miriam has been involved in fieldwork for the last couple of years. The seminar had the aim to introduce students to a multifaceted site with a complex stratigraphy in order to understand its importance for Egyptian chronology and history of urbanization, as well as the application of a variety of new techniques such as magnetometry surveying to cope with the extensive settlement. As part of her two-year program, Miriam introduced a new seminar series to the Oriental Institute Voting Members to further cross-cultural discussions and potentially stimulate interdisciplinary collaborations among the faculty. The quarterly meetings were held in the Director’s Office with an informal presentation by one of the Voting Members on new research, ideas, and thoughts about an individual topic. With two postdoctoral fellows in their respective first and second year, Miriam was furthermore able to support the new fellow in organizing the Annual Oriental Institute Seminar in March 2014. In April Miriam traveled to New Haven for a symposium on household identity and domestic cult in the ancient Mediterranean and Near East, where she had been invited as a keynote speaker, and to Basel in June 2014 for the Ninth International Congress on the Archaeology of the Ancient Near East. She also participated as a panel speaker in the public symposium of the new Oriental Institute exhibit *In Remembrance of Me: Feasting with the Dead in the Ancient Middle East*, curated by Virginia Rimmer Herrmann and J. David Schloen. Articles on household archaeology in Egypt and domestic cults and ancestor veneration as important elements in the formation of household identity are submitted for publication in an edited volume on Middle Kingdom and Second Intermediate Period Egypt and the *Archaeological Review* from Cambridge. In completion of her program at the Oriental Institute in August 2014, Miriam will take up a position as postdoctoral fellow at the Joukowsky Institute for Archaeology and the Ancient World at Brown University.

Hratch Papazian

Hratch Papazian continues work toward completing his next monograph, which centers on the study of the Old Kingdom Gebelein papyri. The monograph will offer a translation of the documents, accompanied by a palaeographical and socio-historical commentary of these important texts from Upper Egypt. Later this year his article dealing with a historical and chronological reassessment of the transitional phase between the Old Kingdom and the First Intermediate Period will appear in the newly established *Harvard Egyptological Studies*; the second installment of that study, which focuses on the primary sources pertaining to the history of the Eighth Dynasty, will be submitted for publication later this year. With respect to his field project, Papazian continues work at the Old Kingdom step pyramid in South Abydos. This fall's project will consist of implementing a site preservation initiative in order to halt the encroachment of nearby agricultural fields onto the antiquities zone; such illicit activities have become a widespread problem in many parts of Egypt and are threatening several sites at an increasingly alarming rate. Once this important stage is completed a conservation plan will be put in place to ensure the long-term physical stability of the monument, which has been destabilized on several sides due to attempts to dig under it over the last several decades.

Richard Payne

Richard Payne joined the Oriental Institute and the Department of Near Eastern Languages and Civilizations in July 2013 as the Neubauer Family Assistant Professor of Ancient Near Eastern History. Throughout the academic year, he prepared a book manuscript, *A State of Mixture: Christians and Zoroastrians in the Iranian Empire*, which is now under contract with the University of California Press. The book is a study of how the Zoroastrian elites of the Iranian empire in late antiquity, CE 226–636, integrated Christians into their political institutions, and how Christians positioned themselves in a political culture not of their own making. The research undertaken in the autumn quarter of 2013 focused on Middle Persian cosmological literature, which has often been undervalued as a source for social history. The scholar-priests who composed these works frequently discussed the practical problems that non-Zoroastrians, especially Christians and Jews, posed for a Zoroastrian empire. If historians traditionally considered Zoroastrian priests to have been consistently hostile toward Christians and Jews, Payne has documented a spectrum of views ranging from arguments that non-Zoroastrians could make positive contributions to the empire and even accrue spiritual merit to those who considered them capable only of malice. The Zoroastrian scholar-priests emerged from the study as much more sophisticated, nuanced observers of their religious landscape than previously realized.

In addition to completing the manuscript, he completed and submitted an article on the Iranian encounter with the Huns of Central Asia and began editing two volumes: one on Iranian archaeology, the other on cosmopolitan political cultures in ancient empires. An article on the role of Zoroastrian cosmological thought in the Iranian practice of war appeared in *Past & Present*, the leading journal in the discipline of social history. On topics related to his research on Iranian political culture, he gave lectures at the University of Basel in Switzerland, the Collège de France in Paris, Rice University, and the Austrian Academy of Sciences

INDIVIDUAL RESEARCH

in Vienna, as well as at a conference comparing the structures of ancient empires at home at the University of Chicago. He gave an Oriental Institute Members' Lecture, "The Rise of Christianity in Iran," and talks at the Persian circle and late antiquity workshop on campus.

In the winter quarter, Payne introduced a new seminar on the social history of Christian communities in the ancient Near East, Saints and Sinners, that considered the relationship between religion and social, political, and economic structures from the perspective of early Christian literatures in various Near Eastern languages, especially Syriac. The spring quarter took him to Istanbul, to teach in the NELC program for undergraduates on the Yıldız campus in Beşiktaş. He taught a course on late Roman political culture through the monuments of Constantinople, teaching where possible from the ruins, statues, and mosaics themselves. For the second course, a survey of Near Eastern history in late antiquity, he took the students on an archaeological tour of the Anatolian countryside, from the grand city of Ephesus to the humble fortress of Amorion, viewing the region as a nexus of the Roman, Iranian, and eventually early Islamic empires.

Robert K. Ritner

The past year saw the release of the paperback edition of **Robert K. Ritner's** sold-out 2011 volume, *The Joseph Smith Egyptian Papyri: A Complete Edition* (Signature Books). His joint study with Nadine Moeller of "The Ahmose 'Tempest Stela,' Thera and Comparative Chronology" appeared in the April 2014 edition of the *Journal of Near Eastern Studies* (vol. 73/1). For a forthcoming festschrift, he completed an article on the transformation of Egyptian religion in a Roman context: "Osiris-Canopus and Bes at Herculaneum." In contrast, he examined early Egyptian and Aegean connections in the illustrated article "Egyptian Examples of the 'Koine' Art Style of the Second Millennium BC" for the publication of the previous year's Chrosteres/Paint-Brushes Conference in Santorini.

Ritner's lectures during the academic year ranged among topics on medicine, the limitations of family terminology, and Third Intermediate Period coffin design and reuse. On October 18, he spoke on "Drug Therapy in Ancient Egypt" for the symposium on Ancient Drugs sponsored by the Center for Ancient Studies at the University of Pennsylvania. On April 5, he discussed "Distinctive Features on a Third Intermediate Period Coffin of Neskhonsu" at the sixty-fifth convention of the American Research Center in Egypt, held in Portland, Oregon. On May 2, he presented "The Inner Body in Motion: Mobile Organs in Egyptian Anatomical Speculation" for the Oriental Institute symposium on The Body and Metaphor in Ancient Medicine. For the third Oriental Institute Connections Seminar, he gave a presentation and led the discussion of "The Notion of Family and Kinship in the Ancient Near East" (May 28). Ritner served as Egyptological reviewer for the University of Pennsylvania Press and the *Journal of Near Eastern Studies*. He also made contributions to more popular media. Ritner served as an interviewed consultant for *Time Magazine's* online review of the Cleopatra-themed *Dark Horse* video by Katy Perry. For the H. P. Lovecraft Society, he reviewed the script for a radio play adaptation (to be released on CD) of Lovecraft's ghost-written tale for Harry Houdini: *Under the Pyramids* (also titled *Imprisoned with the Pharaohs*). For the same project, Ritner translated dialogue into Egyptian and composed and recorded a hymn to the god Tutu, the composite sphinx patron of disease demons whose image may well have inspired the Lovecraft/Houdini story.

In addition to writing, lecturing, and reviewing, Ritner taught five courses on Egyptian grammar, hieroglyphic texts, Egyptian history, Demotic grammar, and Demotic texts.

Yorke Rowan

In 2013, **Yorke Rowan** returned to Wisad Pools as part of the Eastern Badia Archaeological Project, a survey and excavation research program focused on two regions in the Black Desert of eastern Jordan sponsored by the Oriental Institute and Whitman College. Co-authored with Gary Rollefson and Alexander Wasse, “Neolithic Settlement at Wisad Pools, Black Desert, Jordan” reports on the excavations of W-80, a large corbelled basalt structure dated to the Neolithic which appeared in *Neo-Lithics* (1/13: 11–23; also see *Eastern Badia Archaeological Project*, in this report). Soon after, Yorke directed the fifth season of excavations at the Chalcolithic (ca. 4500–3600 BC) site in the lower Galilee (see *Marj Rabba* report). Research results from Marj Rabba appeared during this year, including the results of the geophysical survey conducted in 2011 and co-authored with Thomas Urban and Morag Kersel, which were published in the *Journal of Archaeological Science* (46: 96–106), and a study of animal management with Price, Buckley, and Kersel in *Paléorient* (39/2: 183–200). A summary of the first three field seasons, “New Perspectives on the Chalcolithic Period in the Galilee: Investigations at the Site of Marj Rabba” was co-authored with Kersel and appeared in *Material Culture Matters: Essays on the Archaeology of the Southern Levant in Honor of Seymour Gitin*, edited by Spencer, Brody, and Mullins, pp. 221–37 (Eisenbrauns, 2014). On behalf of the Marj Rabba team, Yorke also presented a lecture at the Annual Meetings of American Schools of Oriental Research in Baltimore.

In other publications, Yorke co-authored with John Dixon and Robyn Dubicz “The Ground Stone Assemblage from Dhaskalio” in *The Settlement at Dhaskalio: The Sanctuary on Keros and the Origins of Aegean Ritual Practice; The Excavations of 2006–2008*, Vol. 1, edited by Renfrew, Philaniotou, Brodie, Gavalas, and Boyd, pp. 557–95 (Cambridge: McDonald Institute for Archaeological Research, 2013). He also contributed “The Southern Levant (Cisjordan) during the Chalcolithic Period” to *The Oxford Handbook of the Archaeology of the Levant (ca. 8000–332 BCE)*, edited by Steiner and Killebrew, pp. 217–30 (Oxford, 2014). Yorke wrote a foreword to *Barda Balka* by Bruce Howe, Oriental Institute Communications 31, pp. xi–xvii, (Chicago: The Oriental Institute, 2014). He also reviewed *The Oxford Handbook of the Archaeology of Ritual and Religion*, by Timothy Insoll, for *Near Eastern Archaeology* (77/2: 146–48).

As part of an exhibit dedicated to the Chalcolithic, Yorke spoke at the Masters of Fire: Copper Age Art from Israel show organized by the Institute for Studies of the Ancient World, New York University. In addition to his lecture, he contributed a chapter titled “The Mortuary Process in the Chalcolithic Period” to the exhibit catalog, pp. 101–13, edited by Sebanne, Misch-Brandl, and Master (Institute for the Study of the Ancient World and Princeton University Press, 2014).

From September 2013 to June 2014, Yorke was the National Endowment for the Humanities Fellow at the W. F. Albright Institute of Archaeological Research in Jerusalem. His fellowship time was dedicated to the publication of the Marj Rabba project, although some time was spent organizing and studying material from the Tel Yaqush project, an Oriental Institute legacy project, which Yorke is coordinating for publication. During the year, Yorke gave lectures at al-Quds University (Abu Dis), Ben-Gurion University (Beersheva), and in Je-

INDIVIDUAL RESEARCH

rusalem, at the Kenyon Institute, the University of the Holy Land, and the Albright Institute. He also mentored interns from Columbia University, Oberlin College, and Wooster College. Students from Wooster and Columbia will be joining the team excavating Marj Rabba during the 2014 season.

Seth Sanders

This year's research for the West Semitic Political Lexicon project produced three conference presentations, two journal articles, and plans for conference sessions and a special journal issue.

The project's investigation of the historical development of political discourse in West Semitic languages led to presentations at the American Anthropological Association in Chicago ("A Philology of Words and Things"), the Society of Biblical Literature ("Placing Scribal Culture in History: Deuteronomy and Late Iron-Age Text Production"), and an invited workshop at the University of Zürich ("Levantine Religion/s in the Iron Age II: The Epigraphic Perspective"). The results of the latter will be published in a special issue of *Hebrew Bible and Ancient Israel*, and a second article, "Absalom's Audience (2 Sam 15–19)" is under review at the *Journal of Biblical Literature*.

Finally, a set of special sessions on "How to Build a (Long-term) Text in the Ancient Near East" is being planned for the American Oriental Society meeting and a special issue of the *Journal of Ancient Near Eastern Religions*. One of the most richly documented areas of written ancient Near Eastern culture is the creation and transmission of long-lived culturally central texts, from the Egyptian Pyramid texts and book(s) of the Dead to the Epic of Gilgamesh. Yet despite a treasure trove of data and studies, the basic patterns and historical trends have never even been surveyed by experts, let alone theorized. These sessions aim to do that. Among an international set of participants, invited scholars from the Oriental Institute include John Wee, Christopher Woods, Foy Scalf, and Theo van den Hout.

Foy Scalf

Foy Scalf spent the better part of 2013–2014 managing the Research Archives and taking over duties as head of the Integrated Database Project (IDB). Despite those commitments, he was able to produce several publications, present at a number of conferences, and reach an important personal milestone. On February 19, 2014, Foy defended his dissertation "Passports to Eternity: Formulaic Demotic Funerary Texts and the Final Phase of Egyptian Funerary Literature in Roman Egypt" in the Department of Near Eastern Languages and Civilizations at the University of Chicago and received his PhD on March 21. To the delight of his advisors and colleagues, he was able to finish his degree while simultaneously juggling the responsibilities of the Research Archives, the IDB, and participating in a variety of other projects. In September 2013, Foy joined the Digital Skies project at the Adler Planetarium to serve on an interdisciplinary advisory board in developing digital tools for public education about astronomy throughout time and across cultures.

In collaboration with Friedhelm Hoffman, Franziska Naether, and Ghislaine Widmer, installment 33 of the *Demotistische Literaturübersicht* appeared in the journal *Enchoria* in winter 2013. It contains 434 entries providing summaries of all bibliographic items related to Demotic studies in 2010–2011. An article co-authored with Jackie Jay, “Oriental Institute Demotic Ostraca Online (O.I.D.O.O.): Merging Text Publication and Research Tools,” appeared in the *Acts of the Tenth International Congress of Demotic Studies* (*Orientalia Lovaniensia Analecta* 231). The online article “Digging through Data at the Oriental Institute” and the *News & Notes* article “Fulfilling Breasted’s Vision: The Oriental Institute Integrated Database Project” co-authored with Jack Green and Scott Branting (no. 218: 9–13), highlighted the great progress made in making the Oriental Institute collections available to scholars and the public worldwide via an online collections search. He is currently working on an entry for “Magic” in the *Dictionary of Daily Life in Biblical and Post-Biblical Antiquity*, reviews of several important volumes of Demotic and hieratic studies, revising his dissertation for publication, and a handful of articles long languishing on the back burner.

Foy was able to fit in a number of presentations throughout the year. He presented a paper on January 4, 2014, about “Composing Demotic Funerary Texts: Textual Criticism, Orality, and Memory in the Demotic Funerary Papyri” at the 145th Annual Meeting of the American Philological Association in Chicago. This talk focused on conclusions reached in his dissertation research concerning clues in the transmission of Demotic texts that are suggestive of an ongoing oral tradition. On April 4, 2014, he presented a paper on “The Book of the Dead in Demotic: Scribal Strategies for Textual Transmission” at the 65th Meeting of the American Research Center in Egypt in Portland. In it, he discussed some of the processes by which Egyptian texts were transmitted, focusing on methods outside of simple copying such as the transformation of a series of images into a series of textual descriptions. Foy also presented an overview of the Integrated Database Project to the Oriental Institute Visiting Committee on May 1, 2014.

Oğuz Soysal

Oğuz Soysal continued his job with the Chicago Hittite Dictionary (CHD) Project. Much of his time was spent preparing a review of the recent cuneiform editions, *Keilschrifttexte aus Boğazköi* volumes 51, 55, 56, 58, and 60, for *Journal of the American Oriental Society*, which is used also for the Chicago Hittite Dictionary files. Soysal began in April 2014 to compile additions and corrections to the early CHD volumes starting from the letter L.

As a personal study Soysal published a review article in the *Journal of the American Oriental Society* 133 (2013): 691–703 “On Recent Cuneiform Editions of Hittite Fragments (II).”

Furthermore, three articles for *Europäische Festschriften / Gedenkschriften* and eight contributions for *Reallexikon der Assyriologie*, as well as a book review to be submitted to the *Journal of the Near Eastern Studies*, have been prepared and are awaiting publication.

In addition, Soysal continued a project involved with the unpublished Hittite texts bearing the siglum “Bo.” As part of his duties in the CHD Project, he prepared transliterations of 170 cuneiform fragments from the range between Bo 9536 and Bo 9736. Pictures, transliterations, and other textual treatments of the entire material are now ready for the monograph entitled *Unpublished Bo-Fragments in Transliteration I (Bo 9536–Bo 9736)*, an upcoming volume

INDIVIDUAL RESEARCH

for the series Chicago Hittite Dictionary Supplements. After an agreement with the Museum of Ancient Anatolian Civilizations in Ankara, Soysal continued to take digital pictures and transliterate another group of tablets (Bo 8695–Bo 9535) publication in another volume of *Unpublished Bo-fragments in Transliteration*.

Gil J. Stein

In the summer of 2013, Gil started a new field project, co-directed with Oriental Institute Research Associate Abbas Alizadeh, aimed at exploring the origins of towns and social complexity in northeast Mesopotamia during the Chalcolithic period (fifth–fourth millennia BC). We are excavating at the site of Surezha on the Plain of Erbil (the ancient Assyrian city of Arbela) in the Kurdistan region of northeastern Iraq. This projected five-year project marks the first Oriental Institute archaeological excavation in Iraq since the Gulf War of 1991 (see the report on the Surezha excavations in this volume).

As Principal Investigator of the Oriental Institute’s Partnership with the National Museum of Afghanistan (see report in this volume) Gil and Oriental Institute Executive Director Steve Camp made three trips to Afghanistan in 2013–14 to assess project progress, coordinate with the National Museum Director Dr. Omara Khan Masoudi, and to deliver supplies to Field Director Mike Fisher and the Kabul team of registrars, conservators, and consultants. Mike and his team have been making tremendous progress on the inventory as we reached the half-way point in the three year grant from the US Embassy. We also worked on the planning of an international conference on preserving the cultural heritage of Afghanistan. The conference will be held in mid-November 2014 at the Afghanistan Center at Kabul University (ACKU).

Gil continued with the work toward publication of his 1992–97 excavations at the fourth millennium BC Uruk Mesopotamian colony site of Hacinebi. Working with Dr. Belinda Monahan, the work on the publication of the Late Chalcolithic ceramics from the site has progressed greatly. We are revising drafts of six chapters and have two more chapters left to write. We hope that the manuscript is ready to be submitted for review by the Oriental Institute Publications Department by the end of December 2014.

Gil has given a number of lectures and presentations during the 2013–14 academic year. In October 2013, Gil was invited to speak at the Chicago Humanities Festival on the topic “Different Foods = Different Dudes: A Primer in Zooarchaeology.” Also in October 2013, he was invited to Iran to present the keynote lecture “Economic Dominance, Conquest, or Interaction among Equals? Theoretical Models for Understanding Culture Contact in Early Near Eastern Complex Societies” at the University of Tehran’s Fourth International Conference of Young Archaeologists. In January 2014, Gil presented an invited paper on “Food, Cooking, and Social Identity: Inter-cultural Households in the Colonial Network of Uruk Mesopotamia, ca. 3700 BC” in the Presidential Panel “Food and Drink” at the Archaeological Institute of America Annual Meeting (Chicago, January 4, 2014). In March 2014, Gil was invited to give a lecture at Canadian Society for Mesopotamian Studies on the University of Toronto campus on “Persians on the Euphrates? Material Culture and Elite Identity in the Achaemenid Tombs from Hacinebi, Turkey.” In May 2014, Gil presented a workshop at the University of Sydney Archaeology Seminar (New South Wales, Australia) titled “‘Who You Callin’ Peripheral?’: The Development of Indigenous Social Complexity in Late Chalcolithic Upper Mesopotamia 5300–

3300 BC.” In June 2014, Gil was invited to present a paper in Berlin on “Producing Income and Re-Producing Identity: The Long-Term Trajectory of a Mesopotamian Trade Diaspora in the Fourth Millennium BC,” at the TOPOI Workshop “Economic and Political Interaction at the Edges of Ancient Empires,” held at Alexander Humboldt University.

Gil had three publications in the past academic year: (Gil J. Stein) “Persians on the Euphrates?: Two Achaemenid Burials from Hacinebi, Southeast Turkey,” in *Extraction and Control: Studies in Honor of Matthew W. Stolper*, edited by Michael Kozuh, Wouter Henkelman, Charles Jones, and Christopher Woods, pp. 265–86, *Studies in Ancient Oriental Civilization* 68 (Chicago: The Oriental Institute, 2014); (Gil J. Stein) “Economic Dominance, Conquest, or Interaction among Equals? Theoretical Models for Understanding Culture Contact in Early Near Eastern Complex Societies,” in *Proceedings of the 4th Iranian Archaeologists Conference*, edited by Hossein Azizi, Morteza Khanipoor, and Reza Naseri, pp. 55–67 (Tehran: Tehran University, 2014); and (E. Anastasiou, K. O. Lorentz, G. J. Stein, and P. D. Mitchell) “Prehistoric Schistosomiasis Parasite Found in the Middle East,” *Lancet Infectious Diseases* 14 (2014): 553–54.

Emily Teeter

In addition to her other museum duties, **Emily Teeter** has started a study of the stelae excavated by the Oriental Institute at Medinet Habu. This has involved looking at all the relevant material in our collection and going through the archival documentation of the excavation (with thanks to John Larson for his assistance), to identify material that was either accessioned into the Cairo Museum or that now falls into the “missing” category, known only from field photographs. Teeter’s initial goal has been to identify examples originally from the workmen’s village at Deir el-Medina. Some of these stelae are otherwise unknown monuments of well-known men, such as Sennedjem, the scribe Qenherkhepshef, and To, the vizier of Ramesses III, the official to whom our famous labor strike ostrakon (OIM E16996) is addressed (small world!). Some of the texts allow known genealogies to be developed further. She continues her study on an enigmatic embalming cache in our collection.

She gave a paper on the stela of Qenherkhepshef at the annual meeting of the American Research Center in Egypt. She also gave Harper Lectures on the history of the Oriental Institute in Denver, Atlanta, and London, and a Breasted Society presentation entitled “Collecting for Chicago,” which was accompanied by a display of archival material.

Publications include the chapter “Egypt” in *The Cambridge Companion to Ancient Mediterranean Religions*, the exhibit catalog *Our Work: Modern Jobs — Ancient Origins*, object entries in the *In Remembrance of Me* catalog, and a review of Jeffrey Abt’s biography of Breasted in the *Journal of Near Eastern Studies*.

Teeter served as a consulting curator for the Art Institute’s exhibit *When the Greeks Ruled: Egypt After Alexander the Great* (October 31, 2013–July 27, 2014). In February, she joined Dr. Michael Vannier, professor of radiology at the University of Chicago Medical Center, and Mary Greuel of the Art Institute, for a project to scan and study two mummies in their collection. Among the most dramatic discoveries — the mummy formerly known as Lady Wenuhotep is in fact male, so we are searching for a new name for “him.” The study will include a comprehensive evaluation of each mummy’s health, nutrition, and dentition, and that forensic data will be correlated to what can be gleaned from the style of mummification, the coffins, and inscriptions.

INDIVIDUAL RESEARCH

In April, Emily rejoined the Board of the American Research Center in Egypt (ARCE) as a Presidential Appointee, and she continues to be very active in the Chicago chapter of the organization. She is on the Board of the International Committee of Egyptology (CIPEG/ICOM), and she also serves as an editor of the organization's electronic newsletter. She is also on the Editorial Board of the Society of Biblical Literature. In April, she attended the annual Board meeting of the Council of Overseas Research Centers (CAORC) as the representative for ARCE.

Tasha Vorderstrasse

In 2013–2014, **Tasha Vorderstrasse** began her excavation work in Armenia with Kate Franklin at Ambroyi (see separate report). The first short season identified the importance and date of the medieval village of Hin Bazarjugh, which is located at the village of Arai in Aragatsotn, Armenia. This work resulted not only in the archaeological excavations but also a publication in *Oriental Institute News & Notes* (no. 220: 19–21). It also formed the basis of several lectures that she gave with Franklin for the Oriental Institute Brown Bag series in February, the Armenian Circle (in Armenian) in March, and the Late Antique and Byzantine Workshop in June.

In addition to these lectures, Tasha also presented on other topics. In September, she gave two lectures: the first on Chinese sources for reconstructing the landscape of Balkh at the Association for the Study of Persianate Societies (ASPS) in Sarajevo, Bosnia, and on Byzantine and Early Islamic Coins from the Excavations at Jericho at the Seventh-Century Syria Numismatic Round Table, 14th Meeting in Worcester, United Kingdom. In November she presented on her forthcoming work for the Amuq Survey at the American Schools of Oriental Research (ASOR) and on the medieval Armenian Artsruni family and their creation of historical memory in what is now eastern Turkey for the Society of Biblical Literature. At the ASOR meeting, she also chaired the session on Byzantine Archaeology of the Near East.

This past year she worked on two exhibitions at the Oriental Institute Museum. The first is a mini-exhibition that runs from February to September 2014 entitled Silk Road and Indian Ocean Traders: Connecting China and the Middle East. This was the topic of her gallery talk in May and she also gave a presentation on the Silk Road to Chicago Public School teachers in May and for high school students attending the Graham School in June. The other is the forthcoming Fustat exhibition that she is co-curating with Tanya Treptow. This exhibition will open in February 2015 and highlights the different communities who lived in Fustat. She also continued her work in the Museum on the Islamic collections in the Oriental Institute. She will continue this in the coming year.

She also made one research trip in January to Princeton in order to look at the objects from the Antioch excavations. She worked primarily on the glass from the excavations. Since the glass was largely unpublished, it was necessary to examine all of it in order to situate and contextualize the material from the single sector that she is currently preparing with other scholars. All the glass from the Hellenistic to Islamic periods was photographed in preparation for this. In addition, she also looked at some of the small finds.

The following articles appeared: “Reconstructing Houses and Archives in Islamic Egypt,” in *Documents et histoire Islam, VII^e-XVI^e siècle*, edited by A. Regourd (Hautes études orientales 51; Geneva: Librairie Droz, 2013); K. Franklin and T. Vorderstrasse, “The Project for Medieval Archaeology of the South Caucasus, Armenia,” in *Oriental Institute News & Notes* 220 (2014): 19–21.

John Wee

John Wee is a Provost's Postdoctoral Scholar and Lecturer in the Department of Near Eastern Languages and Civilizations (NELC). He organized an international and interdisciplinary symposium on Body and Metaphor in Ancient Medicine (1–3 May 2014) at the Oriental Institute, papers from which are under contract (pending peer review) to be published in Brill's Studies in Ancient Medicine (SAM) series. Besides serving as editor for this symposium volume, he will write its introduction and a chapter on "Invisible Bubbles and Air Streams: Sacred Disease Rhetoric and the Physiology of Intelligence in the Hippocratics."

John's book on *Knowledge and Rhetoric in Medical Commentary: Mesopotamian Commentaries on the Diagnostic Series Sa-gig* will appear in Brill's Culture and History of the Ancient Near East (CHANE) series by early 2015. His articles and essays published in 2014 include "Lugalbanda Under the Night Sky: Scenes of Celestial Healing in Ancient Mesopotamia" (*Journal of Near Eastern Studies*); "Grieving with the Moon: Pantheon and Politics in the Lunar Eclipse" (*Journal of Ancient Near Eastern Religions*); "Case History as Minority Report in the Hippocratic Epidemics I" (Studies in Ancient Medicine series, Brill); and "Phenomena in Writing: Creating and Interpreting Variants of the Diagnostic Series Sa-gig" (Science, Technology, and Medicine in Ancient Cultures series, de Gruyter).

Others awaiting publication in 2015 include "Discovery of the Zodiac Man in Cuneiform" (accepted by *Journal of Cuneiform Studies*); "Babylonian Drawings of Planetary Exaltations (Hypsomata)" (under review); and "The Zodiac Man Gazes on a Virtual Moon: Babylonian Calendar Texts and the Making of Medical Zodiology" (accepted in *Time, Astronomy, and Calendars* series, Brill). John is also invited to contribute to a volume on *Divination: Science Masked by Religion?* (ed. J. Fincke) and an *ARAM Periodical* issue on astrology, in addition to his essay on "Prognosis and Physician Reputation in Mesopotamian, Egyptian, and Hippocratic Medicine" (Science, Technology, and Medicine in Ancient Cultures series, de Gruyter) for the 2015 volume of the Babmed Project (Freie Universität Berlin).

In the past year, John presented the following conference papers: "Measurements in Babylonian Drawings of Planets and Star Constellations" (24th International Congress of History of Science, Technology and Medicine, Manchester, 22–28 July 2013); "Late Babylonian and Greco-Roman Medical Astrology" (Conference on the Circulation of Astronomical Knowledge in the Ancient World, Brown University, 12–13 April 2014); "Stranger Beasts in the Zodiac: Kalendartexte and the Astrological Table in BM 56605" (39th International Conference on Astrology in the Near East, University of Oxford, 23–24 April 2014); and "Air and the Physiology of Intelligence in the Hippocratics" (Symposium on Body and Metaphor in Ancient Medicine, Chicago, 1–3 May 2014). He gave a public lecture on "Astronomy and Medicine in Ancient Mesopotamia" for the program Adler After Dark: Terra Firma at the Adler Planetarium (Chicago, 15 May 2014). John is preparing to give a lecture on "The Pragmatics of Moon-Sign Charts in Antiquity and the Middle Ages" for a seminar on General Mathematical Practices in the Astral Sciences and Their Relation to / Contrast with Mathematical Sources by the Mathematical Sciences in the Ancient World (SAW) Project at the Université Paris Diderot (17 October 2014). For these conferences, he received grant assistance from Brown University and the European Research Council.

John continues to work with Prof. Eckart Frahm from Yale University on a digital project that aims to publish searchable cuneiform editions and translations of commentaries online.

INDIVIDUAL RESEARCH

He is responsible for commentaries on the Diagnostic Series Sa-gig, as well as the astrological omen series Enūma Anu Enlil.

Donald Whitcomb

This year began with teaching a seminar in Problems in Islamic Archaeology, though the few students available left the subject open. We settled on discussions on the origin of the mosque, which turned out to be very successful. The remainder of the quarter was devoted to organizing the fourth season at Khirbet al-Mafjar; this project requires extra care as we had invited Dr. Andrew Creekmore and his wife, Dr. Eleanor Moseman, to organize a remote-sensing survey over most of the site (see separate report). Even though this was a short (only eighteen days) and intense project, we found time for social activities: Ellie's birthday, visits to Jerusalem, and visits from Jerusalem by sixteen scholars and friends of the Albright Institute, and from Dr. Tawfiq Da'adli and his son, Walid.

A few days after my return to Chicago, I was on a plane to Paris, where I taught a course called Archaeology of Coptic and Islamic Egypt. This was part of the University of Chicago Study Abroad program. It was designed to be given in Cairo, but this was considered difficult, so we enjoyed the Chicago Center in Paris. The course would have included visits to Egyptian monuments and museums, but we happily substituted visits to the new Islamic galleries in the Louvre, which are quite amazing, and to the Institut du Monde Arabe. This latter museum is off the usual tourist path and, also newly re-installed, features wonderful exhibits of Egypt and the rest of the Middle East (not unlike a Parisian Oriental Institute, but with more Islamic objects).

The last news in my personal research for 2013–2014 was that plans for the new Qasr Hisham Museum at Khirbet al-Mafjar were underway, with agreement to have a panel testifying to the discovery and first excavations by Dimitri Baramki. I had visited his son, Constantine Hisham, in California the previous year and gained a real appreciation of his father as a person and scholar. He has since passed away and did not see the new panel dedicated to Dimitri Baramki in the new museum. Jack Green and I spent much of the summer and fall selecting objects, designing cases, and writing panel copy for the new museum. It was not until the end of our 2014 season at Mafjar that I learned the funds had been approved and, four months later, I represented the Oriental Institute at a grand opening on May 28 with the Minister of Culture, the mayor of Jericho, and the Director of USAID in attendance.



Hamdan Taha, Director of Antiquities (left), and Imad Doudeen, a mosaic specialist who has recreated a famous mosaic for the Qasr Hisham Museum

In the spring there was a reading course on the Persian Gulf and writing some concluding comments for the Sasanian conference of last year; it was a pleasure to return to Iranian archaeology, however briefly. In June there was the 9th International Congress on the Archaeology of the Ancient Near East, in which some fifty papers on Islamic topics were accepted. I offered our new results on the “Mosques of Mafjar.” A good number of these papers were to be given by Iranian scholars and students, but only a fraction were able to participate, leaving a frustration on the part of those of us who wish to learn of their activities and new discoveries. Indeed, concern for archaeology in the Middle East was reflected in a student-organized symposium in Chicago called Surveying the Field. This was a well-balanced and informative set of presentation on problems of looting and fieldwork. I was proud to offer a few comments on Palestine and the Mafjar experience.

Karen L. Wilson

Karen L. Wilson is pleased to report that *Nippur VI: The Inanna Temple* has been accepted for publication by the Oriental Institute and will appear in the Oriental Institute Publications series. This will be the final publication of the Oriental Institute excavation of the Inanna Temple at the site of Nippur during the late 1950s and early 1960s. The authors of the volume are Richard L. Zettler, Karen L. Wilson, Jean M. Evans, and Robert D. Biggs with contributions by R. C. Haines and Donald P. Hansen. The series editor is McGuire Gibson.

The Inanna Temple project has included the preparation of a digital catalog of finds linked with images of the objects plus the scanning of all negatives and drawings as well as the field records generated by work on the site. Michael K. Hannan, of Hannan Architecture and Planning, prepared final architectural plans for the Inanna Temple levels using AutoCAD, and Angela Altenhoffen produced final inked drawings of the sealings.

Karen also continued to serve as Kish Project coordinator and research associate at the Field Museum, preparing the final publication of the results of the Joint Field Museum and Oxford University Expedition to Kish in 1923–1933. She is extremely pleased that the Oriental Institute Publications Committee has agreed to publish the manuscript as a volume in the Oriental Institute Publications series and is currently at work on the volume, which will include papers presented at a symposium in November 2008 focusing on current research and up-dated excavations at the site. Chapters cover studies of the human remains, textual evidence, lithics, animal figurines, and stucco, as well as a catalog of the Field Museum holdings from Kish and Jamdat Nasr.

In September, Karen presented a gallery talk on the Oriental Institute excavations at Khorsabad and the history of the ancient capital of Dur-Sharrukin as part of the Department of Public Education and Outreach’s Luncheon Traveler Series. She also reviewed the volume *Scramble for the Past: A Story of Archaeology in the Ottoman Empire, 1753–1914*, edited by Zainab Bahrani, Zeynep Çelik, and Edhem Eldem (Istanbul: SALT, 2011) for the *Journal of Near Eastern Studies*.

Christopher Woods

Chris Woods devoted much of this past year to continuing work on several long-term projects, completing several publications, presenting papers at several international conferences, and implementing the Writing in Early Mesopotamia as well as the Signs of Writing projects.

As described in our project report (see separate report), the Writing in Early Mesopotamia project has focused on implementing a database that will facilitate the study of Sumerian writing by capturing and categorizing orthographic variation and allowing for complex queries. Our work has also centered upon collecting, inputting, and morphologically parsing texts for inclusion in the database. This year has also seen the launch of our Neubauer Collegium project, Signs of Writing: The Cultural, Social, and Linguistic Contexts of the World's First Writing Systems (in collaboration with Edward Shaughnessy, East Asian Languages and Civilizations). Signs of Writing is a three-year research project designed to investigate, from a comparative and interdisciplinary perspective, the cultural and social contexts and structural properties of the world's oldest writing. Particular emphasis is placed on the four primary writing systems from Mesopotamia, China, Egypt, and Mesoamerica, looking at the similarities and differences in the archaeological and paleographic records across regions and the psycho-linguistic processes by which humans first made language visible. The first of our three annual conferences will take place this November 8–9; a second conference will take place in China on June 25–30, 2015, and will be hosted jointly by the Chicago Center in Beijing and Fudan University in Shanghai. Organized broadly around the linguistic, social, and cultural contexts of early writing, the conferences will bring together specialists in various early writing systems and cover a range of topics, including the origins and structures of writing systems, the relationship between speech and writing, reading and cognition, the adaptation of writing systems and bilingualism, scribal transmission and education, literacy, the materiality and archaeological contexts of writing, and the rise of written genres.

Chris gave keynote addresses at the annual meeting of the British Association for Near Eastern Archaeology at the University of Reading, speaking on “New Light on an Administrative Device from the Dawn of Writing in the Ancient Near East” in January, and at the Ancient Egyptian Biographies: Forms, Contexts, and Functions conference at the University of Basel in May, presenting on “Self-Representation in Mesopotamia: The Literary Evidence.” In November, Chris spoke on “Evidence for Economic Forecasting in the Earliest Texts from Mesopotamia” at the Approaches to Textual Transmission in the Cuneiform World symposium at Johns Hopkins University. He also presented papers at the Women's Athletic Club of Chicago, the University of Chicago Divinity School, and gave a Harper Lecture on Gilgamesh in Tempe, Arizona. Chris's article “Grammar and Context: Enki & Ninhursag ll. 1–3 and a Rare Sumerian Construction” appeared, and, finally, the Festschrift in honor of our colleague Matthew Stolper — *Extraction and Control* — was published this year. Substantial progress has been made this year on another overdue, long-term project, *Materials for the Sumerian Lexicon*, volume 18, which is devoted to the lexical series Igituh, Idu, Lanu, and the Group Vocabularies; the volume should be completed this year. Chris continues to edit the *Journal of Near Eastern Studies* and to oversee the Oriental Institute's Post-doctoral Scholars program, as well as to chair the search committee to rebuild our Assyriology program with three new appointments.

RESEARCH SUPPORT

COMPUTER LABORATORY

Paul D. Ruffin

As I enter my second year as the new IT support specialist, I must say I am happy with the progress that has been made to enhancing various technologies for the Oriental Institute. This past year consisted of three main projects: (1) improving hardware and software management solutions; (2) managing the Oriental Institute's website re-design; (3) working with staff and KE on finishing Phase Two of the Integrated Database.

Projects

The Oriental Institute Website

We are proud to announce our new website redesign for the Oriental Institute. For the past year, we have worked with University of Chicago Web Services in creating a brand new re-design for our website, which you will notice now is more dynamic and easier to navigate. The new website has a program called Drupal, which allows us to update the web pages ourselves without the assistance of Web Services. Because of this new program, you will notice the website will be updated more often than before. Special thanks to Michael Girgis, Bill Mulcahy, Sarah Schmidt, Brenda Janish, and all those on the Web Services team who helped make this possible.

Drupal Content Management System

Drupal is the new software that is used to create the content for our new website re-design. This content management system is a free, open-source web-development platform for online content and user communities. Because Drupal is open-sourced, the platform can be adapted to virtually any visual design as long as programmers work on editing. Drupal has been used for millions of websites, such as whitehouse.gov and the University of Chicago's uchicago.edu. The power of Drupal lies within its ability for the user to add content to the website without web coding/programming knowledge. The interface is user-friendly and you can reach out beyond your site to give a presence on social media and other venues. Drupal's built-in features also give search engines improved web impact.

Freshdesk Software

The Oriental Institute has migrated to a new and improved ticketing system called Freshdesk. This program is the second installment of ticketing systems for the Oriental Institute. Freshdesk is an IT support and content management solution that provides management for users' requests throughout the Oriental Institute. The system allows for increased response times and productivity for IT Support. I will be able to keep records of previous incidents

COMPUTER LABORATORY

and problems that Oriental Institute faculty and staff have had with their computers. This is important information because it allows me to track an ongoing problem and see if another solution, such as hardware replacement, will be required to fix the issue.

Integrated Database

For the past year, I have been working with Foy Scalf and Austin Kramer on adding more photo records to our database. This year we focused on training more users in the Oriental Institute on how to use the KE EMu Integrated Database (IDB). Our goal is to provide public access to information about our research and object-based collections that are managed by the Oriental Institute. So far I have added new users to the registry, provided access to new assistants, and have worked extensively on learning how to manage permissions for users and new assistants. We are working on the multistage project implementing an image archive into the IDB. I will be working with the web development of the Integrated Database, checking the web statistics to see what can be done to increase the efficiency of IDB online. We are working on re-designing the theme of our current database to match our new website. We have agreed that Phase Two will involve working with both IT Services and KE staff to gain knowledge of a transfer session. We worked on implementing over 80,000 records from the Oriental Institute Photo Archives (45,000+ image files) and records for Museum Conservation. Museum Conservation records will not be going online at this time. Photo Archives records, along with their image files, will be included in web services development for Phases 2.2–2.3. Phase 2.4 will be addressed manually by Institute staff. We would like to return to the features of Phase 2.5 for further development at a later date.

Computer Hardware | Software Updates

This year our main focus was on managing our servers in a more efficient way. A new Dell Server computer has been purchased that will run all of our old servers simultaneously. This is possible due to new technology known as virtualization. Virtualization enables today's X86 computers to run multiple operating systems and applications, making the infrastructure simpler and more efficient. Applications get deployed faster, performance and availability increase, and operations become automated, resulting in IT that's easier to implement and less costly to own and manage. Virtualization is the most effective way to reduce IT expenses while boosting efficiency and agility for small and midsize environments.

For further information concerning the above-mentioned research projects and other electronic resources in general, refer to the News page on the Oriental Institute's website, at <http://oi.uchicago.edu/news>.

INTEGRATED DATABASE PROJECT


Foy Scalf

Introduction


During the 2013–2014 year, the Integrated Database Project (IDB) completed its second major phase of transformative development. Through this project the Oriental Institute has initiated a secure and sustainable platform for data curatorship of all internal digital information

SEARCH OUR COLLECTIONS


Welcome to the online home of the Oriental Institute's Integrated Database. This is an on-going project that aims to provide public access to information about the diverse research and object-based collections managed and cared for by the Oriental Institute.




Museum Collection
Explore over two hundred and seven thousand registered objects in the permanent collection and special exhibitions galleries.



Research Archives
Browse over four hundred and fifty thousand entries that represent complete analytics (volumes, manuscripts, essays, articles, and book reviews) for all cataloged Research Archives materials.



Photographic Archives
Search for high resolution images related to our collections, publications, archaeological expeditions, and historical milestones from the Institute's Photographic Archives collection.





Museum Conservation
Specialized training provides conservators with the knowledge to care for our collections. This includes conserving unstable objects, preparing them for display and monitoring their environment.

Search All

[Search Tips and Instructions](#)

Thank you to the following donors for their generous support.

Aimee Drolet

How can we make this a more valuable resource? Let us know what content and features you would like to see.

Browse Galleries

Museum Gallery:

Object Type/Description:

Materials:

Place Name:

Culture:

Dating:

Figure 1. The online collection search (oi-idb.uchicago.edu) for Museum Registration, Research Archives, Photographic Archives, and Museum Conservation records

INTEGRATED DATABASE

and associated metadata related to the departments of the Institute. In addition, a steady effort has made vast amounts of previously unknown information available to the public for the first time in the history of the Oriental Institute, thereby filling a major gap in the study of objects from the ancient Near East. Online access to the vast collections here, in concert with the digitization efforts of museums across the globe, will provide the foundation for a new generation of discoveries about the cultures of the ancient Near East.

It is important to emphasize that the IDB project consists of two separate, but related infrastructures serving two distinct goals. Internally, the database software provides a robust and stable platform for the long-term management of our digital assets according to international standards. On- and off-site backup procedures are in place to ensure the security and viability of these data. The current system offers a sustainable solution for securing, recording, storing, searching, and sorting digital information for the foreseeable future. Externally, data from the EMu system is being imported into a Solr database core on a separate server which runs the online collections search (<http://oi-idb.uchicago.edu>), publicly accessible through an internet browser. Researchers, faculty, staff, students, and interested members of the public will interact with this information primarily through this public portal. Additionally, future projects currently under discussion may include the integration of several institutions' ancient Near East collections through a single web portal.

The digital assets of Museum Registration and Research Archives were migrated into our EMu software platform during Phase One as outlined in last year's *Annual Report*. In Phase Two, funded by a grant from the Institute of Museum and Library Services, Photo Archives and Museum Conservation were scheduled for migration. With the help of project manager Angela Spinazze, teams from both departments (Mónica Vélez, Laura D'Alessandro, Alison Whyte, and Simona Cristanetti) spent many hours preparing their data, reviewing software templates, designing new modules for data analysis, and providing feedback to KE software engineers. After many months of planning and preparation, the data migration was completed at the beginning of 2014. In addition to the 750,000 records belonging to Museum Registration and Research Archives, EMu is now a repository for more than 90,000 Photographic Archives records and more than 10,000 Museum Conservation records. With all this information in one location, we can now begin the process of integrating data in extremely useful ways. Integrating data is necessarily a collaborative endeavor involving many individuals within the departments of the Oriental Institute. The remainder of this report will focus on progress related specifically to the Integrated Database divided by department. Further details may be found in the *Annual Report* contributions of those departments.

Museum Registration

Museum Registration currently has more than 249,000 records in EMu and more than 218,000 of those records are available through the online collections search. More than 4,800 registration cards have been scanned and added to the database for individual objects. The scans of these registration cards have been made available to internal researchers only. In EMu, more than 7,500 objects have images attached to them. With the addition of image files to the internal database system, we can now display these images online as part of the online collections search. When searching, users will now see thumbnail images (200 × 200 pixels) in their search results and results can be filtered via a "Multimedia" facet to show only those records with images to display (fig. 2). There is also a search option to search only items with

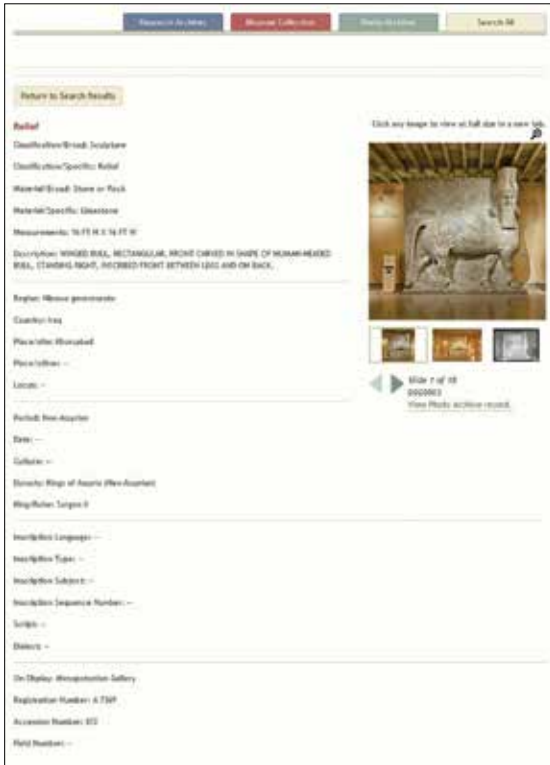


Figure 2. Results list after a search for “Egypt” and the filtering of records via the “Multimedia” and “On Display” facets under the Museum Collection tab



Figure 3. Details of the record for OIM A7369 showing the image rotator and link to the Photo Archives record under the Museum Collection tab

multimedia. Clicking on any individual record or image takes the user to a details page that provides further information as well as an image rotator displaying all images associated with that museum object and a larger size (300 × 300 pixels) of each individual image. Clicking on the images will open a new, larger image (1920 × 1200 pixels) in an additional tab within the user’s web browser. 3,000 records for museum objects display photos of those objects. Under the image rotator, users can navigate to the Photo Archives record for an image by clicking on the “View Photo Archive record” hyperlink below each image.

Research Archives

More than 478,000 bibliographic records from the Research Archives are available in EMU and through the online collections search. More than 3,000 of those records have associated PDF documents that can be downloaded directly from the website and there are currently more than 5,000 PDF documents in EMU for internal use. With the help of student interns and volunteers, the Research Archives has begun compiling data on the biographies of prominent individuals in ancient Near East studies. These records include dates and places of birth, dates and places of death, dates and places of academic degrees, academic advisors, employment history, specialties, short biographies, and portraits. As this information is amassed, it will allow researchers to conduct research into the institutional history of scholars and institu-

Research Archives | Museum Collection | Photo Archives | Search All

Relevance | 1 - 50 of 450 | Page 1 | 50 results per page

Filter by: Documents

Add results 1 - 50 to citations

#	Result	Refine Results
1	<p>Archaic Administrative Text (List of Rations): Catalog No. 52 by Marzahn, Joachim (Author); Wagner, Robert (Translator)</p> <p>Published in: Visible Language: Inventions of Writing in the Ancient Middle East and Beyond. by Woods, Christopher (Editor); Teeter, Emily (Co-Editor); Emberling, Geoff (Co-Editor)</p> <p>Oriental Institute Museum Publications 32:-- Chicago: Oriental Institute of the University of Chicago, 2010, 78. Series Stacks S/OIMP/32 Online Open Access Media: 1 PDF</p>	<p>Format Series Volume Section (435) Series Volume (15)</p> <p>Authors Teeter, Emily (95) Emberling, Geoff (28) Bailleul-LeSuer, Rozenn (27) Herrmann, Virginia R. (20) MacArthur, Elise (20) More</p> <p>Publication Year This year (53) Last 10 years (449) Past 50 years (450)</p> <p>Journals No facets</p> <p>Series No facets</p> <p>Publisher Oriental Institute of the University of Chicago (450)</p> <p>Multimedia <input checked="" type="checkbox"/> Documents (450)</p>
2	<p>Fowling in the Marshes and Aviculture by Bailleul-LeSuer, Rozenn (Author)</p> <p>Published in: Between Heaven and Earth: Birds in Ancient Egypt. by Bailleul-LeSuer, Rozenn (Editor); Ressman, Anna R. (Photographer)</p> <p>Oriental Institute Museum Publications 35:-- Chicago: Oriental Institute of the University of Chicago, 2012, 147. Series Stacks S/OIMP/35 Online Open Access Media: 1 PDF</p>	
3	<p>Hieratic by Bandy, Kathryn E. (Author)</p> <p>Published in: Visible Language: Inventions of Writing in the Ancient Middle East and Beyond. by Woods, Christopher (Editor); Teeter, Emily (Co-Editor); Emberling, Geoff (Co-Editor)</p> <p>Oriental Institute Museum Publications 32:-- Chicago: Oriental Institute of the University of Chicago, 2010, 159-160. Series Stacks S/OIMP/32 Online Open Access Media: 1 PDF</p>	
4	<p>Bibliography for Cuneiform Essays</p> <p>Published in: Visible Language: Inventions of Writing in the Ancient Middle East and Beyond. by Woods, Christopher (Editor); Teeter, Emily (Co-Editor); Emberling, Geoff (Co-Editor)</p> <p>Oriental Institute Museum Publications 32:--</p>	

Figure 4. Results list after the filtering of records via the “Multimedia” facet under the Research Archives tab, showing all records with attached PDF documents available for download

tions within ancient Near East studies. The integrated nature of our database will further stimulate connections between these parties previously unknown as the records with this biographical information are linked throughout the system to bibliographic items, museum accession records, research visits, as well as lectures and events. Currently, these biographical data are not available through the online collections search, but it is hoped that we will be able to develop a display for these data over the next two years.

Photographic Archives

The Photographic Archives data migrated over the past year into EMu derived from a database initially designed in FileMaker by Tom James and further managed by Mónica Vélez. The initial migration consisted of more than 90,000 records consisting of born digital museum photography as well as scans of print photographs and negatives. These records have since been supplemented with more than 25,000 records from Museum Photography and photography from visiting researchers, totaling more than 115,000 multimedia records in

The screenshot shows the EMu database search interface. At the top, there are tabs for 'Research Archives', 'Museum Collection', 'Photo Archives', and 'Search All'. Below the tabs, there are search filters: 'Relevance', '1 - 18 of 18', 'Page 1', and '50 results per page'. A 'Filter by:' section shows 'Images' selected. The main results area displays three entries:

#	Result	Refine Results
1	<p>P021850</p> <p>Photo Number(s): 021850 Negative Number(s): -- Description: Location: Oriental Institute A7369 Provenience: Iraq: Khorsabad Details: Dr. Watson Boyes and a group of students in front of the winged bull.</p>	<p>Registration Number A7369 (18)</p> <p>Collector No facets</p>
2	<p>D020003</p> <p>Photo Number(s): -- Negative Number(s): -- Description: D019175 OIM A7369 Oriental Institute Museum Photography</p>	<p>Photographer Ressman, Anna R. (2)</p> <p>Other People No facets</p>
3	<p>D020004</p> <p>Photo Number(s): -- Negative Number(s): -- Description: D019176 OIM A7369 Oriental Institute Museum Photography</p>	<p>Multimedia <input checked="" type="checkbox"/> Images (18)</p>

Figure 5. Results list after searching for “A7369” and filtering of records via the “Multimedia” facet under the Photo Archives tab

INTEGRATED DATABASE

the EMu database. Those internal records are being evaluated and associated with object records wherever possible. During this process, the images are marked for publication online. There are currently more than 35,770 Photo Archives records in the online collection search and 27,000 of these records have associated image files. The records cover a wide assortment of material, including scans of archival photos and professional museum photography. Scans of archival images are especially interesting as many show monuments and sites that may no longer exist or have been damaged by time. It should be emphasized that the archival images also cover material beyond the Oriental Institute collection, showing sites, scholars, and objects from across the globe. For images of Oriental Institute Museum objects, users can navigate from the Photo Archives record to the Museum Registration record by clicking on the hyperlinked registration number from the details view. Over the next year, volunteers and Museum staff will continue the work toward cleaning and integrating the Photo Archives records while additional digital images from the Museum Archives, Museum Registration, and Museum Photography are incorporated.

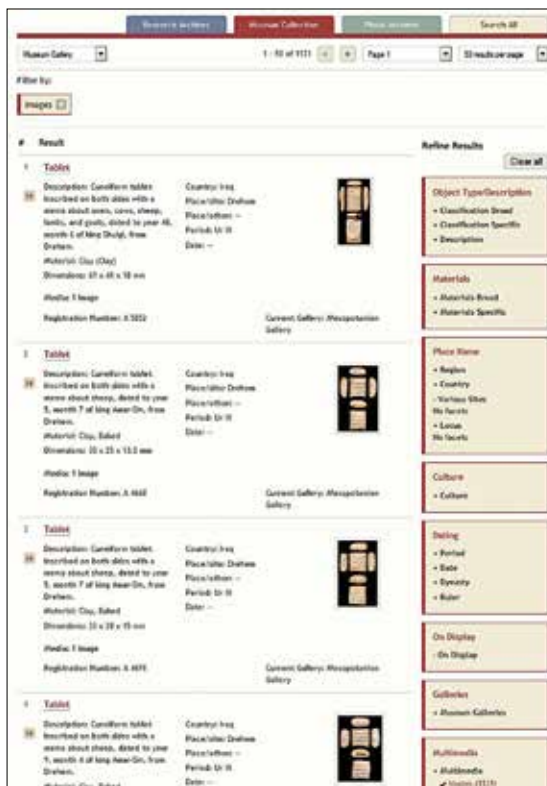


Figure 6. Results list showing records for cuneiform tablets and filtering of records via the “Multimedia” facet under the Photo Archives tab

Tablet Room

Data related to the cuneiform tablet collection is currently being reviewed for online publication by Paul Gauthier for the Tablet Room, curated by Walter Farber and assisted by Andrew Dix. Information in the EMu database is being updated and standardized based on recent printed research prior to its appearance in the online collections search. More than 3,700 records for cuneiform tablets have been edited and almost 1,400 have been published online. This is in addition to the 3,900 images of tablets added to the database from scans prepared and provided by the Cuneiform Digital Library Initiative project. For the use of internal researchers, the registration cards of the tablet room are being scanned and added to EMu by a team of volunteers. 3,500 Tablet Room registration cards have already been scanned and included in the system. Finally, data from a FileMaker database designed by Jon Tenney and curated by Andrew Dix has been moved into EMu so that the Tablet Room is now fully integrated into EMu. Over the next few years, Tablet Room staff and visiting scholars will continue to refine our museum data regarding the cuneiform tablet collection as we look toward the best solutions for also including editions of the cuneiform texts themselves.

Phase Three

The above report demonstrates the exponential growth experience within the Integrated Database Project over the past year. It is already difficult to imagine that a few years ago the Oriental Institute had no form of collection search online beyond a rudimentary library catalog and a FileMaker database. Now, we have nearly a million records available within a single search engine and interconnections among the data. As we look toward the future, we anticipate further expansion as more departments migrate their data. This fall the data from the CAMEL lab map database is scheduled for migration. Simultaneously, training has begun for the Museum Archives staff to begin the enormous task of entering archival data into EMu. Over the next two years, we hope to be able to expand the collections search website to include these data silos, with a geo-spatial searching platform for the CAMEL lab data and the production of industry standard finding aids with inter-silo joins to other departments for the Museum Archives. The scale of the project is daunting, but we are building a large team of dedicated staff, faculty, researchers, students, and volunteers to keep the project moving forward efficiently. Our vision for this project is grand. Building upon the last four years of success, we will continue working toward building a series of unique research tools that will change the face of ancient Near East scholarship.

Acknowledgments

The Integrated Database Project involves every department within the Oriental Institute and is expanding every day. A project of this scale and complexity could not be accomplished without the help of many dedicated individuals working countless hours toward our goals. We'd like to take this opportunity to thank them for making this project possible. The Institute of Museum and Library Science has provided generous funding through two grant cycles over the last four years to get the project off the ground. Further development on the project would have been impossible without the gracious donations of Aimee Drolet Rossi. Ongoing support from the Oriental Institute and the University of Chicago have allowed a stable foundation for year-to-year planning. Scott Branting, John Sanders, Jack Green, and Angela Spinazze assisted with writing the grant request for Phase Two as well as Phase Three. In Museum Registration, Helen McDonald and Susan Allison have worked tirelessly in managing EMu within their department. Under their supervision, Andrew MacIver began a project to digitize the old registration cards and Kirsten Forsberg began the immense task of entering bibliographic references for objects. Foy Scalf has worked tirelessly in the Research Archives expanding the content of the database along with the personnel working on it. Taylor Copen, Young Bok Kim, Andrea Brown, Laura Krenz, Roberta Schaffner, Andrea Dudek, Ray Broms, Art Thorson, Paula Pergament, Stephen Adamcik, and Su Hyeon Kang all contributed to cataloging, data cleaning, and digitizing for the Research Archives. Foy also trained and supervised the following volunteers who worked on data entry for Photo Archives and the Tablet Room: Betty Bush, Rebecca Binkley, David Henson, David Zhao, Gabriele Correa da Silva, Laura Alagna, Amanda el-Khoury, and Malvika Jolly. Mónica Vélez and Austin Kramer worked diligently toward completing the Photo Archives data migration and post-migration clean-up in addition to supervising Michael Woodburn, Andrew Carr, and Joshua Donovan in assisting with those tasks. Work on cuneiform tablet data was performed by Andrew Dix and Paul Gauthier. Two focus groups were organized by Catharine Kenyon and Angela Spinazze to review Phase Two developments. The Achemenet Project, through Tytus Mikołajczak with

the help of Austin Kramer, has begun to update data on the Persian collection. Preparation for Phase Three has relied on the work of the CAMEL lab staff including Scott Branting, Emily Hammer, Susan Penacho, and Elise MacArthur. Development of the online search portal and tools is owed to the Web Services team of the University of Chicago: Bill Mulcahy, Rose Pezuti Dyer, Michael Girgis, and Sarah Schmidt. Paul Ruffin has been very helpful with a range of IT support and other technical advice.

OCHRE DATA SERVICE

Miller C. Prosser

We all like to think we are going places, but the OCHRE Data Service (ODS) may have taken that notion too literally this year. In addition to participating as exhibitors at the 2014 Archaeological Institute of America annual meeting in Chicago, Sandra Schloen and Miller Prosser presented at conferences, workshops, training sessions, and meetings in Toronto, Paris, Basel, Durham (U.K.), and Tübingen. A list of presentations delivered this year can be found at ochre.uchicago.edu/page/past-events.

The OCHRE Data Service supports Oriental Institute research projects using the Online Cultural and Historical Research Environment (OCHRE). For the Persepolis Fortification Archive Project, we completed a reorganization and migration of more than three million images. The electronic Chicago Hittite Dictionary is currently being enhanced to track edits and additions to project data so that all significant updates to a given volume can be released together as a new edition. This type of electronic versioning will allow the online volumes to be updated as editions similar to the publication of new printed editions. For the electronic Demotic Dictionary Project, strides were made in implementing font conversions for the many and complex existing dictionary documents. Once converted to the Unicode standard, these documents will become the basis for the electronic edition of the Chicago Demotic Dictionary. For the Ras Shamra Tablet Inventory, work continues integrating textual, photographic, prosopographical, and lexicographic data for the alphabetic Ugaritic and syllabic Akkadian tablets from Ras Shamra-Ugarit. ODS staff and student workers devoted a great deal of time digitizing legacy data for the Neubauer Expedition to Zincirli, including entering data from locus description sheets and creating GIS shapefiles for loci.

In addition to projects at the Oriental Institute, OCHRE Data Service staff worked with a number of other research projects. The CRANE project is starting its third year (www.crane.utoronto.ca). CRANE members from the University of Durham and Université Laval have added their data to the expanding set of archaeological data from the Orontes watershed region. Also, the expedition to Ashkelon continues to push OCHRE in new directions, one of which is the ability to use OCHRE without an Internet connection. This new functionality allows archaeologists to take OCHRE with them right into the excavation square and use it offline. A quick synchronization process uploads all data collected and edited in the field.

This year, OCHRE Data Service staff developed some powerful new wizards to help our philology projects analyze texts more efficiently. One wizard provides a simple workflow for parsing words and populating a project lexicon. A second wizard allows users to easily

identify and describe geographic places in texts, providing the basis for a project gazetteer. A third wizard helps users identify personal names and describe people mentioned in the texts, laying the foundation for prosopographical study.

This was also a year of reaching out in new directions and making new connections. ODS partnered with the Federated Archaeological Information Management Systems Project, an international collaboration led by the University of New South Wales. We also piloted a project with Martin Mueller, Northwestern University professor emeritus of English and Classics, to present the works of Homer in OCHRE. Closer to home, ODS began working more closely with University of Chicago colleagues, such as the Research Computer Center (rcc.uchicago.edu), the Computation Institute (www.ci.uchicago.edu), and Argonne National Laboratory (www.anl.gov).

Read more about ODS, OCHRE, and our activities at ochre.uchicago.edu.

PUBLICATIONS OFFICE

Thomas G. Urban

The full-time staff of the Publications Office remains Leslie Schramer (tenth year) and Thomas G. Urban (twenty-sixth year). Part-time staff includes Assistant Editor Rebecca Cain (fifth year), Editorial Assistant Brian Keenan (May 2013–June 2014), Rowe-Clark Academy Summer Interns Muhammad Bah and Jalissa Barnslater-Hauck, and volunteer Ken Petchenik.

Production was brisk, and fifteen titles were published and five are in editing. Sales of volumes in the Oriental Institute Seminar series are steady, despite being among the most downloaded PDFs offered by the Institute. The Chicago Demotic Dictionary completed the upload of all its initial letter files and work has begun to create the final files for both a printed book and interactive online database, much like OCHRE is making for the *eCHD*.

Sales

Casemate Academic and Oxbow Books handle the bulk of book distribution for the Oriental Institute. Although a limited number of titles are available for in-house sales in the Suq museum gift shop, please note that all external orders for Institute publications should be addressed to: Casemate Academic, P.O. Box 511 (20 Main Street), Oakville, CT 06779; telephone toll free: 1-800-791-9354; fax: 1-860-945-9468; e-mail: info@casemateacademic.com; website: www.oxbowbooks.com/dbbc

Information related to the sales and distribution of Oriental Institute titles may be obtained via e-mail: oi-publications@uchicago.edu

The series Oriental Institute Seminars (OIS) continues to be the most popular seller of Oriental Institute titles: Since 2004, 4,770 copies have been sold and the titles are consistently the most downloaded from the Oriental Institute website. The first printruns of OIS 2–4 sold out so quickly these volumes were reprinted.

PUBLICATIONS OFFICE

Lifetime OIS Sales (2004–2014)

OIS 1	<i>Changing Social Identity with the Spread of Islam</i> . Donald Whitcomb, ed. 2004	357
OIS 2	<i>Margins of Writing, Origins of Cultures</i> . Seth Sanders, ed. 2006	642
OIS 3	<i>Performing Death</i> . Nicola Laneri, ed. 2007	684
OIS 4	<i>Religion and Power</i> . Nicole Brisch, ed. 2008	725
OIS 5	<i>Nomads, Tribes, and the State in the Ancient Near East</i> . Jeffrey Szuchman, ed. 2009	759
OIS 6	<i>Divination and Interpretation of Signs in the Ancient World</i> . Amar Annus, ed. 2010	709
OIS 7	<i>Slaves and Households in the Near East</i> . Laura Culbertson, ed. 2011	514
OIS 8	<i>Iconoclasm and Text Destruction in the Ancient Near East</i> . Natalie May, ed. 2012	200
OIS 9	<i>Heaven on Earth</i> . Deena Ragavan, ed. 2013	<u>150</u>
		Total 4,740

Electronic Publications

In October 2013, nine years after the digital initiative was established, the scanning of older titles was completed — all titles published by the Oriental Institute since its inception have been uploaded to the Oriental Institute website as PDF files. In April 2014, we transferred 768 titles, in 130,990 files, totaling 646.08 gigabytes of data to the University of Chicago Library Digital Repository for safe storage. Our intent is to transfer new materials to the Repository on a quarterly basis. In addition to Library storage, we keep two copies of the data in the Publications Office and one copy on a secure off-site server.

Most of the older titles were scanned by Northern MicroGraphics (NMT Corporation, <http://normicro.com>), located in LaCrosse, Wisconsin.

To access the complete catalog of Oriental Institute titles, which includes *Annual Reports*, *News & Notes*, and *Chicago House Bulletins*, please visit:

<http://oi.uchicago.edu/research/oriental-institute-publications-office>

The homepage of the Chicago Demotic Dictionary (CDD) was visited 106,495 times since 2004, and during these visits, 154,200 copies of the thirty CDD letter PDFs have been downloaded:

Prologue	14,946	N	6,899	K	5,904
ʒ	14,403	R	5,593	G	6,278
ʾI	2,976	L	5,499	T	1,167
ʿ	7,617	H	5,126	Ṭ	4,691
Y	5,864	Ḥ	4,439	Ḍ	6,863
W	4,275	Ḫ	4,383	Problems	7,319
B	6,904	Ḫ	5,195	Problems 2	3,692
P	3,389	S	388	Days	154
F	5,391	Š	3,875	Months	134
M	4,457	Q	6,233	<u>Numbers</u>	<u>146</u>
				Total	154,200

Volumes Published (In Print and Online)

- 1–4. *The Demotic Dictionary of the Oriental Institute of the University of Chicago*, Volumes S, Days, Months, and Numbers. Edited by Janet H. Johnson. CDD S, CDD Days, CDD Months, and CDD Numbers (online only)

5. *Early Megiddo on the East Slope (The “Megiddo Stages”): A Report on the Early Occupation of the East Slope of Megiddo; Results of the Oriental Institute’s Excavations, 1925–1933*. Eliot Braun, with contributions by David Ilan, Ofer Marder, Yael Braun, and Sariel Shalev. OIP 139
6. *The Oriental Institute Annual Report 2012–2013*. Edited by Gil J. Stein. AR 2012–2013
7. *Chicago House Bulletin 24*. Edited by W. Raymond Johnson. CHB 24
8. *Publications of the Oriental Institute, 1906–2014: Exploring the History and Civilizations of the Near East*. Edited by Thomas G. Urban and Leslie Schramer. Compiled by Zuhal Kuru Sharp. Second revised edition. OIC 26
9. *In Remembrance of Me: Feasting with the Dead in the Ancient Middle East*. Edited by Virginia Rimmer Herrmann and J. David Schloen. OIMP 37
10. *Extraction and Control: Studies in Honor of Matthew W. Stolper*. Edited by Michael Kozuh, Wouter Henkelman, Charles E. Jones, and Christopher Woods. SAOC 68
11. *Barda Balka*. Bruce Howe†, with contribution by Yorke Rowan. OIC 31
- 12–15. *Oriental Institute News & Notes*. Edited by Amy Weber. NN 219–222

Volumes in Preparation

1. *Ancient Settlement Patterns and Cultures in the Ram Hormuz Plain, Southwestern Iran: Excavations at Tall-e Geser and Regional Survey in the Ram Hormuz Area*. Abbas Alizadeh, with contributions by Loghman Ahmadzadeh and Mehdi Omidfar and appendices by John R. Alden, Leah Minc, Jacques Connan, John Zumberge, and Kendra Imbus. OIP 140
2. *Great Hypostyle Hall in the Temple of Amun at Karnak, Volume 2. Translation and Commentary*. Peter J. Brand and William J. Murnane†
3. *Bir Umm Fawakhir 3: Excavations 1999–2001*. Carol Meyer, with contributions by Lisa Heidorn, Salima Ikram, Richard Jaeschke, Thomas Roby, and Wendy Smith. OIP 141
4. *Theban Symposium: Creativity and Innovation in the Reign of Hatshepsut*. Edited by José M. Galán, Betsy M. Bryan, and Peter F. Dorman. SAOC 69
5. *Nimrud: A City of Golden Treasures: The Queens’ Tombs*. Muzahim Mahmoud Hussein, translated by Mark Altawheel, edited by McGuire Gibson. OIP 142

Volumes in Backlog

1. *Where Kingship Descended from Heaven: New Light on Ancient Kish*. Karen L. Wilson
2. *Ancient Mesopotamia: Highlights from the Collections of the Oriental Institute*. Karen L. Wilson
3. *The Monumental Complex of King Ahmose at Abydos, Volume 1: The Pyramid Temple of Ahmose and Its Environs: Architecture and Decoration*. Stephen P. Harvey

RESEARCH ARCHIVES

Foy Scalf

Introduction


To a scholar visiting the Research Archives after a long absence, the library can feel like a second home, seemingly unchanged since last sight. The series volumes still ring the Elizabeth Morse Genius reading room and the journals remain on the minstrel's gallery. This familiarity allows for easy and efficient use of research time in our stacks, but it also disguises the fundamental changes that have taken place in the Research Archives over the last five years. The collections space in the new wing monograph stacks has been doubled through the installation of compact storage; journal space has increased 30 percent through the reorganization of shelves in the map room and storage room in the minstrel's gallery; the Gregory Areshian collection was accommodated by moving our staff into a single office; our library catalog data was migrated to the EMu software system; and an entirely new online web front end was designed and launched for public access to our catalog data; and just this spring the Research Archives received a new homepage through the Oriental Institute website redesign project. These developments will continue to have a positive effect on our collection management for decades to come.

Preparing the *Annual Report* every July provides an opportunity to reflect on not just the past year's successes, but also on our mission, what we are doing to accomplish that mission, and how to target for improvement. The mission of the Research Archives is to acquire, care for, and provide to patrons a collection of library resources serving the research needs of scholars in ancient Near East studies at the Oriental Institute and around the world. Such an endeavor is long-term, designed for generations to come. Many of the books in our collection contain the *scholia* of past scholars and students today regularly conduct research with volumes that once belonged to James Henry Breasted, Wilhelm Spiegelberg, Erica Reiner, and others. In caring for the collection, space has always been a premium and we have been quite successful at expanding our stacks both through large-scale infrastructure projects such as compact storage installation, but also through simple reorganization with very little budgetary impact. Patron services remains excellent, from in-house reference work to providing digital copies of material to patrons electronically. Two areas in which the Research Archives could improve from investment are information technology and preservation.

Technology within the Research Archives is an expensive necessity. As every dollar spent toward new computers or digital imaging equipment directly affects the number of books we purchase, we have remained frugal with such expenditures, replacing aging computers and Xerox scanners once every five to seven years. Preservation is an ever pressing issue. As a result of massive budget cuts in 1994, no material in the collection was sent for binding until the fall of 2007. Since then, we have dedicated a modest portion of the yearly budget to binding paperback volumes, rebinding where appropriate, and providing archival storage boxes for aging material. Research Archives staff and intern students have also begun to collaborate with the Special Collections department of Regenstein Library for help and training in order to provide the appropriate care for our books. The overwhelming majority of the collection consists of works published in the twentieth century. However, we have material as old as a 1548 edition of *Titi Livii Patavini Latinae Historiae Principis* (fig. 2), just a century

Research Archives - Library

Home / Research / Research Archives - Library




Search Our Collections

- Research Archives - Library
- Search Our Collections
- Hours, Access, & Contact
- Adopt-a-Book Campaign
- Online Resources

Publications

- Research Projects
- Integrated Database Project
- Academic Degree Programs
- Individual Scholarship
- Symposia
- CAMEL
- OCHRE Data Service
- Computer Laboratory
- Abtu



Research Archives (2009)

The Research Archives of the Oriental Institute is a non-circulating collection of books and other publications relating to the ancient Near East for the reference and research of Oriental Institute faculty, staff, students and members. Its materials span the history of the ancient Near East from prehistoric times through the Late Antique period and reflect the interests and work of its users and benefactors.


The Research Archives is housed in the former quarters of the old Oriental Institute Library. The Reading Room, which was described by James Henry Breasted as "the most beautiful room in the building," retains most of the original decorative elements and furnishings from when the Oriental Institute was completed in 1931. Of particular note are the "Lotus" Window in the south wall, with its Egyptian-style design, the wood carvings on the north wall, and the elaborately painted ceiling. Overlooking the Reading Room is the Minstrel's Gallery, which now houses the periodicals collection. In recognition of generous support for the Oriental Institute Legacy Campaign, the Research Archives Reading Room is named the Elizabeth Morse Genius Reading Room.

The Oriental Institute has made a substantial commitment to complete the holdings of the Research Archives in the fields represented by the scholarship of its faculty and staff. To this end, individual volumes and complete runs have been (and continue to be) purchased to complete our holdings in serial and periodical publications. With holdings of over 60,000 volumes, the Research Archives is a unique resource for the study of the Ancient Near East.

Further information can be found in the [Brief History of the Research Archives](#) as well as in the [Introduction & Guide](#).


Articles

- 2013 Provisioning the Temple of the Muses: Expanding Capacity in the Research Archives through Compact Storage Installation
- 2009 A Feast of Knowledge: Libraries and Archives, Past and Present
- 2008 Recovering the Lost Story of the Rise of Man: The Research Archives of the Oriental Institute




Introduction & Guide to the Research Archives

View a brief history of the Research Archives and its policies. Download the Introduction and Guide >



Search Our Collections

Browse over four hundred and fifty thousand entries that represent complete analyses for all cataloged Research Archives materials. Search Our Collections >



Featured Of Research

Professor Walter Farber has published a new, comprehensive edition of the Lamaštu incantation, Lamaštu: An Edition of the Canonical Series of Lamaštu Incantations >

Figure 1. The new homepage of the Research Archives



Figure 2. 1548 edition of *Titi Livii Patavini Latinae Historiae Principis*

after the invention of the printing press. Such rare books require special attention. In the coming years we will dedicate more resources to improving archival storage, preservation, and binding to ensure a sustainable home for the life of the collection.

Acquisitions

The library resources provided by the Research Archives are necessary for the successful operation of the Oriental Institute. Therefore, ongoing acquisitioning will be a primary concern of the head of the Research Archives. Nearly 1,100 volumes were acquired during the last academic year, a slight increase over our annual average of 1,000 volumes (see table 1). We were able to fill a number of holes in our back issues, such as volumes of the journals *Baal* and *Levant*. Significant volumes in ancient Near East studies appear daily and we strive to obtain as many of the primary and secondary resources as possible within our budget. In some ways, accession policy has expanded over the last five years. Most important are the publications of primary source material, such as excavation reports and text editions, and linguistic resources, such as dictionaries and grammars. However, the Research Archives strives to acquire additional resources such as important conference proceedings, collected works, monographic studies, and even basic overviews. The printed material in our fields continues to increase, despite and in addition to the rapid expansion of digital resources. Although difficult budgetary choices must be made, our collection continues to grow in very positive directions, remaining a choice destination for scholarly research into the languages and cultures of the ancient Near East.

Table 1. Research Archives Acquisitions July 2012–June 2013

Month	Number of Accession Lots	Monographs, Series, Pamphlets	Journals	Total Volumes
July 2013	61	37	40	77
August 2013	52	49	27	76
September 2013	40	57	22	79
October 2013	35	62	12	74
November 2013	51	62	21	83
December 2013	29	36	19	55
January 2014	34	184	22	206
February 2014	43	41	22	63
March 2014	64	55	37	92
April 2014	51	49	27	76
May 2014	44	45	20	65
June 2014	36	118	27	145
Totals	540	795	296	1,091
	Total Volumes			1,091

Online Catalog

Since the fall of 2007, the online catalog has grown by more than 300,000 records, averaging at least 30,000 records per year (see table 2). In 2013–2014, we added another 30,000 records. We are approaching the 500,000 mark, a significant achievement that Chuck Jones and Terry Wilfong estimated in 1992 would represent a complete index of our collection (see the *1991–1992 Annual Report*, p. 133). In the twenty years since, the field and the library have undergone exponential growth as a complete index would today consist of several million records, if not many more. Retrospective cataloging of the collection continues, with the massive collection of pamphlets and journals underway.

Table 2. Catalog records

Year	Number of Catalog Records Added	Total Number of Catalog Records
2013–2014	30,000	490,000
2012–2013	40,000	460,000
2011–2012	30,000	420,000
2010–2011	30,000	390,000
2009–2010	40,000	360,000
2008–2009	63,000	320,000
2007–2008	62,000	257,000
2006–2007	28,000	195,000
—	—	—
2003–2004	10,000	130,000

The screenshot displays a search results page for the Research Archives. At the top, there are navigation tabs for 'Research Archives', 'Museum Collection', 'Photo Archives', and 'Search All'. Below the tabs, a search bar shows 'Call Number' and '1 - 5 of 9' results. A 'Filter by:' section has 'Images' selected. A 'Refine Results' sidebar on the right includes facets for Format (Series Volume (4), Monograph (3)), Authors (Armstrong, Jeremy (1), Batto, Bernard F. (1), Beal, Richard H. (1), Ebeling, Jennie R. (1), Fello, Lutz (1), More), Publication Year (Last 10 years (3), Past 50 years (7)), Journals (No facets), Series (No facets), Publisher (Eisenbraun (5), Brill (3), The American University in Cairo Press (1)), and Multimedia (Images (9), Documents (1)).

#	Result	Media
1	Literature as Politics, Politics as Literature: Essays on the Ancient Near East in Honor of Peter Machinist by Vanderhoof, David S. (Editor); Weitzer, Abraham (Co-Editor) Wesna Liles Eisenbraun, 2013 Monograph Stacks AON; Machinist	1 Image
2	The Akhetaten Colossus of Karnak by Manolche, Lisa (Author) Cairo: The American University in Cairo Press, 2010 Monograph Stacks AON; Manolche	1 Image, 1 PDF
3	Creation and Chaos: A Reconsideration of Hermann Gunkel's Chaoskampf Hypothesis by Scurlock, Johann (Editor); Beal, Richard H. (Co-Editor) Wesna Liles Eisenbraun, 2013 Monograph Stacks AON; Scurlock	1 Image
4	Household Archaeology in Ancient Israel and Beyond by Yazar-Landau, Assaf (Editor); Ebeling, Jennie R. (Co-Editor); Mazon, Laura E. (Co-Editor) Culture and History of the Ancient Near East: - 50- Leiden: Brill, 2011 Series Stacks S/GHNE/50	1 Image
5	Rituals of Triumph in the Mediterranean World by Spalinger, Anthony J. (Editor); Armstrong, Jeremy (Co-Editor) Culture and History of the Ancient Near East: - 63- Leiden: Brill, 2013 Series Stacks S/GHNE/63	1 Image

Figure 3. The online collections search showing records under the Research Archives tab with images of book covers, downloadable PDFs, and user facets on the right

Every record in our catalog is open and available to the public through the Oriental Institute collections search page (oi-idb.uchicago.edu). Records can be downloaded by users for use in their databases or bibliographic software systems such as Zotero and EndNote. This year the ability to view and download Adobe Portable Document Format (PDF) and images of book covers was added to the online catalog (fig. 3). A search criterion and facet were added so that users interested only in records with associated multimedia could quickly and easily filter results. Next year, we hope to add the functionality to further integrate the Museum Collection and Research Archives records, allowing users to efficiently navigate to bibliographic entries for a museum object or to all the museum objects treated by a particular publication. The vision for this digital resource is grand, but we are excited by the quantitative and qualitative improvements made in our digital tools over the past year.

We continue to add links to online material, both new and old. Currently, there are more than 115,000 links to online material in the Research Archives catalog (roughly 25% of all catalog records). Journal articles available online, either through subscription or open access, constitute the bulk of these links. However, we also link to items available elsewhere on the Internet, including books, dissertations, series, and manuscripts.

Table 3. Links to journal articles

Journal	Links	Access
<i>Journal of the American Oriental Society</i>	15,326	JSTOR
<i>Catholic Biblical Quarterly</i>	12,180	Ebsco
<i>American Journal of Archaeology</i>	11,518	JSTOR/AJA
<i>Antiquity</i>	11,324	Antiquity
<i>Zeitschrift für Papyrologie und Epigraphik</i>	7,366	JSTOR
<i>Syria</i>	5,890	JSTOR
<i>Journal of Near Eastern Studies</i>	5,284	JSTOR/JNES
<i>Journal of Egyptian Archaeology</i>	4,307	JSTOR
<i>Biblica</i>	3,805	Open
<i>Bulletin of the American School of Oriental Research</i>	3,714	JSTOR
<i>Zeitschrift der Deutschen Morgenlandischen Gesellschaft</i>	2,785	Open
<i>Palestine Exploration Quarterly</i>	3,439	Ebsco
<i>Zeitschrift für Assyriologie</i>	3,239	Open
<i>Göttinger Miszellen</i>	2,953	DigiZeitschriften
<i>Académie des inscriptions et belles-lettres. Comptes rendus</i>	2,346	Open
<i>Near Eastern Archaeology (formerly Biblical Archaeologist)</i>	2,420	JSTOR
<i>Journal of the Economic and Social History of the Orient</i>	1,496	JSTOR
<i>Bulletin de l'Institut Français d'Archéologie Orientale</i>	1,842	Open
<i>Journal of the American Research Center in Egypt</i>	1,273	JSTOR
<i>Review of Biblical Literature</i>	1,092	Open
<i>Iraq</i>	1,097	JSTOR
<i>Journal of Cuneiform Studies</i>	1,090	JSTOR
<i>Aula Orientalis</i>	1,086	Open
<i>Bibliotheca Orientalis</i>	845	Peeters
<i>Anatolian Studies</i>	815	JSTOR
<i>Iran</i>	729	JSTOR
<i>Forschungen und Berichte</i>	698	JSTOR
<i>Polish Archaeology in the Mediterranean</i>	750	Open
<i>Oriental Institute News & Notes</i>	458	Open
<i>Orient: Report of the Society for Near Eastern Studies in Japan</i>	447	Open
<i>Journal of the Ancient Near Eastern Society</i>	378	Open
<i>Bulletin: Societe d'Egyptologie Geneve</i>	258	Open
<i>Sudan and Nubia</i>	227	Open
<i>Ars Orientalis</i>	220	JSTOR
<i>Cahiers de Karnak</i>	189	Open
<i>Achaemenid Research on Texts and Archaeology</i>	75	Open
<i>British Museum Studies in Ancient Egypt and Sudan</i>	66	Open

Table 3. Links to journal articles (cont.)

Journal	Links	Access
<i>Studien zur Altägyptische Kultur</i>	65	JSTOR
<i>Égypte Nilotique et Méditerranéenne</i>	56	Open
<i>Lingua Aegyptia</i>	47	Open
<i>ASDIWAL: Revue Genevoise d'Anthropologie et d'Histoire des Religions</i>	41	Open
<i>Studia Orontica</i>	37	Open
<i>Cuneiform Digital Library Journal</i>	37	Open
<i>Cuneiform Digital Library Bulletin</i>	31	Open
<i>Mitteilungen der Sudanarchäologischen Gesellschaft zu Berlin</i>	29	Open
<i>Zeitschrift für Antikes Christentum</i>	25	De Gruyter
<i>Cuneiform Digital Library Notes</i>	19	Open
Total	113,414	

Resources on the Web

In addition to the online catalog, the Research Archives maintains a series of open access online resources.

Introduction & Guide

http://oi.uchicago.edu/sites/oi.uchicago.edu/files/uploads/shared/docs/research_archives_introduction%26guide.pdf

An updated introduction and guide to the Research Archives contains a brief history, a guide to the Research Archives collection, and instructions for using the online catalog.

Online Resources

<http://oi.uchicago.edu/research/research-archives-library/online-resources>

Links to important online resources within the fields of ancient Near East studies are provided on this page with a focus on major tools and large databases.

Acquisitions Lists

<http://oi.uchicago.edu/research/research-archives-library/acquisitions-lists-research-archives>

The acquisitions reports of the Research Archives are distributed in Adobe Portable Document Format (PDF) on a monthly basis. This process has been active and continuative since September 2007.

Annual Reports

<http://oi.uchicago.edu/research/research-archives-library/research-archives-annual-reports>

Annual Reports for the Research Archives are available from 1969 to 2013.

Oriental Institute Staff Newsletter

<http://oi.uchicago.edu/research/research-archives-library/oriental-institute-staff-newsletter>

From February 1998 until March 2005 an Oriental Institute Staff Newsletter was circulated among faculty, staff, students, and the wider academic community. In the interest of preservation, remaining copies of the newsletter have been scanned and archived online.

Dissertations

<http://oi.uchicago.edu/research/research-archives-library/dissertations>

With the permission of the authors, the Research Archives provides access to Adobe Portable Document Format (PDF) copies of dissertations completed in the Department of Near Eastern Languages and Civilizations of the University of Chicago. The following were added during the 2013–2014 academic year:

- Aaron Michael Butts. *Language Change in the Wake of Empire: Syriac in Its Greco-Roman Context*. 2013.
- David Michael Calabro. *Ritual Gestures of Lifting, Extending, and Clasping the Hand(s) in Northwest Semitic Literature and Iconography*. 2014.
- Humphrey Hill Hardy II. *Diachronic Development in Biblical Hebrew Prepositions: A Case Study in Grammaticalization*. 2014.
- Foy D. Scaif. *Passports to Eternity: Formulaic Demotic Funerary Texts and the Final Phase of Egyptian Funerary Literature in Roman Egypt*. 2014.
- Randy L. Shonkwiler. *The Behdetite: A Study of Horus the Behdetite from the Old Kingdom to the Conquest of Alexander*. 2014.

Dissertation Proposals

<http://oi.uchicago.edu/research/research-archives-library/dissertations/dissertation-proposals>

With the permission of the authors, the Research Archives provides access to Adobe Portable Document Format (PDF) copies of dissertation proposals completed in the Department of Near Eastern Languages and Civilizations of the University of Chicago.

Adopt-a-Book Campaign

<http://oi.uchicago.edu/research/research-archives-library/adopt-book-campaign>

The Research Archives has launched an “Adopt-a-Journal” campaign in order to increase support for the Research Archives. Donors are recognized through personalized book plates made in their honor and placed in volumes of their choosing.

Social Media Sites

<https://www.facebook.com/pages/Research-Archives-of-the-Oriental-Institute/153645450792>

RESEARCH ARCHIVES

The Research Archives now maintains an official page on Facebook. Information about recent publications of Oriental Institute scholars or reviews of recent Oriental Institute publications is distributed through this page. 1,961 individuals currently follow the Research Archives through this presence on Facebook.

Donations

The Research Archives has been the lucky recipient of several substantial book and library donations over the past few years, some of which we were only able to fully process this year. Such donations fill in gaps in the collection, allow us to replace aging volumes, and add to our funding through the sale of duplicates. We would like to sincerely thank the following people, their families, and/or estates for generous donations of books, pamphlets, and other material to the Research Archives (in alphabetical order): Debbie Aliber, Michael Flom, Judith Franke, Ernest A. Gunsfeld, Hollis A. De Henseler, Anne Mininberg, and Bruce Williams.

Internship and Practicum Program

During the past year, the Research Archives has become a popular destination for student interns studying library science at nearby colleges and universities. As an academic library serving the needs of a research institute, an internship or practicum in our library offers librarians and archivists in training a unique range of experience and training. Unlike larger university or state libraries, the Research Archives is managed by a single librarian, the head of the Research Archives, who oversees budgets, staffing, acquisitions, information technology, database administration, online content management, digitization, preservation, and patron services. Participating students gain valuable insight into running a research library as well as an introduction to the bibliographic side of ancient Near East studies. During the past year we have had the pleasure of hosting the following students: Su Hyeon Kang on an internship through the University of Wisconsin, Milwaukee (September 2013–December 2014), Michael Bencur participating in a practicum for Dominican University (January–May 2014), and Rebecca Segall from the University of Chicago, who received a summer Metcalf Internship (June–August 2014).

Volunteer Program

Over the past five years, the Research Archives has developed an incredibly robust volunteer program. We supervise a staff of volunteers working on a variety of tasks and projects, including cataloging and digitization for the Research Archives as well as digital asset management of the multimedia files for Museum Archives and the Photography departments. Much of their work can be seen by visiting the online collections search of the Oriental Institute (oi-idb.uchicago.edu). These volunteers are amazing people who dedicate many hours to helping us improve aspects of our data curatorship and produce useful informational tools for a public audience. We cannot thank them enough and the following list of names does little to reflect just how much they are appreciated here (in alphabetical order): Stephen Adamcik, Laura Alagna, Rebecca Binkley, Ray Broms, Betty Bush, Andrea Dudek, Irene Glasner, David Henson, Su Hyeon Kang, Malvika Jolly, Amanda el-Khoury, Paula Pergament, Roberta Schaffner, Gabriele Correa da Silva, Art Thorson, Sierra Wilson, David Zhao.

Visitors

The Research Archives continues to be a place of international collaboration among the community of scholars studying the ancient Near East. Over the past year, we had research visits from the following individuals (in alphabetical order), and I apologize for anyone who may have been missed: Jan Bremmer, Ed Castle, Eva von Dassow, Peter Dorman, Grant Frame, James Hoffmeier, Alexis Jankowski, Jackie Jay, Chuck Jones, Cindy Jurisson and her class at the University of Chicago Lab Schools, Isaac Kalimi, Michael Kozuh, Jacob Lauinger, Massimo Maiocchi, Lina Meerchayad, Adam Miglio, Miriam Müller, John Nielsen, Maggie Paddock, Elaine Fetyko Page with Jacob Hill and the Great Chicago Libraries class of Elmhurst College, Stephanie Rost, Seth Sanders, JoAnn Scurlock, Jon Tenney, Philip Venticinque, Matteo Vigo, John Wee, Jennifer Westerfeld, Terry Wilfong, Avi Winitzer, Irene Winter.

Acknowledgments

The Research Archives is by necessity a collaborative effort. It could not exist without the support from the Oriental Institute and University of Chicago. Oriental Institute faculty and staff continue to be excellent resources for book recommendations, ideas for improvement, and donations. Our volunteer staff has provided the means for us to make incredible progress on large-scale projects that would be impossible without their help and pooled labor. Each and every day, members of the Research Archives staff help run the library, catalog our books, and answer patron requests. Despite their busy student schedules, they bring an invigorating spirit and professional attitude that makes our small office a pleasant place to work. To Laura Krenz, Taylor Coplen, Min Won Song, Young Bok Kim, and Andrea Brown, I extend much thanks and appreciation.

TABLET COLLECTION

Andrew Dix

As usual, the Tablet Collection and its study space, the Tablet Room, were very busy during the 2013–2014 academic year. In July, Noga Ayali-Darshan, a postdoctoral scholar at the University of Chicago at the time, but currently a faculty member at Bar-Ilan University, visited us to study a lexical text from the Oriental Institute's excavations at Nippur. Also in July, Massimo Maiocchi, a Mellon Postdoctoral Fellow and instructor in Assyriology at the Oriental Institute and in the Department of Near Eastern Languages and Civilizations, made hand copies of several fragmentary exemplars from Nippur of the Sumerian literary text Gilgamesh, Enkidu, and the Netherworld for Alhena Gadotti, of Towson University, for inclusion in her new edition of the text. At the end of the summer, Grant Frame, of the University of Pennsylvania, returned to continue collating the royal inscriptions of Sargon II excavated by the Oriental Institute. His careful study of all our exemplars of these texts will be integrated into a complete edition of Sargon II's royal inscriptions in the series *Royal Inscriptions of the Neo-Assyrian Period*.

TABLET COLLECTION

Michael Heinle, a graduate student researcher for the Cuneiform Digital Library Initiative (CDLI), based at the University of California, Los Angeles, made the CDLI's annual trip to the Oriental Institute in January to scan published tablets in the Tablet Collection. The project's members have now scanned most of the published tablets in the Oriental Institute's collection. The images that they create with flatbed scanners may be seen on the project's website (<http://cdli.ucla.edu>).

In February and March, Armando Bramanti, a doctoral student at the Sapienza University of Rome, worked in the Tablet Room studying Early Dynastic tablets in our collection. In April, we had three more visitors: Nathan Wasserman of the Hebrew University of Jerusalem prepared an edition of an Old Babylonian literary text dealing with love. Cale Johnson and Ulrike Steinert, both of the BabMed project at the Free University of Berlin, prepared editions of an exemplar from Nippur of the Sumerian literary text *Two Scribes* and of a Neo-Assyrian medical text, respectively. In addition to the scholars named above, Andrew Dix, the assistant curator of the Tablet Collection, provided digital photographs and collations of dozens of objects in the Tablet Collection for numerous scholars around the world who were unable to visit the Oriental Institute in person.

Throughout the year, professor of Sumerology Chris Woods examined early Mesopotamian tablets in the Tablet Collection as part of his *Writing in Early Mesopotamia* project. He also used tablets from the collection in his classes on the Sumerian language. Professor emeritus of Assyriology Robert Biggs studied three Ur III tablets and will publish them in a forthcoming journal article.

Several objects from the Tablet Collection were shown in temporary exhibits in the Oriental Institute Museum. A Neo-Babylonian cylinder containing a royal inscription of Nebuchadnezzar II was displayed alongside a cast of the "Cyrus Cylinder" donated by the Zoroastrian Association in a short-term exhibit on Persian expressions of kingship organized by Jack Green and Matthew Stolper. The special exhibit *Our Work: Modern Jobs — Ancient Origins*, organized by Jack Green and Emily Teeter, also featured multiple objects from the Tablet Collection, all of which may be found in the exhibit's catalog (OIMP 36).

With the creation of the Oriental Institute Integrated Database, the assistant curator of the Tablet Collection has closely collaborated with Registration to include categories of information in the database to accommodate the relevant data of our cuneiform tablets. Registration has also kindly assigned several of their interns to complete a regular inventory of the Tablet Collection and to the registration of some of the thousands of casts of tablets from other museum collections throughout the world owned by us.

Finally, with the assistance of the Research Archives and its volunteers, we have started to enter information on our tablets from recent Oriental Institute publications into the integrated database. Paul Gauthier, PhD candidate in Assyriology, is checking these entries for accuracy, to approve them for publication on the Oriental Institute's public website. If appropriate funding can be secured, this is meant to be the first step of a project to check, update, and enter all the catalog information of the Tablet Collection, currently only contained on old paper file cards, into the integrated database. Ultimately this project aims at the creation of a full online catalog of the Tablet Collection. The lack of such a catalog has in the past severely hampered efforts by staff and outside scholars to identify and locate tablets of certain types, and its availability should not only increase the general interest in our holdings, but also the number and quality of publications of Oriental Institute cuneiform tablets.



MUSEUM



Overleaf: Modern impression of a stamp seal from the Hyksos culture. While ruling in Egypt, the Hyksos kings increasingly came to absorb certain aspects of Egyptian royalty and culture. The Hyksos also frequently imitated the local glyptic art during this period, producing what scholars call "Hyksos scarabs." Hyksos scarabs were frequently decorated with interlacing patterns, floral motifs, and often meaningless combinations of stylized Egyptian hieroglyphs, such as this example. (above) Steatite scarab with modern impression. Middle Bronze IIB-C, 1750-1550 BC. Israel, Megiddo, Tomb 5067. 1.2 x 0.9 cm. OIM A23815. D. 005493. Photos by Anna Ressman

MUSEUM

Jack Green

It was another very busy and fulfilling year for the Oriental Institute Museum, continuing with our special exhibits program, planning for improvements to the Oriental Institute lobby and galleries, significant updates to our Integrated Database, and new work on cultural heritage projects.

The total number of Museum visitors fell in the past financial year (July 1, 2013–June 30, 2014) by 10.2 percent to 46,887. This was in large part due to external factors beyond our control: the twelve-month closure of 58th Street between Woodlawn and University Avenues to vehicles and pedestrians as work continued on the building set to house the Becker Friedman Institute for Research in Economics (5757 University Avenue, now renamed the Saieh Hall for Economics) and the shared streetscape immediately in front the Oriental Institute (fig. 1). Access to our main entrance was severely restricted, and parking options even more limited than usual due to the construction. The harsh winter this year also contributed to the drop in numbers. We did increase efforts through temporary signage, more widespread marketing, and we presented multiple mini-exhibits. These efforts helped limit this inevitable drop in non-tour visitor numbers (down 19%), which we believe could have been significantly greater. In addition, strong programming and improvements in tour bookings through our Public Education and Outreach Department resulted in an 11 percent increase in visitors coming as part of organized tours. Suggested donations were up, however, to \$2.83 per average non-tour visitor, an increase on last year's figures. Suq sales remained healthy over



Figure 1. Looking west along 58th Street from 5757 S. University Avenue, April 2013, showing the impact on 58th Street in front of the Oriental Institute (photo: Robert Kozloff/University of Chicago)



Figure 2. The new streetscape between the Oriental Institute and the Saieh Hall for Economics, looking west from Woodlawn Avenue, June 2014 (photo: Tom Rossiter/University of Chicago)

MUSEUM

the past year with increased success with Oriental Institute Museum Publication sales that continue to sustain us.

In June, 58th Street reopened. The new pedestrian zone is truly a great improvement (fig. 2). With its appealing tree-lined architectural vista stretching between Ellis and Woodlawn Avenues, plenty of benches and a large open area in front of our entrance. This streetscape provides a natural avenue for our visitors, significantly improving the environment. We look forward to increases in visitor numbers in the coming year and getting to know our new neighbors in Saieh Hall as they move in. We are grateful for the assistance of Turner Construction Company, vibration consultants WJE, and the University of Chicago pProject staff for getting us through this major venture without significant incident, even during the more challenging times when our loading dock and front steps were inaccessible. Special thanks go to head conservator Laura D'Alessandro, head of Visitor Services and Security Jason Barcus, and from the project managers, José Lopez and Sara Matasevac, and representative for Turner Construction Company, Brodie Bricker, for all their efforts and teamwork to ensure that the project went smoothly. We are now in the process of gradually reinstalling objects that were deinstalled from the Edgar and Deborah Jannotta Mesopotamian Gallery last year as a precaution during our monitoring of vibrations that resulted from the project.

Two special exhibits were featured this past year. *Our Work: Modern Jobs — Ancient Origins* opened in August 2013, and *In Remembrance of Me: Feasting with the Dead in the Ancient Middle East* from April 2014 (see *Special Exhibits* section, below). *Our Work* was extremely successful in making community and individual connections with the Oriental Institute. The beautiful photographs by Jason Reblando and video interviews by Matt Cunningham were well balanced and extremely thought-provoking. The intention was to allow space for the non-specialist to respond to objects in our collections and to break down some of the boundaries between artifacts and people. *In Remembrance of Me* is probably our best-designed and most complex exhibit to date, as it involved so many elements ranging from the creation of a replica stela of Katumuwa to the commissioning of a digital reconstruction

of the stela and its rituals in context at ancient Zincirli (fig. 3). We intend for the replica and film to live on following this special exhibit. The video, *Remembering Katumuwa*, will continue to be available on the Oriental Institute's YouTube channel. We are grateful to the Metropolitan Museum of Art, Penn Museum, and Haitian artist Kesler Pierre for object loans that were vital to the exhibit's narrative. It is also excellent to see that key objects in our permanent collections can be highlighted through such exhibits, such as the Late Bronze Age "Megiddo Vase" (fig. 4).

We are currently planning our next special exhibit for February 2015, titled *A Cosmopolitan City: Muslims, Christians, and Jews in Old Cairo*, which promises to be a highly evocative exhibit bringing to life



Figure 3. *Digital Rendering of the Katumuwa Stele chamber, from the film In Remembrance of Me, featured in the special exhibit gallery and on the Oriental Institute's YouTube channel*



Figure 4. The “Megiddo Vase,” ca. 1300–1200 BC, OIM A16415. Featured in the special exhibit *In Remembrance of Me* (OIMP 37, cat. no. 29) (photo by Anna Ressman; D.019129)

the diverse communities of early Islamic Cairo from the seventh to twelfth centuries through archaeological artifacts from Fustat and manuscripts from the Oriental Institute’s collections.

Progress continued on the volume that will feature *Highlights of the Oriental Institute Museum*. Another book in preparation is *Mesopotamian Gallery Highlights*, which is very close to completion. Thanks go to Oya Topçuoğlu, Kate Grossman, Emily Teeter, and Abbas Alizadeh for their contributions to these publication projects.

One change was made to the permanent galleries. We are grateful to filmmaker Farzin Rezaeian for allowing us to use excerpts of his film *Persepolis Recreated* on a video-screen in the Robert and Deborah Aliber Persian Gallery. This impressive digital reconstruction allows visitors to visualize elements of the sculpture shown in the gallery within its architectural setting.

There were some additions to the special exhibits schedule in the past year, including two mini-exhibits: *Power and Legacy: The Cyrus Cylinder and Persian Expressions of Kingship*, and *Silk Road and Indian Ocean Traders: Connecting China and the Middle East*, which were installed in the Aliber Persian Gallery back to back. We also featured a contemporary art exhibit of selected works from Michael Rakowitz’s series *The Invisible Enemy Should Not*



Figure 5. *The Invisible Enemy Should Not Exist*, Michael Rakowitz. Installed in the Edgar and Deborah Jannotta Mesopotamian Gallery (photo by Anna Ressman)

MUSEUM

Exist in March (fig. 5). This venture came about following a personal invitation by the artist to assist with his installation of the same works as part of the *Way of the Shovel: Art as Archaeology* exhibition at the Museum of Contemporary Art (fall 2013). Many of Michael's sculptures were based on the Oriental Institute's 2003 *Lost Treasures of Iraq* database. We displayed his work immediately opposite our own Diyala statues, part of the original division from Iraq. We are very grateful to Michael and the Lombard Freid Gallery, New York, for this opportunity. Programming and events were maximized to coincide with all three mini-exhibits, with special thanks to Brittany Mullins, Carol Ng-He, Susan Bazargan, and Tasha Vorderstrasse.

We have also had success with traveling exhibits in the past year. The updated display of *Catastrophe! Ten Years Later: The Looting and Destruction of Iraq's Past* opened in June 2013 at the Royal Ontario Museum, Toronto, Canada, and continued into mid-February. Visitor figures for this period were approximately 500,000 for the whole museum. Although no accurate figures exist for this small exhibit, advertised as part of general admission, its placement en route to the permanent dinosaur exhibit ensured a high proportion of visitors! Special thanks go to Clemens Reichel and Mary Montgomery of the ROM for suggesting that we include this small exhibit alongside their main exhibit, *Mesopotamia: Inventing Our World*.

The portraits and videos from *Our Work* were exhibited at the University of Chicago Medical Center as part of their Arts in Health initiative, and most recently, the City of Chicago's Department of Cultural Affairs and Special Events is exhibiting Reblando's portraits in the Richard J. Daley Center pedway. These initiatives and the widened scope of our exhibits show just how much further the Oriental Institute is reaching out to new audiences, in Chicago and beyond.

Last year we reported on our preparations being made to create a series of new enhancements for the Museum galleries, including a significant renovation of the orientation area of the Museum and the provision of iPads and other interactive multimedia in the galleries. Although our application to the Institute of Museum and Library Services (IMLS) was unfortunately not successful, we have been able to secure funds from the University of Chicago to make significant physical improvements to the entrance to the Oriental Institute, lobby area, lighting, the Suq, the Museum orientation area, and the hardware required for our enhancements project. The project is aimed toward improving the visitor experience to the Oriental Institute, which is timely since the recent opening of the new streetscape. We continue to seek funding to help develop the interpretive content for these enhancements. We have also in the process of carrying out a "refresh" of the Joseph and Mary Grimshaw Egyptian Gallery, with new LED lighting, graphic panels, and labels, which we intend to extend to all the large wall cases in the gallery. Special thanks go to Erik Lindahl, Emily Teeter, and Keeley Stitt for laying the groundwork on this important project for the coming year, as illustrated in the "refreshed" Kingship case (fig. 6; also see *News & Notes* 222: 11).

In addition to our fixed iPad visitor survey, which is managed by marketing assistant Wahied Helmy Girgis, we have also been getting feedback from other visitor studies. Deanna Aubert of McMaster University, Toronto, carried out a survey for her own research purposes, specifically on visitor participation and feedback during museum visits. Her results are already informing approaches to visitor engagement and involvement through proposed gallery enhancements. Valerie Grabski, an Oriental Institute docent and volunteer, developed and carried out a valuable dwell-time study of our lobby and galleries. While confirming much of what was known already anecdotally, the data from this study will be used as one of the evaluative tools for testing the effectiveness of future gallery enhancements in terms



Figure 6. The “refreshed” Kingship case in the Joseph and Mary Grimshaw Egyptian Gallery (photo by Austin M. Kramer)

of the time spent by groups and individuals in particular areas, such as the orientation area or Khorsabad Court.

The good news reached us in May that an Antiquities Endowment Fund grant is to be awarded to the Oriental Institute by the American Research Center in Egypt (ARCE) to carry out vital conservation treatment and research on our First Intermediate Period coffin of the army commander Ipt-ha-Ishutef (OIM E12071). The coffin has been off display for nearly two decades due to conservation concerns but has always been intended for permanent display in the Museum. The ARCE grant will help fund the necessary conservation treatment and pigment analysis from the coffin’s painted decoration. The coffin will be redisplayed in the Joseph and Mary Grimshaw Egyptian Gallery during summer 2015.

This past year we also received funding to begin another important research and documentation project in the Museum: the Oriental Institute Achaemenet Project (see separate report). With the generosity of the Roshan Cultural Heritage Institute and the Oriental Institute, funding was obtained to support project researcher Tytus Mikołajczak and project photographer Austin Kramer in a one-year initiative to document the Oriental Institute Museum’s holdings from the Achaemenid period, consisting of approximately 2,600 objects, and photograph about 300 objects within the Oriental Institute. We are extremely grateful to collaborate with our project partners, the Musée du Louvre and Collège de France, in this project which will result in the Oriental Institute’s important Achaemenid-period collections being made more widely available via the web resource www.achemenet.com.

The past year saw two staff changes in the Museum. Brian Zimerle left the Museum in August, taking a position as assistant professor of studio art at Cedarville University, near Dayton, Ohio. Brian first joined the Oriental Institute nine years previously and made significant contributions to our exhibit design, marketing design, and the Oriental Institute’s graphic design identity. We’re extremely grateful for Brian’s contributions to the Museum over the years. Keeley Marie Stitt took over Brian’s responsibilities part-time in August, and successfully assisted the design of our most recent exhibit, *In Remembrance of Me*. Curatorial Assistant Mónica Vélez left the Museum Office in March 2014, taking up a position as

MUSEUM

a freelance museum consultant. We thank Mónica for her contributions over the past two years, especially in steering through the updates to the Integrated Database, major improvements to the Oriental Institute's social media profile, and streamlining of our image request procedure. We wish her every success in her future career. Kiersten Neumann, a graduate of the University of California, Berkeley, who recently served as acting director of the Badè Museum of Biblical Archaeology at the Pacific School of Religion, is to be our new curatorial assistant starting this summer. In the interim, Austin Kramer has patiently and valiantly served as our part-time acting curatorial assistant.

We are extremely grateful to the volunteers and work-study interns who come to us through the Master of Arts Program in the Social Sciences (MAPSS) program. Thanks to Morris Fred (Anthropology), Catherine Kenyon, and Moriah Grooms-Garcia for their help in finding candidates and promoting the program. Volunteers, interns, and student workers who assisted myself and the Museum Office in the past year include Megan Niehaus, Matthew Amyx, Justin Seppi, Andrew Carr, Joshua Donovan, Michael Woodburn, and those mentioned in the individual reports below. We are extremely grateful for all their hard work, especially in supporting the Integrated Database project (see separate report), in addition to other Museum projects over the past year. We also took on two interns in the summer of 2014, who will continue into the new financial year: Angela Spidalette, an undergraduate of George Washington University; and Shoshanah Spurlock, a student at the University of Chicago. Angela is focused on a series of special projects in Museum Registration and Shoshanah is assisting the Oriental Institute Achemenet Project.

We had a several private tours and VIP visits of note in the past year. These included a tour focusing on Jewish history through the object and manuscript collections of the Oriental Institute for the Chabad Jewish Center at the University of Chicago and Hyde Park. The January visit was coordinated by Rabbi Yossi Brackman and was led by Jack Green and Rachel Schine, a graduate student of the Department of Near Eastern Languages and Civilizations. Professor Norman Golb gave an introduction to the group. I am particularly grateful to Rabbi Brackman and Rachel for this highly successful tour. The Chicago Council on Global Affairs sponsored event at the Oriental Institute, *Looting the Past: The Battle for Our Ancient Heritage*, included panelists Jim Cuno, Richard Leventhal, Patty Gerstenblith, and Gil Stein. It was particularly well attended and focused on the continued challenges of cultural heritage preservation, looting prevention, and issues of repatriation (see *News & Notes* 221: 15–17). We also received several group visits and delegations, including a group from China led by Mr. Guomin Cui, deputy director general of the Beijing Municipal Administration of Cultural Heritage; a visit by Dr. José Ramón Cabañas, chief of the Cuban Interests Section in Washington, D.C.; and a visit by Prince Ermias Selassie of Ethiopia and his wife Princess Saba Kebede. Their visit included a special tour of the Robert F. Picken Family Nubia Gallery by Bruce Williams.

As detailed in Helen McDonald's report for Museum Registration, the Museum continues to facilitate research and publication projects of the Oriental Institute, as well as those of outside researchers. In addition, loan requests continued to play an important role for us, including the lending of four objects to the Hallie Ford Museum of Art's *Breath of Heaven, Breath of Earth* exhibit in Salem, Oregon, and two objects to the Art Institute of Chicago's *When the Greeks Ruled Egypt*. Incoming loans were also significant, including for *In Remembrance* and *The Invisible Enemy*. I am extremely grateful for the patience and diligence of the Registration and Conservation staffs regarding our loans. The Integrated Database project also loomed large in the behind-the-scenes projects for the Museum staff. With the help of

volunteers working under Foy Scalf, as well as Mónica Vélez, Austin Kramer, Anna Ressler, and Bryce Lowry, we have now added thousands of images of objects and archival images to our collections database. This has led to a significant increase in interest in our collections, with a rise in research requests in the past year. Further interest resulted from an announcement of a new Oriental Institute Collections Research Grant in the past year, which helps support scholars who wish to carry out specific research projects on our collections. The first four successful applicants will be visiting over the course of 2014–2015. The Oriental Institute’s acquisition of a new handheld x-ray fluorescence (XRF) spectrometer, also known as a portable x-ray fluorescence device (pXRF), also helps us to facilitate new scientific research on the collections and in the field (see *Conservation* report, below).

Acquisitions to the Museum included an Egyptian stela with an unusual history. The stela (fig. 7) was donated to the Oriental Institute this past year by Mr. and Mrs. LeRoy T. Carlson of Evanston, Illinois, who had purchased it in 1958 after it was deaccessioned by the Metropolitan Museum of Art. It had originally been donated to the Met in 1889 by Joseph W. Drexel. Its garbled inscription and lack of provenience could suggest this is a modern (19th century) creation, although the imagery is Ptolemaic in style (304–30 BC). There are no immediate plans to display the stela. Further study may help determine its authenticity. We also received from Nancy Shinn Hart a donation of four lithographs featuring birds of Egypt from the second edition of Napoleon’s *Description de l’Égypte* (see *Museum Archives* report).

Museum staff were closely involved in two cultural heritage projects over the past twelve months. The Oriental Institute–National Museum of Afghanistan project continued in its second year, with Jack Green and Laura D’Alessandro continuing to support the Chicago-based part of the team (see *OI-NMA* project report), and with Laura carrying out an in-person assist with conservation training in Kabul and making major contributions to the task of ordering and shipping equipment and supplies. In addition, Jack Green, Erik Lindahl, and Brian Zimerle contributed to the Hisham’s Palace Site and Museum Project, an initiative of the Palestinian Ministry of Tourism and Antiquities (see separate report). This collaborative project involved concept planning, content curation, label and panel writing, as well as mount-making for a permanent museum exhibit at the early Islamic site of Khirbet al-Mafjar (Hisham’s Palace). The museum opened to the public on May 28 (see *Hisham’s Palace* project report).

In summary, I am extremely grateful for the dedication of the Museum staff and other colleagues at the Oriental Institute in helping to deliver our extensive Museum program and



Figure 7. Egyptian stela, Ptolemaic(?), ca. 304–30 BC. No provenience. Gift of Mr. and Mrs. Carlson. OIM E49082 (photo by Anna Ressler)

to fit in all the additional projects we are currently engaged in. I wish to express my gratitude to Oriental Institute director Gil Stein and executive director Steve Camp for all their support, assistance, and advice over the past year. In 2013–2014, we have seen the Museum play an increased role in facilitating research and research projects, expanding its exhibits program through multiple smaller-scale displays and traveling shows, and a practical engagement with cultural heritage. We look forward keenly to the next year.

SPECIAL EXHIBITS

Emily Teeter

Looking back at the year, it is amazing to recall that three different exhibits have been featured in the Marshall and Doris Holleb Family Special Exhibits Gallery. The very popular *Between Heaven & Earth: Birds in Ancient Egypt*, which opened October 17, 2012, closed on July 28, 2013. Less than a month later, on August 19, we opened *Our Work: Modern Jobs — Ancient Origins*, which ran through February 23, 2014. Then, on April 7, 2014, we opened *In Remembrance of Me: Feasting with the Dead in the Ancient Middle East*, which will run through January 4, 2015. This is a very ambitious schedule for a small staff who must conceptualize and plan the shows, design them, raise funds, conserve the objects, produce new photography, write, design, and print a catalog as well as all the wall text and labels, publicize the show, and work with the Public Education and Outreach Department to produce programs.

The background for *Our Work* was detailed in last year's *Annual Report* (pp. 196–97). I am happy to report that the show went as planned with no real changes in concept or content. In summary, the show made connections between the past and the present by showing that many modern professions (real estate agent, policeman, boat builder, manicurist, banker, potter, doctor, brewer, mathematician, and many others) were first, or very early, attested in the ancient Middle East. Then, an artifact from our collection that represented that profession was photographed with a modern practitioner of that job. An important part of the concept of the show was to have the people in the photos take an active part in the narrative. Excerpts from interviews conducted by Matt Cunningham and transcribed by Austin M. Kramer provided commentary for the wall labels and for the catalog about the individual's connection to the object or their thoughts on the antiquity of their profession. The curators (Jack Green and myself, aided by members of the faculty) wrote brief catalog descriptions of the objects and outlines of the background of the specific ancient profession. We wanted to involve the community in ways that the Oriental Institute had not in the past, and the University's Office of Civic Engagement proved to be enthusiastic about the project and very helpful.

Jason Reblando's final twenty-four photographs that made up the show were spectacular and deeply moving (fig. 1). Jason shot them (fig. 2) as tintypes, a complicated process that makes one respect early photographers even more. The original tintypes were scanned and printed by Jason on our large-format printer. A selection of the original tintypes were included in the exhibition. Matt made six videos, five of which profiled the subjects of the photos (urban farmer, horse trainer, pastry chef, stoneworker, and potter), and the last showed Jason producing the photos, from posing the subject through developing the tintype. The videos, on the Oriental Institute YouTube channel, can be accessed through our Special Exhibits webpage.



Figure 1. Portrait of Norman Bobins, a banker, with a clay token ball, an early accounting device (tintype by Jason Reblando)



Figure 2. Jason Reblando taking a tintype portrait of fashion designer Diane Mayers Jones for the Our Work exhibit and catalog (photo by Emily Teeter)

Erik Lindahl and Brian Zimerle (who was featured in the exhibit in his other career as a potter) planned a very simple, elegant installation that highlighted the photos (fig. 3). A selection of objects was included to give the gallery more dimension and to enable the visitor to see in person some of the artifacts featured in the photos. It is astounding how flexible the



Figure 3. View of the special exhibit Our Work (photo by Anna Ressimann)

SPECIAL EXHIBITS

Holleb Special Exhibits Gallery is and how our clever designers manage to create an entirely different mood for each show through color, temporary walls, and lighting.

We are very grateful to Kitty Picken, who supported the photography by Jason Reblando, and to others who made significant gifts, including the David C. and Sarajeon Ruttenberg Arts Foundation, John B. Simon, and Norm and Virginia Bobins in honor of the Robert Bobins Foundation. We also have to give our most sincere thanks to our Publications Office, Tom Urban and Leslie Schramer, along with Rebecca Cain and Brian Keenan, who do such fine work on the exhibit catalogs.

The show was a huge success, judging from the publicity we received (see *Publicity* report, below). One of the most welcomed comments was from a longtime Oriental Institute supporter who admitted to initially being skeptical of the whole premise, but upon seeing the show was very enthusiastic. Some docents made the show an integral part of their tours, starting in *Our Work* in order to remind our visitors how relevant the past is, and how much the modern world owes to the ancient Middle East.

The show connected with the public, some of whom commented that they had no idea that the ancient Middle East had contributed so much to today's world. That public interest is evidenced by the show having an extended showing in the high-traffic gallery space of the University of Chicago's Center for Care and Discovery at the Medical Center (March 3–July 30); another set of prints is being displayed in the pedestrian concourse of the Richard J. Daley Center in downtown Chicago (April 25–September 25), where they are viewed by thousands of people each day. We thank Monica Hork of Billy Hork Galleries for connecting us with the Medical Center, and our old friend and colleague Nathan Mason of the Department of Cultural Affairs and Special Events for the Daley Center installation. We continue to look for other venues for *Our Work* throughout the United States.

It was such a pleasure to work with *Our Work* photographer Jason Reblando and videographer Matthew Cunningham. Hopefully, our collaboration was helpful to their careers as well. Through Nathan Mason, Jason's show *New Deal Utopias* is on exhibit at the Historic Water Tower gallery. Matt later collaborated on an innovative oral-history project with our Public Programs department, and I hope to work with him on some future videos for the Egyptian Gallery.

We try to schedule exhibits that do not repeat a focus on either an area or subject matter, and we try to avoid "object heavy" shows back to back. Shows that have many objects put a lot of scheduling pressure on our registrars, conservators, and photographers. *Our Work* was relatively simple, being comprised mainly of photos. The next show, currently on view, *In Remembrance of Me: Feasting with the Dead in the Ancient Middle East*, falls into the more complex category, with multiple loans and considerable conservation. The installation posed some challenges, including a dual-projection video area and positioning printed fabric above a cast to replicate the statue's original appearance — elements that preparator Erik Lindahl successfully resolved (fig. 4).

The exhibit was curated by Virginia Rimmer Herrmann and David Schloen. Virginia's postdoctoral position at Dartmouth College meant that she was curating largely by Skype and e-mail with occasional visits to Chicago, which was a challenge, but we managed. The show is centered on the Neubauer Expedition to Zincirli's 2008 discovery of a stela of an eighth-century BC official named Katumuwa. Virginia and David wanted to explore the ideas of family, commemoration, and identity that are expressed by the stela. An initial problem was that the stela itself is in the Gaziantep Archaeological Museum in Turkey, and could



Figure 4. General view of the special exhibit *In Remembrance of Me*. Note the bull hoofs on the legs of the central case, designed by Erik Lindahl and patterned on Iron Age furniture from Anatolia (photo by Anna Ressman)

not travel to Chicago. A solution was to have a cast made. Gary Staab of Gary Staab Designs was engaged to make the cast from squeezes made from the actual stela in the field. Head Conservator Laura D'Alessandro oversaw this complicated project. Virginia broadened the scope of the show to include other cultures in the ancient Middle East, giving us the opportunity to incorporate materials from Mesopotamia, Egypt, and the Levant. Virginia added yet more scope to the show with an epilogue case titled “Contemporary Commemorations,” which contained material such as a Mexican Day of the Dead figurine and sugar skull, a Polish cemetery lantern, and paper money for the Chinese Qingming festival, all of which record how people today still revere and commemorate their ancestors.

An important feature of the exhibit is a 6 1/2-minute video on the discovery of the Katumuwa stela and the rituals of family commemoration that its text records, developed by Virginia. Travis Saul, a programmer, software developer, and accomplished digital artist, created an engrossing dual-screen video that introduced the site of Zincirli, the discovery of the stela, and through animation, recreated the sacrifice and offering ritual. Professor Dennis Pardee, who translated the text on the stela, can be heard reciting it in both the original Aramaic and English. The video and Pardee’s audio can be accessed from the page for the exhibit on our Special Exhibits webpage and YouTube channel.

The member’s opening, on Monday, April 7, was well attended, with more than 150 people present. Virginia spoke on the themes of the show (fig. 5), followed by the exhibit viewing and reception. The Turkish Consul General, the Honorable Fatih Yıldız, gave remarks. A festive note was created by the excellent Turkish wine that Consul Yıldız contributed to the reception.

As with all our exhibits, *In Remembrance of Me* is accompanied by a catalog. Editors Virginia and David Schloen produced a very useful book packed with valuable essays from experts from the United States and Europe. Again, Anna Ressman and her assistants provided

SPECIAL EXHIBITS



Figure 5. Virginia Rimmer Herrmann, curator of *In Remembrance of Me*, at the Members' Opening, April 7 (photo by Spencer Bibbs)

new photography, and Leslie, Rebecca, and Tom in Publications transformed it all into a book. Keeley Stitt, our new graphic designer, created a very handsome cover with the Katumuwa Stela embossed on a dramatic black background. Our catalogs are consistently praised for their content and appearance, with many larger institutions expressing their admiration at our productivity.

In addition to all this activity, the Museum presented several mini-exhibits, many of them in coordination with larger campus events. In conjunction with University-wide Envisioning China: A Festival of Arts and Culture (February–June 2014), Oriental Institute research associate Tasha Vorderstrasse arranged a case in the Robert and Deborah Aliber Persian Gallery on the theme *The Silk Road and Indian Ocean Traders: Connecting China and the Middle East* (on view February 18–October 19, 2014). This handsome display (fig. 6) included Chinese ceramics excavated in the Middle East, an example of paper, and the Institute's beautiful eighteenth-century astrolabe. The exhibit served as the basis for a wide range of public programs.

Jack arranged for the mini-exhibit *Power and Legacy: The Cyrus Cylinder and the Persian Expression of Kingship* (October 5, 2013–February 2, 2014) to highlight the Federation of Zoroastrian Associates of North America's generous donation of a cast of the Cyrus Cylinder to the Oriental Institute. The exhibit also included cylinder seals and coins that showed how Persian rulers used words and images to portray the power of their rule. We thank Professor Matthew Stolper for his assistance in preparing this exhibit.

Jack worked with artist Michael Rakowitz, who is well known for his replicas of Mesopotamian objects made of found materials such as tin cans and newspapers with Arabic script, to present a version of his exhibit *The Invisible Enemy Should Not Exist* (March 17–May 25, 2014) in the Edgar and Deborah Jannotta Mesopotamian Gallery. The colorful statues, positioned directly across from the display of our own Sumerian statues from Tell Asmar and Khafajah, represented objects that were looted from the National Museum in Baghdad (see fig. 5 in the *Museum* report, above). This exhibit reflects Jack's continuing interest in juxtaposing ancient and modern objects and our increased engagement with UChicago Arts (see the report on the Dahn Vo's *We the People* in *Oriental Institute 2012–2013 Annual Report*, p. 187).

We also loaned the replica "Indiana Jones" notebook (see *2012–2013 Annual Report*, pp. 196–97) to the La Porte County Public Library from September 9 to November 2. During that time, it was exhibited at seven of the library branches, and it became the basis for the library staff to feature science- and archaeology-based programs.

Our poster exhibit *Catastrophe: Ten Years Later: The Looting and Destruction of Iraq's Past* was shown at the Royal Ontario Museum from June 22 to February 9 (see further in *2012–2013 Annual Report*, p. 195; and the *Museum* report, above).



Figure 6. The mini-exhibit *The Silk Road and Indian Ocean Traders* (photo by Austin Kramer)

Working with Museum archivist John Larson and assistant director of Development Britany Mullins, Emily did a small exhibit of letters and receipts called *Collecting for Chicago*, which documented Oriental Institute founder James Henry Breasted's activities purchasing artifacts for the Art Institute and the Field Museum in the early 1900s. The exhibit was done for a February 27 Breasted Society event.

In addition to all the reported activity, we always have the next special exhibit in mind. On February 16, 2015, the exhibit *A Cosmopolitan City: Muslims, Christians, and Jews in Old Cairo*, curated by Tanya Treptow and Tasha Vorderstrasse, with the advice of Donald Whitcomb, will open. To date, objects have been selected, conservation and photography is underway, essays for the catalog have been assigned, Jack and registrar Helen McDonald are working on loans, and Keeley is pouring over source books of patterns that might be incorporated into the show.

As in previous years, we need to thank and acknowledge the members of our Museum Advisory Board who meet several times a year to help us refine our concepts for special exhibits and consult on how these concept might be presented. In the last year, the group has consisted of some of the veterans, including Nathan Mason (Chicago Cultural Center), Beverly Serrell (Serrell Associates), Matt Matcuk (Field Museum), Molly Woulfe (journalist), Dianne Hanau-Strain (exhibit designer), and Patty McNamara (exhibit evaluator). New additions to the group are Charles Bethea of the DuSable Museum of African American History and Nancy Levenson. These outside professionals are joined by Jack and Emily, Erik, Brian (before his departure), Catherine Kenyon, Moriah Grooms-Garcia, and Carol Ng-He of our Public Education and Outreach Department. We could not do these exhibits without all of their help.

PUBLICITY

Emily Teeter

Thanks to Jack Green's efforts, the Museum now has an unprecedented two accounts for paid publicity — one dedicated to the special exhibits program, the other to general Museum programs and activity. This support has made a tremendous difference in gaining momentum to build a broader public awareness of the Oriental Institute, its research, exhibits, and programs.

Wahied Helmy Girgis continues to work with us as a marketing assistant. He has been absolutely indefatigable in the circulation of our publicity materials. In the last year, he has distributed approximately 25,000 of our special exhibit and general museum rack cards. These are going to hotels, visitors' centers, the Chicago Public Library system, restaurants, and stores. Wahied has also done much to cultivate the local hotel concierges, a relationship that is very valuable for word-of-mouth recommendations.

On April 6 we were honored to be selected as one of the few site visits for travel writers and packagers attending IPW, Chicago's meeting for the U.S. Travel Association. Wahied and docent Shirlee Hoffmann gave tours to forty-seven travel writers and pitched the Oriental Institute as a "must see" destination. We hope to see the Oriental Institute popping up more prominently in stories about Chicago.

We continue our program of street-pole banners, mostly in the Hyde Park neighborhood, but with a lesser presence downtown. In April, Brian Zimerle designed a new series of three banners with very brief and dramatic text: Discover Mesopotamia (fig. 1), Discover Egypt, and Discover Nubia. These are not linked to specific programs or special exhibits, and so they can be left up indefinitely.

Paid advertising included sponsorship spots on WBEZ Public Radio, ads in the *Hyde Park Herald*, *Southside Weekly*, *New City*, and *UCArts Magazine*. We continue to run ads in *Footlights*, the program for the Court Theatre, and for a number of months we advertised in *Concierge Key Notes*, an online directory of events in Chicago.

Articles or extensive notices on the activities of the Institute appeared online in *National*

Geographic ("Free Things To Do in Chicago"), Chabad.org News, UChicagoNews.com, and Slate.com. Print coverage included "Saving Relics, Afghans Defy the Taliban," an extensive story on our collaboration with the National Museum of Afghanistan in the *New York Times*. *Archaeology Magazine* featured Chris Woods' research on ancient token balls. A fun article, "Curators' Choice: Keepers of University Collections Reveal the Pieces Closest to Their Hearts," featuring some of Jack and Emily's favorite Museum pieces, appeared in the September–October issue of the *University of Chicago Magazine*. Emily's work on mummies (in collaboration with the Art Institute and the University of Chicago



Figure 1. The Discover Mesopotamia street-pole banner, designed by Brian Zimerle

Medical Center) was featured on WBEZ, in a University of Chicago Alumni blog, and in a video produced by the *Chicago Tribune*.

Our special exhibits continue to generate valuable publicity. Our Work, which opened just before Labor Day, gave writers lots of material for puns, such as “Working Over Time” in the *University of Chicago Magazine*, “Work Study” in the *Hyde Park Herald*, “The Workplace Has Changed, but the Bread Baking Hasn’t,” and “Works in Progress,” both in the *Chicago Tribune*.

The most rewarding attention was an extensive story (including the cover!) of the January–February issue of *Saudi Aramco World*, which has a print circulation of 500,000 (fig. 2). In Remembrance of Me has also garnered good publicity, including the *Chicago Tribune*’s Museums Section “Pick of the Week: Museum Exhibits,” and a feature on the show on WBEZ.

We continue to work closely with and appreciate the help and advice of Susie Allen, news officer in the University’s Office of Communications, and Nora Semel, University of Chicago communications projects manager.

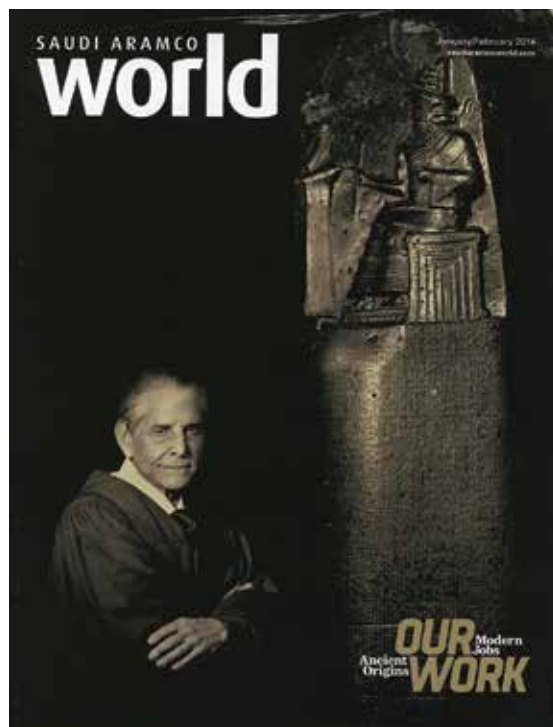


Figure 2. Cover of Saudi Aramco World with the portrait of Justice John B. Simon by Jason Reblando

REGISTRATION

Helen McDonald and Susan Allison

We continue to add more data to the object-related parts of the Integrated Database (IDB) and to improve the data already there. As mentioned last year, our terms for periodization were in a flat list without a hierarchy at the beginning of this academic year. Assistant registrar Susan Allison has now constructed a hierarchy of periods, dynasties, and kings for Egypt and Nubia, and edited the object catalog accordingly. Helen McDonald has begun the process sorting period terms for the rest of the countries of the ancient Near East and gradually editing the catalog. The editing is taking time as the Asiatic collection is three times the size of the Egyptian/Nubian collection. Once the hierarchy is established to cover all the periods of the objects in our collections, it will then be possible to extend it to cover all other period terms of interest to the Research Archives and then other departments. We have been consulting closely with Foy Scalf over this. Together we have been adding new terms to the thesaurus

REGISTRATION

and drop-down lists as needed by Paul Gauthier (University of Chicago graduate student and assistant to the tablet collection), who is adding information to tablet records in the object catalog in preparation for those records going online. Susan also found time to attach all the site names to their particular region, province, or governorate in the thesaurus hierarchy and add that information to the catalog. To this end we received some very useful assistance from the CAMEL lab in putting sites from the Adams' Akkad and Warka surveys into their respective Iraqi governorates.

In three areas large quantities of new information is being added to the IDB: (1) scanning of paper records, (2) addition of images, and (3) inclusion of bibliographic references to the records on objects in the collection. The paper records currently being scanned are the original object registration index cards; these are then attached to the relevant object record in the catalog module in the database. So far this year around 4,800 cards have been scanned and added in this way. We have begun the slow process of adding record shots taken by visiting researchers to the database. For larger groups we have provided metadata on each group of images to Foy Scalf, head of Research Archives, as he has been supervising volunteers to add these images. For the addition of bibliographical references we have started the long and slow process of having volunteers add the bibliographical reference for an object to the references tab in the catalog module and make the connection to the bibliography module. We have consulted closely with the Research archivist to make sure that this is done in a standardized manner. All these tasks will be ongoing for many years to come. Registration continues data cleanup of our object records on a daily basis.

Susan continued testing the website front-end of the database due to various changes and updates to the online collections database, including the addition of images, throughout the year. Registration's database reports were also updated and some new additions were designed and written with the help of J. P. Brown of the Field Museum of Natural History. Susan continued to fulfill the registration component in the National Endowment for the Humanities (NEH) Metals Room rehousing grant, which came to an end in September. She has managed object lists and has kept track of all object movements for special exhibits, including the deinstallation of *Between Heaven & Earth: Birds in Ancient Egypt*, installation and deinstallation of *Our Work: Modern Jobs — Ancient Origins*, and installation of our present special exhibit *In Remembrance of me: Feasting with the Dead in the Ancient Middle East*, which opened with loan objects from the Metropolitan Museum of Art, the Penn Museum, and the Haitian artist Kesler Pierre. Work continues on the next planned special exhibit, *A Cosmopolitan City*, due to open in 2015. Registration also assisted with a number of mini-exhibits this year (see *Special Exhibits* report, above). Susan has also been retrieving objects to be studied and photographed for the Achemenet Project (see separate report).

We have continued to work closely with researchers preparing Oriental Institute material for publication. As well as making material available for research and registering material when requested for the forthcoming Dorginarti, Serra, and Qasr el-Wizz publications, we have also been checking OIM object registration numbers that are going to appear in publications against the actual objects to make sure they are correct. This year the registrar checked plates/figures for forthcoming volumes *Early Megiddo on the East Slope* by Eliot Braun, *Barda Balka* by the late Bruce Howe, and the presentation of the material from the Tell-e Geser excavations in a volume by Abbas Alizadeh.

With regard to outgoing loans this year, we had more study loans than usual. Two groups of material went to the Elemental Analysis Facility of the Field Museum for laser ablation-

inductively coupled plasma-mass spectrometry (LA-ICP-MS) analysis. While this technique is destructive, the amount of an object that is removed is so small it can only just be seen with the naked eye. The two groups were Alishar sherds (related to research being carried out by Dr. Shannon Martino and following up on her pXRF analysis of the same group of sherds), and fragments of glass vessels and beads from the Egyptian site of Quseir; both sets of analyses were carried out by Dr. Laure Dussubieux. Other loans for analysis include samples from Dorginarti crucibles to London and Qatar for analysis by Dr. Thilo Rehren; four human teeth from Megiddo went to George Washington University for isotope analysis by Laural Poolman; and a selection of plaster fragments from Qasr el-Wizz have gone to Poland for Scanning Electron Microscope energy-dispersive x-ray spectroscopy and also for LA-ICP-MS analysis (this relates to the publication of this site by Artur Obluski et al.) As with all loans, loans for analysis require loan contracts, insurance, and condition photography before the object can go out.

With regard to loans for special exhibits we lent four objects to the Hallie Ford Museum of Art of Willamette University (Salem, Oregon) for the exhibit *Breath of Heaven, Breath of Earth*. The loan went out in August of last year and returned in January 2014. Two objects went out to the Art Institute of Chicago for an exhibit on the Greeks in Egypt that may possibly travel on to the Institute for the Study of the Ancient World in New York this autumn. The objects in question are the Arsinoe statue base with bilingual inscription (OIM E10518) and a bronze statuette of Isis and Horus (OIM E10682). The Bismaya head of a ruler (OIM A173) returned from a loan to the Royal Ontario Museum in January, where it had been part of a British Museum touring exhibit called *Mesopotamia: Inventing Our World*. Three objects went on loan to the Smart Museum of Art (OIM E9802, E10486F, and A27978) for inclusion in their temporary exhibit, *Wings, Speed, and Cosmic Dominion in Renaissance Italy*. We have just renewed a loan of two objects (an A-Group Nubian pot and an ushebti) to the DuSable Museum of African American History for one more year until June 2015. Both registrars have acted as couriers for outgoing loans during the year.

As well as the incoming loans for *In Remembrance of Me*, we also had an incoming loan of modern papier-mâché sculptures created by the artist Michael Rakowitz that were on display in two cases in the Edgar and Deborah Jannotta Mesopotamian Gallery during this spring.

The Registration Department has moved or inventoried nearly 47,000 objects this year (a total of almost 74,000 object movements). This is almost double the figures for last year. Just over 22,000 had their locations updated, checked, or corrected (this included an inventory of the tablet collection completed last summer and an ongoing inventory of the small objects store). Temporary storage boxes, 142 in number, were unpacked and the contents rehoused. Over 6,400 objects have been registered this year. Just over 4,550 were the subject of research of all kinds. Around 170 objects were moved for photography, including for forthcoming gallery guides (this is in addition to the 275 objects moved so far for the Achemenet Project that will also be photographed). Around 141 objects were moved for temporary exhibits that were installed, dismantled, or in preparation. We moved over 4,000 objects for the various Nubian publications in process, including around 1,360 newly registered Dorginarti sherds and location changes for all the Nubian beads that were studied by Joanna Then-Obluska last year. At the end of last summer, the Geser publication project returned 1,150 sherds registered by Janet Helman and Yalda Razmahang in preparation for the publication. These were inventoried and rehoused by the Registrar.

REGISTRATION

Visiting Researchers

- Roger Anderson (UC PhD, retired) visited to look at Tell el-Hesi sherds in the Teaching Collection, July and April, the second visit with Jeff Blakely (University of Wisconsin)
- Kei Yamamoto (Metropolitan Museum of Art) came to study Abydos objects (July)
- Mariam Rosser-Owen (Victoria and Albert Museum, London) visited to look at Islamic material, in particular, sherds from Rayy, Iran (August)
- Aurelia Masson Berghoff (British Museum) came to record and photograph Naukratis weights for inclusion in an online database (August)
- Ellen Belcher (John Jay College/CUNY library) studied Halaf and Kurdu baked clay figurines (August)
- Mark Garrison (Trinity University) studied a Persepolis sealing and took it for PTM photography (August and June)
- Alexander Sollee studied Khorsabad objects and photographed Matarrah sherds for a colleague (September)
- Ashley Arico (Johns Hopkins University) came to study Egyptian statue fragments (September)
- Chiara Schoch (Free University of Berlin) visited to study spindle whorls and spinning/weaving equipment (mostly from Alishar and Chogha Mish) (September/October)
- Todd Hickey (University of Berkeley) studied ostraca from the archive of Kabiris (October)
- Robert Demaree (Leiden University) studied hieratic administrative ostraca (October)
- Juris Zarins (Missouri State University) came to study a variety of flint arrowheads from the Diyala (October)
- Erica Hunter (School of Oriental and African Studies, London) visited to study Aramaic incantation bowls from Nippur and the Diyala sites (November)
- Stefano Spagni (La Sapienza – University of Rome) conducted a study of Alishar metalwork that included pXRF analysis (November)
- Reinhard Bernbeck (Free University of Berlin) came to go through the Behbahan survey sherds with a view to preparing an application to carry out non-destructive pXRF analysis (November)
- Dobrochna Zielinska (Warsaw University) studied painted wall plaster from the church at Qasr el-Wizz, in preparation for a loan (November)
- Kristen Thompson (University of Wisconsin) came to look at Amarna statuary fragments (January)
- Petros Koutoupis (independent researcher) came to look at ms E2058 (which contains part of the Iliad)
- Giulia Scazzosi (University of Bologna) studied Nippur objects (January/February)
- Michael Wechsler (Moody Bible Institute) came to study manuscripts for inclusion in the catalog for the forthcoming special exhibit *A Cosmopolitan City* (February)
- Yael Rotem (Tel Aviv University) visited to study Tell Yaqush and Nahal Tabor pottery for her PhD research and a publication (March)

- Armando Bramanti (La Sapienza – University of Rome) photographed Bismaya and Nippur objects (March)
- Melanie Pitkin (Powerhouse Museum, Sydney) studied several First Intermediate Period stelae uncrated by Erik Lindahl (March)
- Fr. Shabel Iskander Bcheiry came to read parts of Syriac ms A12008 (April)
- Philip Forness (Princeton University) visited to study parts of the same Syriac ms A12008 for his PhD dissertation (June)
- Aren Maeir (Bar-Ilan University, Israel) visited to study Megiddo ivory bowls (April)
- Matthieu Begon (Sorbonne, Paris) came to examine Egyptian mummy labels (April)
- Wayne Scrimsher (independent researcher) looked at mss E2057 and E9351 (April)
- Max Price (Harvard University) came to study pig bones from Hacinebi and Gritille (May)
- Tristan Carter (McMaster University) was on sabbatical at the Oriental Institute this academic year. Having analyzed some of the Abu Hureyra obsidian in our collection by x-ray florescence in the previous year, he spent some time counting the flint from the corresponding loci in order to work out the percentage of obsidian to flint. Then he began a study of obsidian tools from Jarmo, Iraq
- Jeanne Moe (Project Archaeology) came to examine flint artifacts from Abu Hureyra, Syria (June). The Oriental Institute Public Education and Outreach Department is partnering with Project Archaeology to publish a curriculum that uses Abu Hureyra as an archaeological site study example
- Jennifer Butterworth (Emory University) studied Nubian human figurines as part of her PhD research (June)
- Amber Ginsburg (University of Chicago) examined Islamic sherds decorated with floral motifs for an art project (June)

Oriental Institute Faculty, Staff, Researchers, and Students

- Natasha Ayers (University of Chicago graduate student) has been down to check on details of Assasif pottery for a project with Christine Lilyquist. She also borrowed a drawer of Mendes sherds for a drawing class in June
- Tasha Vorderstrasse (research associate) has been busy studying Fustat objects for the forthcoming special exhibit, *A Cosmopolitan City*, for which she is one of the co-curators, with Donald Whitcomb and Tanya Treptow. She has also continued to work with us as a volunteer registering Islamic sherd material
- Lisa Heidorn (research associate) has continued to work on the Nubian site of Dorginarti for a publication. A selection of crucible fragments from the site has gone out on loan for analysis
- Karen Wilson (research associate) has continued to work on the publication of the Inanna temple sounding at Nippur with Mac Gibson, Richard Zettler, Jean Evans, and others. The volume has been accepted for publication by the Oriental Institute
- Bruce Williams (research associate) has continued to work on Serra material for a forthcoming publication. NELC graduate students Kathryn Bandy, Elise MacArthur, and Susan Penacho have continued to re-examine the large number of clay sealings from the site
- Sam Harris (University of Chicago student) studied Ubaid sherds from the teaching collection (November)

REGISTRATION

- Tytus Mikołajczak (University of Chicago graduate student) has been studying material from Persepolis as part of the Achemenet Project headed by Prof. Pierre Briant of Paris (see separate report)
- Brian Muhs (faculty) used two Coptic papyri for a class in spring quarter (OIM E13779A and E17943). In June Brian also studied a few ostraca from Dorginarti for the forthcoming publication
- Fred Donner (faculty) used two stelae and several Arabic papyri for a class in spring quarter and several of his students have made additional visits to study their own particular papyri
- Miriam Müller (postdoctoral scholar) used a selection of Middle Kingdom pots for a class (October)
- Persis Berlekamp ran her Islamic Art of the Book class and utilized several of the codices in the collection (October)
- Megaera Lorenz (University of Chicago graduate student) consulted records and chose two objects from storage for her Ground to Gallery course in spring quarter
- Debora Heard (University of Chicago) chose God's Wives ushebtis from storage for use in Ground to Gallery course (May)
- Robert Ritner (faculty) used a selection of heart scarabs for the Beginning Hieroglyphs class
- Nadine Moeller's (faculty) students studied and wrote papers on a variety of Museum objects in the spring term as follows: Ariel Singer (coffins), Sasha Rohret (canopic jars), Oren Siegel (tomb models), Emilie Sarrazin (Middle Kingdom private statuary), Brendan Hainline (First Intermediate Period steles)
- Rachel Schine (University of Chicago student) made a selection of objects for a special gallery tour for Chabad House with objects relating to Judaism/Jewish communities (November)
- Jen Kimpton (Epigraphic Survey) studied accession and registration records for Medinet Habu objects (June)
- Annalisa Azzoni (research associate) came down to examine a selection of sherds with inked Aramaic inscriptions (May/June)
- Carol Meyer (research associate) joined us from time to time to draw Serra and other Nubian material and to study glass objects
- Janet Helman (volunteer) has been through all the registered sherds from Tall-i Bakun for a project with Abbas Alizadeh

Our volunteers, interns, and work-study students have all been busy this year. Jim Soprano registered Baluchistan sherds for the teaching collection and has now begun on the Tell es-Sweyhat sherds (Syria) from Tom Holland's published excavations at the site. Toni Smith has continued with the registration of Dorginarti sherds that are to be published in Lisa Heidorn's forthcoming volume, and in summer 2013 Natasha Ayers spent some time going through the illustrations in Lisa's PhD dissertation to identify them with sherds in our collection and to make sure that anything to be illustrated in the final publication received an OIM registration number. Sam Butler (UC undergraduate, summer intern 2013) helped with a finding aid for the unregistered Dorginarti sherds to assist Natasha. In addition to Sam, we were also helped by summer intern Petra Creamer (Ohio State University) in summer of 2013. Tasha Vorderstrasse has completed the inputting of records relating to Istakhr sherd registrations. Daila Shefner has been working on an inventory of the small objects store. Museum Registration has had the assistance of three MAPSS work-study students this academic year:

Kirsten Forsberg registered all the remaining small fragments of Khorsabad reliefs (some 560 pieces) and inserted bibliographic references for Khirbet al-Kerak Byzantine and Islamic material among other tasks; Erin Livengood completed the registration of Tabun cave flint (388 tools) and then moved on to sherds from the Chalcolithic site of Tepe Sohz, Iran (some 2,450 registered this year); Andrew MacIver scanned registration index cards from the Asiatic collection. This summer we have been joined by Angela Spidalette (George Washington University), who is presently busy registering the Nahal Tabor pottery (Israel, Early Bronze Age) and more Nippur tablet casts. She has also conducted an inventory of our temporary storage boxes and helped with checking OIM registration numbers in the forthcoming Geser publication. All in all it has been a busy and productive year.

ARCHIVES

John A. Larson

As of December 2013, John A. Larson has served as head of the Oriental Institute Archives for thirty-three years.

On November 25, 2013, we received the generous gift of four hand-colored lithographs illustrating Egyptian birds from Nancy Shinn Hart of Batavia, Illinois. The prints come from the second edition of the great Napoleonic publication, *Description de l'Égypte*.

Scholars visiting the Archives during fiscal year 2013–2014 included Ashley Fiutko Arico, a PhD candidate at Johns Hopkins University, who came on September 10, 2013, to look at photographs and archival records of Egyptian statue fragments from Megiddo for her dissertation; David C. and Ina Woolman, who visited on October 9 and 10, 2013, to discuss the work of his father Laurence C. Woolman at Chicago House and Megiddo for a biography; Peter Raulwing came on November 4 and 5, 2013, to do research on German scholars with a special focus on Indo-Aryan in the ancient Near East; on December 9–12, 2013, Kathleen Sheppard, a historian of Egyptology, visited from the Missouri University of Science and Technology to investigate the role of hotels in Egypt as places of knowledge creation in Egyptology; in late January 2014 and again in late April 2014, Jennifer Y. Chi of the Institute for the Study of the Ancient World (ISAW) in New York, and Pedro Azara and Marc Marin of Barcelona, came to do research for a forthcoming exhibition at ISAW; Alex Bray, a PhD candidate at Bryn Mawr, visited on February 14, 2014, to study records of the relief stucco from the palace at Chal Tarkhan in Iran; and on March 3, 2014, Yael Rotem came to do research on Tell Yaqush and Nahal Tabor in Israel for her dissertation.

Oriental Institute personnel using the Archives during fiscal year 2013–2014 included Terry Friedman, Janet Helman, W. Raymond Johnson, Jen Kimpton, J. Brett McClain, Emily Teeter, Bruce B. Williams, and Karen L. Wilson.

We would like to thank two volunteers who assisted us this year: Carole Yoshida, who passed the halfway point in her project to produce digital scans of our Lantern Slide collection for the Integrated Database, and Laura Alagna, who provided information and moral support for a grant proposal.

Matthew Amyx served for two months as Archives summer intern, assisting John Larson by producing new finding aids for the records from Bismaya (ancient Adab) and Khorsabad

(ancient Dur-Sharrukin), and from James Henry Breasted's two seasons on the Nile in Nubia during 1905–1907, as well as researching sources for grant-funding for the Archives.

In the spring of 2014, John Larson began working with project manager Angela Spinazze on introducing the Archives to the Integrated Database as Phase Two of the project, adding to what has already been achieved by Museum Registration, Conservation, and the Research Archives. At the very end of the fiscal year, the Oriental Institute website went live with the addition of the Photo Archives.

In August 2013, John Larson and Mónica Vélez worked on a project to provide a series of archival photographs from the Oriental Institute Archives for display on the walls of the Nile Restaurant, which recently moved into a new space on 55th Street near Woodlawn Avenue in Hyde Park.

CONSERVATION

Laura D'Alessandro

Each year brings a new challenge or opportunity for the Conservation Laboratory and this past year was no exception. Without a doubt, the most exciting event this year for conservation was the Oriental Institute's acquisition of a handheld x-ray fluorescence (XRF) spectrometer, purchased with funds provided by a generous donor. Also known as a portable x-ray fluorescence device (pXRF), this tool will revolutionize the work of the Conservation staff as well as that of our own researchers and international scholars who come to the Oriental Institute to study our collections. Due to its portability, it will also play an important role in Oriental Institute excavations. Our archaeologists will be able to bring the pXRF out to the field to analyze artifacts on site that would otherwise be unavailable for materials research. Since it is not necessary to remove a sample from the object undergoing analysis, and the x-rays have no permanent effect on the material, this type of analysis is considered non-destructive.

The spectrometer uses x-rays to energize matter. As atoms within the structure of the material are excited by the x-ray energy, they give off a characteristic burst of energy which is picked up by a detector within the spectrometer. The detector then measures this energy and converts it into a spectrum that allows us to identify the elements present in the material (fig. 1).

This sounds very straightforward but the actual interpretation of the spectrum and energy counts is somewhat complicated. There are limitations on a machine that is small enough to be held in your hand; however, with an understanding of the physics behind the device, the elemental composition of materials can accurately be determined.

The particular device that we have purchased, the Tracer III-SD (fig. 2), is manufactured by Bruker, a well-known international manufacturer of analytical equipment. The Conservation staff is receiving training from Bruker application scientists to ensure that they are prepared to use the pXRF both to carry out analyses on objects within the collection, an important component of conservation treatments, as well as to assist researchers with their own work.

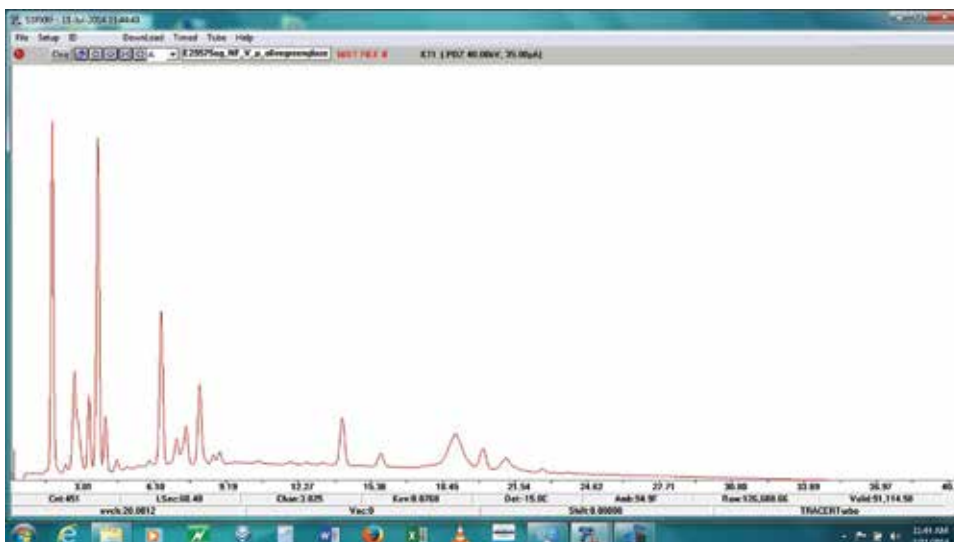


Figure 1. Example of a spectrum produced by the portable x-ray fluorescence (pXRF) spectrometer

Since its acquisition in October, the pXRF has already been used on a variety of internal and external research projects. The first official project was a study carried out by Stefano Spagni in November. Stefano, a PhD student from Sapienza University of Rome, is analyzing early metalwork from eastern Anatolia and visited the Oriental Institute to look at more than 200 metal objects from Alishar Höyük.

Early in 2014, discussions were held with Artur Obluski and Dobrochna Zielinska, researchers from Poland who are working with Bruce Williams on the Qasr el-Wizz materials. Conservation will be working on a parallel analysis of a portion of the wall paintings from Qasr el-Wizz in order to coordinate calibrations on our respective equipment. This will allow for comparison of results on these and similar materials in the future.

In February, we used the pXRF to analyze stone figurines from Diyala to provide Karen Wilson, an Oriental Institute research associate, with material identification for an article she was preparing on this collection.

In March, Felipe Gaitan-Ammann, a faculty member from the Department of Anthropology, contacted Conservation with a request to look at a handful of objects from the Spanish colonial site of Old Panama (1519–1671). These fragments of jewelry and clothing, mostly dating to the late seventeenth century, provided an interesting



Figure 2. Associate conservator Alison Whyte analyzing pigment on a stone object using the Bruker Tracer III-SD pXRF device in the Conservation laboratory

CONSERVATION

change in focus for us and, in return, we were able to provide Felipe with technological and compositional information on the collection.

Later in the spring, we began what promises to be a very important, far-reaching project. Under the direction of Matthew Stolper, the Persepolis Fortification tablets will be studied in an attempt to determine the clay sources used to make the tablets. Using their compositional make-up, researchers hope to be able to identify groups of tablets with similar clay matrices. As the project progresses, one of the goals will be to match the different clay groups with their (geological) clay source. The preliminary phase of this project is currently underway. Matt Stolper and his colleagues provided the Conservation staff with twenty-eight Persepolis Fortification tablets to serve as the basis for this first testing phase. The tablets were chosen on the basis of their text/content and visible clay attributes and are believed to represent four or five possible sources. Analysis in the Conservation laboratory focuses on identifying the major and minor elements within the clay. Multiple locations are tested on each tablet to ensure that representative data is obtained. The resulting data will be analyzed by Dr. Lee Drake, a senior application scientist with Bruker. Dr. Drake has degrees in anthropology and chemistry and is ideally suited to collaborate on this project. Once the preliminary data has been analyzed, Dr. Drake will make his recommendations for the next step in the trial phase.

Conservation has also begun studying a number of objects slated for display in the next special exhibit, opening in February 2015: *A Cosmopolitan City: Muslims, Christians, and Jews in Old Cairo*. Using the pXRF we will be analyzing Islamic-period glazed ceramics, ink inscriptions, and pigments used to decorate stone objects in order to identify some of the raw materials used to manufacture these artifacts. Material identification is an essential component to the conservation treatment of these objects, which will be carried out by associate conservator Alison Whyte. It is hoped that the results will assist the exhibit curators to describe the objects in more detail than was previously possible.

The pXRF kept us busy, it's true, but of course the primary work of the lab revolves around the care and treatment of the collection. Alison was kept particularly busy this past year with the addition of three mini-exhibits: *Silk Road and Indian Ocean Traders*, *The Cyrus Cylinder*, and Michael Rakowitz's mesmerizing *The Invisible Enemy Should Not Exist*, which were installed in the midst of work for our special exhibitions and dealing with outgoing loans and research requests. Alison kept the workflow moving smoothly as she managed the conservation for our two main exhibits. The first of these, *In Remembrance of Me: Feasting with the Dead in the Ancient Middle East*, opened in the spring. As with any new exhibit, there are a myriad of responsibilities in addition to the stabilization of the objects, including accelerated aging tests on exhibit materials, handling incoming loans, and advising on appropriate environmental parameters for the display of the collection. Alison is already hard at work on next year's exhibit. As mentioned above, an important component of this work will involve the accurate identification of the materials used in the manufacture of the objects.

Work on the KE EMu (Electronic Museum) database continued with Alison and contract conservator Simona Cristanetti playing key roles in designing the conservation section and facilitating the migration of the conservation records. After the integration of the data, many hours were devoted to testing the system and ensuring that the information had been entered in the correct locations within the database. Then it was on to the design and review of the reports that will be generated by the database. This phase will continue on into next year. We look forward to the time when all our record-keeping will be accessed and generated via the KE EMu database.

Simona, as a key member of the Conservation staff, kept busy working on a multitude of projects over the course of the year. She also continued her work on the Persepolis Fortification Archive Project for Matt Stolper and his team of researchers, carrying out conservation on the collection to facilitate the transcription and imaging of the tablets.

This year also saw the completion of the two-year, National Endowment for the Humanities-funded Metals Room rehousing project. The entire Conservation staff played a role in the final months of activity to bring this project to a successful conclusion. We were ably assisted during this period by Conservation pre-program volunteers Anna Kusters and Marissa Bartz (fig. 3). We thank them for their invaluable contributions.

The joint Oriental Institute–National Museum of Afghanistan inventory and rehousing project, funded by the U.S. Embassy in Kabul, continued as well. I traveled to Kabul in May to accompany the new project conservator Federica Grifi, and to introduce her to our Afghan colleagues. Federica, an Italian conservator, has worked abroad for many years in a variety of situations and is ideally suited to fill the position. She was very well received by our Afghan colleagues and has been busy working alongside the National Museum conservators since early May. On the return trip, I stopped in London to attend The Impact of Cross Disciplinary Conservation on Social Development conference at University College London. I presented a poster entitled “Focus on Afghanistan: Conservation and Cultural Heritage” that was co-authored by Alison, Simona, and myself.

We are slated to begin a research and conservation project on the coffin of the First Intermediate Period of the army commander Ipt-ha-Ishutef (OIM E12071) in the fall. Due to the size and fragile condition of this painted wooden coffin, it will require many months of conservation treatment as the coffin is stabilized and research is conducted on the pigments used in the decoration. We look forward to completing this project in the coming year and putting the coffin back on display once again in the Joseph and Mary Grimshaw Egyptian Gallery.

I thank Alison and Simona for their contributions to this section. And I am sure that I have left out many of their activities and responsibilities, but I would like to take this opportunity to thank them both for their hard work over this past year.

The year has flown by almost too quickly. We look forward to seeing what the new year will bring.



Figure 3. Contract conservator Simona Cristanetti (left) working in the Metals Room with Conservation volunteer Anna Kusters

PREP SHOP

Erik Lindahl

It's been another exciting and productive year in the Prep Shop. We have a new assistant preparator, Keeley StiTt, to replace Brian Zimerle. The special exhibits program is continuing to provide exciting challenges. Contemporary art has continued to have a home at the Oriental Institute with the *The Invisible Enemy Shall Not Exist* mini-exhibit. The following is a brief summary of the year's activities.

A major project for the Prep Shop this year was the design, construction, and installation of *In Remembrance of Me*. For this exhibit we hired Matt Federico and Michael Hall to assist with construction and installation. This was a complicated exhibit to put together. It has a multimedia viewing area with dual synced projection, a custom dining table-like central display case copied from an ancient example portrayed on a stela from Zincirli (see fig. 4 in the *Museum* report, above), and a monumental sculpture.

Mini-exhibits have always been a part of the Oriental Institute Museums activities; they serve as a tool to highlight specific topics, or to add to an event. This year's mini-exhibits included: *The Silk Road and Indian Ocean Traders*, *The Invisible Enemy Shall Not Exist*, and *The Cyrus Cylinder*. All these projects were exciting and rewarding to complete. We look forward to more mini-exhibits.

The contributions of our student workers cannot be overlooked. Justin Malichowski left us at the beginning of this year. His shop skills and depth of knowledge were missed during the installation of *In Remembrance of Me*. Kelly Messenger was with us for the year, her research skills and positive attitude were a great boost. Adam Bierstedt started in the fall and will continue while he works his way through the College. We hope his problem-solving skills and attention to detail will continue to be relied upon into the future.

The Joseph and Mary Grimshaw Egyptian Gallery was the first of our permanent galleries to be re-installed after the Museum was redeveloped in the late 1990s. It is starting to show its age, and so the Museum is working to refresh this gallery. We have replaced the labels and added LED lighting in one case as a test; it was well received by the museum community. We are working on a strategy for the rest of the gallery.

The Public Education and Outreach Department has enlisted the Prep Shop in the production of a museum activity cart. This year the design and testing was completed and the cart should be in service early next year.

Working with museums associated with Oriental Institute projects has become a trend for the Prep Shop. This started in 2005 with the Sanliurfa Museum in Turkey and this year the Prep Shop has completed its fifth installation in a foreign museum. This time at the Hisham's Palace Museum near Jericho in the West Bank. We worked with the Palestinian Department of Antiquities and Cultural Heritage to rehabilitate the museum at the site of Hisham's Palace (see separate report). Our team consulted on the design, display case construction, and performed the mount-making and final installation of the exhibit, which opened in May.

The *Our Work* exhibit has continued to engage the public. After closing at the Oriental Institute the Prep Shop helped prepare it to travel to the University of Chicago Medical Center and then to the Richard J. Daley Plaza pedway.

The building that houses our off-site storage is scheduled for demolition in the not too distant future. We have been working to develop a future strategy for long-term storage of display cases and other items.

Keeley Stitt has been working with Emily Teeter to produce advertisements and publicity materials for the Oriental Institute. Some of these include advertisements for the *Hyde Park Herald*, street-pole banners, rack cards, and posters for new outdoor signage.

The Oriental Institute is always hosting events for the public and the community. The Prep Shop has continued to prepare the Museum for these functions by moving display cases, preparing special displays, and being generally helpful.

Due to a large construction project across the street, the Museum needed to de-install some of the material in the Edgar and Deborah Jannotta Mesopotamian Gallery and relocate some of the display cases. The construction was completed in June and we are now putting the gallery back together. As a part of this process we are also working to improve the lighting, re-mount some objects, and fine-tune the layout of the gallery.

Another improvement to the permanent exhibits this year was the installation of a video reconstruction of Persepolis in the Robert and Deborah Aliber Persian Gallery. Farzin Rezaei provided the reconstruction video; Keeley Stitt edited the footage and performed other post-production work. The video, called *Persepolis Recreated*, has helped to contextualize the material from Persepolis on display in the gallery.

This year has been a busy one, and we anticipate more of the same next year. We thank all who have helped us accomplish our goals for this year.

PHOTOGRAPHY

Anna R. Ressman

The Photography Department had a busy and productive 2013–2014 fiscal year. One special exhibit catalog was completed, one is under way, one Museum highlights book has been completed, thousands of Photography Department images were put online, and photography for a major rehousing project was completed, while a major new research-oriented photography project has begun. I completed catalog object photography for the In Remembrance of Me special exhibit last fall. An example of object photography from the exhibit catalog is OIM A12640/A17345, stone box and lid (fig. 1.) Catalog photography has begun for the special exhibit *A Cosmopolitan City: Muslims, Christians, and Jews in Old Cairo*, which will go on display early in 2015. Photography for the upcoming *All Galleries Highlights* book has also been completed this summer, it will include new and updated photography of the highlights of objects from each of the Museum's seven different regional galleries. New object photography for that book includes images of OIM A30553, a bronze foundation peg from Mesopotamia (fig. 2) and OIM A24066, a man-bull column capital from Persepolis (see *Achemenet* project report, fig. 1)

This year assistant photographer K. Bryce Lowry completed the photography, cataloging, and archiving of images for the Metals Room Rehousing Project, funded by a National Endowment for the Humanities Preservation and Access: Sustaining Cultural Heritage Collections grant. The Oriental Institute *Achemenet* Project (see separate report) is a new project

PHOTOGRAPHY



Figure 1. Box and lid, stone. OIM A17345 (box), A12640 (lid). Tell Judaidah (box), Chatal Hüyük (lid). Iron Age II, Iron Age III, Amuq, Turkey (photo by Anna Ressman)

in conjunction with the Louvre and will enable new photography of about 500 Persian objects from the Achaemenid period, which will be included in the Achaemenid Project website. Assistant photographer Austin M. Kramer began photography for this project in May and will work on it through the next year.

This winter and spring Bryce and I worked very hard to upload the last seven years of studio object photography into the new Integrated Database, which went online for public access this spring. Between that work and the Metals Room rehousing images that Bryce uploaded, over 8,000 images were added to in-house and public-facing databases for reference and research. Most recently Austin and I have been working to update the imagery on the Oriental Institute's new website.

As usual, there were a number of medium-length projects, individual in-house requests for photography, and requests for images for publication in external exhibit catalogs, academic journals, as well as in print and online media outlets. The article "Behind the Scenes: Museum Photography at the Oriental Institute," in the spring 2014 issue of *News & Notes* was featured on the Cultural Heritage Imaging website for its discussion of Reflectance Transformation Imaging in a museum setting.

We again had the pleasure and good fortune to have John Whitcomb as an occasional volunteer this year before he left for graduate school in architecture at UCLA this fall. Finally, I would like to acknowledge the outstanding efforts of assistant photographers Bryce Lowry and Austin Kramer and thank them for all the hard work they put into all the Photography Department projects this year.



Figure 2. King Ur-Nammu foundation peg, bronze. OIM A30553. Ur III, Nippur, Iraq (photo by Anna Ressman)

SUQ

Denise Browning

This year was a bit of a challenge for us with the closing and construction on 58th Street, which lasted the entire year. Our sales were down almost 20 percent — the first time ever. However, those that made it through the door were full of praise for the Museum and the gift shop. The new pedway is absolutely gorgeous and if you haven't seen it yet you will be surprised. We have lots of beautiful landscaping and benches to encourage visitors to linger. Our sales have already started to rebound.

Our incredible volunteers gave those customers impeccable service. Many thanks to Judy Bell-Qualls, Ray Broms, Norma van der Meulen, and Jane Meloy. Plus, we had two new student volunteers, Natasha Wands and Jared Isaacs.

Norma continues to outdo herself with beautiful new designs of jewelry for the Suq, creating quite a following of customers waiting to see her new work. Many thanks to Evan Bernard, who did the mail orders and helped in the office as well as the Suq. As well as Dylan Genest and Nicholas Polk, student employees who were able to keep up with their studies and still give time to the Suq. Evan and Dylan graduated this year and will be leaving us; they will be missed.

The pedway literally opened three days before our big rug sale. We covered the loading dock with a large tent and filled it with rugs. The market is cautious for big-ticket items like these rugs, which are brought directly from Afghanistan, but we managed to sell seventeen of them, bringing in \$20,000.

We are looking forward to the new year and the fascinating new special exhibits so that we can bring in unique inventory from the Middle East along with some new product development. It is amazing in itself that we are still able to get shipments from Syria. Egypt has cut back in its tourist trade, but they are still producing many crafts and our connections are still intact.



PUBLIC EDUCATION AND OUTREACH



Overleaf: Modern cylinder seal impression; (above) Hematite cylinder seal with modern impression. Mitanni period, 1600–1500 BC. Turkey, Tell Tayinat. Excavated by the Syrian Expedition of the University of Chicago, 1936. 2.1 × 1.1 cm. OIM A27494. D. 009194. Photos by Anna Ressman

PUBLIC EDUCATION AND OUTREACH

Catherine Kenyon

Here we are as another successful, exciting, and enriching year has passed with the opportunity to reflect on our accomplishments, challenges, and new ideas on the horizon.

Growth in Programming

One of the department goals for fiscal year 2013–2014 was to increase program attendance by 10 percent for adult, family, and teacher programs. To accomplish this goal, the Public Education Department launched four distinctly new programs in an effort to reach whole new audiences and made significant increases to two stagnant programs.

The total program attendance for this fiscal year has exceeded our goal for all three of these audience areas, which is an impressive achievement given that our walk-in visitor attendance dropped nearly 35 percent as a result of the University's construction in front of the Oriental Institute during this fiscal year (fig. 1).

New Programs

Epic Wednesday targets the young professional and over-21 audience segment (fig. 2). Three programs have been produced with a total of 116 attendees. The significant metric for this program is the increase between the first program (14 attendees) and the third program (57 attendees). The increase represents a 69 percent increase in a seven-month period.

Lunchtime Traveler targets the University faculty, staff, and student audience, as well as docents and the Hyde Park community at large (fig. 3). Eleven programs have been produced with a total 293 people coming to the Museum for this midday program.

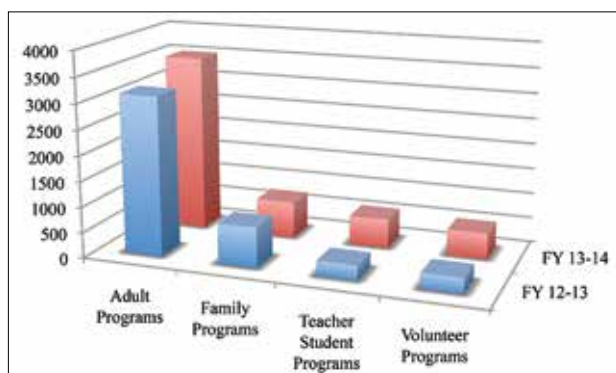


Figure 1. Public Education program growth chart

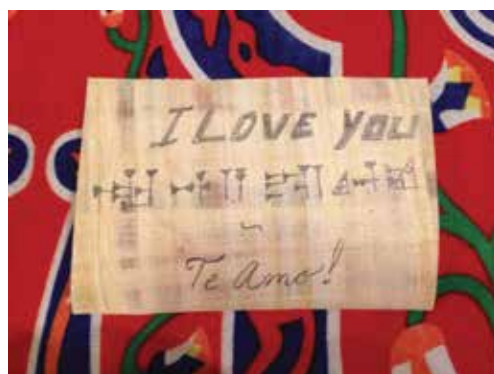


Figure 2. A Valentine's message written by one of the Epic Wednesday participants in February 2014 (photo by Catherine Kenyon)

PUBLIC EDUCATION AND OUTREACH



Figure 3. Lunchtime Traveler talk by Martha Roth (photo by Austin M. Kramer)

Homeschool Programs target the vast homeschool audience in the Chicago suburban area, northwestern Indiana, and southeastern Wisconsin. In this fiscal year we launched six programs and attended one outreach event. There is one more homeschool program planned for this fiscal year. We have reached a total of 162 people with these events.

Drop-In Tours is an experimental program established after the 2013 Docent Captain Luncheon with Gil at the request of the Captains. This program targets the walk-in Museum visitor. Unfortunately, we did not see the numbers of attendees that made the effort worth the docents' time. We believe the

harsh winter and construction were key factors for these low numbers. We offered eleven drop-in tours with a total attendance of fifty-seven people with an average of five people per program. After running this program for three months, we have placed it on hold until walk-in attendance improves.

Deciphering the Past: Beginning Egyptian Hieroglyphs. This fiscal year saw the development, production, and launch of a whole new online course — a language course. These online courses target an adult audience interested in continuing education and many online classes



Figure 4. Cover of the spring 2014 public programs brochure

include our members and docents. We had twenty-one participants for this new course. More analysis is needed to determine how to make this and future language-based courses successful, but this project marks a significant milestone for the Public Education Department in revamping the old correspondence course.

Advances in Communication

This year the Public Education Department overhauled its quarterly brochure and created an integrated public programs brochure, which includes information about special exhibitions as well as member and other sponsored lectures (fig. 4).

New System for Tour Booking and Processing Payments

The department has created a new computer-based tour booking process and created new procedures for processing payments for tours and all other fees taken in by the department. A new tour database was built that automatically sends communications to tour booking clients. These communications include: registration confirmation, tour reminders, and follow up e-mails encouraging clients to book future tours. We have initiated and completed approximately three-fourths of our new accounts receivable/invoice/receipt system to process payments more efficiently and with improved record keeping which is in line with the University's accounting requirements and systems (figs. 5-6).

Outreach

This year we had a number of opportunities to bring the Oriental Institute into public and professional communities. We even reached the international community. This outreach included professional presentations at the University of Chicago's Faculty Technology Day, CPS Social Science Meeting, Computer Applications and Quantitative Methods Conference (CAA) in Paris (fig. 7), public speaking engagements for Montgomery Place Assisted Living Community, DePaul University business school students, Dominican University art history students, Chicago Volunteer Expo and public programs with the Assyrian Community,



Figure 5. The new Education Department FileMaker Pro tour database



Figure 6. Oriental Institute public programs online registration page — what the public sees

PUBLIC EDUCATION AND OUTREACH



Figure 7. *The Sorbonne, Paris, April 2014*

Hyde Park Arts Fair, Home School consortiums, and the 57th Street Book Festival.

Adult Programs and Continuing Education Courses

This year we offered sixty-nine programs and reached out to 3,667 adult learners through our in-house, off-site, and online programs and courses. We also advanced our online communications through the new bi-monthly Adult Programs and Courses e-News, which reaches over 1,370 recipients.

In the three-part series *Ground to Gallery: The Secret Life of Museum Objects*, we engaged the scholars at the University of Chicago in examining the living histories of selected objects in the Oriental Institute Museum collections with our visitors. The topics and presenters in the series included “Hittite

Plaque, Megiddo,” with Dr. Theo van den Hout, professor of Hittite and Anatolian languages at the Oriental Institute; “Serving Statuettes from the Tomb of Nykauinpu, Giza, Egypt,” with Megaera Lorenz, PhD candidate in Egyptology at the University of Chicago; and “Mining the Nubian Gallery,” with Debora Heard, PhD candidate in anthropology at the University of Chicago (fig. 8). Visitors received a behind-the-scenes tour to places such as the Registration Office and Hittite Dictionary Office to explore the full spectrum about the presented objects.

In June 2014, we hosted the Graceland Cemetery Walk, led by Egyptologist Michael Berger (fig. 9). In this two-hour tour, twenty participants explored obelisks, mausolea, even a pyramid, and other Egyptian-style grave markers, followed by a lunch at a neighborhood eatery, Delece Restaurant.



Figure 8. *From Ground to Gallery. “Mining the Nubian Gallery,”* was given by guest presenter Debora Heard (far left), PhD candidate in anthropology at the University of Chicago (photo by Megaera Lorenz)



Figure 9. *Graceland Cemetery Walk* (photo by Carol Ng-He)

Family and Youth Programs. *Moriah Grooms-Garcia*

Over 1,000 people took advantage of our youth and family programs this past year, a 23 percent increase from the year prior. Contributing to this progress were the offering of long-time favorite programs (*Secret of the Mummy* and *Junior Archaeologist*; fig. 10) on a regular basis, the creation of additional recurring and annual family programs, and the building of our homeschool workshop program.

Art and Archaeology

The year started off with the Oriental Institute co-hosting the annual Be an Ancient Egyptian Artist Camp with the Lillstreet Art Center. Youngsters between the ages of five and eleven attended the week-long camp, which was offered for one session during summer 2013. For half the camp's duration our own Kipper Family Archaeology Discovery Center (KADC) facilitators filled the role of "artist-in-residence," facilitating the making of Egyptian-themed crafts. The camp culminated in a trip to the Oriental Institute and its simulated archaeology dig site, the KADC.

During the first part of the year our Boy Scout Archaeology Merit Badge Workshop went on hiatus while we revamped the program. The Scouts are now able to meet all their requirements for the badge by the end of the workshop. The simulated archaeology site family program *Junior Archaeologists* saw 60 percent increase in attendance.

Literacy

This year we continued a story-time series hosted by the Museum's biggest bird of all, LamaSSu. This program, called LamaSeuss, pairs one of the Institute's most iconic artifacts with the most well-known American children's book writers — Dr. Seuss — for a fun and educational opportunity that teaches children about the ancient world. The lamassu, with his cuneiform inscription and colossal stature, makes the perfect entry point to learn about ancient writing, animals, money, hats, and more!

The program *Little Scribe* is a new addition to our recurring program offerings. An interactive presentation takes kids ages 9 through 12 through the evolution of writing from ancient pictographs to modern "text language" (i.e., "I <3 u. We hv 2 c Bieber"). Children also try their hand at Assyrian cuneiform and Egyptian hieroglyphs.

Family Fests and Events

This past summer we hosted a large end of the exhibit event for families and instituted two new events that will return to the Oriental Institute annually.

Over 200 people came to the day-long bird-themed family event *Open Nest*, offered in conjunction with the special exhibit *Between Heaven & Earth: Birds in Ancient Egypt*. Among the many activities this final event for the exhibit offered, it invited families to make a bird-version of themselves and learn the staff-parody "The History of the Chicken" Dance about the origin of the chicken and its travels from Asia to Egypt (fig. 11, left). The Oriental Institute



Figure 10. Kids and parents have fun digging up artifact replicas during the Junior Archaeologist program

PUBLIC EDUCATION AND OUTREACH



Figure 11. Open Nest. Left: the “History of the Chicken” Dance was offered three times during the all-day Open Nest event in July 2013. Youth and Family Program coordinator Moriah Grooms-Garcia and intern Leila Makdisi lead the activity from the center of the ring of chicken dancers; Right: this little Hyde Park resident, Maya, found one of the GOOSE flyers for Open Nest and brought it in to get her free pharaonic rubber duck!

engaged the Hyde Park neighborhood in a “goose chase” of sorts through its flyer campaign leading up to Open Nest. Flyers with either the word “DUCK” or “GOOSE” were posted in the area, with the latter type of flyer offering a free pharaonic rubber duck to its finder. You can see this happy participant who found one of our GOOSE posters before she claimed her rubber duck (fig. 11, right). We would like to extend special thanks to those who supported this event, particularly our event sponsor La Petite Folie. Their support and yours helped the Oriental Institute offer this fun, educational event to families free of charge.



Figure 12. The Look. Left: Oriental Institute volunteer Isabella Anthony explains how to wear a linen like a woman in Old Kingdom Egypt versus in New Kingdom Egypt; Right: kids entranced with the loom activity

The Look got families investigating the science and process behind the fashions of ancient Egypt (fig. 12). Kids worked on a loom, created jewelry, examined minerals, and tried on ancient clothes in both Old Kingdom and New Kingdom styles. Families learned how archaeologists are able to use the fashions of ancient Egypt to date artifacts.

Every November, starting this past year, you can expect the Oriental Institute to host their annual family event in honor of International Game Day: Ancient Game Day. Families learned how to play the favorite board games of ancient Egypt and Mesopotamia and created their own using the basic “rules” of how to make a game.

Offsite Programs

This year we focused on two highly successful off-site programs with area partners. The Children’s Book Fair (formerly known as The 57th Street Children’s Book Fair) has been an annual Hyde Park celebration of books and reading since its start twenty-six years ago. The Oriental Institute has the distinction of being the only community institution that has taken part in the fair since its inception. Families enjoyed the Oriental Institute’s booth at both the fall Children’s Book Fair and the spring 57th Street Art Fair. Parents and children were eager to make rubbing imprints of ancient Egyptian reliefs and Egyptian murals that follow the artistic “rules” of ancient Egypt. As in the past, the fairs let us introduce the Oriental Institute to families from around the city.

Homeschool Programs

This year we began hosting monthly workshops for the homeschool community. Homeschool programs offer a great opportunity to go in-depth on a specific topic for children ages 5 to 12. We experimented with a few program models this past year, taking our audiences’ feedback along the way. This has led us to a model that splits the large group into two smaller groups: ages 5 to 8 and ages 9 to 12. This past year we investigated the science of mummification (fig. 13), used ancient Egyptian math and math theory to learn place value and multiplication (and by extension, binary code!), and to find out how ancient Mesopotamians lived by investigating the dwelling at the site of Jarmo.

On the Horizon

The coming year will see further growth in our homeschool workshops with a focus on building relationships that foster a sense of community. In addition, we will continue to strengthen and grow our current family program offerings.



Figure 13. Homeschoolers got to touch a 3-D print of a mummified eagle at Mummy Science

K-12 Teacher Programs. *Carol Ng-He*

Building upon the success of joint programming with the University's K-12 outreach, we continued to work with the Center for East Asian Studies, Center for East European and Russian/Eurasian Studies, Center for International Studies, Center for Middle Eastern Studies, Center for Latina American Studies, Smart Museum of Art, and Committee on Southern Asian Studies/South Asia Language and Area Center. This year we had four major collaborative programs for K-12 teachers, including:

- Summer Teacher Institute — Natural Disasters and Social Responses: A Global Perspective in July 2013
- The sixth annual Chicago International Education Conference in November 2013 (fig. 14)
- Teacher Appreciation Night in May 2014 (fig. 15)
- Summer Teacher Institute — Energy and the Environment: Science, History, Politics in June 2014 (fig. 16)

The Teacher Advisory Council continued to consult with us to make K-12 teacher programming more effective to meet the needs of teachers and their students. In 2013-2014 we had six active members on the Council: Cory Schiffern, Mitchell Elementary School; Christine Gray-Rodriguez, Garvy Elementary School; Kayla Vigil, Namaste Charter School; Nashwa Mekky, Ivy Hill Elementary School; Nissa Applequist, Lane Tech High School; and Cindy Jurisson, University of Chicago Laboratory School. With their advice and support, we successfully offered new programs for teachers and assessed the need for new teacher curriculum and resources.

This year we launched a series of four CPS Arts Liaison Welcome Events in partnership with the Smart Museum of Art aimed to offer K-12 art teachers and liaisons museum collections as a teaching resource. The programs were: Context Matters! Exploring the Role of Archaeology in Art History, with a tour by Lisa Truex, PhD candidate in Near Eastern art and archaeology at the University of Chicago; Exploring the Oriental Institute's Integrated Database & the Museum's Architectural Design, with Foy Scalf, head of the Oriental Insti-



Figure 14. Carol Ng-He, K-12 and Continuing Education Program Developer, presented in a break-out session at the sixth annual Chicago International Education Conference (photo by Lisa Davis)



Figure 15. Representatives of the UChicago K-12 outreach offices participated in the Oriental Institute's first annual Teacher Appreciation Night in May 2013 (photo by Carol Ng-He)



Figure 16. Rozenn Bailleul-LeSuer, PhD candidate in Egyptology at the University of Chicago, represented the Oriental Institute at the Summer Teacher Institute organized by the Center for International Studies (photo by Carol Ng-He)



Figure 17. Oriental Institute Museum chief curator Jack Green, center, gave a gallery tour to teachers at the CPS Arts Liaison welcome event (photo by Carol Ng-He)

tute Research Archives; Who Owns the Past?, with Jack Green, chief curator of the Oriental Institute Museum (fig. 17).

The fee-based, quarterly Teacher Workshop Series engaged teachers in a more in-depth exploration of the Oriental Institute Museum collections and research materials while teachers learned how to use objects in their inquiry-based teaching pedagogy (fig. 18). The themes covered were: Teaching Ancient Egyptian Art and Architecture with the Oriental Institute Museum Collection, by Megaera Lorenz, PhD candidate in Egyptology at the University of Chicago; Teaching with Primary Sources, by Debora Heard, PhD candidate at the Department of Anthropology at the University; and Teaching the Arts, Science, and Archaeology of Ancient Food, by Oya Topçouğlu, PhD candidate at NELC and in collaboration with Atorina Zomaya of the Assyrian Kitchen.

In spring 2014, the Oriental Institute Museum participated in Envisioning China, a cross-departmental festival of arts and culture organized by UChicago Arts. The Public Education Department partnered with the Smart Museum of Art for a teacher workshop entitled Material Culture and Artistic Exchange: From the Silk Road to Slow Dance associated with the mini-exhibit: Silk Road and Indian Ocean Traders: Connecting China and the Middle East. Tasha Vorderstrasse, research associate and exhibit curator, led this program (fig. 19).

Additionally, this year we partnered with the Chicago Public Schools, Department of Literacy for the Social Science Academy, which was a year-long professional development program for classroom teachers. Through this program, three Chicago Public School teachers, from Orr Academy High

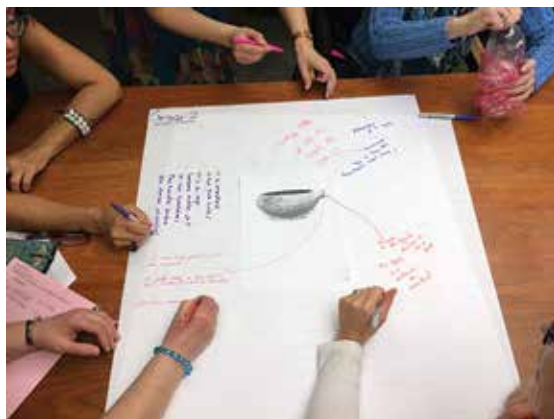


Figure 18. Teachers participated in a lesson planning activity at one of our Teacher Workshops (photo by Carol Ng-He)

PUBLIC EDUCATION AND OUTREACH



Figure 19. Oriental Institute research associate Tasha Vorderstrasse spoke about the mini-exhibit Silk Road and Indian Ocean Traders: Connecting China and Middle East to a group of teachers in May 2014 (photo by Carol Ng-He)

School, Gage Park High School, and Alcott East Elementary School, were engaged in a project focusing on the theme Defining Ancient Civilization and Connecting It to Today's World. Through an object-based approach, teachers learned how to incorporate primary-source materials — including maps, artifacts, and archaeological excavation documentation — into a classroom curriculum focused on contributions from the ancient world such as writing, urbanization, and economy systems. Building upon the scholarship of the Oriental Institute, and in alignment with the Common Core State Standards, teachers worked with Oriental Institute education staff to develop and implement a unit tailored to the needs of their

students. Through our K–12 teacher outreach initiatives and professional development programs, we reached out to a total of 534 teachers this year.

Our outreach extends cross the country and the world. Our educator blog From Ground to Gallery provides an additional space where educators can share their experience and ideas for teaching ancient civilizations in classrooms. From July 2013 to June 2014, the blog had 1,730 viewers, a fivefold growth from the previous year. In addition, e-Scribe, our monthly e-newsletter for educators, has reached over 1,360 people, a 60 percent growth from last year.

K-12 Student Programs

Between October 2013 and February 2014, we piloted an after-school program: Telling My Family's Story, designed for grades 5–6 and implemented at two Chicago Public Schools (Mitchell Elementary School and John W. Garvy Elementary School) (fig. 20). This program was in conjunction with the special exhibit Our Work: Modern Jobs — Ancient Origins. Twenty-two students participated in the program and learned about the importance of conducting and recording oral history projects. More importantly, students drew inspiration from Our Work to examine modern professions with origins in the ancient Middle East. Students worked with Matthew Cunningham, videographer of Our Work, to develop questions and use digital recorders and cameras to record their interviews for their project. In February, students and their families were invited to attend a celebratory event for their creativity and success in the project.



Figure 20. (left to right) Matthew Cunningham, Carol Ng-He, Christine Gray-Rodriguez (art teacher at Garvy Elementary School), and Cory Schiffern (social studies teacher at Mitchell Elementary School) at the Telling My Family's Story event in February 2014

Catherine J. Dueñas Transportation Scholarship Fund

In 2013 we launched the Catherine J. Dueñas Transportation Scholarship Fund in recognition of Cathy Dueñas for her service in the Volunteer Program. This fund offers eligible local schools with a contribution of \$150 toward the cost of one school bus to visit the Museum. As of June 2014, awards have been made to nine schools; 506 students were served.

On the Horizon

Since fall 2013, the Oriental Institute is one of the certified Illinois State chapters of Project Archaeology, a joint program of Montana State University and the Bureau of Land Management. The program began in Utah in 1990 as a statewide project to combat the vandalism and looting of archaeological sites. The Oriental Institute Department of Public Education is honored to collaborate with Project Archaeology to advocate ancient cultural heritage preservation. In August we will launch a new three-day Summer Teacher Workshop — Exploring Archaeology with the Common Core — based on the Project Archaeology curriculum Investigating Shelter. Through modeling the investigation process, teachers will experience how archaeological inquiry can engage students and meet Common Core State Standards in literacy and mathematics. This workshop is open to all K-12 educators of all disciplines and recommended for teachers who teach grades 3-5.

VOLUNTEER PROGRAM

Terry Friedman

Now in its forty-eighth year, the Oriental Institute's Volunteer Program continues to be a strong, vibrant force, helping the Institute and its Museum reach new audiences world-wide and to educate museum visitors about the history and culture of the ancient Near East. This year has been one of new beginnings, significant transitions, and meaningful conclusions.

Docents and volunteers continued serve the Oriental Institute in many capacities throughout the year. During this past fiscal year 2013-2014, 7,507 service hours were documented.

Recruitment

This year we carefully tracked through our Excel database the pool of potential volunteers and docents. Seventy-eight individuals submitted an application to become an Oriental Institute volunteer. After careful vetting through our interviewing process, thirty-two people were accepted into the Volunteer Program, eleven were invited to go through Docent Training, and six docents were officially certified to give tours, with three more who are still studying to pass certification.

Fall 2013 Docent Training Class

Monday, October 7, heralded the beginning of the fall 2013 Docent Training class, the first comprehensive training offered since the renovation and reopening of the Museum galleries in 2006. Our new docent-training model integrated content with inquiry and object-based learning. This methodology is a best practice and the gold standard used by docents throughout the museum field. We found that it was exciting and challenging at the same time and offered both seasoned and new recruits opportunities to incorporate new ideas and to develop fresh perspectives on how to create interactive tours for visitors of all ages.

“Tell me and I forget, Show me and I remember, Involve me and I understand.” (quote attributed to Benjamin Franklin)

This quote served as a guiding principle for the docent training class. Training sessions were designed to combine equal parts of content by faculty and research staff, with hands-on practice in crafting a tour, using themes and objects.

Inspired by the new gallery teaching methodology, docents enjoyed practicing the inquiry-based, object-centered learning techniques during their gallery tours. As one Museum docent, Stephen Scott, commented, “I found the docent training emphasis on object-centered learning to be invaluable. The training program emphasized the importance of encouraging students to observe the object before them in an inquisitive, thoughtful manner. This visual process that I facilitate supplements and enriches the classroom experience and stimulates student interest through an active, focused process of engaging with a single object.”

Throughout the planning and implementation of the fall training, we were fortunate to have the guidance and expertise of Friday Docent Co-captain David Figiel. David, a museum educator for over ten years, has been responsible for leading gallery teaching at the Met’s Cloisters, the Museum of Fine Arts Boston, and the Brooklyn Museum of Art — each with acclaimed ancient Near Eastern collections.

Thanks to the generosity of Mrs. Lee and Dr. Arthur Herbst, who underwrote the taping of the lecture portion of each training session, these lectures are posted to the Oriental Institute’s YouTube channel and will be a valuable resource for docents in the years to come.

Docent Library

The Docent Library collection continues to grow under the stewardship of head librarian Margaret Foorman and assistant librarian Marilyn Murray. Thanks to the combined success of the December Book Sale with re-



Students working in the galleries after their tour

cent sales through the Suq, the Docent Library now has over \$800 to fund the purchase of new books for the collection. Our thanks to the docents, volunteers, faculty, and staff who have been generous throughout the year with their donations of books, museum catalogs, and articles to the library's collection.

Object File

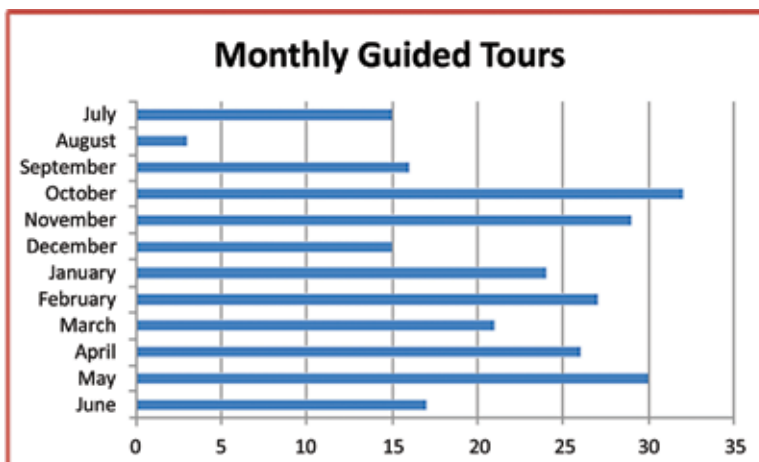
The Object File Project was initiated in May 2014 by docents in order to develop a resource for highlights objects in the museum galleries. These files, which will contain all pertinent publications related to each object, will play a crucial role in the training of docents who are encouraged to use object-based teaching strategies on their gallery tours. The object file team has begun their work on twenty-five objects from the Egyptian collection. Members of the object file team include Margaret Foorman, Marilyn Murray, David Figiel, and Terry Friedman.

Tours

Tour Program

The Oriental Institute Museum welcomed almost 250 groups this year for docent- and guided tours. This increase from last year is due to both the introduction of drop-in tours, which is a scheduled and advertised tour individuals can attend without prior registration, and “special tours” or tours that are given by faculty, curators, and grad students to various groups which data had not been recorded in prior years. We continue to provide the same number of tours to school groups during the academic year as we have for several years; in other words, we are basically booked with field trips every weekday, especially in October, November, February, April, and May!

We also track groups that come to the Museum and do not use our docents, or what we refer to as self-guided tours. The number of self-guided tour groups has more than doubled from the prior fiscal year, going from 92 to 211! Much of this reported increase comes from the collaboration of Jason Barcus and his team of guards requiring groups who have not registered with us prior to their visit to complete a registration form.



Monthly guided tours FY 2013/2014

VOLUNTEER PROGRAM

Docent Captain System

The Docent Captain System remains integral to the success of the Tour Program by making communication between the department's staff and the Museum docents more organized and efficient. Captains continue to mentor and guide new docents-in-training, giving them the support and guidance they need to become successful, confident gallery teachers. We extend our thanks and appreciation to the following captains and co-captains for their dedicated support throughout this past year: Gabriele DaSilva, David Figiel, Ralph Klein, Wahied Girgis, Dennis Kelley, Stuart Kleven, Larry Lissak, Jean Nye, Stephen Ritzel, Deloris Sanders, Margaret Schmidt, and Carole Yoshida.

New Policies and Procedures

In an effort to improve docent-led tours, we began to institute guidelines to ensure that docents arrive fifteen minutes prior to their scheduled tour in order to allow sufficient time to prepare for incoming groups. Docents now extend their time a few minutes after each tour for a debriefing session with the Volunteer staff to assess the tour and share ideas with one another for future tours. This informal setting allows us to evaluate how the inquiry-based techniques are working and to make adjustments when needed.

Staff Liaison

The role of staff liaison was implemented so docents have the staff support they need on busy tour mornings, as well as someone who can answer the many questions teachers have about the Oriental Institute. Liaisons help expedite tour arrivals and departures, assist with crowd control, and document the number of tour participants.

Timekeeper

A timekeeper slot was also developed to help captains regulate traffic flow in the galleries. They help to alert docents when they should begin to finish their last object and conclude the tour with knowledge checks and a review for what visitors have seen, learned, and experienced.

Parking

Over the course of the past year, we have seen a need to review the policies and procedures for all volunteers, including docents, to qualify for a parking pass to the Lexington Lot. After careful review and analysis, new guidelines for parking eligibility were developed to create a fair and transparent system to distribute our limited supply of parking passes. This new policy underscored the importance of a committed and engaged volunteer corps. As we move into the coming fiscal year, each volunteer with an assigned parking pass will be asked to sign a one-year parking agreement.

Volunteer Recognition

December Volunteer Day remains a time when faculty, staff, and volunteers gather to recognize the contributions of the Oriental Institute's volunteers. This year's program took place on Monday, December 9, in Breasted Hall, and ended with a lovely luncheon at the Quadrangle Club.

Volunteer Recognition Award recipients in Breasted Hall before leaving for the Annual Holiday Recognition Luncheon. Pictured, from left to right (back row): Myllicent Buchanan, Mary Finn, Terry Friedman (Volunteer Manager), Norma van der Meulen, Carole Yoshida, and John Aldrin. Front row: Irene Glasner, Daila Shefner, Deloris Sanders, Rev. Dennis Bailey, and Dennis Kelley. Not pictured are Judy Bell-Qualis, Sue Geshwender, Debby Halpern, Janet Helman, Lee Herbst, and Lucie Sandel



Gil Stein, Oriental Institute director, was our guest speaker and delivered a fascinating lecture on “Surejz: The First Season of Excavation.”

Immediately following Gil’s talk, the recognition ceremony began with the introduction of the new volunteers, class of 2013. We were pleased introduce the following new docents and volunteers: Laura Alagna, Isabella Anthony, Craig Bean, Elizabeth Bush, Angela Hanson Candadai, Kim Crawford, Omari Davis, Kristen Fanning, Davis Figiel, Valerie Grabski, Jacob Ter Haar, Shirlee Hoffman, Jared Isaacs, Malvika Jolly, Amanda El-Khoury, Ralph Klein, Mark Mandle, Paula Pergament, Peg Rom, Margaret Schmid, Arthur Thorson, Daniel Zaboroski, and Christine Zappella.

This year, eighteen people celebrated a milestone year in their volunteer service to the Oriental Institute.

Active Volunteers

5 Years

Reverend Dennis Bailey
Judy Bell Qualls
Ray Broms
Sue Geshwender
Paul Mallory

10 Years

John Aldrin
Mary Finn
Dennis Kelley

15 Years

Myllicent Buchanan
Debby Halpern
Lee Herbst
Lucie Sandel

20 Years

Irene Glasner
Deloris Sanders

25 Years

Daila Shefner

30 Years

Carole Yoshida

35 Years

Janet Helman
Norma van der Meulen

Reflections on Retirement

It has been a bittersweet experience to write this year's *Annual Report* since I will be retiring from my position as volunteer manager in October. After four decades serving as a volunteer and then as a staff member, I have decided to step aside and enjoy the next chapter of my life, retirement. Forty years goes by in the blink of an eye. I began my association with the Oriental Institute in 1974 as a Museum docent and for nineteen years, I was a docent/captain for the Tuesday afternoon team. In 1993 I assumed the role of volunteer coordinator as a job share with Cathy Dueñas. In February 2013, Cathy retired and I continued solo in my new role as volunteer manager.

Over the course of my tenure as a volunteer and staff member, I have seen the Volunteer Program transform itself to meet the expectations, opportunities and challenges of an ever-changing world. I have been honored to work with a group of exceptional colleagues who have inspired and challenged me, both professionally and intellectually. I am so proud of what Cathy Dueñas and I were able to accomplish during our time together as the Volunteer Services Coordinators. Together we took gigantic leaps of faith to make the program work. The establishment of an outreach program was a professional benchmark that helped keep the program alive during the years the Museum was closed for renovation. I am grateful to my mentors throughout the years: Carolyn Livingood, Carlotta Maher, Peggy Grant, Janet Helman, and Cathy Dueñas, who built a strong foundation on which the program could grow and thrive. I also want to recognize two ladies, Georgie Maynard and Joan Rosenberg, who were instrumental in helping me during my early years as a docent.

But it is the volunteers themselves who have given me the greatest sense of joy and fulfillment over the years. They form a unique community of dedicated individuals whose passion for learning, pride in the Institute's research, and appreciation for the Museum's collections have been the foundation of the program's success and the key to its historic longevity. While many technological advances have taken the program to new levels of efficiency and accessibility, it is the volunteers themselves who continue to hold on to many of the traditions that make this program unique. Although each person's motivation to join the volunteer corps may be different, the common denominators that unite them is their love of learning and their eagerness to contribute their time and talents to help enrich the Institute's mission and goals.

Although I will no longer be part of the Education and Outreach Team, I want to thank my colleagues in Public Education and Outreach, Catherine Kenyon, Carol Ng-He, Moriah Grooms-García, and Sue Geshwender for their support, patience, and confidence in me throughout this past year.

I know they will continue to recruit, nurture, and inspire new generations of volunteers, helping them to discover the wonders of the ancient Near East. I wish them every success as we move forward with great anticipation to the fiftieth anniversary of the Volunteer Program. My thanks to everyone for the opportunity to be part of the Oriental Institute family for the past four decades. It has been the experience of a lifetime.

In Memoriam

The Volunteer Program lost three loyal friends and supporters this past year: Andrew Buncis, Sandy Jacobsohn, and Lillian Schwartz.

These individuals exemplified the true spirit of volunteerism by devoting their passion, intellect, and support to help further the goals and mission of the Oriental Institute. We are so honored to have known and worked with them over the years and it is our good fortune that they chose to spend a portion of their lives with us.

Museum Docents

** Denotes active docents who are also project or event volunteers*

John Aldrin	Barbara Heller Friedell	Mary O'Connell
Isabella Anthony	Dario Giacomoni	Mary O'Shea
Craig Bean	Wahied Helmy Girgis*	Nancy Patterson
Dennis Bailey	Valerie Grabski*	Kitty Picken
Douglas Baldwin	Erica Griffin*	Semra Prescott*
Nancy Baum*	Janet Helman*	Stephen Ritzel*
Susan Bazargan*	Lee Herbst	Peg Rom*
Christel Betz	Mark Hirsch*	Lucie Sandel*
Rebecca Binkley-Albright*	Shirlee Hoffman*	Deloris Sanders
Daniel Bloom	Dennis Kelley	Hilda Schlatter*
Myllicent Buchanan	Ralph Klein	Margaret Schmid*
Roberta Buchanan*	Stuart Kleven	Joy Schochet
Ginny Clark*	Panagiotis Koutsouris	Stephen Scott
Gabriella Cohen	Alfia Lambert	Mary Shea
Gabriele DaSilva*	Larry Lissak*	Toni Smith*
John DeWerd	Paul Mallory*	Dee Spiech*
Cathy Dueñas*	Margaret Manteufel	Craig Tews*
Fred Eskra*	Sherry McGuire	Ronald Wideman*
David Figiel*	Donald McVicker	Steve Wolfgang
Margaret Foorman*	Marilyn Murray*	Carole Yoshida*
	Jean Nye*	

VOLUNTEER PROGRAM

Volunteers

Stephen Adamick	Irene Glasner	Karen Righeimer
Laura Alagna	Debby Halpern	Salenie Sanker
Jacqueline Angulo	David Henson	Roberta Schaffner
Elizabeth Bush	Malvika Jolly	Dena Siegel
Marissa Bartz	Anna Kusters	Daila Shefner
Angela Candadai	Laura Ledin	George Sundell
Kim Crawford	Katherine R. Lieber	O. J. Sopranos
Andrea Dudek	Carlotta Maher	Arthur Thorson
Mariola Dudzicka	Leila Makdisi	Tasha Vorderstrasse
Amanda El-Khoury	Alice Mulberry	Karen Wilson
Kristen Fanning	Shel Newman	Sierra Wilson
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DEVELOPMENT AND MEMBERSHIP



Overleaf: Modern impression of a cylinder seal showing a beer-drinking scene; (above) White stone cylinder seal and modern impression. Early Dynastic period, ca. 2750–2330 BC. Iraq, Khafajah, found in a robbers' hole. Excavated by the Oriental Institute, 1932/1933. 2.1 × 1.3 cm. OIM A11464. D. 027514. Photos by Anna Ressman

DEVELOPMENT AND MEMBERSHIP

Development

Tracy Tajbl

Through the generosity and visionary efforts of our loyal friends and donors, the Oriental Institute was able to continue a wide variety of projects, programs and initiatives in Chicago and throughout the Middle East. More than \$1.9 million was raised to support the wide range of Oriental Institute research efforts, including our fieldwork projects in Egypt, Israel, the Palestinian Territories, and Turkey, along with a new project in northern Iraq. Closer to home, donors made it possible to continue work on the Chicago Hittite and Demotic Dictionary projects along with the Persepolis Fortification Archive Project. Philanthropic contributions also supported our Museum staff in development of new special exhibits and preservation of our unparalleled collection. We are especially grateful for the continuing support of our foundation partners, including the National Endowment for the Humanities (NEH), the National Science Foundation (NSF), the Andrew Mellon Foundation, and the Roshan Cultural Heritage Foundation, among many others for their continuing investment in Oriental Institute research projects.

The Oriental Institute requires a unique funding mix, one that provides sustained financial commitments to projects like our dictionaries, which often require decades of work to bring to completion, while also offering the flexibility to take advantage of new research opportunities, such as new archaeological excavations. Pledged commitments and planned gifts are especially important in providing a solid and reliable base of funding for the future. This year, the Oriental Institute was privileged to receive a new pledge commitment which will help secure the future of our Ancient Persian Studies program and was named as a beneficiary of more than \$4 million in future bequests and deferred gifts by friends who want to have a positive impact on the Oriental Institute beyond their lifetimes. We are honored — and humbled — by these wonderful shows of support for our mission.

Every gift makes a difference for the Oriental Institute. On behalf of the faculty and staff of the Oriental Institute, thank you for being partners in our discoveries this year, and for your investments in the future of the Oriental Institute.

Current Income

	2014	2013	2012
<i>Outright Gifts</i>	\$635,753	\$861,086	\$739,020
<i>Realized Bequests</i>	\$686,753	\$368,382	\$557,585
<i>Payments on Multi-Year Pledges</i>	\$671,430	\$637,130	\$510,050
<i>Totals</i>	\$1,993,936	\$1,836,598	\$1,806,656

DEVELOPMENT

Future Commitments

	2014	2013	2012
<i>Pledged Commitments</i>	\$2,002,500	\$71,150	\$0
<i>Planned and Deferred Gifts</i>	\$4,112,120	\$960,000	\$1,800,000
<i>Totals</i>	\$6,114,620	\$1,031,150	\$1,800,000

Figures above do not include foundation and federal/nonfederal grants.

Visiting Committee

The Oriental Institute Visiting Committee 2013-2014

Harvey Plotnick, Chairman

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Guity N. Becker	Arthur Lee Herbst*
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* Denotes Life Member

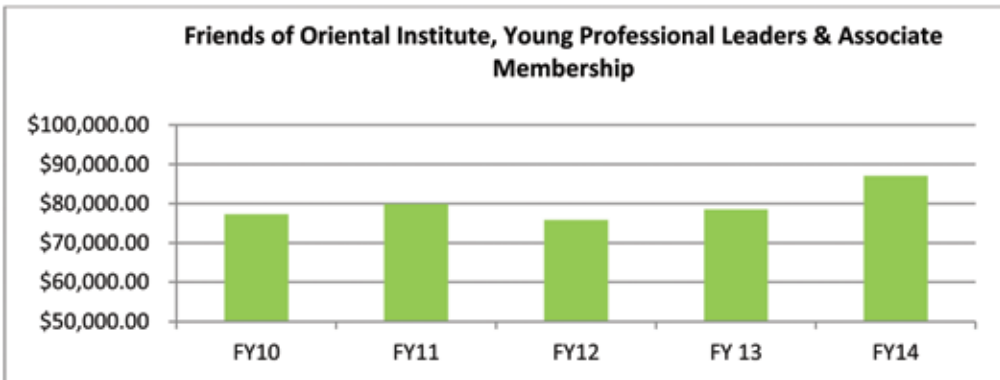
MEMBERSHIP

Amy Weber

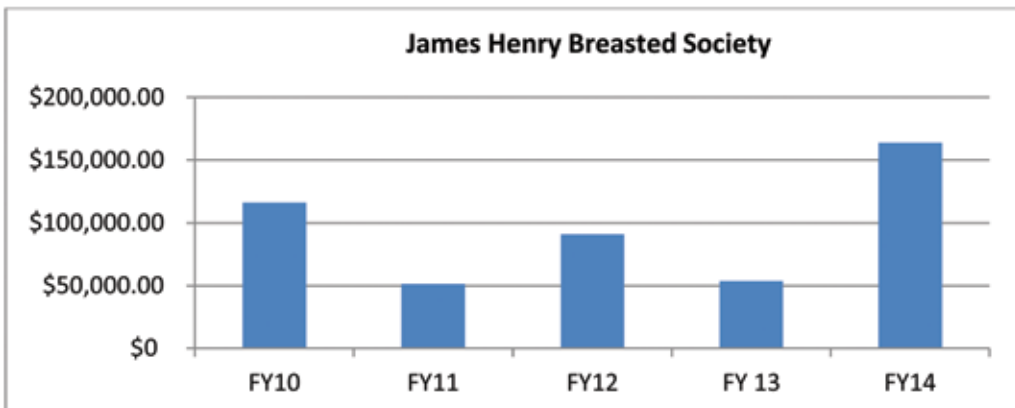
Oriental Institute membership remained strong in fiscal year 2014, with over 1,500 Membership households representing more than 2,400 members. The Oriental Institute is proud to have such a committed group of supporters, whose participation and generosity are integral to the Institute and to ensure the Museum remains vibrant all year long. Members enjoyed discounts in the museum gift shop, on classes, programs and special membership events.

The Oriental Institute greatly appreciates all of its Members for their support, advocacy, and commitment to the mission of the Institute.

Fiscal Year	Membership	JHBS	# Gifts
FY10	\$77,242.00	\$121,547.00	1091
FY11	\$79,894.00	\$56,500.00	1128
FY12	\$75,810.00	\$112,150.00	1085
FY13	\$78,473.50	\$53,700.00	1117
FY14	\$87,114.00	\$163,777.00	1019



Membership has increased for fiscal year 2014 because of higher per household donations and productive acquisition campaigns.



MEMBERSHIP

James Henry Breasted Society Membership has increased in fiscal year 2014 because of several large patron donations and effective acquisition campaigns. Annual variations in JHBS revenue are primarily due to gala years when gala ticket and table purchases reduce JHBS gifts.

Young Professional Leaders

The Oriental Institute's Young Professional Leaders (YPL) group is a vibrant community of young people who support the overall mission and programs of the Oriental Institute. This special membership category is designed to give emerging civic leaders a meaningful way to engage with the Oriental Institute, one of Chicago's leading cultural institutions. Through fundraising, advocacy, and volunteering, the YPL actively strengthens the Oriental Institute's efforts to study and preserve the archaeological heritage of the Middle East. The YPL group is intended for anyone between the ages of 22 and 45 who wants to learn more about the ancient Middle East while participating in exclusive educational, social, and volunteer activities with some of the world's foremost academics.

YPL members use their creativity, knowledge, innovation, and professional skills to advance the Oriental Institute. The YPL group supports the Institute's programs through event-based fundraising activities. YPL members use part of the money they raise to award grants to Oriental Institute projects of their choosing. YPL members also serve as ambassadors for the Oriental Institute, increasing awareness of the Institute's work and engaging new audiences through outreach events. The group hosts several successful YPL member events throughout the year:

- Hosted Cocktails & Cuneiform: Benefiting the Oriental Institute Museum Virtual Tour (October 10, 2013)
- Scavenger Hunt (October 21, 2013)
- Partnered with Adler Planetarium for Adler After Dark: Terra Firma (May 15, 2014)

UChicago Arts Pass Student Membership

As part of the University of Chicago's Arts Pass program, the Oriental Institute began offering free membership to all University students in May 2010. As of June 2014, the Institute had over 1,000 University of Chicago student members, more than any other campus organization. Enkhmend Gereltogtokh and Alex Taylor, graduate students, were brought on to manage this program. Through partnerships with the Office of Publication and the Museum, the Membership Office was able to host several successful student member events throughout the year:

- Bulls and Buns (September 2013) — a tour of the Museum for new college students as part of O Week activities (co-sponsored by Public Education, Museum, and Volunteer Program)
- Indian Jones Winterfest at the OI (January 2014) — a watch party with popcorn and hot chocolate
- Study at the OI (December 2013, March and June 2014) — quarterly, late-night study hall hosted in the Museum galleries

In total, we hosted over 800 university students at the Institute during the academic year through these special events and programs. The student membership program aims to

increase student awareness of the Oriental Institute, make the Oriental Institute an integral part of the student and campus experience at the University, and become active participant in student events.

Members' Events

Members enjoyed a wide variety of events in 2013–2014:

- Members' Preview — Our Work: Modern Jobs — Ancient Origins Exhibition Preview (August 19, 2013)
- Members' Preview — In Remembrance of Me: Feasting with the Dead in the Ancient Middle East Exhibition Preview (April 7, 2014)
 - James Henry Breasted Society Events
 - Private Tour of When the Greeks Ruled (December 19, 2013)
- Collecting for Chicago (February 27, 2014)

For in-depth information on the above events, please see the *Special Events* section of this *Annual Report*.

In addition to Members' Events, Oriental Institute members supported a comprehensive lecture series during the year with topics ranging from climate change in the ancient Near East to Christianity in Iran:

Members' Lectures

- Geoffrey Thorndike Martin, "Re-excavating the Royal Tomb of Horemheb in the Valley of the Kings" (September 4, 2013)
- Ian Morris, "Why the West Rules — For Now: The Patterns of History, and What They Reveal About the Future" (October 2, 2013)
- Felix Hoflmayer, "Chronologies of Collapse: Climate Change and the late Third Millennium BCE Ancient Near East" (November 6, 2013)
- Clifford Ando, "The Long Defeat: The Fall of the Roman Empire in East and West" (December 4, 2013)
- Hartmut Kühne, "The Collapse of the Assyrian Empire and the Evidence of Dur-Katlimmu" (January 8, 2014)
- Richard Payne, "The Rise of Christianity in Iran" (February 5, 2014)
- Elspeth Dusingberre, "Empire and Identity in Achaemenid Persian Anatolia" (April 2, 2014)
- Gregory Marouard, "New Discoveries at Wadi el-Jarf: The Harbor of King Khufu on the Egyptian Red Sea Coast" (May 7, 2014)

A very special thank-you is in order for all of our lecturers, co-sponsors, and members for participating the 2013–2014 Oriental Institute Lecture Series. The series aims to bring a varied selection of the most recent work and scholarship on the ancient Middle East to our Members and the local community. We look forward to an exciting and dynamic lecture lineup for the 2014–2015 series, which will begin in October 2014.

Members' Events would not be possible without the hard work of many dedicated Oriental Institute staff members and volunteers and the Membership Office is thankful for all of their assistance with a very successful 2013–2014 events season.

Member Publications

With the assistance of the Publications Office, the Membership Office continues to publish *News & Notes*, the quarterly members' magazine. The fall 2013 edition (no. 219) highlighted the Oriental Institute's partnership with the National Museum in Kabul. Winter 2014 (no. 220) featured the archaeology of the Institute's site at Tell Edfu. Spring 2014 (no. 221) introduced us to an exhibition on the Silk Road and Indian Ocean traders. Finally, summer 2014 (no. 222) presented us with news of a refreshment project in the Egyptian Gallery. The Membership Office is greatly appreciative of the Publications Office for their hard work and guidance in producing *News & Notes*, as well as all of the authors and staff contributors who provide exciting and engaging articles and program notices each quarter for our members.

Member Travel

Due to conditions overseas, the Oriental Institute did not offer any tours in 2013–2014, but is looking forward to sending two tours, to Georgia and Armenia, during the next fiscal year.

Oriental Institute travel programs are a unique in that our passengers experience exclusive site visits and on-site learning privileges not enjoyed by other institutions or travel groups. Our Members learn directly from some of the most eminent scholars in the world, at sites the Oriental Institute has been working on and researching for almost a century. For more information on Oriental Institute travel programs, contact the Membership Office at oi-membership@uchicago.edu or visit our website at oi.uchicago.edu/travel or visit our Facebook Oriental Institute Members' Travel page at www.facebook.com/OIMemberTravel.

SOCIAL MEDIA

Amy Weber

Recognizing the importance of social media as a mainstream information source and global communication tool, the Oriental Institute has established a cross-departmental working committee to create an active presence in the major online channels. This past year the social media committee — consisting of Moriah Grooms-García, Mónica Vélez, and Amy Weber who come from the Public Education and Outreach, Museum, and Membership Departments, respectively — has brought standards of management and measurement to the Oriental Institute's social media communications, which has produced clear results of its ability to reach a broad and diverse audience.

The Oriental Institute currently holds a place on the major social media networks including Twitter, YouTube, and Facebook, with the most significant growth seen in the latter venue. On Twitter, @orientalinst has over 4,900 followers. The Oriental Institute's YouTube channel has a subscription base of 978, up 52 percent from last year. The Oriental Institute's Facebook fan base has increased by 65 percent in the past year, bringing it to over 12,309 fans from across the globe and putting its page among the top ten Facebook pages for cultural institutes in Chicago.

As well, the committee manages the use of the Oriental Institute's online tools such as the event management service Eventbrite and Regonline, used to sign up for some of our events, and the e-mail marketing program myEmma, used to create and deliver the Oriental Institute's monthly e-Newsletter, event reminders, and more. The use of the online traffic statistic, Google Analytics, has helped the committee to measure results and set future goals for the Oriental Institute's online presence.

In the next year the social media committee would like to focus on advocating and marketing the Oriental Institute to current and new patrons and to keep them abreast of the Institute's endeavors. Field Projects, Publications, Development, and Research Projects will receive a greater emphasis in the coming year, bringing the valuable offerings of the Institute to an ever-larger social media community.

SPECIAL EVENTS

Brittany F. Mullins

During the 2013-2014 academic year, we hosted a variety of events at the Oriental Institute and offsite for our members, donors, and the general public. These events included two exhibition previews, our annual postdoctoral conference, two beer-tastings in collaboration with Great Lakes Brewing Company, a lecture sponsored by the Chicago Council on Global Exchange, and two James Henry Breasted Society events, in addition to many others. Several of these events are highlighted below. We would like to thank our generous donors and members, whose support makes our exhibits, programs, and special events possible.

Our Work: Modern Jobs — Ancient Origins Special Exhibit Preview

On August 19, 2013, over 200 members and their guests enjoyed a preview of the special exhibit *Our Work: Modern Jobs — Ancient Origins*, which featured a diverse group of Chicago professionals photographed with objects from the Museum collection representing the ancient counterpart to their modern professions. Chief curator Jack Green spoke about the exhibit concept and photographer Jason Reblando recounted his artistic vision for the portraits. Many of the sitters for the photographs were present to speak with guests, bringing the images to life.

The exhibition and catalog were made possible by the generous support of Kitty Picken, The David C. and Sarajeon Ruttenberg Arts Foundation, John B. Simon, Norman and Virginia Bobins on behalf of the Robert Thomas Bobins Foundation, and the members of the Oriental Institute.

A Toast to Ninkasi: Sipping Sumerian Beer

The Oriental Institute and Great Lakes Brewing Company co-hosted two ancient Sumerian beer tastings: a summertime event on the roof-top of Fountainhead restaurant in Lincoln

SPECIAL EVENTS



Diane Mayers Jones, left, and Rebecca Stein, center, enjoy cocktails and the preview of the Our Work exhibit (photo by Joel Wintermantle)



Judith Baxter gets her copy of the Our Work catalog signed by Ron Wasser, the modern face of horse training, at the special exhibit preview (photo by Joel Wintermantle)



Guests enjoy a feast in remembrance of Katumuwa prepared for them for the In Remembrance of Me exhibition members' preview (photo by Spencer Bibbs)



Catherine Novotny-Brehm and Angeline Sopranos enjoy the preview of the In Remembrance of Me: Feasting with the Dead in the Ancient Middle East exhibition (photo by Spencer Bibbs)



University of Chicago PHD candidate Tate Paulette discusses the history of Sumerian culture and the history of beer at A Toast to Ninkasi (photo by Joseph Harvey)



Guests enjoy communally sipping Sumerian beer at A Toast to Ninkasi (photo by Joseph Harvey)

Square, on August 26, 2013, and a winter tasting in the Edgar and Deborah Jannotta Mesopotamian Gallery at the Oriental Institute on March 20, 2014. These tastings were the result of a collaboration between Oriental Institute scholars and Great Lakes to develop an ancient Sumerian beer recipe. Great Lakes brewers and Oriental Institute archaeologists drew from cuneiform texts, including the Hymn to Ninkasi, to recreate the 5,000-year-old beer recipe using ancient brewing techniques. At each sold-out event guests were treated to three styles of Sumerian beer: Enkibru, the ancient recipe brewed using ancient technology; the Enkibru with date syrup added to sweeten the taste as the Sumerians did; and the Gilgamash, which was the ancient recipe brewed using modern technology.

Fountainhead executive chef Cletus Friedman prepared a Sumerian-inspired three-course menu to complement the beer, and Food for Thought prepared hors d'oeuvres to highlight the brews at the Oriental Institute tasting. Each evening was capped off as guests were invited to communally sip the Enkibru through a reed straw out of the clay vessels used to brew the beer.

James Henry Breasted Society Event: Private Tour of When the Greeks Ruled

Members of the James Henry Breasted Society enjoyed an exclusive tour of the Art Institute's special exhibit *When the Greeks Ruled: Egypt After Alexander the Great* on December 19, 2013. Oriental Institute associate professor of Egyptology Brian Muhs guided members through the exhibit explaining how Ptolemaic rulers fused Egyptian and Greek iconography and gods to rule the two populations living alongside one another. Conservator Rachel Sabino and exhibit curator Mary Greuel each detailed challenges in preparing the show and gave a tour of the newly installed Mary and Michael Jaharis Galleries of Greek, Roman, and Byzantine Art. The evening concluded with a private reception complete with nighttime views of the Chicago skyline and the Lurie Gardens in the Nichols Trustee Suite.

James Henry Breasted Society Event: Collecting for Chicago

James Henry Breasted Society members were introduced to the origins of Chicago's three major Egyptian antiquities collections by Emily Teeter, research associate and special exhibits coordinator at the Oriental Institute on February 27, 2014. Guests learned how the University of Chicago, the Art Institute of Chicago, and the Field Museum each depended upon the Oriental Institute's founder, James Henry Breasted, to guide their acquisitions. Emily Teeter selected special archival items to display for this single event. These letters and documents brought to life Breasted's collecting expeditions and a few lively episodes in his quest to bring Egypt to Chicago.

Tenth Annual Postdoctoral Conference

This year, postdoctoral fellow Felix Hoeflmayer organized the tenth annual post-doctoral conference on the topic *The Early/Middle Bronze Age Transition in the Ancient Near East: Chronology, C14, and Climate Change*, held on March 7–8, 2014. Sixteen international specialists working in different fields of the ancient Near East, as well as scholars working on radiocarbon dating and climate data, explored three major topics during the course of the

SPECIAL EVENTS

conference: the radiocarbon evidence for the mid- to late third-millennium BC Near East, the chronological implications of new dates and how historical/archaeological chronologies should/could be adapted, and — based on this evidence — if and how climate change can be related to transitions in the late Early Bronze Age.

The Oriental Institute hosted a special dinner on Thursday night for the speakers in our Edgar and Deborah Jannotta Mesopotamian Gallery so that those participating in the conference could meet Oriental Institute faculty and learn about each other's research. The postdoctoral conference is supported by a gift from Dr. and Mrs. Arthur Lee Herbst. A publication of the conference is currently in production.

David Kipper Ancient Israel Lecture Series

On April 29, 2013, the Oriental Institute welcomed Dr. Aren Maeir, professor at Bar-Ilan University, Israel, as the speaker for the second annual David Kipper Ancient Israel Lecture Series. Dr. Maeir delivered a lecture titled "New Light on the Biblical Philistines: Study on the Frenemies of Ancient Israel," which explored the relationship between the Israelites and the Philistines based on recent archaeological evidence. Dr. Maeir met with graduate students from the Department of Near Eastern Languages and Civilizations, the Divinity School, and the Anthropology Department the following day for lunch and to conduct a workshop on The Tell es-Safi/Gath Archaeological Project: An Overview after 17 Years of Excavation.

The lecture series focuses on the history and archaeology of ancient Israel and was established through a gift from Barbara Kipper and the Kipper Family. The program includes an annual public lecture as well as a lecture or workshop for faculty, graduate, and undergraduate scholars at the Oriental Institute.

In Remembrance of Me: Feasting with the Dead in the Ancient Middle East Exhibit Preview

Our members and their guests were invited to a preview of this special exhibit on April 7, 2014, which explores how the living and dead interacted to commemorate ancestors in the ancient Middle East. The exhibit is centered on the stele of Katumuwa, which was discovered in 2008 during the Oriental Institute's Neubauer Expedition to Zincirli, Turkey. Virginia Herrmann, who excavated the stele and co-curated the exhibit, spoke about the concept behind the show. The exhibit features a recreation of the discovery site and setting of the stele and the rituals involved to preserve the memory of Katumuwa in a video produced by Travis Saul. Following the lecture Virginia answered questions during a tour of In Remembrance of Me in the Marshall and Doris Holleb Gallery for Special Exhibits and during a reception in the Edgar and Deborah Jannotta Mesopotamian Gallery.

This exhibit was made possible by the generous support of Howard Hallengren, Roger Isaacs, Anna White, the Estate of Albert and Cissy Haas and the Haas family, the Chicago Center for Jewish Studies, and members of the Oriental Institute.

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The Oriental Institute gratefully recognizes the many donors who have furthered the mission and impact of the Oriental Institute with a gift of \$100 or more from July 1, 2013, to June 30, 2014. The following pages list the many donors whose gifts help to inspire excellence at the Oriental Institute. We celebrate your commitment and are pleased to recognize publicly the impact of your generosity on the Institute and our community. We appreciate you!

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Overleaf: Modern impression of a seal showing a goddess at the gate and the bull of heaven; before the goddess is a deeply cut crescent and behind her a palm tree; over the bull is a gate; (above) Serpentine cylinder seal with modern impression. Early Dynastic-Akkadian, ca. 2900–2150 BC. Iraq, Kish, Mound III, Level 2, Grave 4. 3.3 × 2.1 cm. OIM A535. D. 019007. Photos by Anna Ressler

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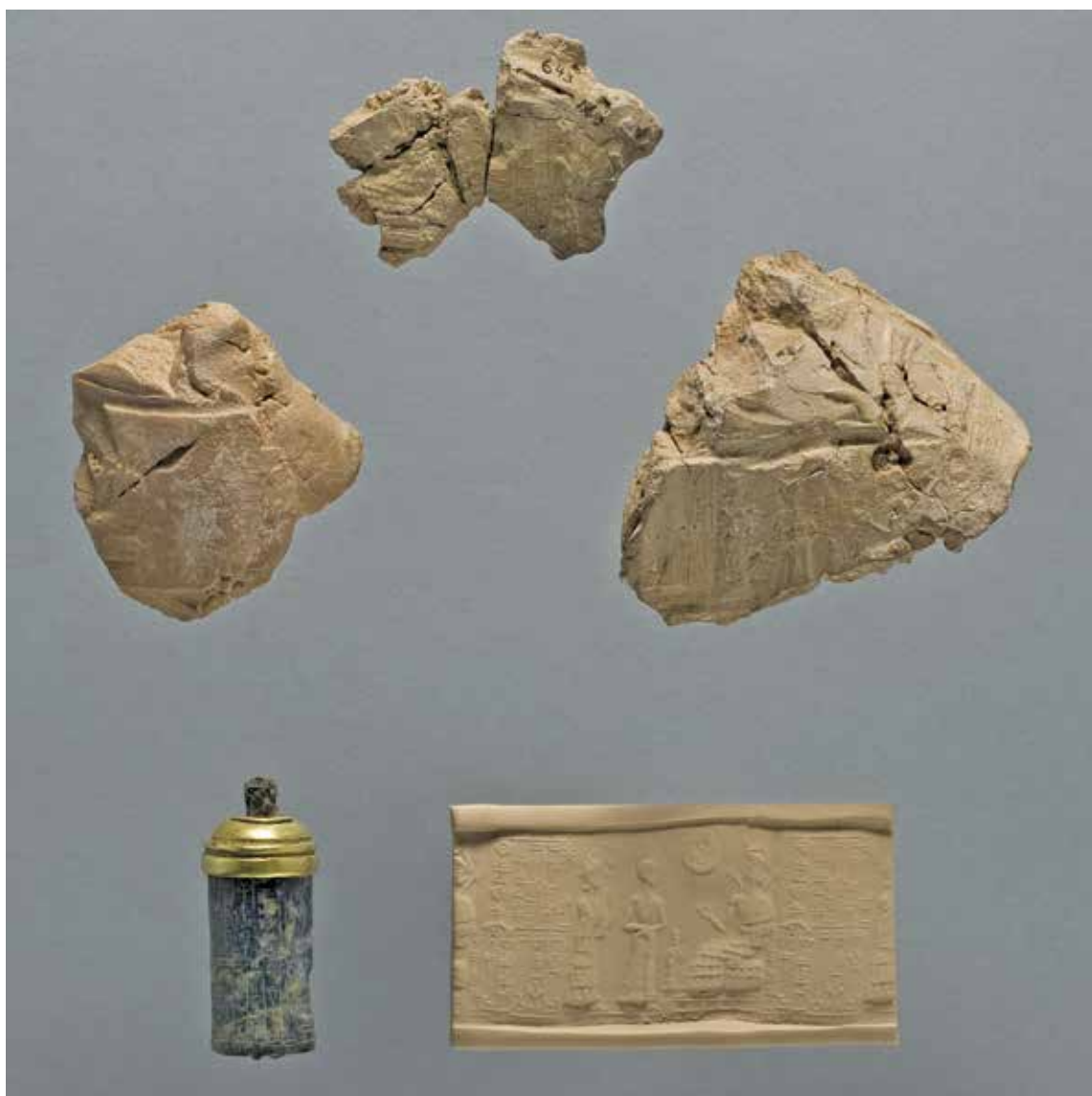
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Bilalama seal (with modern impression) and sealings. Seal: lapis lazuli and gold with remains of copper alloy rod. Isin-Larsa period, ca. 1980 BC. Purchased in Baghdad, 1931. 4.2 × 2.0 cm. OIM A7468. D. 000070. Photos by Anna Ressman. The clay sealings were excavated by the Oriental Institute in 1930/1931 at the Palace of the Rulers at Tell Asmar. As. 30:T.650, 643; As. 31:T.256

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