

**THE ORIENTAL INSTITUTE  
2015-2016 ANNUAL REPORT**





**THE ORIENTAL INSTITUTE  
2015-2016 ANNUAL REPORT**

© 2016 by The University of Chicago. All rights reserved.  
Published 2016. Printed in the United States of America.

*The Oriental Institute, Chicago*

ISBN: 978-1-61491-035-0

Editor: Gil J. Stein

Production facilitated by Emily Smith, Editorial Assistant, Publications Office

Cover and overleaf illustration: *Eastern stairway relief and columns of the Apadana at Persepolis. Herzfeld Expedition, 1933 (D. 13302)*

The pages that divide the sections of this year's report feature images from the special exhibit "Persepolis: Images of an Empire," on view in the Marshall and Doris Holleb Family Gallery for Special Exhibits, October 11, 2015, through September 3, 2017. See Ernst E. Herzfeld and Erich F. Schmidt, directors of the Oriental Institute's archaeological expedition to Persepolis, on page 10.

*Printed by King Printing Company, Inc., Lowell, Massachusetts, USA*

# CONTENTS

## INTRODUCTION

INTRODUCTION. <i>Gil J. Stein</i> . . . . .	5
IN MEMORIAM . . . . .	7

## RESEARCH

### PROJECT REPORTS

ÇADIR HÖYÜK. <i>Gregory McMahon</i> . . . . .	13
CENTER FOR ANCIENT MIDDLE EASTERN LANDSCAPES (CAMEL). <i>Emily Hammer</i> . . . . .	18
CHICAGO DEMOTIC DICTIONARY (CDD). <i>Janet H. Johnson</i> . . . . .	28
CHICAGO HITTITE AND ELECTRONIC HITTITE DICTIONARY (CHD AND eCHD). <i>Theo van den Hout</i> . . . . .	33
DENDARA. <i>Gregory Marouard</i> . . . . .	35
EASTERN BADIA ARCHAEOLOGICAL PROJECT. <i>Yorke M. Rowan</i> . . . . .	49
EPIGRAPHIC SURVEY. <i>W. Raymond Johnson</i> . . . . .	54
GALILEE PREHISTORY PROJECT. <i>Yorke M. Rowan, Morag M. Kersel, and Austin (Chad) Hill</i> . . . . .	75
GIZA PLATEAU MAPPING PROJECT. <i>Mark Lehner</i> . . . . .	82
JERICHO MAFJAR PROJECT. <i>Donald Whitcomb</i> . . . . .	100
KERKENES DAĞ PROJECT. <i>Scott Branting</i> . . . . .	102
KOM ED-DAHAB. <i>Gregory Marouard</i> . . . . .	109
MODELING THE ANTIQUITIES TRADE IN IRAQ AND SYRIA (MANTIS). <i>Fiona Rose-Greenland, Oya Topçuoğlu, and Tasha Vorderstrasse</i> . . . . .	118
MUMMY LABEL DATABASE (MLD). <i>François Gaudard</i> . . . . .	126
NIPPUR. <i>McGuire Gibson</i> . . . . .	128
THE ORIENTAL INSTITUTE PARTNERSHIP WITH THE NATIONAL MUSEUM OF AFGHANISTAN (OI-NMA). <i>Gil J. Stein</i> . . . . .	130
ORIENTAL INSTITUTE NUBIAN EXPEDITION (OINE). <i>Lisa Heidorn, Artur Obluski, Alexandros Tsakos, Dobrochna Zielińska, Grażyna Zofia Żukowska, Barbara Wagner, Olga Syta, Bruce Williams, Donald Whitcomb, Tasha Vorderstrasse, and Carol Meyer</i> . . . . .	136
PERSEPOLIS FORTIFICATION ARCHIVE PROJECT. <i>Matthew W. Stolper</i> . . . . .	143
POSTDOCTORAL SEMINAR: STRUCTURES OF POWER. <i>Stephanie Rost</i> . . . . .	149
TELL EDFU. <i>Nadine Moeller and Gregory Marouard</i> . . . . .	150
ZINCIRLI. <i>Virginia R. Herrmann and David Schloen</i> . . . . .	159

INDIVIDUAL RESEARCH . . . . .	169
-------------------------------	-----

### RESEARCH SUPPORT

COMPUTER LABORATORY. <i>Knut Boehmer</i> . . . . .	205
INTEGRATED DATABASE PROJECT. <i>Foy Scalf</i> . . . . .	208
OCHRE DATA SERVICE. <i>Sandra Schloen</i> . . . . .	216
PUBLICATIONS OFFICE. <i>Thomas G. Urban</i> . . . . .	218
RESEARCH ARCHIVES. <i>Foy Scalf</i> . . . . .	221
TABLET COLLECTION. <i>Walter Farber and Andrew Wilent</i> . . . . .	230

## MUSEUM

MUSEUM. <i>Kiersten Neumann</i> . . . . .	235
SPECIAL EXHIBITS. <i>Emily Teeter</i> . . . . .	244
PUBLICITY. <i>Emily Teeter</i> . . . . .	247
SOCIAL MEDIA. <i>Kiersten Neumann</i> . . . . .	250
REGISTRATION. <i>Helen McDonald and Susan Allison</i> . . . . .	251
ARCHIVES. <i>John A. Larson</i> . . . . .	256



CONTENTS

**CONSERVATION.** *Laura D’Alessandro* ..... 258

**PREP SHOP.** *Erik Lindahl* ..... 262

**SUQ.** *Denise Browning* ..... 263

**PUBLIC EDUCATION**

**PUBLIC EDUCATION AND OUTREACH.** *Carol Ng-He and Leila Makdisi* ..... 267

    ADULT AND COMMUNITY PROGRAMS. *Carol Ng-He* ..... 267

    K–12 EDUCATOR PROGRAMS. *Carol Ng-He* ..... 269

    YOUTH AND FAMILY PROGRAMS. *Leila Makdisi* ..... 271

**VOLUNTEER PROGRAM.** *Susan Geshwender* ..... 274

**DEVELOPMENT AND MEMBERSHIP**

**DEVELOPMENT.** *Brittany F. Mullins* ..... 283

**VISITING COMMITTEE.** ..... 284

**MEMBERSHIP.** *Jennie Meyers* ..... 285

**SPECIAL EVENTS.** *Brittany F. Mullins* ..... 288

**HONOR ROLL OF DONORS AND MEMBERS** ..... 293

**FACULTY AND STAFF OF THE ORIENTAL INSTITUTE** ..... 307

**INFORMATION** ..... 320

# INTRODUCTION

Gil J. Stein

I am happy to share with you the *Oriental Institute's Annual Report* for 2015–2016. The Oriental Institute has continued and expanded its archaeological and textual research despite the uncertainty, strife, and upheaval across the Middle East in Syria, Iraq, Turkey, the Palestinian Territories, Egypt, and Afghanistan. The cultural heritage of these areas remains under grave threat, lending ever greater urgency to our work of exploration and preservation. The Institute's work of discovery continues to have a major impact in the exploration and preservation of ancient Near Eastern civilizations and the communication of this knowledge to the scholarly and general public.

Our Hittite Dictionary continues its work under the editorship of Theo van den Hout and Petra Goedegebuure; at the same time, even though the Chicago Demotic Dictionary is officially “finished,” editors Janet Johnson and Brian Muhs continue to make improvements on this important lexicographic resource. In Egypt, our Epigraphic Survey, under the able direction of Ray Johnson, has transitioned to fully digital recording of the monuments of Luxor and Medinet Habu.

Our ongoing archaeological excavations in Egypt (Edfu and Giza), Iraq (Surezha), Jordan (the Badia Research Project), in the Palestinian Territories (Mafjar/Jericho), and Turkey (Zincirli, Çadır, Kerkenes) continue to make new discoveries across the millennia from the Neolithic through the Islamic periods. The Galilee Prehistory Project under Yorke Rowan and Morag Kersel is finishing its excavations at Marj Rabbah and will be shifting its focus to a new site as part of a long-range plan to explore the full range of Chalcolithic settlement types in northern Israel. At the same time, we have inaugurated a new field project at Dendara in Egypt as the “sister city” to Tell Edfu, in an innovative multi-site project — co-directed by Nadine Moeller and Gregory Marouard — to explore ancient Egyptian urbanism.

The Oriental Institute has been active in heritage preservation work. The Oriental Institute-National Museum of Afghanistan partnership continues its work in Kabul on the inventory of the holdings of the Kabul Museum while training their staff of conservators and curators. Emily Hammer and her colleagues in our CAMEL Lab have been making great progress in using remote sensing to document the full range of archaeological sites in Afghanistan, while assessing the degree and date of looting activities at these ancient settlements. The Oriental Institute has also worked with Fiona Rose-Greenland of the University of Chicago Neubauer Collegium's “Past for Sale” program on an innovative new project (MANTIS) to develop quantitative estimates of the volume of looting from archaeological sites in Syria.

Finally, our Museum is undertaking the ambitious Gallery Enhancements program (also known as the “Gilgamesh Project” in honor of our anonymous donor). This will install over seventy new display cases, along with upgrades to the electrical infrastructure, re-painting, and cleaning of the stonework in the galleries.

Taken together, this is an impressive range of programs by the talented faculty, research associates, and staff of the Oriental Institute. We are proud to convey this information to our community of members and supporters, without whom none of this would be possible. Thank you for being our partners in discovery.





## IN MEMORIAM

### MARGARET H. GRANT

On Wednesday, August 3, 2016, Margaret (Peggy) Grant passed away at the age of 98. Her affiliation with the Chicago neighborhood of Hyde Park was a central part of her life. She had been a resident as a teenager attending the University of Chicago High School and moved back for the rest of her life in 1952 when her husband joined the University of Chicago Divinity School Faculty. Peggy was born Margaret Huntington Horton in Middletown, Connecticut, on December 3, 1917. Her father, Douglas Horton, became Pastor of the United Church of Hyde Park. He subsequently became the General Secretary of the Congregational Church and later Dean of the Harvard Divinity School.



Peggy graduated from Wellesley College in the class of 1939 and then obtained an MA in philosophy from Columbia University. She was predeceased by her husband, Robert McQueen Grant, Carl Darling Buck Distinguished Professor Emeritus in the Humanities at the University of Chicago, whom she married in 1940.

Peggy was a thirty-year volunteer at the Oriental Institute including Volunteer Director for a number of years. One of her greatest accomplishments in this role was initiating a museum education program, for which she hired Joan Barghusen to head the department. Fellow volunteers remember her as the most efficient and organized person imaginable and more than anyone else, she was responsible for the smooth way the docents functioned and the great popularity of our tours with school groups. Due to her many accomplishments and her generosity she became the third honoree of the Oriental Institute's James Breasted Award since its inception.

Peggy had a long-term relationship with Chicago's St. Paul and the Redeemer Episcopal Church where she had been director of the Sunday School. Some of her other interests included writing, acting, and directing in University of Chicago Service League and Hyde Park Neighborhood plays, studying hieroglyphs, and attending the opera and symphony. She was outgoing and enjoyed a wide circle of friends. At Montgomery Place, the retirement home she moved to in her nineties, she was active in the poetry club and painting, and participated in the French Table and the German Table.

Randolph, New Hampshire, was the other important location in her life. She summered in her family compound there for more than seventy years. She always welcomed anyone of any age who came to her door. In the Randolph community she was active in the Randolph Mountain Club, where she was Camps Supervisor, Board Member, and Vice-President. She was a lifelong believer in exercise and swam laps every morning until her mid-nineties. She was an active hiker and almost every hiker in Randolph had hiked with her. She is survived by four children, Douglas Grant, Peter Grant, Susan Slattery, and James Snyder-Grant, six grandchildren and two great-grandchildren. Additional survivors include her three siblings, Alan Horton, Alice Tibbetts, and Elizabeth Breunig, fourteen nieces and nephews, and twenty-four grandnieces and grandnephews. She will be greatly missed by her friends and family here at the Oriental Institute.



## HOWARD G. HAAS



Last June, our dear friend and Visiting Committee Member, Howard Haas, passed away at the age of 92. Howard became a friend of the Oriental Institute through his brother, Visiting Committee Member Bud Haas, after reading James Henry Breasted's biography. Like Breasted, Howard was a born leader who was always ready for a challenge: first as a World War II fighter pilot in the U.S. Airforce where he faced many life-threatening situations; then later in life when he worked his way up from cost accountant to president and CEO of Sealy, where he led the company to great success as the most renowned mattress company in the business; and finally by establishing the Practice in Business Leadership course here at the University of Chicago's Booth School of Business, in which he trained future CEOs.

A first lieutenant in the US Air Force during World War II, Howard flew more than fifty missions over Axis-occupied Europe, after which he was awarded the Distinguished Flying Cross and the Air Medal with three Oak Leaf Clusters, in addition to receiving the French Legion of Honor. Following his career in the Air Force, Howard joined Sealy in 1956 as sales manager. As he moved up at Sealy, Howard was known for arriving a day ahead of his scheduled factory visits to conduct an unofficial tour of the factory floor, speaking with individual workers and viewing the process for himself. This led to significant improvements in production, and "to unprecedented growth and renown in the home furnishings industry," placing Sealy as the most recognized brand in the industry.

After reading James Henry Breasted's biography, Howard found a kindred leader with a clear vision and innovative ideas about how to realize that vision. He admired Breasted for shifting the focus regarding the origins of civilization from the Classical world to the Middle East. Howard held the Oriental Institute and Breasted in high regard and very much felt he was honoring his brother Bud's legacy and commitment to the Oriental Institute as a member of the Visiting Committee.

It has been a privilege to have Howard's leadership on our Visiting Committee for the past eighteen years. Over the years many at the Oriental Institute benefitted greatly from Howard's experience, advice, and friendship. He will be sorely missed.

---

## DORIS B. HOLLEB

This past September we lost our dear friend Doris B. Holleb. Doris was a member of the Oriental Institute Visiting Committee since 1973, a member of the Division of the Humanities Visiting Committee, and was a faculty member at the University of Chicago since 1966, most recently as a Professorial Lecturer Emerita in Social Sciences and Geographical Studies. Doris and her late husband, Marshall, were loyal supporters of the Oriental Institute Museum and special exhibits, the gallery of which bears their name as the Doris and Marshall Holleb Special Exhibits Gallery.



Doris was also a Trustee of the Field Museum for over seven years and extended her support of special exhibits programming there as a member of their Exhibition Committee. She was an economist and urban planning consultant whose books and articles focused primarily on issues of housing, economic development, poverty, and metropolitan planning. Over the years, she was active in public affairs, serving on several commissions both in the United States and abroad. These include three Presidential appointments (with Senate confirmation) as a member of the National Council on the Humanities, a Director of the Inter-American Foundation, and a member of the President's Advisory Committee of the White House Conference on Balanced National Growth and Economic Development.

It has been a pleasure for those of us who knew Doris. Both her and her late husband Marshall have made invaluable contributions to the Oriental Institute and our special exhibit programming. All of us here at the Oriental Institute will miss her dearly.

---





*Ernst Emil Herzfeld (July 23, 1879–January 20, 1948) standing at the top of the stairway to the Apadana at Persepolis, 1933. Herzfeld directed the Oriental Institute's Persian Expedition in Iran from 1931 to 1934 (D. 13306)*



*Erich Friedrich Schmidt (September 13, 1897–October 3, 1964) in his office at the Oriental Institute, 1935. Schmidt directed the Oriental Institute's Persian Expedition in Iran from 1934 to 1939 (D. 13300)*







*Above and overleaf (detail): Lydian tribute bearers from the eastern stairway relief of the Apadana at Persepolis. Herzfeld Expedition, 1933 (D. 13303)*

# ÇADIR HÖYÜK

Gregory McMahon

The Çadır Höyük site is located in the Yozgat province of central Turkey. We continue to enjoy the presence of a number of University of Chicago graduate and undergraduate students participating on the project, including three current graduate students, Sarah Adcock, Tony Lauricella, and Josh Cannon; a graduate who now holds a tenure-track position at the University of Washington, Stephanie Selover; and an undergraduate, Rolland Long, here in 2016. The 2015 season was incredibly productive, and we are at present in the midst of an equally successful 2016 season.

## June through August 2015

We are fortunate that Hasan Şenyurt remains the Director of the Yozgat Museum, the regional museum which oversees our work. In the 2015 season we benefitted from the help of our government representative Mahmut Aygat. The season began on June 12 and continued until August 2 for a nearly eight-week season. During the season we partially or fully opened a total of fourteen 10 × 10 m trenches and hosted 35 researchers and employed 36 workers at the site. Trenches spanned the Late Chalcolithic (mid-late fourth millennium BCE) to the final century of the Byzantine occupation in the early centuries of the second millennium CE. Five of these trenches are located on the southern slope and date to the fourth millennium BCE (Late Chalcolithic). Two of them, USS 9 and 10, are ably run by Stephanie Selover, our Chicago alumna (fig. 1). In our earliest exposure in the three lower trenches (first half of fourth millennium BCE) we revealed a new architectural plan that includes “agglutinated” (attached) rooms surrounding interior courtyards. This is a typical Late Chalcolithic central Anatolian housing plan, but up until our 2015 excavations, one that had been absent from our site (fig. 2). We now understand that this was the residential norm until the refashioning of this area into the “Burnt House” and “Omphalos Building” that date to the later fourth millennium and which have been extensively reported on in our Oriental Institute reports and elsewhere. These housing (and material culture) alterations at Late Chalcolithic Çadır Höyük seem to correspond roughly with the emergence of the Uruk system in Mesopotamia, but more research on this must be conducted in following seasons.

Just above this complex are the two trenches run by Stephanie. Excavations here through the 2014 season have revealed the Transitional (end of the fourth millennium) and Early Bronze I



Figure 1. Stephanie Selover





Figure 2. Agglutinated rooms, typical of Late Chalcolithic Anatolian houses



Figure 3. Upper slope of the settlement

(early third millennium BCE) occupation at the site. The 2015 season and now 2016 season have proceeded down to the later centuries of the fourth millennium, revealing that at this time occupants resided in a two-tiered settlement, with the lower town described just above, and a higher set of houses and work areas approximately 1.5 m up the slope. We hope in the 2016 season to understand the access points to this higher area; at present we believe residents simply used rooftops to access the higher areas of the slope, but there may have been pathways up the mound as well. Stephanie's trenches have consistently revealed that in the Early Bronze periods this upper slope was industrial in nature (producing ceramics among other things), but as she excavates these earlier periods it appears that the area is turning to more



*Figure 4. First-millennium domestic structure*

domestic patterns (fig. 3); we hope to understand this higher area of the settlement better in the 2016 season.

On the eastern side of the mound is our second-millennium occupation. In previous seasons we have exposed two Hittite (1600–1300 BCE) casemate defensive walls, an earlier one that is 2 m in width, and a later one, built atop this one, that is over 3 m in width. In 2013 University of Chicago alumnus Jon Clindaniel supervised a trench that exposed more of the larger casemate wall. In 2015 our colleague from the University of Rome, Stefano Spagni, excavated within these walls to identify what type of occupation was to be found in the second-millennium settlement. By the end of the season he had discovered an unusual built subfloor consisting of clay, stones, and what were once wooden posts resting horizontally in a cross-hatch pattern. Above this was over a meter of intentional fill. At present it would seem this is the subfloor to a substantial structure or perhaps terracing for the upper level of occupation belonging to the Hittite empire period. We only exposed part of this built feature in 2015 and hope to completely uncover it in 2016.

We continued our Byzantine operations both on the North Terrace and on the mound summit. Out on the terrace we continued our excavations of the domestic structure that may have begun life in the early first millennium CE as a manor house belonging to a local elite, and transitioned to a multi-family farm house by the ninth–eleventh centuries (fig. 4). We used the season to clarify our phasing on this domestic area and to investigate some of the surrounding areas (which yielded rubbish pits and walls to what may have been non-domestic structures).





Figure 5. Tony Lauricella (center)

Tony Lauricella (fig. 5) continued his excavations on the mound summit, working in two trenches that span the Late Iron to the Middle Byzantine periods (ca. fourth–sixth century BCE to at least the eleventh century CE). Tony’s work revealed a second room next to the first he excavated in 2014, built up against the substantial Byzantine defensive wall (fig. 6). These rooms were largely devoid of domestic materials and may have served as storage areas or perhaps been associated with the defensive wall (shelter for those on duty?).

Tony’s other trench is located just below the Byzantine defensive wall and has been instrumental in not only clarifying how the Byzantine residents built their wall, but also defining the Late Iron Age occupation on which it was constructed. In 2015 Tony continued to expose the complex of mudbrick and stone walls dating to the Late Iron Age, likely the fourth century BCE. He uncovered a cobble-stone pathway that presumably leads into the Iron Age settlement. However, most of this complex was destroyed and covered by the later Byzantine fortification wall. Below this pathway was a set of stone and mudbrick walls and open areas that may have served as an open area on the edge of the Iron Age settlement. It is clearly non-domestic given the lack of cultural materials in the courtyard area.

Our lab/work rooms are very busy during the day, with specialists working on a variety of materials. One of our stalwarts is, of course, Sarah Adcock, who is pursuing her PhD work on the Late Bronze/Iron Age archaeozoological samples (fig. 7). Sarah delivered a paper at the November 2014 American Schools of Oriental Research conference on her findings thus far,



Figure 6. Second room and Byzantine defensive wall



*Figure 7. Sarah Adcock*



*Figure 8. Josh Cannon*

which continue to demonstrate changes in industrial activities from the Late Bronze to Iron Age occupation at Çadır. Sarah's work is a critical part of understanding this pivotal period in Anatolian history as it was experienced at Çadır Höyük. Also hard at work is Josh Cannon (fig. 8) who is conducting his dissertation research on the second-millennium BCE ceramics from Çadır. He is interested in determining the differences in domestic/utilitarian versus ritual ceramics in the early Hittite and Hittite empire periods. In 2015 he conducted pXRF analyses as well as detailed observations of hundreds of sherds. He also has made good use of a 3D scanner to capture each sherd in the field, allowing him to take complete data home with him at the end of the season.

Our 2015 season was one of our most productive, yielding tremendous results and answers to many questions while also providing new ones to answer. We left the dig house last August anxious to return to the site, and our work so far this season has more than fulfilled our expectations.



## CHICAGO DEMOTIC DICTIONARY (CDD)

Janet H. Johnson

with the assistance of Jonathan Winnerman and Ariel Singer

Although the Chicago Demotic Dictionary is “done,” there is still work to do! We have two short-term goals and one major, long-term goal. For the short term, we want to replace the old PDFs on the Oriental Institute Publications website with new, up-to-date PDFs, and we want to publish a hard-copy version of the dictionary for use by libraries and so on. The long-term goal is to move from a text-based format for the dictionary to a web-based, database format. But both of these goals require a fair amount of “make-over” before they can be implemented. That’s what we’ve been working on this year. “We” includes me, Brian Muhs, the Associate Director of the CDD, three advanced graduate students in Egyptology, Kate Lockhart (who, unfortunately, stepped down from working on the Dictionary in May; we shall miss her careful work and her always friendly presence in the CDD office), Ariel Singer, and Jonathan Winnerman, from all of whom you heard in last year’s *Annual Report*. Ariel technically works for the OI Publications Office, which provides an excellent lead-in to the other people who need to be mentioned and thanked in this report, Tom Urban and Leslie Schramer, our great Publications Office duo, Knut Boehmer, the OI’s IT Specialist, and Sandy Schloen and Miller Prosser of Ochre Data Service, all of whom provide excellent IT assistance for us.

**From Jonathan:** When the final letter file of the Chicago Demotic Dictionary was completed last year, work on the dictionary proper was finally finished, at least until the next phase of the project. Yet, a few additional files remained to be edited before the dictionary is fully up and running. These are the bibliographic appendices, files which do not contain any Demotic but provide crucial textual and bibliographic information about each citation used by the dictionary. There are three such files: the Bibliography, Bibliographic Abbreviations, and New Text Information. In the following paragraphs, I provide a brief outline of each of these appendices and explain how these can be used in conjunction with the letter files to provide users with a wealth of information and avenues for future research.

The Bibliography file, as its name suggests, provides basic bibliographic references for all works cited by the dictionary. Since the letter files contain only the most basic information about a publication in the interest of conciseness, the Bibliography provides complete publication information for each work. This includes, for example, the complete title of the work, the abbreviated name of any journal or series in which the work was published, the place and date of publication, and the inclusive page numbers, if applicable. This file is organized by author’s last name and the date of publication. If there are two publications by the same author from the same year, the entries are listed alphabetically by the abbreviated title selected by the CDD. To demonstrate how this works, the dictionary’s entry for *hnm* “to be friendly” > “propitious” can serve as a good example.

The information provided in the letter file supplies the basic information that most users might desire: the basic definition of the word, its equivalencies in other Egyptian dictionaries and language phases, its variants, and, in this case, related words in Biblical Hebrew and other Northwest Semitic languages. The Bibliography can be used in conjunction with the entry




<p><b>ḥnm</b><sup>sm</sup> v.it. "to be friendly" &gt; "propitious"</p> <p>= EG 362 as var. of <i>ḥnm</i> "to smell"</p> <p>= "to be friendly" <i>Wb</i> 3, 292/10-14 for discussion, see Parker, <i>Omina</i> (1959) pp. 20-21, n. to l. 8</p> <p>var.</p> <p><b>ḥim</b> "to be friendly"</p> <p>so Hoffmann, <i>Kampf</i> (1996) p. 321, n. 1846 or =? <i>šrm</i> "to sue for peace; to lay down one's arms" <i>Wb</i> 4, 528/8-10, as Bresciani, <i>Kampf</i> (1964) see Galán, <i>ZAS</i> 124 (1997) 37-44 = BH  "to be in covenant, peace" BDB 1023b = NWS <i>šim</i> DNWSI 1144-1152 see Vittmann, <i>WZKM</i> 86 (1996) 441</p>	<p>R P Omina A, 4/8 </p> <p>R P Krall, 177 </p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Figure 1. Sample from CDD Bibliography

to find out more about the publications cited here. For example (fig. 1), the first publication giving an author's last name listed in this entry is the discussion of the word in Parker, *Omina* (1959) pp. 20–21, n. to l. 8. If users wanted to consult the discussion of this word in this work but were unable to locate the work without the full title, they could consult the Bibliography first under Parker and then by year, 1959.

<p> Parker, R. A., "A Late Demotic Gardening Agreement, Medinet Habu Ostrakon 4038," <i>JEA</i> 26 (1940) 84-113</p> <p>...<i>The Calendars of Ancient Egypt</i>, SAOC 26 (1950)</p> <p>...<i>The Names of the Sixteenth Day of the Lunar Month</i>," <i>JNES</i> 12 (1953) 50</p> <p>...<i>Another variant of ntr 'š wr (n) šz' ḥpr</i>," <i>JEA</i> 42 (1956) 122</p> <p>...<i>A Demotic Mathematical Papyrus Fragment</i>," <i>JNES</i> 18 (1959) 275-79</p> <p>...<i>A Vienna Demotic Papyrus on Eclipse- and Lunar-Omina</i>, <i>Brown Egyptological Studies</i> 2 (Providence: 1959)</p>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Figure 2. Sample from CDD Bibliography

There are two works by Parker published in 1959 (fig. 2), but the bold section of the entry, which indicates the abbreviation used in the letter files, indicates that the work in question is the second one: Parker, R. A., *A Vienna Demotic Papyrus on Eclipse- and Lunar-Omina*, *Brown Egyptological Studies* 2 (Providence, 1959). Here, users can see the full title, the series to which the book belongs, *Brown Egyptological Studies*, and its volume number within that series, 2. Notice also that all bolded information in the Bibliography is the abbreviated information provided by the letter file.

Yet, as can also be seen in this entry for *ḥnm*, other abbreviations are used that do not conform to the pattern of author's name, abbreviated title, and date. These abbreviations, such as EG 362 and *Wb* 3, 292/10-14, represent those works cited more often in the dictionary and those with which an Egyptological audience will be more familiar. These abbreviations can be found in the second appendix, Bibliographic Abbreviations. This file lists all abbreviations that consist of a mix of letters and/or numbers and titles not preceded by an author's last name, such as dictionary names, titles of edited volumes, and the names of journals and series. The first of these in the entry for *ḥnm* is EG 362. Checking the Bibliographic Abbreviations file reveals that this corresponds to Erichsen, W., *Demotisches Glossar* (Copenhagen, 1954).

Since this work is cited so often in the dictionary, it is abbreviated to EG instead of Erichsen, *Glossar* (1954). Note that this information can also be found under Erichsen in the

<p>EG</p>	<p>Erichsen, W., <i>Demotisches Glossar</i> (Copenhagen: 1954)</p>
-----------	--------------------------------------------------------------------

Figure 3. Sample from CDD Bibliographic Abbreviations

Bibliography. While each of these appendices contains some of the same information, they can be used together to quickly find all bibliographic information available for a citation.

The final appendix, New Text Information, is not a bibliographic file in the traditional sense but one that provides a bibliography for each Demotic text cited in the dictionary. This file is arranged alphabetically first by collection name, then material on which the text is written, and finally by inventory number. For example, P BM (papyrus from the British Museum) would be listed after P Berlin (papyrus from Berlin) since Berlin is alphabetized before British Museum, but O BM or O Berlin (ostrakon from these museums) would be alphabetized before the papyri from the same museum since O precedes P. Each entry provides not only the basic publications for the text, but it also lists additional information like provenance, date, and how these have been determined. It also states whether the staff of the CDD had access to a photograph of the text or whether we relied on an author's hand copy. To again use the entry for *hnm* as an example, the first text cited is P Omina A, 4/8 (column four, line eight).

There is a great deal of information to be found about this particular text in New Text Information. First, the user can see that its pieces have been given individual inventory numbers, P Vienna 6278–6289, 6698, 10111, and other fragments, which are also cross-listed to this entry in New Text Information. Next, the publication information, Parker, *Omina* (1959) is provided. The provenance of the text follows, but in this case one can see that it has been somewhat debated. Parker gives the provenance as Arsinoe without further explanation, but Reymond, *Medical* (1976) p. 26, argues instead that the text comes from Dimē (Soknopaiou Nesos) based on paleography (abbreviated pal.; for a full list of such non-bibliographic abbreviations, see the prologue to the dictionary). The date is also contested. Quack, *Enchoria* 26 (2000), and Reymond, op. cit., agree that the text should be dated to the first century AD based on paleography. Parker, op. cit., however, prefers a date of late second or early third century AD, also based on paleography. By including vs., versus, here, the dictionary staff indicate that we favor the conclusions of Quack and Reymond. All this information is followed

P. *Omina* A & B (= P. Vienna 6278-6289, 6698, 10111 & fragments)  
 Parker, *Omina* (1959): Fayyum (Arsinoe(?) (sq. ed.) gr. (Dimē) (pal.)) (sq. Reymond, *Medical* [1976] p. 26): Roman  
 (late 1st century A.D.) (pal.) (sq. Quack, *Enchoria* 26 [2000] 85, n. 10, & so Reymond, *Medical* [1976] p. 26  
 vs. Parker, who said: late 2nd or early 3rd century A.D. (pal.)) (composition dated to 6th century B.C.) (sq.  
 ed.), photo: TM 55992

Figure 4. Sample from CDD New Text Information

by a note that the original composition on which the papyrus currently under discussion is based was composed in the sixth century BC. Then the entry notes that dictionary staff had access to a photograph of the text. Finally, the entry gives the number assigned this text in the Trismegistos online database,<sup>1</sup> so that the text can easily be found in this database as well. This small entry thus provides users with a very wide range of information and the appropriate sources to pursue, should they wish to know more or conduct further research. In this way, these three appendices greatly contribute to the richness and utility of the dictionary.

**From Jan:** We now need to convert all our Microsoft Word documents (one document per letter of the alphabet plus documents for the Prologue/Introduction, Bibliography and Abbreviations, Text Information, and appendices on Numbers, Months, and Days of the Month) to Adobe InDesign, which is better able to handle our detailed formatting and the extensive graphics we have incorporated. This involves converting from the so-called “Diacritics” font we designed many years ago to present all the diacritics (e.g., *h* and *š* in the sample/example

provided above by Jonathan) needed to transliterate Demotic and Egyptian in general, to a Unicode font which can handle all the diacritics but also handle all the other scripts we cite in the dictionary, especially Greek, Hebrew and other Northwest Semitic languages, Akkadian, Persian, and even Meroitic. Tom Urban has been working to add all the signs/letters that we need for the Demotic Dictionary (including a basic core of Egyptian hieroglyphs) to a Unicode font called Gentium Plus. But he's also adding all the other signs/letters that the Publications Office needs for all its publishing responsibilities. Once this is done, we shall begin to convert our extensive files to this font (this will be done electronically, but it will have to be checked by human, Demotic-reading eyes). Preparation for the conversion has begun with Sandy and Miller taking the old Word files (stripped of much of their background formatting) and writing a program to convert them from the old series of fonts to the new Unicode font. We have prepared PDFs of all the files before this conversion so that when the files have been converted to Gentium Plus, we will be able to compare the new files to the old PDFs to make sure everything, including the detailed foreground formatting, has been converted properly.

At the same time, we have to begin handling the extensive graphics (the thousands of scans of words and hand copies which illustrate all the vocabulary) in a more precise fashion. Currently, and for years, we have simply cut a scan of the word in question from a photo of the text itself, converted it from a photo-scan to a line art black-and-white line drawing of the scan, and pasted both the photo and the line art on the pages of the appropriate Word document. But Word now requires that all photos be better identified (preferably uploaded from an independent, unique Word file saved on the computer alongside the file into which it is being pasted). But we have found many of our graphics are not legible (or are legible only in very low resolution) in the newer versions of Word due to Word's automatic image file compression. This is another reason for converting to Adobe InDesign. In preparation for this, we are going through all the Word files and saving every image, image by image, to be uploaded into InDesign. These saved individual images will also serve as the core to be uploaded for the online searchable database *eCDD*, which we hope to prepare in the years to come.

**From Ariel:** The first step in this has been to extract the images of the Demotic words from the old Word files. This is necessary as the new files have a degraded version of the images — in some cases these are so pixelated that they are unreadable. We have also had a few instances where the images in the file appear to be corrupted, either showing up as large red X-s, or simply not appearing at all. The actual process of extracting the images is quite easy; however the files that result are named only by the word “image” and a number, representing where it falls in the sequence of the document. This is not useful in the long run because without knowing what the transliteration and the name and line number of the original text are, there is no way to correctly associate that image with the file from which it came. This is problematic both if the files are changed or additions are made to them in the future, and also if we want to move on to the next step of creating an interactive searchable database.

Once the images are extracted as individual files, they need to be given unique and readily identifiable names that also conform to system-readable standards in the context of coding. Thus, each file begins with the letter of the entry in which it is found, then a number (which increases by one for each new image). This is followed by the transliteration of the word or phrase, as it appears in the dictionary (although using the upper-lowercase system of transliteration, since the diacritics are problematic in a file name). Then comes the name of the papyrus, ostracon, etc. and the appropriate line number. An example would appear: n00141\_nyAt\_P\_BM\_10507\_2-6\_5-21.png. This means it is the 141st image in the “n” file, transliterated



ny<sup>3</sup>.t, and found in lines 2/6 and 5/21 of P BM 10507. If the image is a hand copy we add “hc” at the end. In order to make this system expandable, i.e., if we want to add more examples in the future, an option to add dashed lowercase letters to the number allows for infinite growth.

This process, while thorough, requires a great deal of time, since there are perhaps as many as 40,000 images in the files. We have looked into creating a more automated method; however, given the complexity of the naming system, that does not appear to be possible. So far we have completed extracting and naming the images from all the files we had already edited. Those have been passed along to the Publication Office, where they are converted into higher resolution JPEGs, and then will be added to the InDesign files. After much discussion we decided that it made more sense to complete the image naming project and get all of the documents into InDesign before continuing with more editing. We are now beginning to work on the letters that have yet to be edited, and in total we have completed 24 of the 42 files. (Although the number of images in each of these can vary considerably, and we still have some of the largest files to process!) Although we know that this process is time-consuming, we strongly feel that it adds to the long-term utility and stability of the CDD.

In the Fall, Brian and I had the opportunity to discuss the current status and future plans of the CDD at the Institute’s outreach presentation on Oriental Institute Projects for members of the Breasted Society. We were also delighted to sponsor the two-month spring visit of Dr. Roman Gundacker, Fellow of the Austrian Academy of Sciences at the Institute for Oriental and European Archaeology, Department of Egypt and the Levant, and Director of the project “Studies on Ancient Egyptian Compound Nouns.” He spent his two months with us going through the files of the CDD looking for entries of compound nouns; he also took the opportunity to discuss with many of us various problems in the attested compound nouns in Demotic and in the historical development through Demotic of these forms. While he was here, he gave two public lectures aimed at students and faculty, one on the restoration of an important Old Kingdom tomb inscription and one summarizing his work on compound nouns throughout the history of the Egyptian language.

In summary, for the short-term, we are converting fonts and we are extracting, naming, and saving images. Both will allow us to produce high-quality PDFs to replace the sometimes ten or more year-old PDFs that are currently online. Both will contribute to the quality of the hard-back publication of the Dictionary. Both will also allow us to incorporate all this data directly into an online database, which is our long-term goal.

## Note

<sup>1</sup> <http://www.trismegistos.org/>, self-described as “An interdisciplinary portal of papyrological and epigraphical resources formerly Egypt and the Nile valley (800 BC–AD 800), now expanding to the Ancient World in general.” This marvelous resource, overseen by Mark Depauw, Research Professor, Department of Ancient History, University of Leuven, can be searched by text, collection, archive, people, network, place, (ancient) author, or (modern) editor, and includes (or will eventually include) all Egyptian texts dating within their time range.

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

Theo van den Hout

The CHD team — Richard Beal, Petra Goedegebuure, Oğuz Soysal, and Theo van den Hout — continued work during the past year on what will be the final fascicle or installment of the Š volume. Practically all entries have been written and edited as well as sent to our outside consultants. Important (and therefore often lengthy) entries among this last batch of words starting in *šu-* are the conjunction *šu* “and,” and the possessive *šumma/i-* “our.” Of great cultural interest are words like *šuhḫa-* “roof,” and *šuppi-* “holy, sacred,” and its many derivatives, to be distinguished from *parkui-*, which just means “pure, clean.” Cleanliness and purity are key notions in Hittite religion and *šuppi-* describes the highest degree in that area: many things can be clean and pure but not all of them are fit for the gods. *Šuppi-* denotes anything that is appropriate to be used in divine presence. For instance, the gods’ assistance is requested when a woman gives birth and if a woman in labor is using a birth stool, it is of course important it is clean, but if one of the stool’s legs breaks, it is no longer *šuppi-*.

Oğuz Soysal continued his work on the so-called Bo-fragments, approximately a thousand Hittite texts from the very early excavations at the Hittite capital between 1906–1912 that are still unpublished. The second volume of these, the third in the CHD Supplement Series (CHDS 3), should be out when you read this. Beal and Soysal also did further work updating the L volume, the very first letter of our dictionary that came out in the late seventies; on both projects see the *Oriental Institute 2013–2014 Annual Report*. Students working for the CHD this year were graduate students Thalia Lysen (1st year PhD) and Robert Marinneau (3rd year PhD), and undergraduate Katherine McFarlin, all of them supervised by Oya Topçuoğlu. Oya just defended her dissertation and is now officially Dr. Topçuoğlu! Since she will remain in the Chicago area for some other projects we will benefit one more year from her organizational talents.

We were also very fortunate this year to have Barbara Jillson volunteering several hours each week for the CHD. Barbara started work on our bibliographical database at the



Figure 1. The family of Prof. Harry Hoffner celebrating the inauguration of the Harry A. Hoffner Library of the Chicago Hittite Dictionary

beginning of the academic year and her wide knowledge of several modern languages is a great asset to this particular project!

As you may remember from our previous report, we were shocked last year (March 10, 2015) by the very sudden passing of our Senior Editor and co-founder of the dictionary, Professor Harry Hoffner. Through the kindness and generosity of his wife Wini we have received Harry's library of Hittitological books. We used to have a collection of photocopies and offprints, to which we added some important works on permanent loan from the Joseph Regenstein Library. However, especially when going through the painstaking process of reference checking, many trips downstairs to the Research Archives were necessary to track down the various sources. Now we have many of them conveniently on our own shelves! We had ex-libris stickers made for the books and hung up a sign saying "Harry A. Hoffner Library of the Chicago Hittite Dictionary" with his photo. On June 4 Mrs. Wini Hoffner, accompanied by her two sons David and Lee and their wives Cherry and Theresa, came to the OI to officially inaugurate this with some coffee, sodas, and pastries (see fig. 1). I want to take this opportunity to thank our loyal supporters and donors: Mr. Philip Elenko, Walter and Susan Güterbock, Drs. Audrius and Sigita Plioplys, Richard Beal and JoAnn Scurlock, Mrs. Gwendolyn Dhesi, and Thomas and Bernice Güterbock.

Among our visitors this year was Dennis Campbell, our former student and CHD Assistant, now Assistant Professor of Ancient History at San Francisco State University and our immediate go-to person in all matters Hurrian. Dennis came to teach in van den Hout's Hurrian class and he also gave a lecture. In November 2015 Hajime Yamamoto, our former Japanese student, returned for a few weeks to consult our files for work on his dissertation. It was good to see them again!

Finally, we further prepared for the 10th International Congress of Hittitology (see logo) to be held at the Oriental Institute from August 28 through September 1, 2017. We have done some important initial fund raising, secured lodgings for the Hittitologists who will descend on Chicago for this occasion, and have started working on a small exhibit featuring the history of Hittitology and the CHD while the conference takes place. The fund raising will continue in the coming year as summer 2017 nears: check our website at [ich10.uchicago.edu](http://ich10.uchicago.edu) for the latest!



## DENDARA

Gregory Marouard

Dendara (Tentyra, Iunet) is one of the major archaeological sites north of the Theban region and the ancient capital of the sixth nome of Upper Egypt, *Iqer*, the Crocodile nome. The site is located 55 km (34 mi) north of the Luxor area and 5 km (3 mi) south of the modern town of Qena. Situated on the “West Bank” from an ancient Egyptian perspective, Dendara lies south of the river, in a curving bend of the Nile, the only part of the valley where the river runs from the east to the west (fig. 1). Today the site is positioned along the desert fringe of the Nile valley floodplain. It seems quite likely that the river — currently situated 2 km to the north — flowed much closer to the site in ancient times.

Well known by its sanctuary complex of the goddess Hathor, which dates back to the late Ptolemaic and early Roman periods (fig. 2), the main temple is one of the most iconic and the best preserved, with the Ptolemaic temple at Edfu-Behedet. Those two sanctuaries, the temple of Hathor at Dendara and the temple of Horus in Edfu, were always considered as sister-sites sharing a close religious connection. The triad of Edfu (Horus, Hathor, Harsomtut/Ihy) was honored in both temples and every year in the month of Epiphi (Season of Shemu), when the Nile waters were at the lowest level, the “Feast of the Beautiful Reunion” was celebrated. The statue of Hathor left its temple and traveled upstream by boat to the south in order to join her consort Horus in Edfu. But this highly spiritual relationship between the two sites can also be found in a more historical and archaeological aspect, with a very similar evolution of both sanctuaries and urban settlements. The new project of the Oriental Institute at Dendara is therefore narrowly interconnected to the ongoing work conducted by Nadine Moeller at Edfu, which — since 2001 — focuses on the extensive urban remains founded on the tell, directly next to the Ptolemaic temple (see *Tell Edfu* report).

By combining these two complementary urban excavations and two sister sites, the Oriental Institute has a unique opportunity to examine on a deeply comparative level the archaeological data from two provincial capitals with the aim to better characterize the multiple facets of the urban phenomenon in addition to the process and dynamics of the development of the agglomerations of Upper Egypt over more than three thousand years, from their Pre-dynastic origins to the end of the pharaonic times.

Originally engaged in 2012 with two preliminary seasons of reconnaissance survey (2012 and 2014), the Oriental Institute (OI) reached an agreement with the French Institute for Oriental Archaeology (IFAO) last fall, 2015, in order to work on its archaeological concession, investigated since the 1930s. The specific focus of the OI project lies in the study of the very poorly known settlement remains, covering the periods from the origins to the Christian period, as well as the interconnections between the civic and administrative spaces with the religious structures. In addition, as have been investigated in Edfu for a couple of years now, the various phases of enclosure and town walls, which mark the phases of extension and contraction of the site, will be under investigation as well at Dendara.

The Oriental Institute program is a part of a collaborative venture that regroups the projects of three major institutions in Egyptology, the Institut français ancien orientale (IFAO),



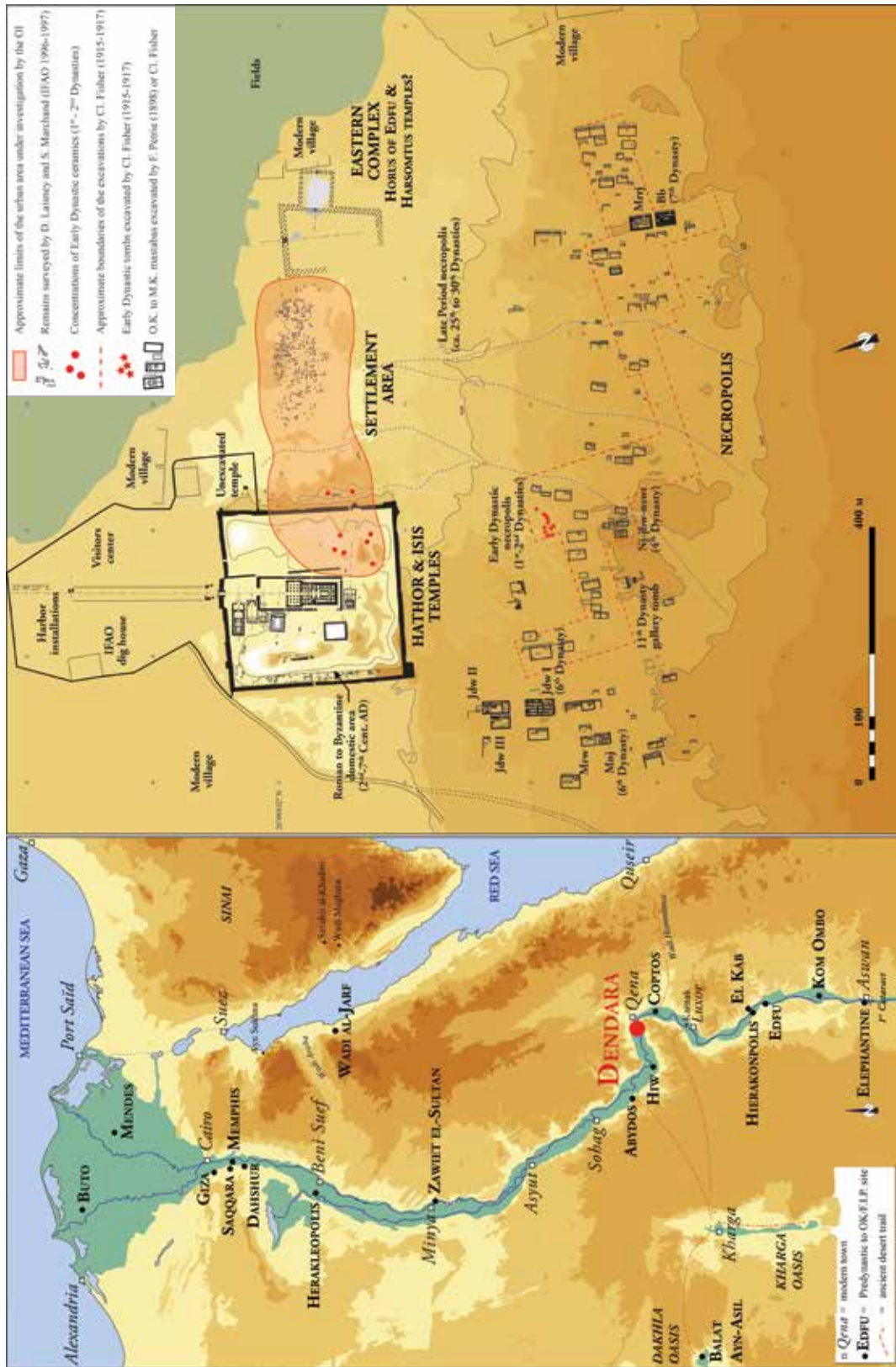


Figure 1. Dendara on the general map of Egypt and plan of Hathor and Isis sanctuaries with the surrounding archaeological area (plan: G. Marouard after P. Zignani and D. Lainey, "Cartographie de Dendara, remarques sur l'urbanisme du site," *Bulletin de l'Institut français d'archéologie orientale* 101 (2001): fig. 1)

the Oriental Institute, and the Macquarie University in Sydney (<http://www.ifao.egnet.net/archeologie/Dendara/>). The IFAO mission is directed by Pierre Zignani since the 1990s. Pierre is an architect at the CNRS who focused his work on the study of the religious spaces and conducted an extensive examination of the Roman Hathor temple, particularly considering the relation between lighting provisions and the internal spaces of the temple. Since 2012 he has been involved with the architectural study of the Roman *mammisi*, which had



Figure 2. The façade of the pronaos of Hathor's temple, achieved during the reign of the Roman Emperor Tiberius (ca. AD 32–38) (photo: G. Marouard)

never been properly recorded with a detailed plan, and he also conducts archaeometric investigations on building materials (masonry and stone cutting techniques, analysis of the metallic elements used in construction, etc.).

This mission of the Macquarie University in Sydney, directed by Yann Tristant, focuses on the archaeological and anthropological re-examination of the various phases of the large necropolis which is located on the southern side of the Hathor and Isis sanctuaries (fig. 1).

The first season took place between mid-November and mid-December 2015. The team consisted of Gregory Marouard (Director), Nadine Moeller (Co-director), and three NELC students in Egyptian archaeology: Émilie Sarrazin, Oren Siegel (PhD candidate), and Sasha Rohret. An overview of the site and ancient work there and a preliminary introduction of the 2015 season have been recently presented in last spring's issue of the *Oriental Institute News & Notes* 229 (pp. 4–16).

In order to answer the questions about the origins of the settlement, the first campaign mostly focused on the area within the large enclosure wall, next to the Hathor temple and the small Isis temple. Except for the major stone monuments (fig. 3), this part of the site still preserves some of the oldest remains of the town, which date from the middle of the third millennium BC, but it was really exposed to severe destructions after multiple cleaning attempts during the late nineteenth and early twentieth centuries. The intra-mural part of the site was under excavation since the time of Mahomet Ali, who gave the order in 1845 to cut an access to the notorious *pronaos* of the Temple of Hathor through the vestiges of the Late Byzantine period. Until the end of the 1920s, the work of the Antiquities Service, supervised by Pierre Lacau and Émile Baraize but executed by hundreds of *sebbakhin*, was focused on the expeditious clearance of the sanctuaries from the mudbrick constructions, especially the Greco-Roman town that extended east of the temple with a thickness of over 12 m and which is today entirely destroyed (fig. 4).



Figure 3. General plan of the intra-mural archaeological area at Dendara with the location of the Oriental Institute operations in 2015 in red and green (plan: G. Marouard after P. Zignani, and D. Laisney, "Cartographie de Dendara, remarques sur l'urbanisme du site," *Bulletin de l'Institut français d'archéologie orientale* 101 (2001): fig. 24)



## Excavations on the West Side of the Isis Temple

The Isis temple, dedicated to the birth of this major divinity, is located on the southern side of the main temple of the goddess Hathor (fig. 3, nos. 5–6). In the early 1990s, during the epigraphic work undertaken on the monument by Sylvie Cauville, this area had been cleaned and all in situ paving elements drawn. The badly damaged remains of a wide mudbrick wall in an L-shape had been spotted on the eastern edge of the sanctuary and were attributed to an earlier phase of the main temple *temenos* (P. Zignani and D. Laisney, “Cartographie de Dendara, remarques sur l’urbanisme du site,” *Bulletin de l’Institut Français d’Archéologie Orientale* 101 [2001]: 429–30, figs. 26–28). The existence here of a possible religious precinct from the third millennium therefore motivated a resumption of the work, this time using an archaeological and stratigraphic approach in order to better determine its chronology and

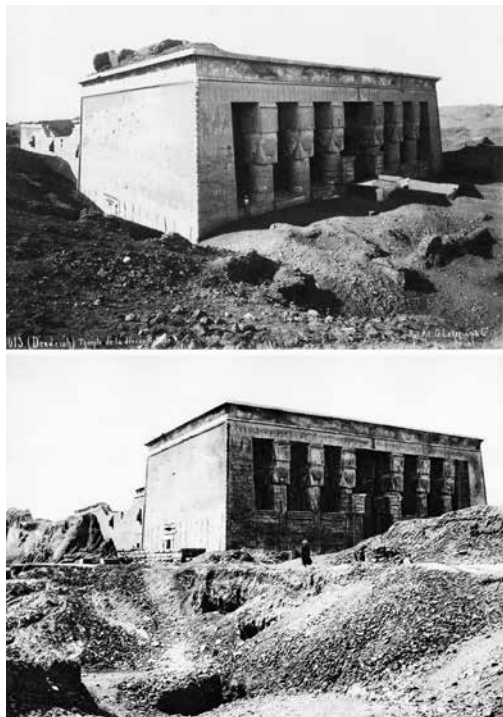


Figure 4. View of the pronaos of Hathor’s temple before (ca. 1870) and after (ca. 1930) the clearance work conducted by the Antiquities Service and sebbakhin (photo: G. Marouard)



Figure 5. View of the eastern side of the Isis’s temple at the end of the 2015 season (photo: G. Marouard)





Figure 6. Pottery sherds from the Naqada II C–D contexts found under the foundation of the temple of Isis (photo: G. Marouard)

perhaps a cultic building that has now disappeared. The systematic cleaning of the previous excavation trenches revealed a sequence of totally new installations. The mudbrick wall does not correspond in fact to an enclosure wall but to the southwest corner of a large building, using both mudbrick and limestone, which corresponds to a monumental phase significantly older than the four phases previously known for the temple of Isis (one from Nectanebo I, two from Ptolemy VI and Ptolemy X, one from Augustus).

Although quite destroyed, the brick walls are massive and traces of the use and occupation on the floors include ceramic assemblages characteristic for the end of the Eleventh Dynasty and the beginning of the Twelfth Dynasty. Those remains, together with traces of an ancient limestone pavement and multiple reused decorated limestone blocks which bear the name of Amenemhat I could demonstrate here the existence of an underlying temple foreshadowed by earlier work that would date from the early Middle Kingdom. Except for a few isolated reused blocks in later structures, no archaeological evidence for a cultic installation of the New Kingdom has so far been exposed; however, a systematic archaeological exploration of the building will be conducted in the future to clarify this chronological hiatus.

More exceptional, the levels from the early Middle Kingdom are constructed directly on the surface of stratified occupation layers — floors, ashes, fireplaces — which the ceramics allow us to date from the Nagada IIc–d culture (ca. 3450–3225 BC; fig. 6). This occupation is set on the natural sand and no remains were noted below after verification by using deep drill core. To date, those remains are the oldest archaeological evidence ever discovered at Dendara. The settling of this area had been previously assumed to begin only with the Protodynastic times (First and Second Dynasties, ca. 3150–2650), as evidenced by a dozen tombs excavated in 1915–1917 by Clarence Fisher in the necropolis and by some ceramic assemblages recently discovered in 2014 during our preliminary survey in the southwest intra-mural area.

Despite the fact that the chronology of the early occupation at the site has been pushed back more than 500 years earlier, the discovery of Nagada IIc–d layers is in fact not really a surprise. Dendara is situated in the cradle of the Egyptian Predynastic cultures, halfway between Abydos and the Nagada-Nubt-Ballas area. At Taramsa Hill, located 2.5 km south of the Hathor and Isis complex, the oldest modern human of Egypt — possibly Africa’s oldest burial — was discovered in the early 1990s and attributed to the Middle Paleolithic period with a possible age between 50,000 to 80,000 years ago (mean age ca. 55,000 years ago). A few kilometers to the west, at Maghar Dendera 2, rescue excavations revealed some occupations from the Badarian culture (Early Predynastic Period, ca. 4500–4000 BC) and, on the opposite side of the

to confirm — or not — the presumed function of this construction.

The work was extended to areas which have never been touched since the ancient clearance work undertaken by the Antiquities Service ca. 1910–1920. A set of four lime kilns, clearly dating from the early Byzantine period (fifth century AD) but seriously leveled to the ground by former excavations, marked the surface of the wide mudbrick wall (fig. 5). These kilns are good evidence for the dismantling operations and calcination of limestone blocks from a nearby structure,

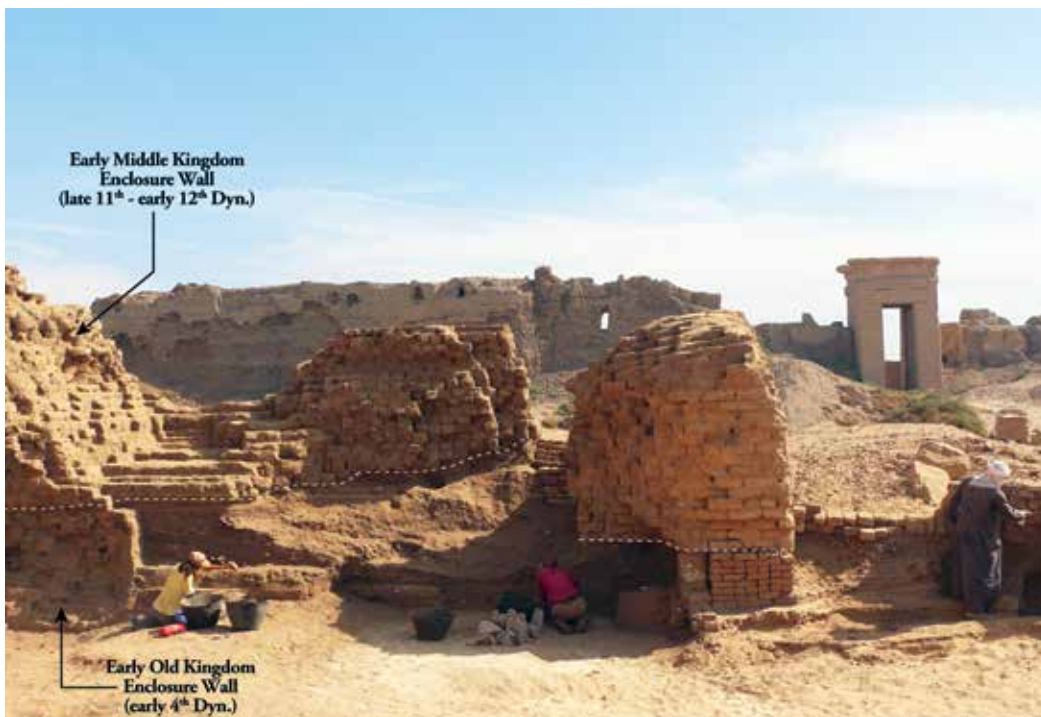


Figure 7. Ongoing excavations on the western face of the early Middle Kingdom enclosure wall that sealed Predynastic layers and Old Kingdom settlement contexts (photo: G. Marouard)

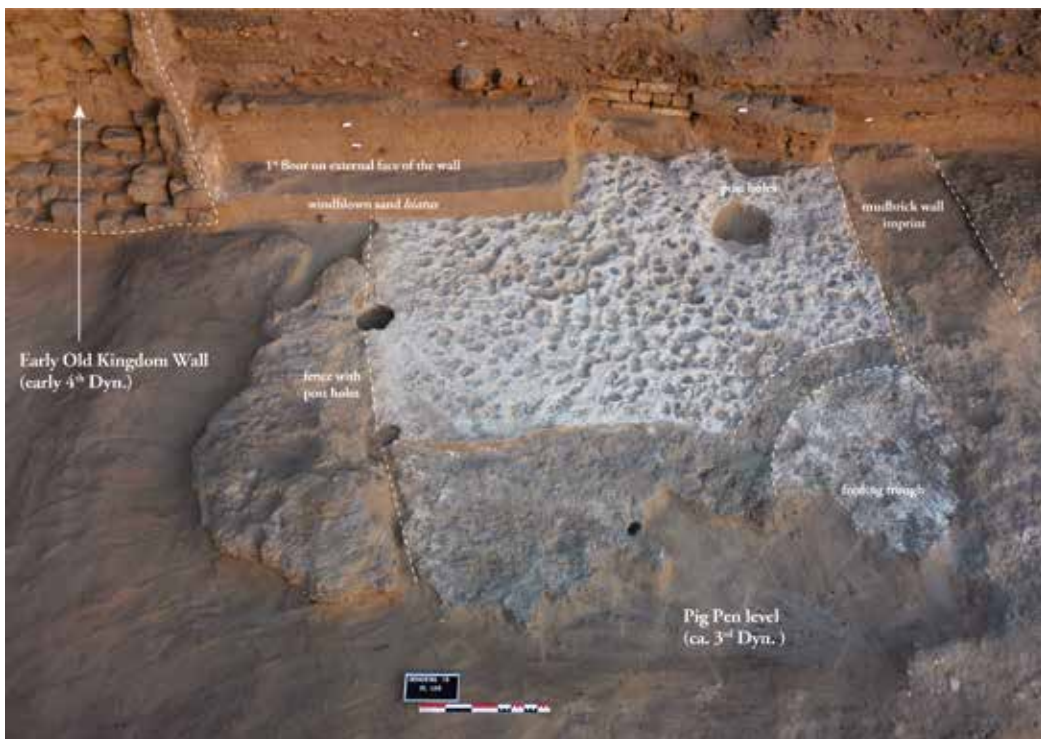


Figure 8: The Third Dynasty pig-pen under the early Fourth Dynasty wall, floors and occupations (photo: G. Marouard)



Figure 9. Ongoing cleaning operation on the eastern face of the early Middle Kingdom enclosure wall with the Hathor's temple in the background (photo: G. Marouard)



Figure 10. Stratigraphic profile on the eastern side of the early Middle Kingdom enclosure wall with the underlying Fourth Dynasty settlement remains (photo G. Marouard)

Nile river, a Predynastic (Badarian to Nagada IA?) and Early Old Kingdom cemetery (late Third and Fourth Dynasty mastabas) should be mentioned at El-Gozeriya.

With this new evidence, the occupation at Dendara seems to really emerge in the landscape in the second half of the fourth millennium, ca. 3500 BC, but it starts to take form with a major local sanctuary and a provincial capital only 800 years later at the beginning of the Old Kingdom, ca. 2600 BC.

At that point, the worship of Hathor, probably strong since the very first dynasties, seems to have grown in importance at the turning point of the early Fourth Dynasty. According to François Daumas, one of the inscriptions of the third western crypt of the Roman temple could be interpreted as a proof for the creation of a shrine dedicated to Hathor and the establishment of a liturgical ritual under the reign of king Khufu.

A stela found in 1952 at Dahshur mentions a son of king Snofru, *Ntr-'pr.f*, priest of



the Bent Pyramid, who was also a high ranking provincial administrator, entitled “Overseer of Commissions of Coptos, Hiu, and Dendara,” a position that points out the agglomeration already existed at the very beginning of the Fourth Dynasty as a nome capital with a hierarchical and fully functional administration attached to the central power at Memphis. These hypotheses also constitute the main questions for the settlement excavation engaged in the area east of the main temple of Hathor.



Figure 11. Typical bread molds of the Fourth Dynasty with standard modules (right) and unusual large modules (left) (photo: G. Marouard)

## Study of the Enclosure Walls and Town Remains

East of the Hathor temple stands a lengthy north–south section of a massive mudbrick wall (fig. 3, no. 18), renovated on several occasions (maybe by king Shabaka, Twenty-fifth Dynasty?), and which seems to have marked an ancient boundary of the Hathor sanctuary.

Several cleaning operations and stratigraphic trenches have been carried out this season which have clearly confirmed a construction corresponding to the early Middle Kingdom, at end of the Eleventh or the early Twelfth Dynasties (ca. 2000–1900 BC), a period that roughly



Figure 12. Mud jar stopper with the imprint of a royal serekh (photo: G. Marouard)



Figure 13. Stratigraphic profile showing the late Old Kingdom and early First Intermediate Period settlement remains cut by the foundation trench of the early Middle Kingdom enclosure wall (photo: O. Siegel)



corresponds to the construction of a chapel of Mentuhotep II (now dismantled and exposed at the Egyptian Museum in Cairo), or to the lost monuments of Amenemhat I and Senwosret I. This enclosure wall probably corresponds to a new extended *temenos* which encompasses the temple of Hathor and the possible Middle Kingdom building discovered this season under the temple of Isis.

Along the western side of this enclosure wall, an area 18 m in length and 10 m wide has been cleaned from thick *sebbakhin* dumps, revealing multiple levels that predate the wall (fig. 7). Again, this sector revealed in the lowest sandy levels an important Predynastic occupation that a deep coring has evaluated to measure between 1.20 m and 1.50 m in thickness. A test trench of 3 × 3 m, resulted in the collection of abundant ceramic and lithic materials, significant organic residues (charcoal and seeds), as well as many fragments of clay firedogs that indicate in this area was an artisanal kind of occupation devoted to beer production which can be dated according to the ceramic and lithic tools, especially in comparison with the excavations at Adaima, to the Naqada IIIc–d period (ca. 3450–3225 BC).



Figure 14. Kite aerial view of the Roman mammisi with the Byzantine well and fountain excavated in the 2015 trench (upper left) (photo: G. Marouard)

After the abandonment of those levels and several phases of windblown sand deposits making a significant chronological hiatus, this area was reoccupied by a close succession of mud floors and light mudbrick walls regularly separated by sand deposits. This sequence ends with a well-preserved level of a pig-pen, with still-fresh feet imprints of *suidae* on the floor (fig. 8), which can be dated to the Third Dynasty according to the pottery assemblages.

If those levels were still characterized by the occasional and “rural” type of occupation, this area shows, probably at the turn of the Fourth Dynasty, a radical change in its function with the appearance of a very massive mudbrick wall, forming a right angle and marking the southern and western boundaries of a large enclosed space (fig. 8). If further investigations are needed, this large wall might correspond to the most ancient and the very first *temenos* wall that thus confirms both the existence of a sanctuary of Hathor at this early phase and the consistency in the path of the temple precinct, as suggested by the Middle Kingdom wall (and its many subsequent reconstructions), which has been re-settled in this same area and exactly on the same north-south axis.

Along the east side, a vast cleaning operation for removing the excavation debris dumped here by the *sebbakhin* (fig. 9) allowed us to completely uncover the in situ levels from the Old Kingdom that had been preliminarily observed in 2014 (see *Supplement to the Bulletin de l’Institut français d’archéologie orientale* 115: 127, fig. 86). A linear stratigraphic profile about 30 m in length and 1.40 m to 2.30 m in thickness was established in order to better determine the nature of the contexts and chronology of the occupation in this area (fig. 10). All levels excavated here this season correspond to the Fourth Dynasty, later than the Fifth Dynasty, and at least three successive phases of buildings appear.

The first phase, and conspicuously the most important one, is located directly on top of the windblown sand levels that sealed the Predynastic and Protodynastic phases on the western side of the Middle Kingdom enclosure wall. The care used in the construction process and the importance of the walls discovered, as well as the nature of the archaeological material,



Figure 15. The deep trench on the northwestern corner of the Roman mammisi, showing the foundation techniques and the previous Late Period enclosure wall cut by the foundation trench (photo: G. Marouard)



Figure 16. The eastern face of the Byzantine fountain flanked by two half-columns and, on the left, the foundation system of the Roman mammisi built on the previous Late Period enclosure wall (photo: G. Marouard)

indicate here again a significant change in the function of this area at the beginning of the Fourth Dynasty. The archaeological levels in situ that sealed this phase, characterized by a thick and stratified trash disposal, have yielded large quantities and equivalent proportions of beer jars and bread molds, both in standard modules and in unusually large modules (fig. 11). Dozens of fragments of mud jar stoppers and clay sealings have been discovered, some showing cylinder-seal imprints. One of these jar stoppers revealed a *serekh*, an early form of royal cartouche, containing the Horus name of a king who is not identified so far due to the erosion of this impression (fig. 12). This discovery emphasizes here both the administrative character of this area and the control of these activities by the central government.

Under the supervision of Oren Siegel, an additional trench 4.0 m wide has been dug to the north, which has revealed a significant stratigraphy especially for the end of the Old Kingdom and the early First Intermediate period (fig. 13). Here, the urban settlement levels are quite deeply cut by the foundation trench of the enclosure of the Middle Kingdom (fig. 16), which seems to settle into the landscape at the beginning of this period, probably at the same time that a new monument appears farther south below the present temple of Isis. This area has also allowed to confirm a gradual thickening of the archaeological levels northward and to observe that the foundations of the enclosure are neither homogeneous nor horizontal, the wall was adapted directly onto the sloping topography formed by the surface of the ancient tell (town hill) from the Old Kingdom.

## Excavations on the Roman *mammisi* Area

In close collaboration with the Institut Français d'Archéologie Orientale team, two excavation areas have been opened on the northwestern and northeastern corners of the Roman *mammisi* (fig. 3, no. 9). These operations are beneficial for both partners to the extent that the question here is twofold.



Figure 17. Kite aerial view of the extra-mural area with extensive Old Kingdom and First Intermediate Period settlement remains to be excavated in 2016 (photo: G. Marouard)

In order to complete the architectural study of the *mammisi* and to document the foundation, deep trenches are necessary (fig. 14). These trenches revealed for example a complex system of foundations, set on a mudbrick case filled with 55 cm of yellow thin sand from the desert. On this strong and incompressible layer, five different levels of blocks have been disposed in order to compose the floor on which the construction of the building itself starts (fig. 15).

These two operations have also had the objective to confirm an earlier phase of the massive mudbrick enclosure



wall that actually surrounds the entire sanctuary. Our hypothesis is that this precinct was not built only in one single phase, as suggested previously, but in two very different phases, a solution that would explain many of the irregularities and inconsistencies of its plan and multiple stratigraphic or chronological contradictions observed elsewhere on the site. In both excavations a wide mudbrick wall is visible which seems to have been voluntarily dismantled right under the *mammisi* foundation system and was clearly cut by its foundation trench.



Figure 18. The 2015 Oriental Institute first team at Dendara. From the left: Inspector Mohamed, Gregory, Nadine, Sasha, and Oren; Émilie is taking the picture.

This discovery confirms a first enclosure wall here, probably constructed at the end of the Late Period according to the technique used, and maybe under the reign of Nectanebo I, like the enclosure walls at Karnak temple or at El-Kab. This enclosure was partially demolished at the very beginning of the Roman period when Nectanebo's *mammisi* was condemned, which probably influenced the decision to build a new one at this position. After the completion of the Roman *mammisi*, at least of the main structure but not the decoration, a new section of enclosure wall was then reconstructed farther north, all along the northwestern and western sides of the sanctuary (fig. 3). This operation was commemorated by an inscribed stela, discovered during the *sebbakhin* excavations and published in 1926, which mentions the completion during the Year 9 of Tiberius, ca. year AD 23, which has always been systematically and paradoxically mentioned prior to the recent fieldwork to emphasize the only possible Roman date for the entire enclosure wall.

Untouched since the 1950s, the area of the operation led in 2015 on the northeast corner of the *mammisi* also revealed a wide installation of red bricks and lime mortar, with a large well about 3.5 m in diameter, and the flat surface of a wide basin. The latter was used to hold and conduct water from the well to a semicircular fountain installation set on the eastern face flanked by two half-columns (fig. 16). This original construction can be dated in the current state of the study to the fifth to seventh centuries AD. It probably served as a fountain or maybe a baptistery installation in relation to a second Coptic church in brick, which was built onto the dismantled entrance terrace of the Roman *mammisi*.



An extension of the trench eastward is planned for the next season in order to recover the remains of the original main gate of the complex dating to the first Late Period phase of the enclosure wall that was replaced later by the actual Hathor Gate.

## Further Ongoing Projects

As part of our ongoing questions about the long-term evolution of the ancient town and settlement during the third millennium, aerial photographic coverage assisted by a kite was undertaken in 2015 on the extramural urban area (fig. 17) in order to plan an extensive excavation of the residential neighborhoods for the next season, which date from the end of the late Old Kingdom and the First Intermediate Period. Identifiable over an area measuring 350 m in length and covering nearly 20 acres, this sector was barely touched by archaeologists, only between 1999 and 2002 by a French-Polish team conducted by François Leclère, which focused on a single domestic unit.

To better define the northern margins of the extramural urban area and possibly to find some of the boundaries of the eastern sanctuary that are now partly under the cultivated fields, an extensive geomagnetic survey will be launched in 2016. This initiative will be conducted simultaneously with some geomorphological operations and attempts at landscape reconstruction across the Dendara territory, extending into the floodplain in order to track the capricious developments of the Nile River and with a more targeted and geo-archaeological approach for the settlement areas.

In order to protect the entire extra-mural area — town, necropolis and also a very rare example of an animal necropolis — which is seriously exposed to the encroachments of new constructions, the extension of modern cemeteries, the large trash deposits, or the very occasional looting attempts (the site is well guarded), an accurate mapping and a clear delimitation of the archaeological site with new visible and lasting boundary markers should be considered in the short term. In addition to the priority of accurately redefining the areas that need to be protected, it should be possible to include in that project a more extensive trail for future visitors while maintaining the area open for the locals, such as the children who have to cross this part of the site every day to go to school.

An important site management operation also needs to be done on the intra-mural area, especially in the area of the Roman *mammisi*, in order to reorganize, sort, store, protect and study the hundreds of decorated blocks in red granite, sandstone and limestone carelessly piled up for decades on the northern side of the building.

## Acknowledgments

We would like to thank Gil Stein, Director of the Oriental Institute, for his confidence and the strong support that he has placed in this new project, and the extreme generosity of all the Oriental Institute donors, whose support is essential for all our fieldwork. A very special thank you also goes to the French Institute partners and the Egyptian Antiquities authorities at Dendara especially our inspector of this season, Mohamed.

# EASTERN BADIA ARCHAEOLOGICAL PROJECT

**Yorke M. Rowan**

In the late 1970s and 1980s, systematic investigations by Andrew N. Garrard and Alison Betts revealed the presence of ancient social groups in the unforgiving steppe and desert of eastern Jordan. This groundbreaking research was hampered by a sampling problem because the area is vast and their research areas relatively limited. Based on those excavations and surveys, they concluded that the area was only sparsely populated by very small groups, perhaps families, conceivably hunter-gatherers moving from place to place based on the availability of water, who perhaps added the novel element of herding to their subsistence practices.

The Eastern Badia Archaeological Project, a joint project of the Oriental Institute of the University of Chicago and Whitman College, examines two study areas (Wadi al-Qattafi and Wisad Pools) in the area of the Black Desert investigated by Andrew Garrard and Alison Betts. Pilot seasons conducted between 2010 and 2014 recorded and explored structures in these two areas. Our initial impressions, based on limited survey and recording, led us to suggest that these clusters of collapsed structures were tombs, presumably of transhumant pastoralists passing briefly through this very arid region. The dates of these mortuary structures, tombs, and other anthropogenic features were unknown due to the lack of chronologically diag-



*Figure 1. Aerial view of Mesa 7, with collapsed structures on lower slope (photo: A. C. Hill)*



Figure 2. South slope structure #1, Mesa 7, before clearance (photo: Y. M. Rowan)

and a line of 55 constructed chambers) are visible, we later realized that approximately 100 collapsed structures of basalt also extend along the slopes. On the southern slope, one collapsed basalt structure (SS-11) was selected for excavation because an intact entrance was visible. We initially posited that this may be a burial structure, but the oval, corbelled dwelling (ca. 2.0 × 3.0 m) had another eastern entrance opening onto a courtyard with a small hearth, and an attached storage room with a pillar supporting a roof, still standing. A charcoal sample (5475–5325 cal. BC) from an interior hearth supports the Late Neolithic dates based on the excavated arrowheads (Rowan et al. 2015).



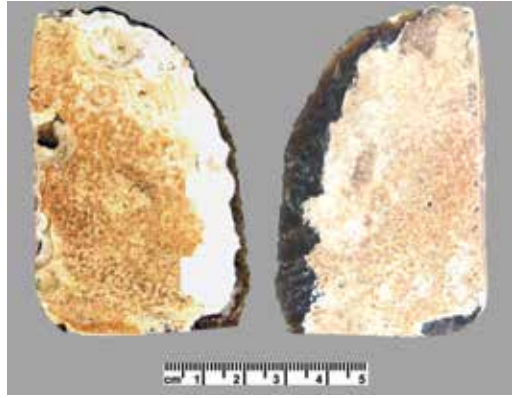
Figure 3. Final overhead photo of SS1, Mesa 7 (photo: Y. Rowan)

nostic surface artifacts. We posited that some structures may be similar to *nawamis* (local Arabic term for burial structures in the Sinai) and other large, dry masonry tombs known in Yemen and Saudi Arabia.

Approximately 60 kilometers east of Azraq, about thirty basalt capped mesas rise 50–60 meters above the relatively flat surrounding *qe'an* (playas) and broad channel of Wadi al-Qattafi. These mesas include Maitland's Mesa (M-4), recognized by Royal Air Force pilot Percy Maitland to have extensive structures covering the top. Although more than 250 structures atop the flat summit of M-4 (huts, animal pens, a tower tomb,

Excavation of that structure, and two others at Wisad Pools, led us to the realization that these structures were not part of a necropolis. For comparison to structure SS-11, we selected a roughly similar, apparently undisturbed structure on the southern slope of Mesa 7 (fig. 1), one kilometer north of Maitland's Mesa. Prior to excavation, uprights that formed part of the wall were visible (fig. 2). The initial clearance of basalt rubble revealed an intact wall, in places nearly 1 m thick. This wall was built with upright slabs for the interior, and an exterior line that includes boulders and horizontal slabs; between those two rows, smaller stones were placed. Our north-south section crossed a central standing basalt pillar, with other supporting pillars along the walls (fig. 3). On the western exterior of the building, a U-shaped feature was apparently a fairly expedient construction of a later date, established on little more than 5–10 cm of sediment above the sloping limestone bedrock. Rubble and cobbles were filled in a foundation trench on the upslope side of the building, which had been excavated into the soft limestone bed-





Figures 4a–b. Cache of seam flint outside the northern wall of SS-1 (left); seam flint knife (right) (photo: G. O. Rollefson)

rock in order to create a level space. On the northeastern exterior, a very compact fill under the stones was full of flint (blades, flakes, cores, burins, and drills), and exposed a small wall built on bedrock. This included the exposure of a cache of largely unretouched tabular flint about a half centimeter thick, with bifacial cortex (fig. 4a). A knife made of this material was found inside the structure in a fire pit (fig. 4b).

Interior dimensions were approximately 4 meters NW–SE, to about 5 meters NE–SW. Removal of paving in the northern aspect exposed an unusual, impressive pressure flaked bifacial point (6 cm) we have termed a Qattafi point. Grinding slabs, an obsidian fragment, Dabba marble, a stone disk with a central drill mark, and some carbonized samples were all found in this context. A hearth became quite large (ca. 52 × 64 cm), occupying much of the floor in the northern section of the interior, to a depth of around 20 cm. Filled with dark ashy silt, the hearth included a sandstone palette fragment and an impressive “seam” knife. Virtually all matrix was taken for flotation samples.

On the western interior, two standing pillars may have defined a spatial separation within the building. Below this compact matrix and a few flat stones, a shallow, light gray, gypsum plaster basin was approximately 80 cm in length and 70 cm in width. Initially built on the bed-

rock limestone and up against small upright slabs lining the interior of the southern wall, a new layer (ca. 0.5–1.0 cm thick) was added on top of the old one, leaving clear finger impressions (fig. 5). We plan to complete excavation of this structure during the 2016 season and hope to explore the exterior area to the south, the leeward side where a courtyard might have been built.

Chipped stone artifacts were numerous, inside and outside of the building. Based on Gary Rollefson’s prelimi-



Figure 5. Two layers of plaster basin inside of SS-1, with finger impressions (photo: M. M. Kersel)





Figure 6. Badia points (photo: G. Rollefson)

nary analysis, burins and drills were quite common, as were notches and denticulates. Blades were most commonly used for tool manufacture. Projectile points were also numerous, and a high relative frequency were badia points (fig. 6). These large points contrast to the very high relative frequency of the much smaller transverse arrowheads found during excavations at structure W-80 at Wisad Pools, which may reflect emphases on different sized game between the two sites. Contrasting this structure to SS-11 at Maitland's Mesa, the number of chipped stone tools is much higher than that of SS-11, although roughly similar in relative percentages of tool types. This may reflect a longer duration of stays, or more frequent visits, at SS-1 in contrast to SS-11 at Maitland's Mesa.

In order to better understand the spatial distribution of the built environment on the landscape, we need to map the variety of structures in our two study areas. Along the Wadi al Qattafi, there are probably hundreds of similar structures represented by large piles of basalt, intermingled with desert kites, walls, animal pens, and other structures. All these elements in the landscape need to be recorded. In order to accurately document the many different structures, we started employing Unmanned Aerial Vehicles (UAVs, or "drones") in order to methodically survey and document the many prehistoric structures distributed atop and along the slopes of these mesas. In recent decades, archaeologists in the Near East have successfully used satellite imagery for mapping the cities and landscapes of the ancient world (and more recently, to note their looting and destruction). For our purposes, satellite imagery provides insufficient resolution for individual prehistoric buildings that tend to be fairly small. As an alternative, we are using drones for survey and mapping purposes and will be some of the first archaeologists to use them for regional survey beyond the site level in Jordan.

After testing the possibility to use aerial photographs and GIS to create high precision, high resolution maps during 2015, we adopted this technique in order to quickly document the many structures, both atop the mesas and below. The high resolution map, which will be orthorectified, provides higher accuracy than is possible even with high-quality laser total stations and in a much shorter time. A short season of aerial mapping was supported with a grant from the Brennan Foundation, funding through a successful crowd-sourcing effort on the website experiment.com, and an American Center of Oriental Research (ACOR) grant to Research Associate Austin "Chad" Hill. In late April, Yorke and Chad began flying a fixed wing UAV and a multi-rotor Dà-Jiāng Innovations (DJI) platform over the mesas and slopes along the Wadi el-Qattafi. Initial flights with the fixed wing during the 2015 field season established the best conditions for flying, and the limitations for collecting data this way in such a remote area. Morning flights were clearly the best time to have a breeze, helpful for successful launches, while afternoons were typically too windy. Batteries allow flights of 15–25 minutes, and batteries for cameras, drones, laptops, and tablets took hours for the gas powered gen-

erator to charge. We also identified a problem with dust affecting the cameras at landing, so a cover was added that protects the camera set into the fuselage. The total result of the survey was some 10,000+ GPS geo-tagged photographs of the landscape that will now be used to construct spatially accurate orthophotographic maps of all the mesas in the survey area.

Our limited investigations at Wisad Pools and Maitland's Mesa suggest that many of the putative tombs and mortuary structures are in fact dwellings, permitting substantial numbers of people to occupy these areas for considerably longer periods of time than we expected. These structures were not recognized as dwellings by scholars because few parallels are known or documented in the region, the post-occupation collapse of these structures effectively obscures their building plans, and the aridity of the desert was assumed to prevent all but the briefest visits. These initial exploratory field seasons of survey and limited excavations now offer compelling evidence for an impressive investment in substantial dry stone masonry buildings that were clearly occupied for longer periods of time, perhaps on an annual, seasonal basis (Rowan et al. 2015). Built with very large slabs of basalt, some weighing ca. 500 kilograms, these structures are not flimsy pastoral camps, but sturdy domestic buildings intended for work and occupation, possibly throughout the Late Neolithic period (ca. 7000–5000 cal. BC). These structures required substantial investment, atypical of short term transhumant pastoralist sites. Contradicting our incorrect hypothesis that these two areas represented necropoli, these dramatic discoveries demand alternative explanations. We propose that hunter-pastoralists exploited these arid eastern lands, perhaps as part of the large-scale expansion of population and settlements that took place during later prehistory.

We must reconsider the nature of buildings on these slopes, the slopes of other mesas along Wadi al-Qattafi, and Wisad Pools. These basaltic structures indicate greater investment and semi-permanent occupation in this arid zone, perhaps reflecting anticipated annual rounds, allowing greater population clusters during the Late Neolithic than previously recognized. Future research will include examination of similar structures, in an attempt to date other structural types; geomorphological investigations, which might determine the existence of a wetter climate with better soil conditions; and additionally aerial mapping using UAVs.

## **Reference**

- Rowan, Y. M.; G. O. Rollefson; A. Wasse; W. Abu-Azizeh; A. C. Hill; and M. M. Kersel  
 2015 "Revelations in the 'Land of Conjecture': New Late Prehistoric Discoveries at Maitland's Mesa and Wisad Pools. The Eastern Badia Archaeological Project, Jordan." *Journal of Field Archaeology* 40/2: 175–88.
-

## EPIGRAPHIC SURVEY

W. Raymond Johnson

On April 15, 2016, the Epigraphic Survey, in cooperation with the Ministry of Antiquities and Supreme Council of Antiquities (SCA), completed its ninety-second six-month field season in Luxor. Chicago House's activities ran from October 15, 2015, through April 15, 2016, and were focused at the sites of Medinet Habu, Luxor Temple, and Theban Tomb (TT) 107; no work was done at Khonsu Temple this season.

### Medinet Habu

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 House of Butehamun, the destroyed western High Gate, and the Medinet Habu blockyard. Most of the work was supported by a new grant from USAID Egypt; the Ramesses III well work was supported by a grant from the Rockefeller Brothers Fund (RBF).

Our work was supervised by Ministry of Antiquities Inspectors Mr. Mahmoud Abd el-Gawad, Mr. Abu el-Haggag Taye Hassanein, Mr. Ahmed Mohammed Hashem, Mr. Alaa Hussein Mahmoud, Mr. Mohammed Badawy Mohasmed, and Miss Rasha Mohammed Abd el-Kareem, with the support of Ministry of Antiquities Conservators Mr. El-Tayib Abu el-Haggag Hussein, Mr. Gamal Mohammed Ahmed Hassan, Mr. Gaber Mohammed Ahmed Loust, Mr. Mahmoud Mohammed el-Azab, Mr. Youssry Mohammed Abd el-Basset, and Mrs. Karima Mohammed Sedek.



Figure 1. Chicago House workmen manufacturing new mudbricks for restoration. Medinet Habu (photo: Ray Johnson)

## Epigraphy

*J. Brett McClain*

### **Small Amun Temple**

Documentation continued for the full six-month season this year in the Small Temple of Amun, with continuing work on the late additions to the temple exterior and marginal inscriptions, to appear in *Medinet Habu XI*, and the bark shrine, to be published in *Medinet Habu XII*.

We have now completed all drawing enlargements for *Medinet Habu X*, which, as agreed upon previously, will contain the documentation of the following portions of the temple:

- the façade (including the 18th Dynasty decoration as well as all later revisions of the decorated architraves of the Thutmosid peripteros)

Work on facsimile drawings for *Medinet Habu XI* occupied part 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.



*Figure 2. Sue Osgood checking a facsimile drawing. Small Temple, Medinet Habu (photo: Ray Johnson)*

### **Graffiti Project**

Tina Di Cerbo, assisted by Richard Jasnow, continued graffiti recording on the small Amun temple Ptolemaic pylon; Kushite Court walls C, D, and the west wall; the west wall of the 18th Dynasty temple; and west interior wall of the Ptolemaic northern annex. Graffiti documented included Demotic inked texts, various layers of Coptic fresco paintings, and miscellaneous written and figured graffiti.

### **Medinet Habu Southern Sector – Ramesses III Walls and Pavement**

Conservation, restoration, and tourist development/access work in the Medinet Habu southern sector, including the Ramesses III palace and adjacent mudbrick walls and ancient paving stones, were inaugurated this season. This restoration work, supervised by Chicago House senior conservator Lotfi Hassan, conservation assistant Nahed Samir, and stonemason Frank Helmholz, marks the beginning of a four-year grant funded by USAID Egypt for the development of the western precinct for study and tourism. This first phase is devoted to the cre-



ation of a viewing area for visitors and the initial stages of pavement restoration for accessibility to the western precinct.

### ***House of Butehamun***

This season, preliminary USAID grant-supported conservation, cleaning, and documentation continued on the 21st Dynasty House of Butehamun, excavated by the Architectural Survey directed by Uvo Hölscher in 1932–33. During the 2015–2016 season, re-cleaning of the surrounding and underlying mudbrick structures, supervised by Dr. Gregory Marouard, was undertaken in order to clarify the building history of the structure, prior to restoration of the mudbrick architectural elements. Additionally, photographer Yarko Kobylecky took reference photographs of all the parts of the house prior to consolidation work. It was determined by Gregory that Uvo Hölscher had indeed excavated the house to the base of its casemate foundations, inside and out. Our reconstruction work can now proceed accordingly.

### ***Western High Gate***

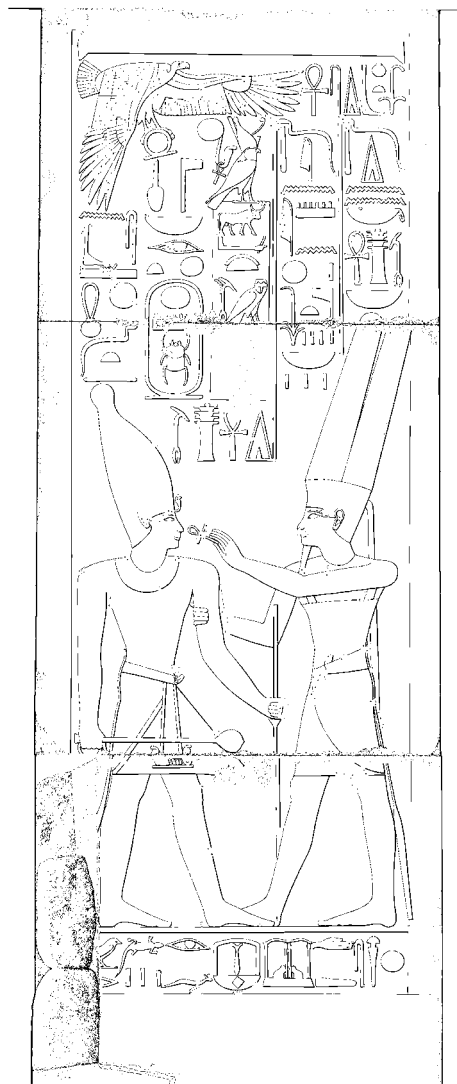
*Jen Kimpton*

The USAID grant-supported activities this season at the Western High Gate (WHG) at Medinet Habu were undertaken by Jen Kimpton, Keli Alberts, Yarko Kobylecky, and Anait Helmholz, with the addition of a photogrammetric survey by Owen Murray and Hilary McDonald.

### **Catalog of Fragmentary Material at the Western High Gate**

The preliminary catalog of the fragments located in the area of the Western High Gate is now essentially complete, although it will certainly expand somewhat as small fragments are revealed by the removal of the larger fragments now concealing them. The catalog now contains 1,019 entries, which represent 948 separate blocks and fragments (the discrepancy between the two numbers is due to the practice of dedicating a separate entry in the catalog to each decorated surface). These 948 fragments are all those that I could find as a result of a close survey of the immediate area of the Western High Gate as well as outliers from farther afield, including Butehamon house, the modern wall at the western bound of the temple complex, and the exterior of the temple complex. All fragments included in the catalog are provided with reference photographs, dimensions, and basic descriptions.

In addition, this season all the documented fragments were marked with permanent numbers. First, a small unobtrusive area of each fragment was coated with a paraloid solution pro-



*Figure 3. Facsimile drawing of pillar with Thutmose III and Amun-Re. Small Temple, Medinet Habu (drawing: Tina Di Cerbo and Krisztián Vértés)*

vided by Lotfi. Then, after the paraloid had hardened, the number was inked with a Sharpie Extreme fade-resistant marker.

### Photography

Yarko Kobylecky, in addition to producing drawing enlargements for all forty-five of the decorated surfaces that he photographed last season at the Western High Gate, continued the photography of the gate



Figure 4. Tina Di Cerbo recording graffiti on the Wacom tablet. Small Temple, Medinet Habu (photo: Ray Johnson)

material. Since December 2015, Yarko has produced negatives for an additional 302 decorated surfaces, including all the large blocks possible to photograph as they are currently positioned. Digital photographs were also made for all the material documented with film, and also for some additional pieces that will not require drawing enlargements (such as sculptural elements and blocks whose in situ positions will necessitate drawings on plastic). This season's photography program began with thematic selections focusing on fragments with interior decoration, fragments that formed part of the exterior rebus frieze, and blocks of all types that were located in the area west of the gate. All these thematic groups have been photographed as thoroughly as possible, but none can be deemed absolutely complete due to practical problems of access — several blocks will have to be moved before they can be photographed, and they are generally of such a size and weight that a supervised team of workmen is necessary for the task. Once the blocks and fragments belonging to those groups were finished as

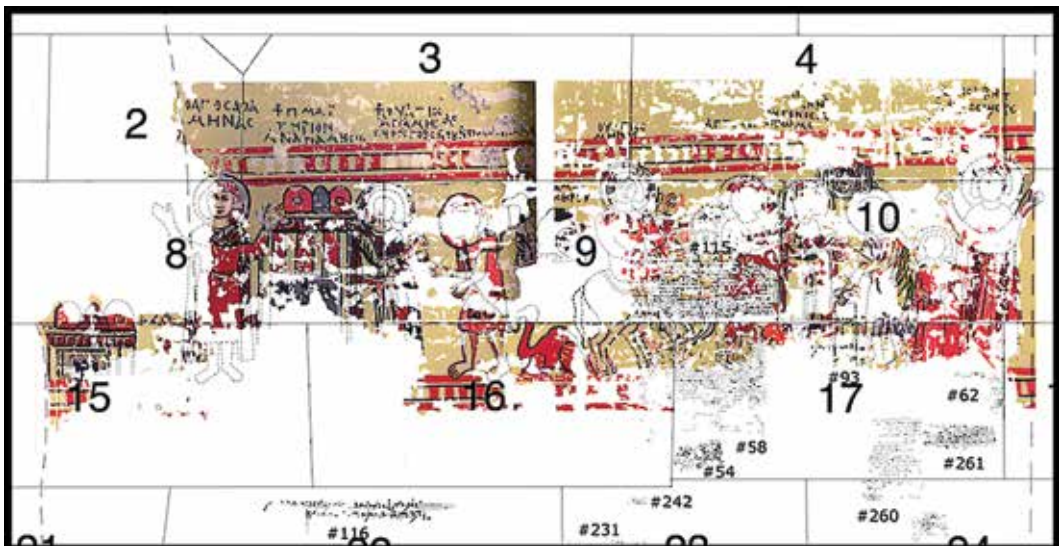


Figure 5. Digitized drawing of graffiti and Coptic paintings. Small Temple, Medinet Habu (drawing: Tina Di Cerbo)



Figure 6. Construction of stone viewing platform with restored mudbrick walls. Ramesses III palace, Medinet Habu (photo: Ray Johnson)

well as they could be, all the remaining fragments were deemed eligible for photography (since they all have to be done eventually), with only a bias in favor of larger, more certainly identifiable fragments in our selections.

Drawing

In late October 2015 Keli Alberts began penciling the enlargements. She commenced with the fragments contained in the blockyard, continued with the blocks reused in the uninscribed Ptolemaic

ic gate, and finally settled in to record the blocks still residing in the Western High Gate area for the remainder of her season. A total of 45 Western High Gate enlargements have been penciled to date.

Isometric field drawings

This season the isometric field drawings were for the most part done by Anait Helmholz. The season’s total was 43 isometric drawings. These have been scanned and converted into digital renderings over the summer.

Photogrammetry at the Western High Gate

Owen Murray and Hilary McDonald carried through a project to record the entirety of the Western High Gate complex in its current state via photogrammetry in order to establish 3D images of the current state of the archaeological features in the area prior to any further intervention. With a digital camera lashed to an extendable, twenty-foot 1920s tripod, Owen combined new and old technologies to produce thousands of digital images of the western precinct that were later stitched together using Agisoft Photoscan software into a 3D

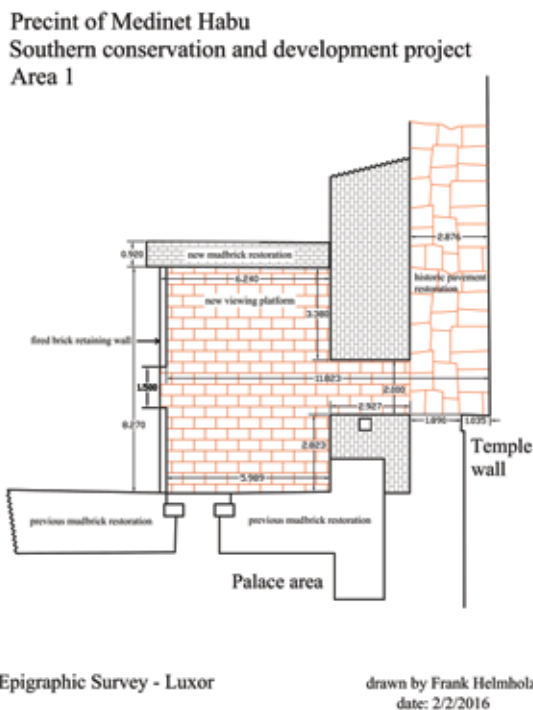


Figure 7. Plan of new stone viewing platform and restored mudbrick walls. Ramesses III palace, Medinet Habu (drawing: Frank Helmholz)

plan of the Western High Gate and Butehamun house sites. In addition to the photogrammetric 3D map, experiments were made in the creation of 3D images of separate blocks for reconstruction work, since many of the blocks and fragments in this area are reconstructible, with some very exciting results. For a rotatable preview of our 3D map of the western High Gate, check out <https://sketchfab.com/chicagohouse>.



*Figure 8. Test cleaning of subsurface strata. House of Butehamun, Medinet Habu (photo: Ray Johnson)*

### Organization of Fragments

During the final weeks of the season, a series of straw mats were set up in the interior of the south court in order to organize and store more safely the smaller fragments belonging to the Western High Gate. Two sets of mats are organized thematically: rebus fragments and fragments bearing human figures in raised relief. The remaining mats are much more roughly sorted between raised relief and sunk relief. 238 fragments have been moved onto mats in the south court.

### ***Epigraphy Summary***

The artists' and epigraphers' efforts at Medinet Habu this season were concentrated mainly in the ambulatory and the bark shrine of the Small Temple, with sets of drawings in progress for MH XI and MH XII; these are tabulated below. Significant progress was also made this winter on the documentation of fragments from the Western High Gate of Ramesses III, which will continue to be a focus of our epigraphic work in future seasons.

In the course of the 2015–2016 season, the following total numbers of drawings at Medinet Habu have passed through the indicated stages of the Chicago House process:

- Photographs completed: 302
- Penciling completed: 49
- Inking completed: 16
- Transfer check completed: 5

Even with ongoing commitments to documentation at the other sites in our concession, it has been possible once more to make significant progress in our documentation program at Medinet Habu this year, and we look forward to continuing our work within the temple complex next season.



### ***The Domitian Gate***

This was the sixth season in our Medinet Habu Domitian Gate restoration work. Five 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, stonemason Frank Helmholz, and our



*Figure 9. Keli Alberts recording a chariot scene of Ramesses III. Western High Gate, Medinet Habu (photo: Ray Johnson)*

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. During the 2015–2016 field season, the reerection of the gate structure, including original stones and new replacement blocks, has substantially been completed, and only minor retouching, conservation, and site management measures will be necessary to finish the project in 2016–2017.

### ***Southern Well of Ramesses III***

This season, thanks to a new grant from the Rockefeller Brothers Fund (RBF), Chicago House undertook extensive conservation measures in the Southern Well of Ramesses III. The project was supervised by Chicago House Senior Conservator Lotfi Hassan and Assistant Conservator Nahed Samir, and was accomplished by a team of Egyptian conservators from our own training programs. This season's work focused on the consolidation of the broken upper well block courses and consolidation of the crumbling well head, and will continue next season.

## **TT 107 Tomb of Nefersekheru**

*J. Brett McClain*

From 17 January 2016 through 9 March 2016, the Epigraphic Survey continued its documentation work in TT 107, the tomb of Nefersekheru. Our work at TT 107 this season was supervised by MSA Inspector Mr. Walid Abd-el-Rahim Mohammed Ibrahim.

During the first week of the campaign, test cleaning and preliminary test trenches were conducted in the area of the portico outside the doorway of the tomb; these operations were undertaken by Profs. Boyo Ockinga and Susanne Binder of Macquarie University (archaeologists) for Chicago House. The initial results included the presence of rock-cut column bases, and the recovery of a flickstein/patchstone from the wall. This cleaning work is scheduled for completion in 2017–2018.

Documentation of the façade reliefs and fragments resumed on 23 January 2016, undertaken by J. Brett McClain (senior epigrapher), Susan Osgood (senior artist), Margaret De



Figure 10. Fragment of a palace scene with Ramesses III and princess. Western High Gate, Medinet Habu (photo: Yarko Kobylecky)



Figure 11. Sandstone sculpture fragment with face of a Nubian prisoner. Western High Gate, Medinet Habu (photo: Yarko Kobylecky)

Jong (senior artist), Yarko Kobylecky (photographer), Elinor Smith (photographer's assistant), and W. Raymond Johnson (field director).

Twenty-six drawings were collated this season. The bulk of the first collations are completed, the second collations and discussions/wall checks are well under way, and recording and collation of the fragments is also well under way. We expect the drawings and collations to be completed during the 2016–2017 field season, and all the drawings to be finalized during the following season, pending staff availability for the work.

## Luxor Temple

The work of the Epigraphic Survey at Luxor Temple this season included documentation and conservation of fragments in the blockyard, along with documentation of Roman-period fresco paintings in the central chamber of the temple. Our work this season was supervised by MSA Inspectors Miss Sara Ahmed Fahmy, Miss Shaimaa Youseef Rashidy, Miss Shaimaa Farshouty Aly Hussein, Mr. Ashraf Abdu Mohammed Hussein, and Mrs. Amal Roshdy Abdel Naiem Ahmed.

### ***Luxor Temple Blockyard Documentation***

*James B. Heidel*

This year the work in the Luxor temple blockyard centered on continuing to develop the Luxor Temple Fragment Database. Since its creation two years ago, records for fragments, including the photos and location data, have been added from our records at Chicago House. In the blockyard itself, the work consists of verifying the location of each fragment based on the data we have, locating fragments whose data have been lost, determining the numbers assigned to fragments we have studied in past whose numbers have fallen off or become illegible, and adding new fragments to the database based on what is found. The process of checking in the



*Figure 12. 3D photogrammetric map of the Western High Gate and environs, Medinet Habu (photo: Owen Murray)*



*Figure 13. 3D model of a sandstone fragment with part of chariot scene. Western High Gate, Medinet Habu (photo: Owen Murray)*





Figure 14. View of fragment sorting area. Western High Gate, Medinet Habu (photo: Owen Murray)



Figure 15. Western High Gate team (left to right): Yarko Kobylecky, Hilary McDonald, Ellie Smith, Owen Murray, Brett McClain, Jen Kimpton, Anait Helmholz, Keli Alberts (photo: Ray Johnson)



field proceeds mastaba by mastaba, and will continue until all previously numbered/studied fragments have been accounted for and all new fragments that are deemed to be of importance to the fieldwork have been added to the database.

At the beginning of the season, Jen Kimpton helped to alter the location data page of the database to change the entry of location information from a typed field to a series of drop-down menus. This helps to eliminate errors and clarify the locations of some pieces. The location information for approximately 1,500 fragments was re-entered as field checking progressed to migrate the data to the drop-down menus. This is now mostly complete. In March, with Jen's help, we began designing a new tab in the database to create a location to log conservation information. The information the tab contains has been formulated with the guidance of Hiroko Kariya, and we hope to have the new tab/page added to the main database for the coming season.

Exciting tests were also completed by Hilary McDonald and Owen Murray exploring the capabilities of three-dimensional imaging software for documenting fragments. A virtual 3D model of a small mastaba was built from photographs using Agisoft PhotoScan, and techniques are being developed to extract drawing-enlargement-quality square, scaled images of fragment surfaces from the model. If this can be accomplished, we will have the ability to greatly speed up our fragment documentation and to create a new situation where most of the work devoted to producing square, scaled photos of fragments can be accomplished off-site in any location.

The main part of the database creation for the fragments is also proceeding. The "backlog" of all previously studied fragments is being located, numbered, and organized, with each fragment having a confirmed location, inventory number, and clear photograph. We are nearing the completion of the "backlog" phase, which should wind up early in the next season of work. This will allow the fragment documentation and database to move forward to begin to catalog the tens of thousands of remaining fragments for which there has never been a photograph or an inventory number. It is expected that work on these new fragments can proceed much more quickly than the work sorting out the previously studied ones.

Below are totals for what has been added to the database this season for the work ending 10 March 2016.

- 3,424 records have been created in the database, 183 more than last year.
- 582 records are currently showing as "not used" because they were skipped or not photographed in the past, 32 fewer than last year.
- 2,842 fragment records have been entered with photos, 215 more than last year.
- 720 of those entered records are still showing location data as "Unknown," 160 fewer than last year.
- 2,122 fragments have location data, 375 more than last year.
- 1,674 of those fragments with location data have been field verified and their locations confirmed, 1,120 more than last year.
- 1,168 additional fragments have recorded location data and are awaiting field verification, 6 fewer than last year.
- 1,182 fragments have been fully checked and have had numbered aluminum tags affixed to them to make their permanent inventory numbers clear. All these were done this year.



*Figure 16. Johannes Weninger and Chicago House workmen reconstructing the Domitian Gate, Medinet Habu (photo: Ray Johnson)*



*Figure 17. View of the Domitian Gate reconstruction in progress, Medinet Habu (photo: Frank Helmholz)*



*Figures 18–20. Clockwise from top left: (18) Conservation team at work on fragments of the South Well of Ramesses III, Medinet Habu; (19) Conservation team restoring blocks of the well housing, South Well of Ramesses III, Medinet Habu; (20) View of the court, Tomb of Nefsekheru (TT 107) (photos: Ray Johnson)*

- 270 fragments are now listed as needing a film-based photo, meaning only a digital photo for them exists.
- 113 fragments were added to a list as likely needing conservation treatments.

And finally, one of the benefits of a relational database is that in addition to individual fragment entries, groups of fragments that reconstruct together can be related to each other and shown in reconstruction. We have begun the process of entering relational information for reconstructible fragment groups as well. The initial emphasis is on groups that have been reconstructed, that are being worked on now, or that belong to the upper registers of the Colonnade Hall since this will be our next Luxor Temple publication. The entries include:

- 0001 Re-erected Amun bark scene, AIII Sun Court, east wall (108 fragments)

- 0002 Re-erected Khonsu barge scene, colonnade hall, east wall (47 fragments)
- 0003 Bentresh stela parallel text (39 fragments)
- 0004 Ptolemy I group associated with group 0003 Bentresh (141 fragments)
- 0005 Thecla church group (129 fragments)
- 0006 Deteriorating Fragments (52 fragments)
- 0007 Luxor Temple Ished Tree Scene (9 fragments)
- 0008 Great Ennead Offering, Seti I/Tut, Col. Hall, 3rd Register, W Wall (124 fragments)

For the coming season the goals are to finish locating and tagging the remaining previously studied/numbered fragments, to finish systematizing the mastaba numbers, and to begin photographing/processing new, previously unstudied or documented fragments.

### ***Luxor Temple Epigraphy***

*Krisztián Vértés*

This season the work in the King's Chamber centered on continuing to copy the Roman fresco remains on the lower half of the East Wall. The digital wall map that was created at Chicago House was divided into sub-sections and was prepared for digital fieldwork carried out using a digital tablet. Once digital penciling was finished on the lower section, scaffolding was erected at the northern corner of the East Wall and work continued on the upper section, mostly using traditional photo enlargements as the base material for epigraphy. All these drawings were scanned/transferred and prepared for digital inking to take part during the summer of 2016. Sixteen drawings were completed during this season and are ready for inking over the summer.

### ***Luxor Temple Fragment Conservation Project***

*Hiroko Kariya*

Between January 16 and March 9, 2016, the tasks below were carried out by Hiroko Kariya at Luxor Temple under the supervision of Ray Johnson.

#### Conservation work

Nine sandstone blocks were selected for treatment prior to my arrival this season. This included a Hathor head capital



*Figure 21. Large-format photograph of funerary text with priest and offerings. Tomb of Neferssekheru (TT 107) (photo: Siegfried Schott)*





*Figure 22. Boyo Ockinga and Susanne Binder supervising test cleaning of the court and portico. Tomb of Nefersekheru (TT 107) (photo: Ray Johnson)*



*Figure 23. Brett McClain collating facsimile drawings. Tomb of Nefersekheru (TT 107) (photo: Ray Johnson)*



Figure 24. View of blockyard and open-air museum. Luxor Temple (photo: Ray Johnson)

currently on display in the Open-Air Museum. Depending on their condition, consolidation, facing removal, stain removal, and/or loss compensation were performed. Prior to silane consolidation treatment, a temporary treatment tent was installed in order to keep the proper microclimate for the chemical reaction of the consolidant. The blocks consolidated with silane should be checked and retreated next season.

Annual photo documentation (for condition monitoring) of large blocks of Amenhotep III, all blocks on display at the Open-Air Museum, column drums, and reconstructed wall of the colonnade hall, as well as the sun court, was carried out. This season, condition checking of each block could not be performed due to limited time and work priority, but the condition of selected inscribed blocks was digitally documented this season for the first time as a trial. This was done using the software Procreate on iPad as well as iPad Pro. This program, compatible with Adobe Photoshop, allows one to create layers and draw over photography for condition documentation, including “damage mapping.”

A conservation section (“tab”) for the main database (designed by J. Heidel) was created. This was designed to document simple conditions of an inscribed face of a block mainly using limited terminology (i.e., check-boxes and drop-down lists.) It is currently in the process



Figure 25. Jay Heidel cataloging fragments in the blockyard. Luxor Temple (photo: Ray Johnson)



of being added to the main database by Jen Kimpton. Once completed, this will also allow priority identification for conservation work.

Reflectance transformation imaging (RTI) was tried by H. McDonald on 2 blocks (#0147 and #1632) and 1 joined group (including blocks #1194, 1310, 0014, 0489, 0217, 0106, 0686 and 1316). They were selected to enhance recarved and defaced surfaces by Ray Johnson. D-stretch software was provided by Tina DiCerbo. It was used to try to enhance painted surface of large Amenhotep III blocks.

Two large educational panels in English and Arabic were replaced with better-quality panels, and one new panel was installed that explains Ramesses II's Luxor Temple pylon gateway.

## Chicago House

### *The Chicago House Marjorie M. Fisher Library*

The Chicago House Marjorie M. Fisher Library reopened on Friday, October 23, 2015, and closed on Friday April 8, 2016, under the direction of librarian Marie Bryan, assistant librarian Anait Helmholz, and library assistant Gina Salama. 147 new titles were accessioned this season, including 62 monographs, 51 journals, 31 series volumes, and 3 parts of sets. 71 of the titles received were gifts from 42 donors. 227 volumes were repaired during the season by Anait and Gina. The entire season saw many Egyptian graduate students, archaeological mis-

sions, and field school participants come and go. Gina joined the library team as a full-time employee and we are very pleased to have her, especially with Anait now working part time at Medinet Habu. When things are slow in the library, Gina scans our dictionary card files for backup and duplication.

### *The Chicago House Tom and Linda Heagy Photographic Archives*

Chicago House Tom and Linda Heagy Photographic Archives registrar Ellie Smith assisted photographer Yarko Kobylecky with the field photography at Medinet Habu and Luxor Temple this season; registered 162 new large-format negatives; numbered, sleeved, filed the negatives and prints, and kindly assisted library patrons who needed access to our photo files. In addition to opening and closing the Chicago House facility with our workmen at the beginning and end of each season, Tina Di Cerbo continued to update the Photo Archives's data storage and backup systems, organize and scan slides, enter data on the slide database, and continue scanning negatives after Ellie left. Archivist Sue



Figure 26. Margie Fisher at work in the Chicago House Library, December 2015 (photo: Ray Johnson)



Figure 27. Krisztián Vértés recording Roman frescos. Imperial Chamber, Luxor Temple (photo: Ray Johnson)



Figure 28. Krisztián Vértés at work on the iPad Pro tablet and MacBook Pro. Imperial Chamber, Luxor Temple (photo: Ray Johnson)

Lezon reviewed the entire large-format negative database with Brett, reviewed 76 digitally joined drawing plates done by Brett and photographic images that will be published in *Medinet Habu X*, and helped write several grant proposals for the Photo Archives. Alain and Emmanuelle Arnaudies returned to the Photo Archives for their tenth season entering data in our master database. This season they recorded 22,075 large-format photographs; 4,172 bibliographic references; 2,158 PDF files; 9,847 Nelson Numbers for Medinet Habu, Luxor Temple, Karnak temple, Deir el-Bahri, Gurna, Deir el-Medina, Deir el-Shelwit, the Ramesseum, and Qasr el-Aguz sites; and 2,942 Nelson Number references for Medinet Habu alone. All the Nelson Numbers are linked to 16,607 photographs, 11,745 bibliographic references, and 1,281 plates (drawings and photographs) from Epigraphic Survey publications.

This season Chicago House was presented with the photographic archives of our colleague Edwin (Ted) Brock, who passed away suddenly in September. Preliminary assessment of the scope of the archive indicates that there are over 60,000 individual images of sites throughout Egypt as well as from museums worldwide. The images consist of 35 mm color slides and black-and-white negatives. Sites include Abydos, Giza, Luxor, Aswan, Dhakla, Sinai, Memphis, Mendes, and Qantir, to name but a few. The images were taken over a span of 35 years (1980s–2015) and represent Ted's remarkable personal journey as an Egyptologist, scholar, and photographer. We will miss our friend, but his work will live forever in our archive, and will soon be accessible to everyone.

Finally, I am saddened to report that on January 7 our beloved Jean Jacquet passed away peacefully in Carouges, Switzerland, aged 95. From 1997 until 2008 Jean and Helen (who passed away in 2013) lived with us at Chicago House while they worked with us and on the publication of material they had previously excavated at the site of Thutmose I's Treasury in North Karnak. Jean was a superb architect and archaeologist, and they both were inspirations and mentors in every way. While we will miss them very much, they will always be a part of us. Jean's obituary, written by Chicago House archivists Alain and



Figure 29. Hiroko Kariya and Jay Heidel tracking fragments for conservation in the blockyard. Luxor Temple (photo: Ray Johnson)





Figure 30. Hiroko Kariya and Hilary McDonald, assisted by Mohammed Selim and Saoud Kamal, making 3D record of fragment group. Blockyard, Luxor Temple



Figure 31. Nashat Seidhom, Mohammed Selim, and Sami Komos installing educational signage. Luxor Temple (photo: Ray Johnson)

Emmanuelle Arnaudies, can be found at <http://oi.uchicago.edu/article/jean-jacquet-architect-and-archaeologist-passes-away-95>.

The Epigraphic Survey professional staff this season, besides the director, Ray Johnson, consisted of J. Brett McClain as senior epigrapher, Jen Kimpton and Christina Di Cerbo as epigraphers; Boyo Ockinga and Susanne Binder as archaeologist/epigraphers; Margaret De Jong and Susan Osgood as senior artists; Krisztián Vértés and Keli Alberts as artists; Julia Schmied as blockyard supervisor; Jay Heidel as architect/artist/data manager; Yarko Kobylecky as chief staff photographer; Owen Murray and Hilary McDonald as photographers; 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 Helmholz as assistant librarian and Medinet Habu blockyard assistant; Gina Salama as

library assistant; Frank Helmholz as master mason; Johannes Weninger as mason; Lotfi K. Hassan as Medinet Habu conservation supervisor; Nahed Samir as Medinet Habu conservation assistant supervisor; Hany Diab, Al Azab Ahmed, Nehad Badry, Skina Oraby, Safaa Nuby, Anhar Hassan, Fatma Ahmed, and Neema Ahmed as Medinet Habu conservators; and Hiroko Kariya as Luxor Temple conservator. Alain and Emmanuelle Arnaudies worked on the Chicago House Digital Archives database. Special congratulations to senior artist Sue Osgood who celebrated her thirtieth season working at Chicago House. Thanks must go to our forty year-round Egyptian workmen who form the core of the house



Figure 32. Jean and Helen Jacquet. Chicago House (photo: Sue Lezon)

and temple staff. Without them we could do nothing, and we appreciate what they do more than words can express.

## Acknowledgments

Sincerest thanks to the many friends of the Oriental Institute whose generous support allows Chicago House to maintain its documentation, conservation, and restoration programs in Luxor, especially to USAID Egypt for a new four-year grant that now supports a major new restoration and site development effort at Medinet Habu. Sincerest thanks must also go to the Rockefeller Brothers Fund (RBF) for the Ramesses III southern well conservation project grant. Thanks to the Honorable US Ambassador to Egypt R. Stephen Beecroft; to former US Ambassador to Egypt the Honorable Anne Patterson; former US Ambassador to Egypt the Honorable Margaret Scobey; US Embassy Cultural Attaché Mark L. Wenig; US Embassy Counselor for Public Affairs Adnan Siddiqi; to Sherry Carlin, mission director of the United States Agency for International Development in Egypt; former USAID Egypt directors Mary Ott, Walter North, Jim Bever, Hilda (Bambi) Arellano, Ken Ellis, and Bill Pearson; Anne Patterson, Bill Patterson, and Sylvia Atalla, USAID Egypt; Curt Ferguson and Coca Cola Egypt (Atlantic Industries); to Ward and Diane Zumsteg for launching our new endowment campaign; Dr. Marjorie M. Fisher; David and Carlotta Maher; O. J. and Angie Sopranos; Misty and Lewis Gruber; Nassef Sawiris; Mark Rudkin; Kitty Picken; 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; The Secchia Family; 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; Dr. Gerry Scott, Kathleen Scott, Mary Sadek, Amira Khattab, and Jane Smythe of the American Research Center in Egypt; Dr. Michael Jones; and all of our friends and colleagues at the Oriental Institute. I must also express our special gratitude to the Egyptian Ministry of Antiquities (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 for their support of our work. Sincerest thanks to you all!

We would like to thank the Egyptian Ministry of Antiquities for another excellent collaboration this season, especially Dr. Khaled el-Enany, Minister of Antiquities; Dr. Mamdouh el-Damaty, Former Minister of Antiquities; Dr. Mustafa Amin, SCA Chairman; Mr. Hany Abu El-Azm, General Director of Foreign Missions; Dr. Mahmoud Afify, Head of the Pharaonic Sector; Dr. Hisham El-Leithy, Director of Publications and the Documentation Centre; Mr. Sultan Eid, Director of Upper Egypt and Luxor; Dr. Mustafa Waziri, General Director of Luxor; Dr. Talat Abdel Azziz, Director General of Gurna and the West Bank; Mr. Mohamed Yehia, Assistant Director of Gurna; Dr. Mohamed Abdel Azziz, General Director of Karnak and Luxor Temples; Mr. Gamal Mohamed Mostafa Husein and Mr. Ahmed Araby, Directors of Luxor Temple respectively; Mr. Omar Mohamed, Assistant 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. It has been a pleasure working with them all.



Figure 33. Chicago House 2015–2016 professional staff (photo: Sue Lezon)

Back Row (left to right): Brett McClain, Jen Kimpton, Keli Alberts, Hilary McDonald, Owen Murray

Third Row: Hany Diab, Al-Azab Ahmed, Krisztián Vértes, Tina di Cerbo, Marie Bryan, Frank Helmholtz, Anait Helmholtz, Gina Salama, Johannes Weninger

Second Row: Nehad Badry, Skina Oraby, Safaa Nuby, Samwell Maher, Jay Heidel, Ray Johnson, Samir el-Guindy, Essam el-Sayed, Anhar Hassan, Fatma Ahmed, Neema Ahmed

Front Row: Lotfi Hassan, Nahed Samir Azziz, Sue Osgood, Ellie Smith, Sue Lezon, Yarko Kobylecky

## Addresses of the Epigraphic Survey

### October through March

Chicago House  
Luxor  
Arab Republic of Egypt  
tel. (011) (20) (95) 237-2525  
fax. (011) (20) (95) 238-1620

### April through September

The Oriental Institute  
1155 East 58th Street  
Chicago, IL 60637 USA  
tel. (773) 702-9524  
fax. (773) 702-9853

## GALILEE PREHISTORY PROJECT

Yorke M. Rowan, Morag M. Kersel, and Austin (Chad) Hill

### Survey and Test Excavations of Wadi el-Ashert (Bet Netofa II, Hanaton)

After the completion of six years of excavations and survey at Marj Rabba, the next phase of the Galilee Prehistory Project (GPP) is to identify and investigate another Chalcolithic (4600–3600 BC) site in the Galilee in order to examine further the dramatic changes in the relationship of villages, ritual sites, and mortuary practices during this under-investigated period. Comparisons between sites in the Galilee with other areas of the southern Levant (lands bordering the eastern shores of the Mediterranean Sea) allows for greater insights into the striking transformations in ancient life ways such as agricultural expansion, economic diversification, and intensified craft production. Excavation at another Galilean site provides further comparative evidence on subsistence economy, material culture production, and intra- and inter-regional variability during the Chalcolithic period.



*Figure 1. Wadi el-Ashert, looking east to the Bet Netofa Valley, with the Eshkol reservoir in the background (photo: Y. M. Rowan)*





Figure 2. Field walking during survey, looking west across the Wadi el-Ashert (photo: Y. M. Rowan)

During the summer of 2015 the Galilee Prehistory Project conducted an intensive survey (pedestrian, unpiloted aerial vehicle (UAV), and geophysical) and limited excavations (shovel tests) along the Wadi el-Ashert, a small drainage area on the western side of the Bet Netofa Valley, directly east of the village Bir al-Maksura and south of Kibbutz Hanaton (fig. 1). Previous limited salvage excavations (carried out in advance of a pipeline) in this area (Nativ et al. 2014), videntified sixth- to fifth-millennium remains that further confirmed this might be a site worthy of additional investigation.

## Survey

A goal of the intensive pedestrian survey along the small wadi just south of Kibbutz Hanaton was an understanding of the scope, size, and boundaries of the site referred to in past publications by different names: Bet Netofa II (Gilead 1989; Shalem 2008) or Hanaton (Nativ et al. 2014). The small but seasoned crew (two Metcalf interns from the University of Chicago, three recent graduates of Whitman College, one recent graduate of the College of Wooster, one current undergraduate at the University of North Carolina, Greensboro, and one recent PhD graduate from the University of Toronto) worked tirelessly through the heat, the hard-packed earth, the thistles and brush to provide greater understanding of the site and its boundaries (fig. 2). The pedestrian survey was augmented by an intensive geophysical component and by the placement of shovel test pits to understand better the limits, depth, and stratigraphic sequence of the site.

Maps of the survey/excavation area were created using images collected during several UAV flights using a fixed wing UAV. A series of fixed ground control points (GCPs), used to facilitate geo-referencing the UAV data, were recorded using a Leica total station. Photographs taken with cameras on the UAV (capturing images every 2–3 seconds during flight) were processed in Agisoft Photoscan Pro, using the GCPs, to create orthophotos and Digital Elevation Models (DEMs) for export to ArcGIS. In ArcGIS, the UAV-derived orthophotos were used as base maps to divide the survey area into transects for the pedestrian survey (fig. 3), and establish a grid

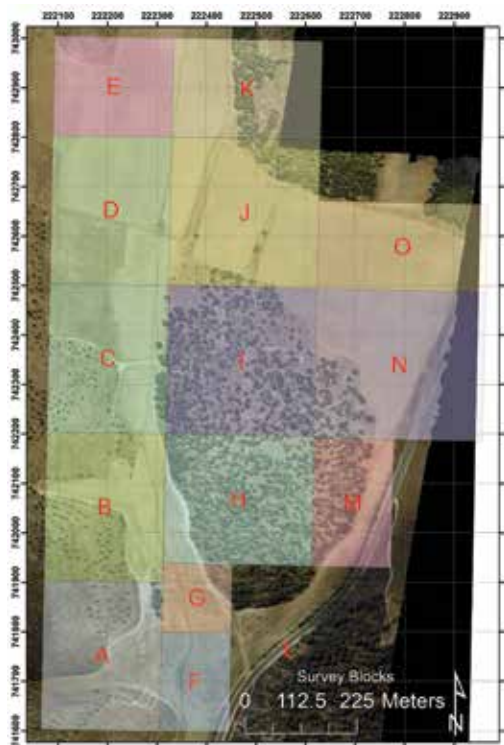


Figure 3. Orthophotograph with survey blocks (A. C. Hill)

to divide the survey area into transects for the pedestrian survey (fig. 3), and establish a grid

for shovel test pits. Primarily surveyed using standard cameras onboard the UAV, we also surveyed the site with cameras modified to record the near infrared spectrum using NDVI (normalized difference vegetation index) in order to investigate plant growth variability that might reflect buried features. Primarily surveyed using standard cameras onboard the UAV, we also surveyed the site with cameras modified to record the near infrared spectrum using NDVI (normalized difference vegetation index) in order to investigate plant growth variability that might reflect buried features. This was met with limited success.

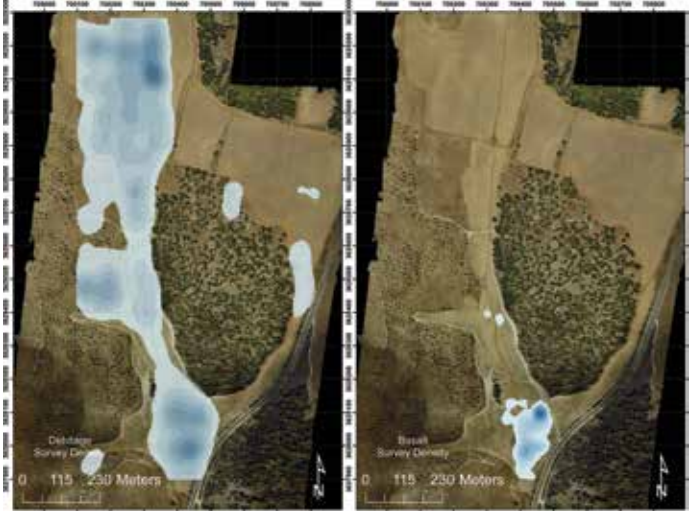


Figure 4. Orthophotograph comparing flint debitage and basalt distribution from pedestrian survey (A. C. Hill)

### **Survey Methodology**

Traditional intensive pedestrian survey typically consists of individuals placed a particular distance apart, walking in straight lines to observe material culture and landscape features that provide evidence of the past. During the Wadi el-Ashert survey we walked transects (the straight lines) placed 20 m apart and approximately 300 m long (within the boundaries noted in fig. 3). The standard length of transect blocks was 300 m, although the distance actually walked was modified according to fence lines, roads, and other obstacles. Thus, the first transect in block A, Transect A1, was 300 m long, while blocks G and F were smaller. The length of transects was also modified to reflect areas where the site was more easily recognizable based on previous salvage work (Nativ et al. 2014). These areas were covered more intensively. Along each transect, diagnostic pottery (rims, bases, handles, painted/decorated), flint (tools, flakes, debitage), and ground stone artifacts (typically made of basalt), were all noted by the field walkers. Counts of lithic tools and debitage, basalt, and ceramics (Chalcolithic, Byzantine/Roman, and other) were recorded in 20 m segments along each 300 m transect. Field walkers also noted the vegetation, ground coverage, and other aspects of the landscape encountered on a particular transect (proximity to roads, agricultural disturbances, sources of water). At the end of each field day the data was entered into an Excel spreadsheet. This allowed for the spatial analyses of the surface finds.

### **Survey Results**

A series of distribution maps were created based on the surface finds, which resulted in some curious patterns in the survey area. Interestingly, the analyses demonstrate that the distribution of lithics does not correlate well with Chalcolithic ceramics or basalt artifacts. Mapping of the distribution of lithic debitage (the fragments produced during the process of

lithic reduction and the production of chipped stone tools) indicates several different high concentrations of flint debris along the Wadi el-Ashert, as seen in figure 4. At the northern end of the wadi, concentrations of flint reflect flint nodules unearthed by centuries of plowing, although in addition to the chips and chunks of flint some prehistoric chipped stone artifacts were also included. Higher concentrations of lithics relative to ceramic sherds might also be the result of differing properties — rock is more durable and survives longer on the surface than ceramic, particularly where annual plowing has continued for years.



Figure 5. Chad Hill demonstrating excavation and recording procedures for shovel test pits (photo: Y. M. Rowan)

In contrast, the distribution of Chalcolithic ceramics and basalt remains are concentrated in the southern aspect of the area, just before the southern end of Wadi el-Ashert meets the road (fig. 4). The slopes along the channel are the primary area of the site known as Bet Netofa II (and Hanaton), which seems to represent Wadi Rabah, early Chalcolithic, and late (Ghassulian) Chalcolithic. An explanation for this might be as simple as topography — this area is downslope and during episodes of intense rain/flooding the lighter ceramics might wash down the slope. This would not, however, explain the predominance of basalt (a heavy material) at the southern end of the wadi. It is these types of patterns that archaeologists look for during surface surveys. Once a

cluster of artifacts has been identified in a concentration, further analyses are required in order to determine if the deposition is accidental or indicative of something below the surface (architecture/settlement).

## Test Excavations

In order to assess the nature of the surface concentrations and evaluate patterns detected by the mapping of the survey results, test excavations are required in order to determine whether there is anything below the surface. Sometimes surface scatters are the result of agricultural or other modern practices. Testing the relationship between surface and sub-surface patterns leads to the next step: test pit excavations. For this, small holes are excavated (see fig. 5) along a grid at predetermined locations. The excavated dirt from each shovel test is passed through a 2–3 cm mesh screen and all artifacts are collected. The quantities and types of materials are mapped onto a site grid revealing areas of higher artifact concentrations, which may or may not correspond with the results of a pedestrian survey. If the surface findings are similar to the sub-surface shovel tests, archaeologists might decide to excavate or to conduct other remote-sensing technologies such as ground penetrating radar or magnetometry to gain an even greater understanding of what lies below the surface.

### *Test Excavation Methodology*

During the 2015 field season at Wadi el-Ashert, test pit locations were chosen in order to investigate the results of the intensive pedestrian survey (see fig. 6). Teams of two or three

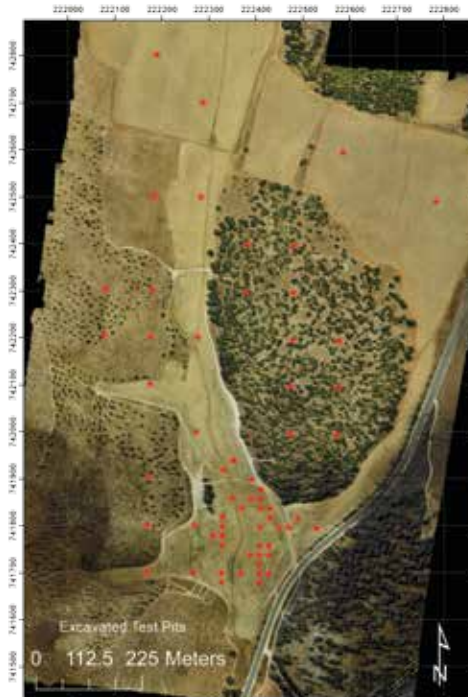


Figure 6. Location of excavated test pits within survey area (orthophoto: A. C. Hill)

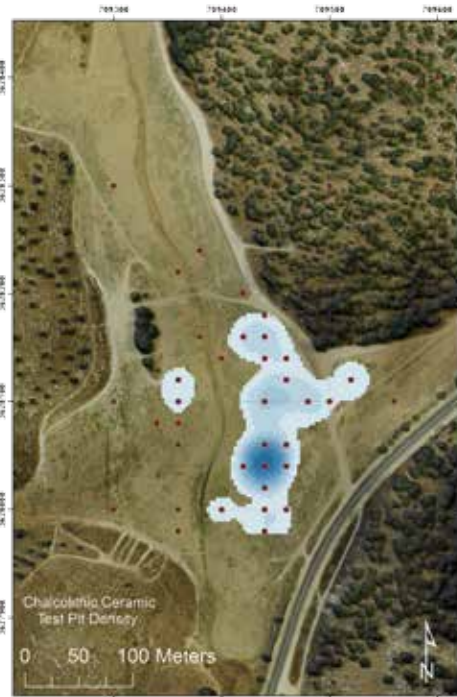


Figure 7. Test pit locations with density distribution of Chalcolithic sherds (orthophoto: A. C. Hill)

people excavated 61 test pits, all measuring a standard 50 × 50 cm, and dug to a variety of depths (typically excavated until no more cultural material was recovered from the pit, or no greater depth was possible), although never much more than a meter. The depth of the shovel tests was determined by recovering sterile soil, hitting bedrock, or reaching the limitations of field equipment. Shovel tests were excavated stratigraphically with picks and shovels, and all soil was sieved. Each pit was refilled when completed. All artifacts recovered were bagged, washed, recorded, classified and stored.

### **Test Excavation Results**

A goal for the excavation of the test pits was to establish the boundaries and depth of remains in the area of Bet Netofa (II), a known site along the Wadi el-Ashert, with Chalcolithic, Wadi Rabah and Pre-pottery Neolithic artifacts. As seen in figure 6, the southern area within the survey boundaries was more intensively sampled, with shovel tests spaced along both eastern and western flanks of the small wadi in blocks G, F, and A. Some test pits were excavated across the entire survey area, in a 100 m grid, while the majority of test pits were placed in the southern part of the wadi and spaced 20 m apart, where we noticed the greatest concentration of surface material, primarily flint tools, pottery, and debitage. This is also near the salvage excavations carried out by Nativ et al. (2014), which were located just to the immediate east of block F, along the western side of the road.

Summarized data for each test pit included information on the precise location of each pit (easting/northing), the depth of each pit, soil types and color, and general types of finds found for each. For instance, the distribution of Chalcolithic ceramics are much more con-





Figure 8. Pre-Chalcolithic incised pottery sherd (photo: A. C. Hill)



Figure 9. Possible wall in Test pit T14-6 (photo: Y. M. Rowan)

strained, primarily limited to the southern extent of the survey area, which closely correlates to Chalcolithic pottery from the pedestrian survey (fig. 7). In addition, summarized data on the faunal remains were collected. Although the lack of contextual integrity renders the animal bones of limited interpretive significance, the strong presence of pig bones (ca. 20%) is roughly equivalent to the faunal assemblage profiles from other nearby early Chalcolithic sites, particularly Marj Rabba/Har Hashaavi, where pigs constitute roughly 30% of the total faunal profile, and at least suggests a connection to the Chalcolithic.

Preliminary results of the shovel tests indicate that while there are limited Ghassulian, Chalcolithic diagnostic sherds, much of the ceramic corpus includes red wash, some burnishing, and simple decorative motifs (fig. 8) that fit more comfortably with earlier Chalcolithic or Late Neolithic (Wadi Rabah) styles than the Chalcolithic “Ghassulian” of the south. This is problematic, however, since the better-known “Ghassulian” types are not well represented or documented in the north, underscoring the regional nature of Chalcolithic entities and highlighting one of the reasons the GPP chose this particular area for investigation.

The primary goal of test pit excavation is to elucidate the boundaries of buried artifact distributions and gain insight into stratigraphy across the survey area. As such, test pits are not intended to identify buried features. However, in at least two test pits we may have hit portions of the built environment (see fig. 9). Test pits X and Y contained significantly higher levels of artifacts and may have included portions of walls. These pits are located in block F, where we also found the highest proportions of pottery and ground stone in the surface survey.

### ***Geophysical Survey***

Test pit data confirmed that the area with the highest density of prehistoric material is located in the southeast side of the wadi (blocks F and G). As we had only limited field time to dig test pits across our entire grid, we also employed geophysical survey techniques in order to get a greater understanding of the distribution of buried material in this area. Thomas Urban per-

formed an electromagnetic survey of 1 m transects. Results are forthcoming, but preliminary results fit well with the distribution of artifacts we found on the surface and in the test pits.

## Conclusions

This season of exploratory field research was very productive and adds to earlier research that indicated a Chalcolithic site exists in the area (Gilead 1989) with earlier levels dating to the Wadi Rabah, and a pre-Chalcolithic but post-Neolithic period (Nativ et al. 2014). Our survey and the sub-surface investigations, both GPR and test pit excavations, support the recently published salvage results that indicate that the late Chalcolithic (Ghassulian) is poorly represented at the site. Below those late, highly disturbed levels near the surface, our evidence for ceramics supports a less-well understood level of early Chalcolithic, post Wadi Rabah level proposed by Nativ et al. (2014).

Based on these results, we do not think this site has enough potential to fulfill the goals of the GPP. Although the earlier periods represented by this site deserve greater attention, and this site has potential for the Wadi Rabah to early Chalcolithic levels in particular, the late Chalcolithic levels seem likely to have been highly disturbed by plowing and other modern agricultural processes, as well as infrastructural projects. Recent satellite imagery, our field walking, and limited shovel test pits show that the area near the road, in the eastern portion of the survey area, has been heavily affected by recent construction. Yet our survey revealed interesting results. In particular, we believe that a possible Late Neolithic site also exists on the western slopes above the Wadi el-Ashert where a number of axes and other lithics suggest an earlier occupation. Based primarily on surface finds, and the shallow nature of the deposits, we cannot determine whether this area was agricultural, an occupation, or even possibly a source for flint cobbles.

During the 2016 study season, the team will continue the search for the next project of the GPP.

## References

- Gilead, I.  
1989 "Chalcolithic Sites in Beit Netofa Valley, Lower Galilee, Israel." *Paléorient* 15: 263–67.
- Nativ, A.; R. Shimelmitz; N. Agha; I. Ktalav; and D. Rosenberg  
2014 "Hanaton: Interim Report on a Neolithic-Chalcolithic Settlement in the Lower Galilee." *Journal of the Israel Prehistoric Society* 44: 117–47.
- Shalem, D.  
2008 "The Upper and Lower Galilee in the Late Chalcolithic Period." In *In the Hill-Country, and in the Shephelah, and in the Arabah (Joshua 12, 8)*, edited by Shay Bar, pp. 99\*–110\*. Jerusalem: Ariel Publishing House.
-

# GIZA PLATEAU MAPPING PROJECT

Mark Lehner

## Introduction to Season 2016

During Season 2016, February 20 to March 31, the AERA team worked at the Great Pyramid and in the Heit el-Ghurab site of Fourth Dynasty settlement ruins.<sup>1</sup> At the Great Pyramid, as part of the Glen Dash Foundation Survey, our team mapped marks that the pyramid builders left in the bedrock terrace surrounding the monument — etched lines, postholes, lever sockets, and other traces of the human hand that had never been mapped before. The overall set of “tracks” reveals much about the builders’ movements and *modus operandi*. As the analysis of this survey is ongoing, I focus here on our work at the Heit el-Ghurab (HeG) site.

We resumed excavations on the southern edge of the settlement in a compound that we call Standing Wall Island (SWI), named for the meter-tall fieldstone wall we discovered in 2004 perched on high ground between two depressions, dubbed Lagoon 1 and 2 (figs. 1–2). The wall formed the northern boundary of two compounds, ES1 and ES2, which opened on the south to a large enclosure defined by a fieldstone wall that we uncovered in 2011. Our faunal specialist, Dr. Richard Redding, noted the striking similarity of the large enclosure to corrals and livestock pens depicted in ancient Egyptian art. The rounded corners are similar to the rounded corners of modern livestock pens and corrals. So we dubbed the enclosure the OK (for Old Kingdom) Corral. During our 2015 season we excavated ES2 and discovered the elaborate room structure of a house, which we hypothesized served as the residence and office of a high official who managed a stockyard and slaughterhouse, which Redding hypothesized as the function of the overall complex.<sup>2</sup> After we determined last season that ES2 contained a residence, we now think the slaughterhouse could have been in the adjacent enclosure ES1.

We based our office-residence hypothesis on several key findings. The compound in the center of the residence (rooms 10,805, 10,821, and 10,822) — the core house — included a large, oblong room with pilasters that project from the east and west walls to frame a niche, about a meter wide, at the southern end — a feature we have also found in three other large houses at HeG, and in other houses in the Khentkawes Town and in the Silo Complex Building (fig. 3).<sup>3</sup> Felix Arnold suggested that in the so-called “priests’ houses” of the Khentkawes Town these large, oblong chambers served as the audience hall for the master to receive visitors and conduct business.<sup>4</sup> Arnold believed the pilasters formed the sides of a projecting frame. During 2015, our excavators found in ES2 pieces of red-painted plaster and mudbrick — the collapsed and broken remains of just such a frame as Arnold reconstructed — strewn between the pilasters.<sup>5</sup> In addition, between another set of pilasters that set off an adjacent niche on the east of the hypothetical audience hall, our team found three limestone furniture supports like the ones that ancient Egyptians placed under the wooden legs of chairs and beds. We regard the hall with the pilastered niche at the south end as the hallmark of an official residence. The collapsed pieces of a red frame and the limestone furniture supports lend credibility to this hypothesis.

Along with uncovering the core house in 2015, we partially cleared all of the other spaces in ES2, revealing the ground plan of the compound. But we did not reach the floor level in

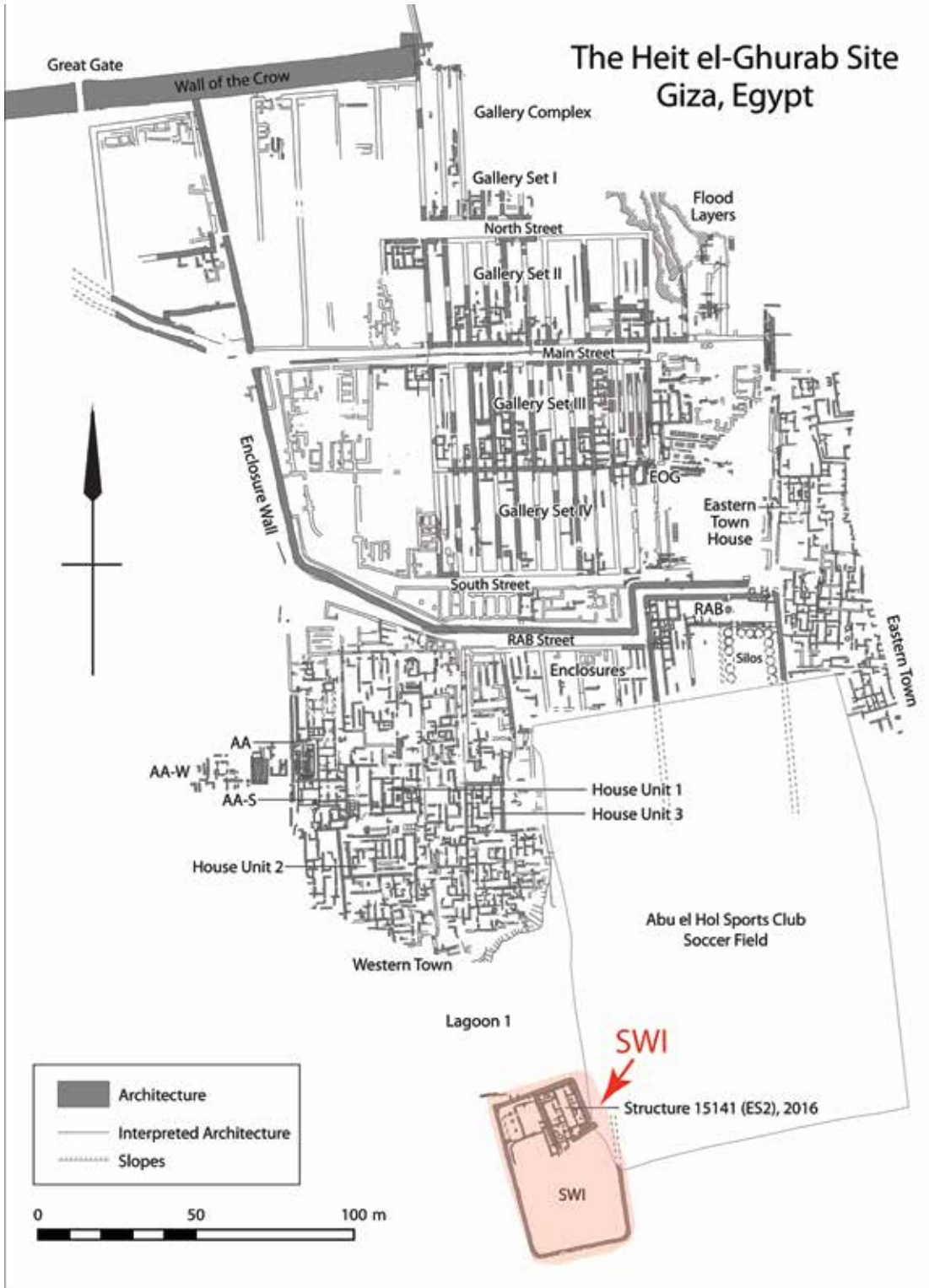


Figure 1. Map of the Heit el-Ghurab site at the end of Season 2016. SWI (Standing Wall Island), where we worked this season, is highlighted in red (map: Rebekah Miracle from AERA GIS)



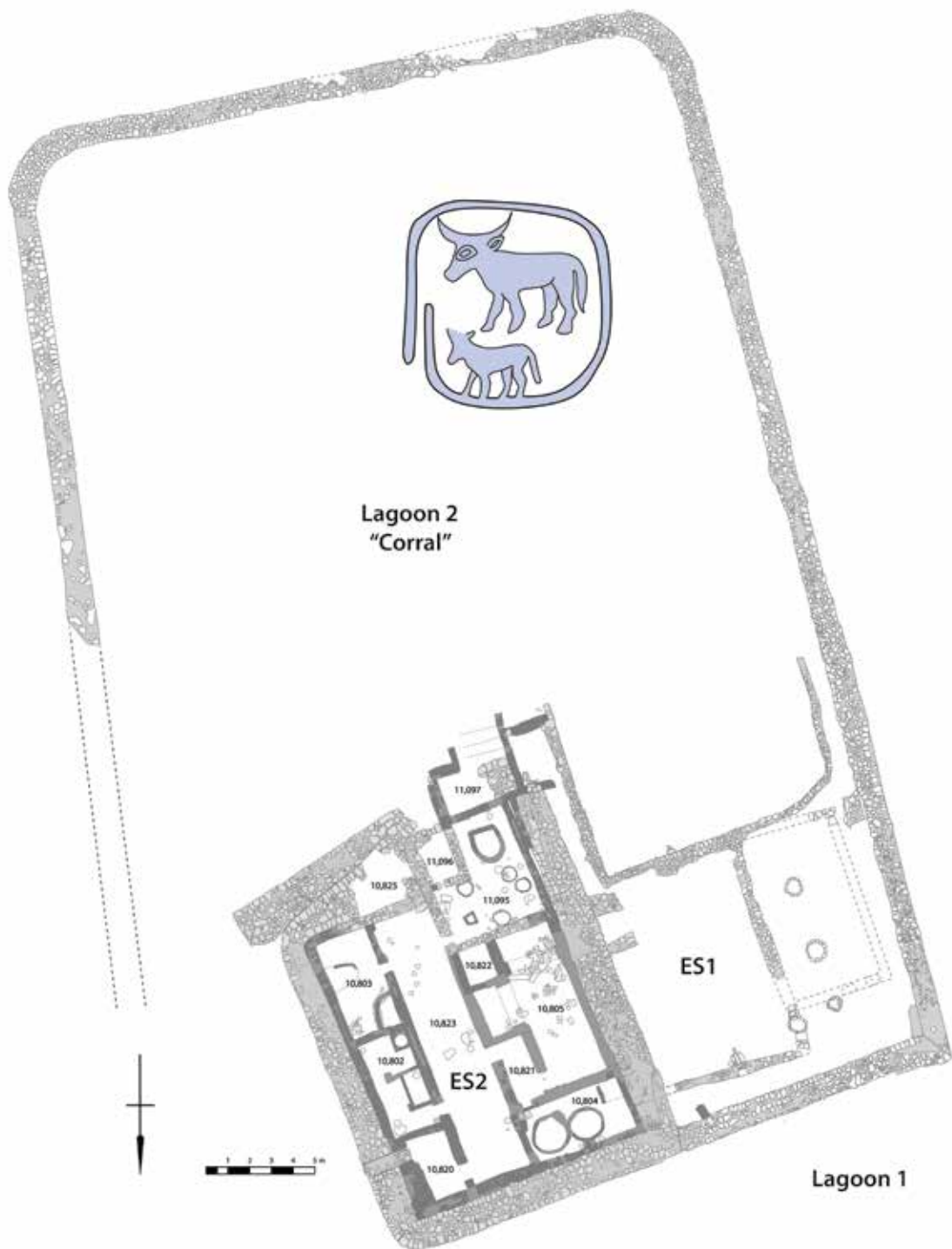


Figure 2. The compound in Area SWI, with south to the top — the orientation privileged by the ancient Egyptians, in contrast to north at the top. Insert: One of two corrals depicted on the upper (right) shoulder of the Early Dynastic ceremonial mace-head of King Narmer. Note the similarity of the SWI corral to the image on the mace-head (map: Rebekah Miracle from AERA GI)

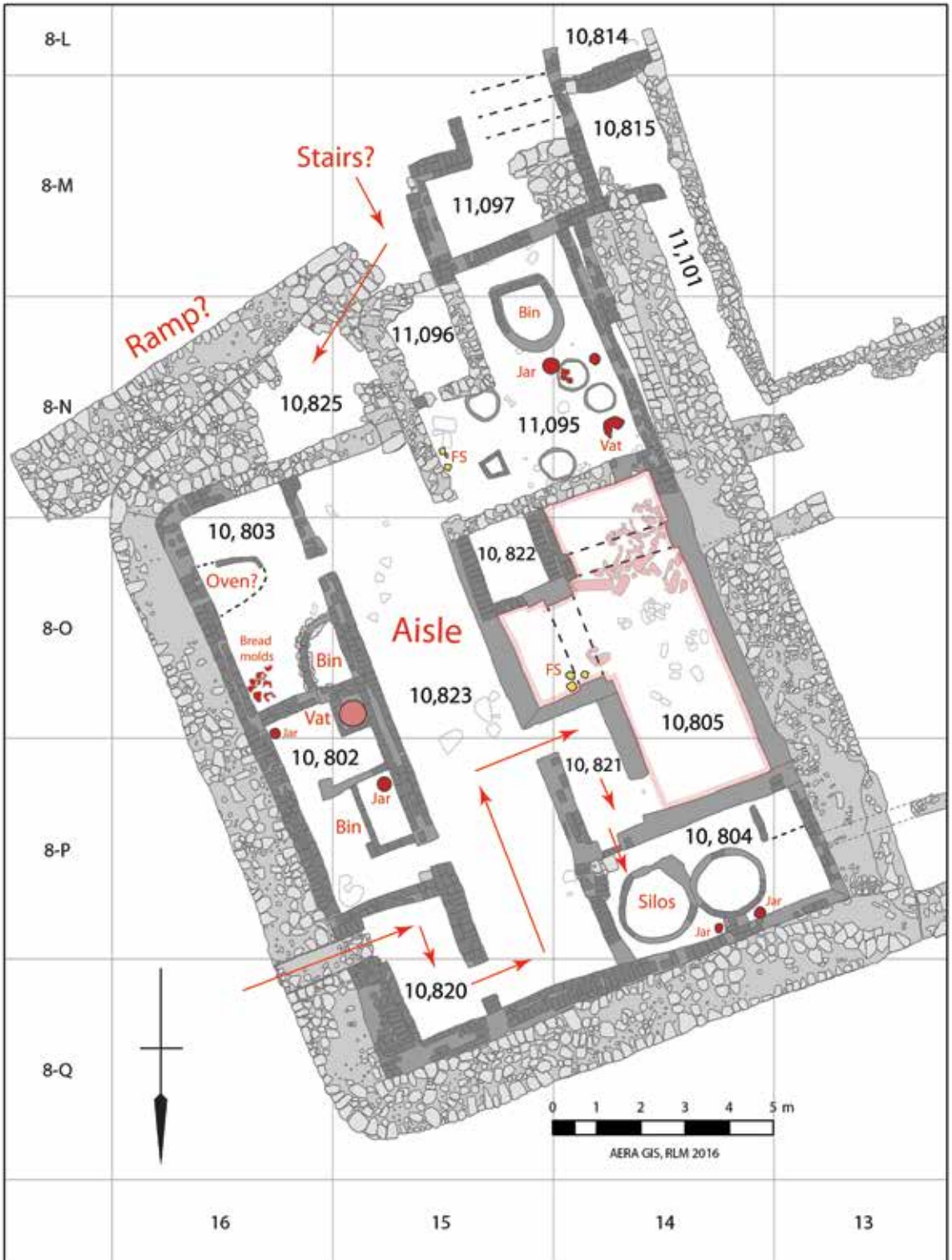


Figure 3. Internal structure of ES2 after Season 2016. FS = furniture supports. Red = ceramic vessels. Yellow objects are furniture supports. Generated from post excavation plans and from AERA GIS by Rebekah Miracle



Figure 4. Room structure of House ES2 in the northeast corner of Standing Wall Island, with assigned space numbers. View to the southeast (photo: Dan Jones)

most of the rooms. We were training beginners in a field school, which necessarily slowed our progress. So our goal for 2016 was to excavate to the floor and learn more about each of the chambers, their contents, and functions.

### Discoveries in ES2 during Season 2016

The layout of ES2 is unlike any other house we have uncovered at HeG or in the Khentkawes Town. A wide central aisle or hallway runs north to south down the middle. All the other chambers open directly or indirectly off this aisle (figs. 3–4). The aisle (10,823), 12.85 meters long, traverses most of the interior length of ES2. While the width ranges from 2.64 to 2.83 meters, the builders doubtless intended five royal cubits (2.62 meters), a dimension we find again and again across the HeG site.

A thick fieldstone girdle wall reinforces a much thinner outer wall of mudbrick on the east, west, and north sides of ES2, creating the appearance of a fortress. One entered at the northern end of the eastern wall through a corridor, 2.27 m thick. It gave access to the interior via a small vestibule (10,820), where a guard may have kept watch.

#### **Silo Room**

Directly across the central aisle from the entrance vestibule stands a room (10,804) containing two silos (fig. 5). In 2015 we uncovered the base of one round silo here, and this season, excavating down to floor level, we found the base of a second silo. In modern times, someone



Figure 5. The Silo Room (10, 804) in House ES2; view to the west

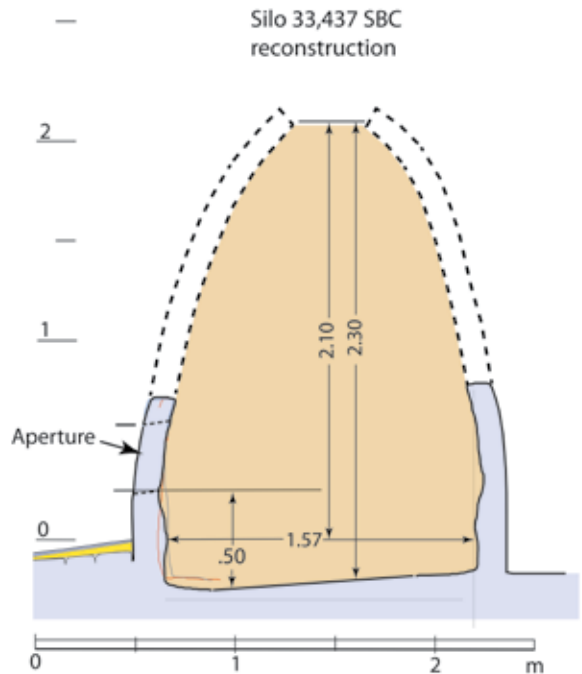


Figure 6. Schematic profile of an SBC silo on the basis of the measured profile at the eastern side of Silo 3,437 in 2014

cut down the ruins in this part of ES2, leaving the silos nearly flush with the floor. But the interior floors of these silos lie 16 to 30 centimeters below the truncated tops. The builders set the bottoms of the silos below floor level, as they did in the two silos we excavated in the Silo Building Complex (SBC) in 2014. The ES2 silos measure about 1.50 meters in diameter, a little less than 3 cubits (1.575 meters), with single-brick walls, 10 to 14 centimeters thick. With so little of the walls remaining, we cannot reconstruct the shape or height of the silos. However, since the ES2 silos are the same diameter as the SBC silos, they may have been the same shape and height as well. In 2014 I extrapolated the shape and height of the SBC silo walls, which were preserved to 0.9 meters high, and came up with an elliptical cone standing 2.1 meters above the floor level (fig. 6).

The ES2 silos almost certainly held grain, which workers would have poured in through an opening in the top. A ladder, if not some other structure, would have been required to get up above the silos. On the southwest side of each silo we found what might have been the base of a step, possibly for a stairs or ladder positioned against the silo. But it is not clear how workers would have brought grain sacks into the silo room. Only one door, a mere 47 centimeters wide, gave access through the southern wall. It connected the Silo Room with the interior (10, 821) small vestibule leading into the hypothetical audience hall (10,825). But would workers have carried large, heavy sacks of grain into the small vestibule, via a sharp right turn, then through this narrow doorway? More likely they reached the tops of the silos from a staircase outside the chamber, possibly via a stairway in the girdle wall. A partial roof over the silo room would have allowed them to access openings at the tops of the silos.

In the southwestern corner of the room, we found a square marl-paved patch on the floor, 0.80 × 0.90 meters, lined with three bricks on its east side. On the north, between the western



silo and the northern wall, we found the remains of a cross-wall that appears to have once divided the room until those who built the western silo cut through it. On either side of this older wall, we found two fine red ware jars embedded in the floor.

A round limestone table turned up against the eastern wall of the Silo Room (fig. 7). Considering it came from mudbrick debris that had collapsed from the walls, it may have found its way into this room from elsewhere in the house. It was one of two complete limestone tables—the other is a rectangular table from Room 10,802 (see below). Several fragments of tables in alabaster and travertine also turned up. Was there something special about this building that required small tables for serving or working? Or would we have found just as many tables in other houses of the HeG site had people not stripped them of objects when they abandoned the site?

### **Bin Room**

Room 10,802 on the east side of the central aisle features a bin and a vat built against the western wall (fig. 8). We enter through a doorway, 1 cubit (0.52 meters) wide, into a corridor formed by a thin wall on the south. At the end of this corridor a hearth, simply a small fire lit upon the floor, must have warmed someone. We see how it scorched the floor. Perhaps a bowab (door person) watched from here to see if anyone entered through a wooden door that swung inward on a pivot and pivot stone with a round socket.

Single-brick walls define the bin, 1.56 × 0.88 meters. We do not know how high the side-walls stood as the upper courses have eroded or collapsed, but the eastern wall was a low partition, only 15 centimeters high. At the southwest corner of the bin, we found a jar embedded in the floor, with a pot mark inscribed on its shoulder (fig. 9). We found a similar jar embedded almost to the rim in the floor in the southeast corner of the room. In the southwest corner we found a vat, 0.54 meters in diameter, encased in a mudbrick box, 0.70 × 0.80 meters, stand-



*Figure 8. Room 10,802 with the bin (center) and vat emplacement (right) found in 2016 (photo: Dan Jones)*



*Figure 7. Director of Archaeological Science Claire Malleson holds the small limestone table from the Silo Room in the ES2 house*

ing 0.36 meters high (fig. 10). The vat is 0.44 meters deep, bringing the bottom below floor level of the room. We have found a number of complete vats across the HeG site, but none boxed in like this. Did it contain liquid or dry goods? Whatever the contents, one would have to scoop the material to empty the vat. People must have used the bin and vat together.

The second complete limestone table turned up in this room (10,802) with the bin and the vat. This limestone table was larger and rectangular, 0.10 × 0.20 meters. It



Figures 9-10. From left to right: (9) Close up of the jar, with the pot mark etched into the shoulder next to the wall; view to the east; (10) the vat boxed in by mudbrick in the southwest corner of room 10,802; view to the west



Figure 11. Room 10,803 in the southeastern corner of House ES2; view to the east-southeast (photo: Dan Jones)

also features a knob or foot on the bottom and shows lines made from cutting with a sharp edge.

### **Oven Room**

Unlike most HeG walls, which are ankle- to waist-high at best, the eastern and southern walls of east room 10,803, adjacent to the Bin Room on the north, stand 1.85 meters high (fig. 11). The wall is heavily scorched for a length of about two meters, suggesting an oven may have once stood against it. Only a curving line of bricks remained because, prior to our work, someone had dug a pit down through the ruins and took out most of this hypothetical oven.



*Figure 12. View of Courtyard Pantry (11095) and its annex (11096) showing the features within the space 11095; view to the southwest (photo: Dan Jones)*

The bricks suggested the oven extended about 1.4 meters from the east wall, probably as a domed superstructure rising from a half-oval projecting base.

In the northeast corner of the room, not far from the oven, we uncovered a larger cluster of about two dozen nearly medium-sized bread pots (one of the three sizes found at HeG). But it is unlikely that the inhabitants used these molds for baking bread in the oven, despite their proximity to it. The conical, thick-walled molds were designed for baking in open pits. We have found a good number of bread-baking pits at the HeG settlement, but none in ES2. The residents may have baked in the adjacent enclosure, ES1, but that would not explain why the molds were lying amongst ash deposits, next to an oven in this room.

The Oven Room (10,803) also featured a bin,  $0.91 \times 1.43$  meters, formed by a wall curving across the northwest corner. Preserved to a height of 0.98 meters, the wall was built of mudbricks on a foundation of rough limestone pieces that protrude from the lower interior and exterior sides. The interior floor lies 0.20 meters above the chamber floor. While people probably filled the bin from above, they may have removed the contents from an aperture, 0.42 meters wide, near the bottom next to the west wall of the chamber. On the other hand, if they used the bin to store fuel for the oven, such as charcoal, straw, and chaff, they would not have taken these materials out of the small opening, which, in any case, they blocked at some point.

### ***Courtyard Pantry***

Across the aisle from the Oven Room, four steps led up through a narrow doorway into a large, L-shaped chamber (11,095) that appears to have been a storage and food processing area. In this space our team uncovered four silos, smaller than the two in the Silo Room, with outer

diameters ranging from 0.62 to 0.80 meters (fig. 12). These silos appear to have been placed more ad hoc—created for a particular purpose as necessary. They were less designed into the room space than the two big silos or subsidiary structures in the other chambers. Moreover, they were formed of clay more than mudbrick and set directly on the floor. Two on the east side of the chamber sit against the walls. One of these is preserved only slightly above floor level. The other three silos range in height from about 0.30 meters to more than 0.50 meters. None showed any signs of an opening at the bottom. People must have removed the contents from the top. They may have kept pulses, dried fruits, malted grain, and other foodstuffs in these small containers. In the bottom of one of the silos, we found two ceramic vessels that would have been used to measure out commodities (fig. 13): a cylindrical pot, known from tomb scenes to have been used to measure oil,<sup>7</sup> and a pear-shaped vessel, with a capacity twice that of the cylinder. A shallow ceramic bowl lying next to the pots had served as a lamp, as indicated by the soot coating on the inside and outside of the rim.

Next to one of the silos, the inhabitants partially buried, upside down, a ceramic pot with its rim embedded deep in the floor. They cut its bottom cut off to create an opening, apparently so they could use it as another ad hoc storage vessel (fig. 14). Adjacent to the northernmost western silo, we found sitting upon the floor a large, deep ceramic vat (our type CD 25), such as we have found in several of the bakeries at the HeG settlement. This one appears to have crumbled in place.

A large horseshoe-shaped bin stands in the center of the southern leg of the room (fig. 15). It measures 1.64 meters north–south and 1.30 meters east–west across the widest point. The thin walls, the width of a single brick, were preserved to around 0.30 meters above the floor. The bottom of the bin lay more than 0.27 meters below floor level. The walls showed no sign of an aperture, so people must have added and removed contents from above. The team found a complete bread mold and a part of a bread mold on the floor at the southwest corner of this bin. Perhaps it served as a pottery stash. Elsewhere at HeG, we have found bins and boxes built into mudbrick walls stuffed with pottery. In two such compartments, we found, bread molds stacked upside down, one over another.

This series of containers in 11,095 — the bin, upside down jar, the western silos, and vat — all line up in a row. Perhaps people used them to hold different ingredients temporarily, or ingredients at different stages of processing, such as in malting grain, in a kind of assembly line (fig. 15). People set the western silos and the bin to stand out from the wall, so they could move around this assembly line. They could access the two eastern silos, set against the walls, from the front. They must have filled and removed contents from openings at the top, as we saw no obvious apertures on the sides near the bottom (although we are lacking most of the height of the silos). A small square enclosure, defined by bricks, just inside the entrance of this space (11,095), must have functioned with the assorted storage containers. The excavators suggested that people supported the bottoms of conical jars in this odd feature, as a socket, while they filled the jars with grain or other goods.

The bins and silos may have served to store more than foodstuffs. In the deposits covering much of the room, and spilling into the small annex space (11,096) on the southeast, team members found a variety of craft tools and common domestic utensils: capstones for rotary drill rods; a stone axe; dolerite pounding stones; beads and abraders; granite querns and grinding stones for milling grain; a ceramic jar stand; and fragments of plates, tables, or pallets. Ancient Egyptians seemed prone to stashing hodgepodes in storerooms. Even in the magazines of the pyramid temples at Giza, they stuffed a completely heterogeneous mixture,





Figures 13–15. Clockwise from top left: (13) The two jars and a dish as found together in the silo on the left in figure 14; (14) Silos and a jar set upside down as a mini-silo in the western side of Room 11,095; (15) The large bin (background) and silos in Room 11,095. The bin, a jar set upside down as a container, two mudbrick silos, and the ceramic vat comprised a production line; view to the south-southeast (photos: Dan Jones)

including pottery vessels, copper ore and copper chisels, hammer stones, plaster cones, faience beads, and many flint knives.<sup>8</sup>

Among the hodgepodge of common objects in space 11,095, the most remarkable, and perhaps most out of place, were three truncated limestone pyramidal furniture supports, similar to the three we found last year in Room 10,805, mentioned above (fig. 16).<sup>9</sup> In our 2016 season, when we uncovered the first such object we thought it must be the fourth support that completed the set we found in 2015. But then we discovered two more in the same collapse deposit. So now we have a total of six from two different chambers, perhaps members of two incomplete sets. If they had all been used in the pilaster and niche room (10, 805) as supports for a bed and a chair, then the objects clearly moved about after abandonment.



Figure 16. The six furniture supports from House ES2

### ***Back Entrance, Ramp, and a Tower?***

The small space at the south end of the house (10,825) offered a back entrance off the “corral.” From the central aisle in the house, people accessed this small rear chamber via four steps leading up to the floor, which lies 0.47 meters above the general floor level of the house (fig. 17). Anyone who continued south into the corral had to descend 0.75 meters down what appears to be a short stairway, formed as a series of stones set in pairs, at the southwest end of room 10, 825.

On the east side of space 10,825, the stone girdle wall terminates in an irregular sloping pile of stone. Perhaps a squared end here collapsed. Against the outer girdle wall on the south, builders added a huge trapezoidal mass, 8.80 meters long, made of fieldstone and clay. It fans out from a width of 0.5 meters on its low, southwestern end to nearly 2 meters wide at its squared-off eastern end, which projects slightly east from the southeast corner of the house. Could the trapezoidal mass have risen to a lookout tower? Apparently, people built towers in the Old Kingdom countryside.<sup>10</sup> The trapezoidal mass not only widens four-fold on its 8-meter run, it rises more than a meter, from 15.64 to 16.59 meters asl, a slope of around 6 degrees. I think the slope may reflect its purpose as a ramp up onto the roof. At its upper end, the combined thickness of the mass and the girdle wall could have created a platform whence anyone could watch all movement through the corridor leading into the corral. It was also thick enough to have supported a tower that rose higher than roof level. But the shape is not right. We would expect a square or round footprint as the foundation for a tower, as suggested by models of ancient Egyptian towers.<sup>11</sup>

### ***How was ES2 Roofed?***<sup>12</sup>

The central aisle most likely functioned as an open light well, without a permanent roof, like the open courts in House 3 and AA-S at the HeG site.<sup>13</sup> Oriented roughly north to south, the long walls would offer shaded relief from the sun, except at high noon. But the whole house turns slightly west of north, so it could catch the prevailing northwest wind. A partial, move-

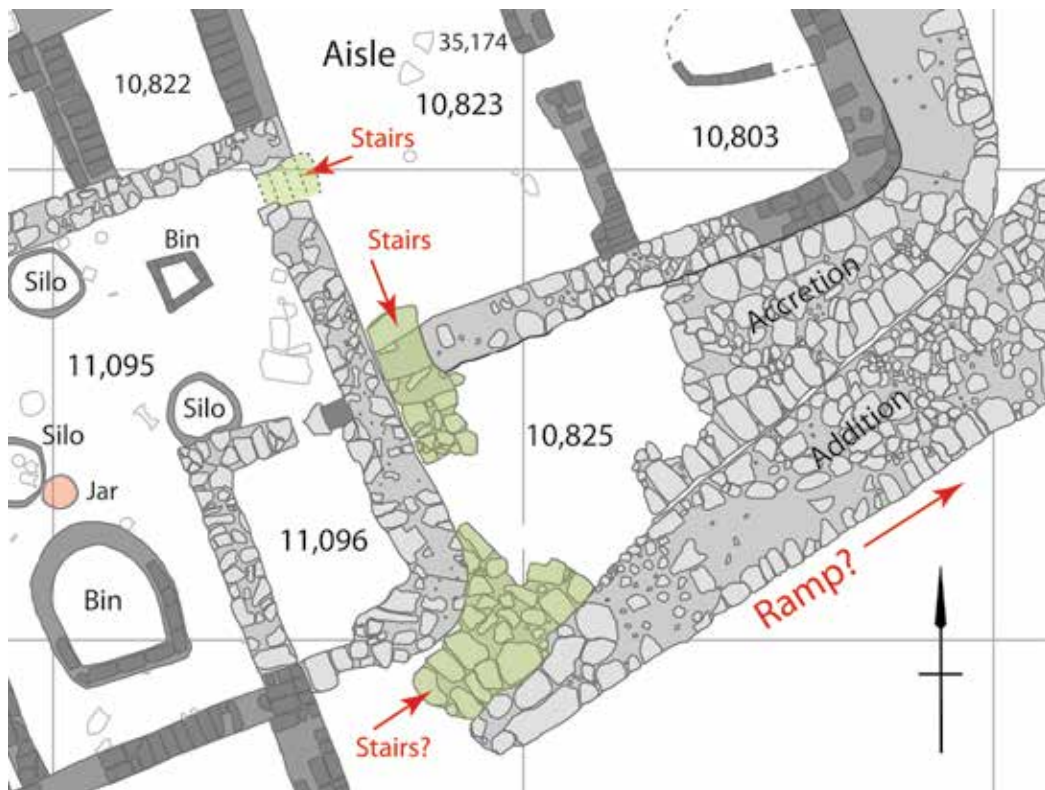


Figure 17. The southeastern corner of House ES2, showing stairs (green) from the lower floor level of the aisle up into rooms 11,095 and 10,825, and possible stairs (or stone blocking?) from the southern edge of the larger enclosure — the hypothetical corral — up to floor level on room 10,825. Note that north is up, unlike figures 2 and 3, where north is down. We found the stairs from the central Aisle (10,823) into room 11,095, collapsed, with stone pieces from the steps scattered in the aisle (map: Rebekah Miracle from AERA GIS)

able, light cover of reed mats on wooden spanners — palm logs could span this 5 cubit (2.62 m) width — would offer shade and admit the breezes (fig. 18).

The reception hall (10,805) in the core house was most likely roofed with a vault, following Arnold's reconstruction of the priest's houses in the Khentkawes Town: a parabolic leaning vault extending over the hall (fig. 18).<sup>14</sup> Windows in the end walls would allow pleasant cross-ventilation with the northwesterly prevailing winds.

Other chambers would probably have had flat roofs, if roofed at all. From ancient times until today, Egyptians built flat roofs on mudbrick structures with wooden beams, such as palm logs, laid across the short axis of the room and covered by a layer of plant material — poles, woven matting, palm frond ribs, and coarse grass — finished with a thick coat of mud.<sup>15</sup> Unfortunately, ES2 left no archaeological evidence of roofing, such as impressions of matting. But a layer of ash that covered part of ES2 (see below) included a small quantity of mud and brick fragments, which might have collapsed from a roof.

A flat roof probably covered the southern and eastern niches and other two small chambers ancillary to the hypothetical audience hall, while a vaulted roof may have covered the hall itself. For channeling cool air through these spaces during warm months, a *malqaf*, or wind catcher, could have been positioned over the eastern niche (for sleeping?). The open

side of the wind catcher would have faced northwest, provided there was also an outlet for expelling hot air, such as a window or another *malqaf*, opening to the leeward side. *Malqafs* may also have been mounted above both ends of the central aisle to increase airflow and help cool the rooms on the east side.

The Oven Room would have had at most a partial roof covering only the north side of the chamber, given the need to ventilate smoke generated by the oven. The adjacent room 10,802 and the vestibule (10,820) may have been roofed with a continuous flat roof. It would have provided protection from the elements, security, and a work and storage area, as well as a place to escape the summer heat at night.

The Silo Room (10,804), as suggested above, may have had a partial roof, which workers used to access openings in the tops of the silos. If the silos were also covered, and grain was indeed poured in through the top, the covering needed to be high enough to accommodate men standing over the silo apertures. A light screen supported by poles would have been preferable to the heavier flat roof described above, as it would not have blocked windows in the end wall of a vault over the reception hall, if there had indeed been a vault. On the other hand, there may have been nothing over the silos, as at a number of ancient Egyptian sites.<sup>16</sup>

The L-shaped layout of the pantry (11,095) does not lend itself to a continuous flat roof, unless it had support columns for which we find no evidence. However, a light roof may have covered part of it, perhaps the southern end. On the other hand, people may have preferred to leave this space open because they probably needed abundant light for tasks involving the small silos.

### ***An Evolving Layout***

As noted above, originally the thick field stone girdle of ES2 reinforced an inner, thinner wall of mudbrick. Certain details indicate the mudbrick walls belong to an earlier phase, not just the step of a short building process. We found evidence of an earlier, different internal layout, but not enough to reconstruct the older ground plan or to link the features stratigraphically.

Our excavators found that room 10,805, the hypothetical audience hall, was originally an active space of movement and transit rather than a stative space for decorum. A door in the southwest corner, into what would later be the pilastered niche, opened into the pantry room (11,095). Of this we are certain. Also, a wide access may have opened through the west wall from adjacent enclosure ES1. This looks probable, but we still need to confirm it. Builders blocked these entryways when they fashioned the southern pilasters and niche. It was probably after they framed in the southern niche that they wrapped House ES2 in the massive girdle wall of broken stone.

In the Oven Room (10,803), our excavators discovered a sealed opening in the north wall of the bin that connected it to the southwestern corner of adjacent room 10,802. At some point, inhabitants blocked this opening and constructed the mudbrick box encasing the large vat. The Silo Room (10,804) also had a different configuration in an earlier phase of ES2. As noted above, a cross-wall divided this room into western and eastern parts before the western silo was built.

Builders created the back transit space (10,825) when they erected the trapezoidal ramp or accretion against the south girdle wall. But this area and the adjacent small chamber (11,096) on the west were once a single space. The uppermost surfaces of both spaces shared a common floor until inhabitants built the stone wall that separates them, perhaps at the same time that they built the girdle wall. Nearby, the southern wall of the Courtyard Pantry (11,095) shows blocked access into space 11,097 to the south, installed on a common floor of these spaces.



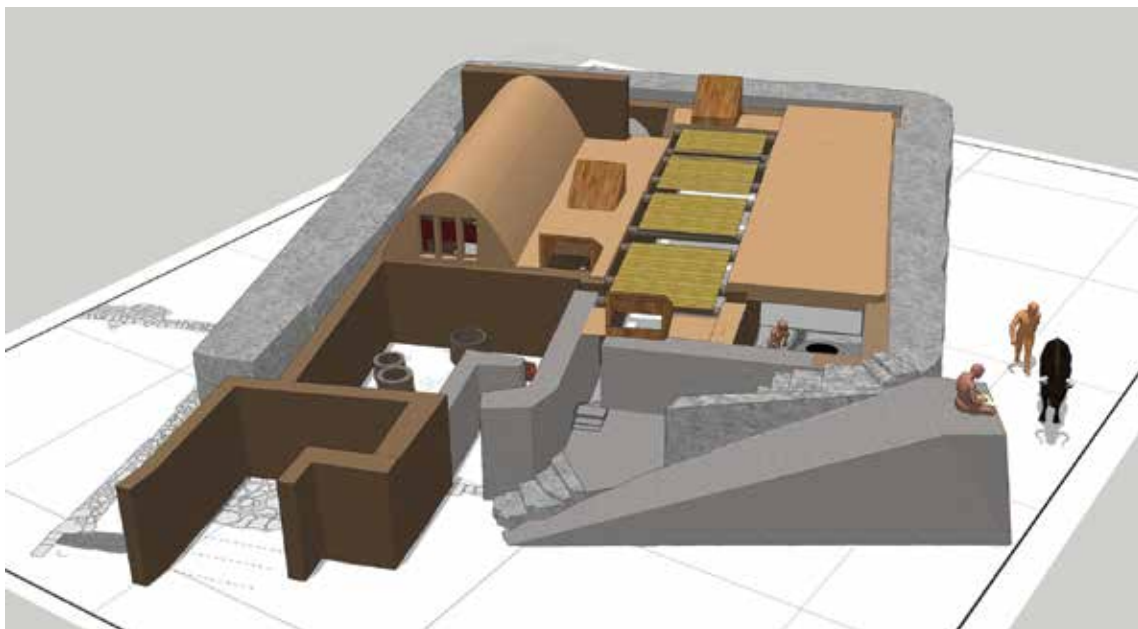


Figure 18. A 3D model showing possible roofing over ES2, including a leaning vault over the “reception hall”

### ***Late Phase Activity and Abandonment***

Our team also found traces of changes late in the occupation of ES2. In the northeast corner, people blocked the main entrance opening into the vestibule (10,820) with limestone and red granite chunks. The outside surface of the blocking was coated in silt that was smoothed over the existing plaster on the wall, such that there was no external sign of an opening. Unfortunately high ground water prevented the excavators from reaching the bottom of the blocking or the floor in the vestibule, but they believe that they were very close to the floor level. The careful blocking suggests that people still used ES2 after this main access was closed. At this stage, they must have come from the north, through the eastern corridor into the “corral,” and then they must have turned around to enter ES2 from the south.

The excavators noted that the numerous objects they found littering the final floor surface of the central aisle (10,823) probably related to activities during this late phase. Near the south end of the aisle, they found a beer jar, bread molds, worked stone, and a flint knife. Near the north end, they uncovered a worked stone and fragments of a storage vessel. Five pieces of limestone resting on the aisle floor may have been sills or lintels from the doorways along the hallway, perhaps dislodged when wooden doors were removed.

At some point after people blocked the access openings and doorways and left these items, an undulating layer of ash and charcoal accumulated over the central aisle (10,823) and eastern chambers in ES2. People may have dumped this ash and debris, as opposed to it falling from a burning roof. The core house, silo room, and 11,095 were apparently still in use. But then another layer of ash and charcoal fell over the aisle, the Oven Room (10,803), and this time, on the core house vestibule (10,821) and Silo Room (10,804) as well. The reception hall (10,805), however, was spared. It appears inhabitants were still keeping it clean. The walls in ES2 were still standing to some height, but the two large silos had collapsed. It is possible that people dumped the second layer of ash and charcoal into these spaces from elsewhere,

moving burnt debris around. Or the material might have collapsed as the roof burned and the walls crumbled.

Obviously, people eventually abandoned ES2 completely and this building fell into ruin. But ruination was not entirely gradual. In the central aisle, we found “sheet collapse,” where a whole section of wall fell at once. Curiously there was no sheet collapse in the rooms along the aisle.

### ***The Stockyard-Slaughterhouse Hypothesis***

We have yet to confirm our hypothesis that the greater enclosure, together with the northern enclosures, ES1 and ES2, functioned as a “corral” and processing center for cattle. Our 2016 excavations of house ES2 did not yield items and structures we would expect from butchering, such as tethering rings, meat hacking tables, or an entrance that a bull, or bull calf, could pass through. In ES2, bins, jars, vats, and silos suggest storage and processing of grain. We might find them in any large house of this time. We have yet to excavate the adjacent enclosure, ES1 (fig 2). I suspect that there lies important evidence on the overall purpose of the whole SWI. Enclosure ES1 is on the docket for Season 2017. Meanwhile, I still find compelling the similarity of our large SWI “corral” to animal enclosures found elsewhere and to the ancient Egyptians’ depictions of corrals.

## **Acknowledgments**

For a successful 2016 field season we would like to thank former Minister of Antiquities Dr. Mahmoud El-Damati and Minister of Antiquities Dr. Khaled El-Enany; Dr. Mustafa Amin, Chairman of the Supreme Council of Antiquities; Yusuf Khalifa, Director of Pharaonic Monuments; Dr. Mahmoud Affifi, Director of Central Administration and Middle Egypt; Shaaban Abd El-Gawad, Director of the Department of Egyptology and Museums in the Minister’s Office; Hani Abu Azm, Director of Foreign Missions and Secretary of Permanent Committees; Dr. Hussein Bassir, General Director of the Giza Pyramids; Sayeed Hassan, Director of Giza; Fedai Helmi, Chief Inspector of Giza; and Giza Inspectors Mohamed Saidi and Ahmed Eiz.

Major support for AERA’s Season 2016 was provided by David H. Koch; The Glen Dash Foundation for Archaeological Research; Ann Lurie, Ed and Kathy Fries; Lou R. Hughes; Bruce Ludwig; Piers Litherland; Marjorie Fisher; Ann Thompson; Janice Jerde; and an anonymous donor. Raymond Arce, Michael and Lois Craig, Richard S. Harwood, Don Kunz, Nathan Myhrvold and Rosemarie Havrenak, Jeffrey Raikes, Dr. Bonnie M. Sampsell, Craig Smith, and many AERA members made possible AERA’s 2016 fieldwork.

The Ann and Robert H. Lurie Foundation, the Waitt Family Foundation, Peter Norton and the Isambard Kingdom Brunel Society, the Charles and Lisa Simonyi Fund for Arts and Sciences, and the Urban Land Institute members on behalf of Bruce Ludwig made possible the AERA Egypt Center.

I thank all the AERA team members who made our Season 2016 a success. AERA Executive Director Dr. Mohsen Kamel opened the season with Archaeological Science Director, Dr. Claire Malleson, who directs our Giza Field Lab and, as archaeobotanist, analyzes ancient plant remains. AERA Senior Archaeology Supervisor Dan Jones ensured control of recording and excavation on site. Veteran AERA archaeologists Hanan Mahmoud and Rabee Eissa served as AERA Supervisors. Dr. Richard Redding studied the animal bones. Dr. Sherif Abd El-Monam, Mahmoud El-Shafey, Aisha Mohamed Montaser Ahmed, and Nermeen Shaban Hassan

Yazeed analyzed the pottery. Emmy Malek documented and studied the objects. Manami Yahata organized all the records. Rebekah Miracle directed AERA's Geographic Information System (GIS). Abd El-Gawad Harbi represented the Ministry of Antiquities (MoA) as Inspector for the site. Ahmed Eiz served as MoA representative in the lab.

Amer Zakariya and Ashraf Abd El-Aziz headed the survey team. While we excavated at SWI, they continued the Glen Dash Foundation Survey (GDFS) of the Great Pyramid, working with a team of three assistants and Inspectors Menah Taher and Mennat Allah Taher Ahmed.

## Notes

<sup>1</sup> In this report I benefit from the Data Structure Report prepared by Dan Jones, Hanan Mahmoud, and Rabee Eissa, "Data Structure Report for the 2016 Excavations at Standing Wall Island." Report on file. Ancient Egypt Research Associates, Boston and Giza, 2016. Wilma Wetterstrom edited this report for the *Oriental Institute 2015-2016 Annual Report* from my longer dispatch from the field.

<sup>2</sup> Lehner 2015, pp. 74–96.

<sup>3</sup> Lehner 2015, p. 76.

<sup>4</sup> Arnold 1998, pp. 1–18.

<sup>5</sup> Lehner 2015, p. 81, fig 6.

<sup>6</sup> Lehner 2014, p. 65, fig. 5.

<sup>7</sup> One example of this style of pot being used for oil comes from Mastaba G 6020, Iymery's tomb at Giza. The scene on the south wall of the first chamber includes a man pouring oil out of a cylindrical vessel like the one found in ES2. Weeks 1994, pp. 36–37, pl. 30.

<sup>8</sup> Reisner 1931, pp. 16–18.

<sup>9</sup> Lehner 2015, pp. 83–85

<sup>10</sup> Moreno Garcia 1997, p. 116.

<sup>11</sup> Badawy 1966, fig. 36, 1–3.

<sup>12</sup> In this section I benefit from Wilma Wetterstrom's reconstructions of how the rooms of building ES2 might have been roofed and her research into roofing in ancient Egyptian vernacular buildings.

<sup>13</sup> Lehner 2015, p. 86.

<sup>14</sup> Arnold 1998, p. 13, figs. 7, 10

<sup>15</sup> Kemp 2000 p. 99

<sup>16</sup> Khentkawes Town (Yeomans and Mahmoud 2011, figs 7.7, 7.8); Lahun (Petrie et al. 1923, p. 39, pl. 36A); Edfu (Moeller 2016, fig 8.46); Elephantine (von Pilgrim 1996, fig. 26); and Amarna (Kemp 2012, figs. 2.6, 35) all had sets of large round granaries standing in open courtyards.

## References

Arnold, Felix

1998 "Die Priesterhäuser der Chentkaues in Giza." *Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo* 54: 1–18.

Badawy, Alexander

1966 *A History of Egyptian Architecture, Volume 1: From the Earliest Times to the End of the Old Kingdom*. Giza: Studio Misr.

Kemp, Barry J.

2000 "Soil (including mud-brick architecture)." in *Ancient Egyptian Materials and Technology*, edited by Paul T. Nicholson and Ian Shaw, pp. 78–103. Cambridge: Cambridge University Press.

2012 *The City of Akhenaten and Nefertiti: Amarna and Its People*. London: Thames & Hudson.

Lehner, Mark

2014 "The Giza Plateau Mapping Project." *Oriental Institute Annual Report 2013–2014*, pp. 64–76. Chicago: The Oriental Institute.

2015 "The Giza Plateau Mapping Project." *Oriental Institute Annual Report 2014–2015*, pp. 74–96. Chicago: The Oriental Institute.

Mahmoud, Hanan; Rabee Eissa; and Dan Jones

- 2016 "Data Structure Report for the 2016 Excavations of Standing Wall Island." Report on file, Ancient Egypt Research Associates, Boston.

Moeller, Nadine

- 2016 *The Archaeology of Urbanism in Ancient Egypt: From the Predynastic Period to the End of the Middle Kingdom*. New York: Cambridge University Press.

Moreno García, Juan Carlos

- 2013 "The Territorial Administration of the Kingdom in the 3rd Millennium." In *Ancient Egyptian Administration*, edited by Juan Carlos Moreno García, pp. 85–151. Handbook of Oriental Studies 1. Leiden: Brill.

Petrie, Lahun II; Guy Brunton; and Margaret Alice Murray

- 1923 *Lahun II*. London: British School of Archaeology in Egypt.

Reisner, George

- 1931 *Mycerinus: The Temples of the Third Pyramid at Giza*. Cambridge: Harvard University Press.

von Pilgrim, Cornelius

- 1996 *Elephantine XVIII: Grabung des Deutschen Archäologischen Instituts Kairo in Zusammenarbeit mit dem Schweizerischen Institut für Ägyptische Bauforschung und Altertumskunde Kairo 18 Untersuchungen in der Stadt des Mittleren Reiches und der Zweiten Zwischenzeit*. Mainz: von Zabern.

Weeks, Kent

- 1994 *Mastabas of Cemetery G 6000*. Giza Mastabas, Volume 5. Boston: Museum of Fine Arts.

Yeomans, Lisa, and Hanan Mahmoud

- 2011 "KKT-N: Building E and the Adjacent Khentkawes Causeway." In *Giza Plateau Mapping Project Season 2009, Preliminary Report*, edited by Mark Lehner, pp. 43–52. Giza Occasional Papers 5. Boston: Ancient Egypt Research Associates.

---



## JERICO MAFJAR PROJECT

**Donald Whicomb**

This is the last presentation of the Jericho Mafjar Project, which has finished its fieldwork and proceeds into aspects of research and publication. This is a natural progression and the following is an account of activities during the last year.

From the beginning of this project, Hamdan Taha insisted that we publish the new photographs of the mosaics taken by the Palestinian Department of Antiquities and Cultural Heritage in 2010. Few persons realize that these magnificent mosaics were available only in black & white and water color images from 1959. Hamdan and I reorganized the old presentation made by Hamilton and published a new mosaic book in Ramallah in 2014. This volume has limited distribution, so we agreed to publish a second edition at the Oriental Institute, *The Mosaics of Khirbet el-Mafjar, Hisham's Palace*, in 2015. One can be easily reminded

of the Mafjar mosaics by checking the Aramco World 2016 calendar. The editor, Dick Doughty, put together a monthly display of photographs from our mosaic book with fine descriptions and essays. The calendar is available from Saudi Aramco World and a few copies are still available at the Oriental Institute.

Perhaps even more exciting, from a more local, archaeological point of view, is the PhD dissertation of Michael Jennings, *Beyond the Walls of Jericho: Khirbet al-Mafjar and the Signature Landscapes of the Jericho Plain* (June, 2015). This thesis fulfills the original premise of this project, that Mafjar was constantly tied to the city (and ruins) of Jericho. Jennings analyzed this relationship from the Hasmonaean through Islamic periods from an original perspective of natural and political landscapes.

Two years ago there was a small symposium in Jericho during which the mosaic book, mentioned above, was presented. This was also the occasion of the announcement that, after twenty years of service, Hamdan Taha would retire. This meeting and

celebration was followed by a very different Jericho symposium in London (June 29–30, 2015), organized by Bart Wagemakers (director of The Non-Professional Archaeological Photographs Project [NPAPH]). The symposium was mainly attended by British archaeologists, many of whom remember the early days of Kathleen Kenyon (1950s), with some more recent Italian and Chicago excavations. This symposium was an appropriate venue to denounce the “Orientalist mythology” of Robert Hamilton, still accepted by many scholars there; this denouncing will appear in the conference proceedings.

In August the project took a different turn. The department applied for a grant from the Ambassador’s Fund through the American Consulate to restore the synagogue at Ain Deuk,

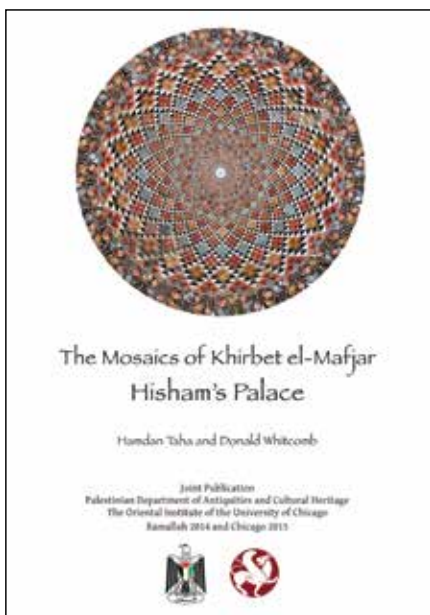




Figure 1. Gazelles in mosaic: (left) from 'Ain Deuk (Na'aran) synagogue; (right) from The Mosaics of Khirbet el-Mafjar, Hisham's Palace (p. 117, B4)

about four kilometers northwest of Mafjar. I endorsed the project, never realizing I would be called upon to research and write up the mosaics of this synagogue. We had visited the site, situated on a beautiful bluff above the springs and nestled among banana plantations. The synagogue has a central zodiac, which I restored on the basis of contemporary fifth–sixth century synagogues in Palestine. Indeed, comparing the gazelles in the synagogue with those in the Diwan of Mafjar suggests the synagogue was still visible in the eighth century or later. (fig. 1). As Hamdan said, “This is part of our cultural heritage and must be preserved for visitors to Jericho.” Unfortunately it cannot be opened yet, due to settlers who break inside and use the building for prayers.

As mentioned in my personal research, we put together a Mafjar panel at the American Schools of Oriental Research (ASOR) November meetings in Atlanta on our most recent seasons of fieldwork. A number of members commented on the main theme, a hypothesis by Ignacio Arce that there may have been a Roman fort long before the Umayyads arrived. This hypothesis is now published as a series of perspectives in *Near Eastern Archaeology* magazine (79.2 [2016], pp. 78–87). One purpose for this presentation is to suggest future directions for research at Mafjar.

The most recent publication is a fine volume by Hamdan Taha, *The Umayyad Palace at Khirbet al-Mafjar* (Ramallah: Dar al Nasher, 2016). This book summarizes the monuments and excavations in Arabic, much needed for Palestinian visitors, and especially for the many teachers who bring their students to Jericho each year. A visitors' guide remains a needed contribution, in addition to our work on the new museum and signage for the archaeological park. Our efforts combine with the Palestinian archaeologists in these new interpretations, and we must now turn to presenting the new archaeological data for future research.



## KERKENES DAĞ PROJECT

Scott Branting

The most important result of the Kerkenes Project in 2015 was the issuance of a full excavation permit by the government of Turkey. Since 2012 the project had been operating under yearly museum permits during the transition of leadership in the project. This very welcomed news, not received until after the project had returned from the field in 2015, should facilitate ongoing research at this important late Iron Age city for decades to come. It is the culmination of years of hard work by the Oriental Institute and its partner institutions in the project and ensures the continuation of the cutting-edge research that Kerkenes is known for around the world.

The 2015 season was undertaken over slightly more than two months from the start of May to the beginning of July. Work included a renewal of the highly successful geophysical surveys, continued excavation in the northern portion of the city, the start of a new program of ceramic analysis, continued conservation of the excavated remains, and infrastructural improvements to the excavation facilities and to the archaeological site (fig. 1). This work benefitted enormously from existing collaborations including international support from foundations and partner universities and local support from the Sorgun Mayor, the Sorgun Regional Governor, and the Yozgat Governor. None of this work would have been possible without the facilitation support generously provided by the Ministry of Tourism and Culture and the Yozgat Museum.

### Geophysical Survey

While the 2014 season had marked a return of the Kerkenes project after a brief hiatus, the late start of that season did not allow for the renewal of the resistivity survey at Kerkenes. In most years by late May or early June the soil becomes too dry for electricity to effectively reveal the city buried under the surface of the ground. This meant that the return of geophysical surveys at Kerkenes was left for the 2015 season. With the start of the season in May 2015 nine days of geophysical survey were able to be undertaken using a Geoscan RM85 resistance meter generously provided by the FORTH Institute of Mediterranean Studies and run by Tuna Kalaycı (fig. 2). Dur-

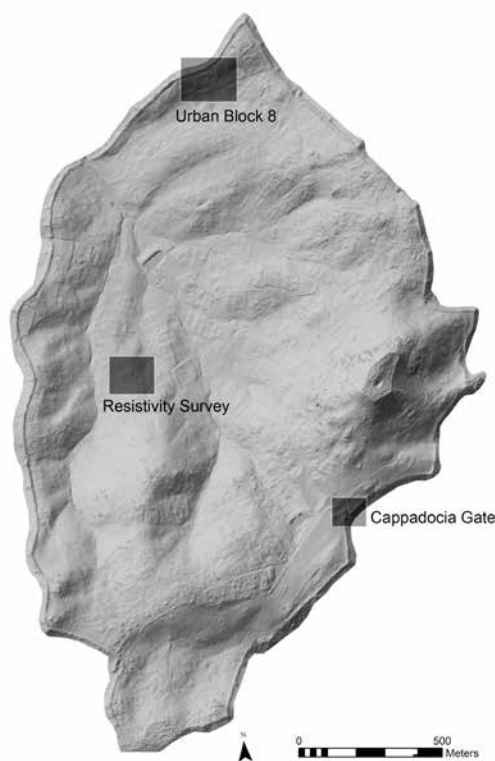


Figure 1. Map of Kerkenes showing major areas of work in 2015

ing this time 18,800 m<sup>2</sup> (1.88 ha) of area along the high slopes in the south-central portion of the city were surveyed (figs. 1 and 3). This area was selected to test the state of preservation of building foundations along the slopes of the high ridge and to begin to connect previous survey areas. Previous surveys, followed by excavations in 2010, had revealed a large structure with interior columns that was intentionally set on fire in the final destruction of the city. This season's results confirmed the presence of numerous buildings surrounding this large structure and extending well up the steep slopes, buildings which do not appear to have been intentionally set on fire or burnt to the same extent during the city's destruction. Surveys next year are planned to further expand this area and to connect it up with a large contiguous area of survey in the central portion of the city.

## Excavation and Site Conservation

Two trenches in the northern portion of the ancient city at Kerkenes were the focus of excavations during the 2015 season (fig. 1). Trench 33 (TR33) and Trench 40 (TR40) had both seen preliminary work in 2014 and 2012, but the area of the combined trenches was greatly expanded in 2015. These trenches were situated to uncover the full extents of a large columned building, measuring 20.5 × 25.5 m, and to expose an expanse of stone pavements in front of and behind the building. This building is located within Urban Block 8, one of 757 such urban blocks within the city, and is part of multi-year excavations intended to clear the full 6,000 m<sup>2</sup> extents of this important urban block. These excavations are paired with an intensive program of soil sampling and flotation in order to seek to identify different activity areas within the urban block and to gain information about the people and households that used it.

Trench 40 extended the exposure of the large columned building by an additional 300 m<sup>2</sup> (figs. 4 and 5). The focus of this work was to reveal the plan of the building and to offer a preliminary identification of the location of activity areas and installations within its two rooms. Eighteen meters of the eastern wall of the building had been exposed in 2014 and the rest of it

up to the northern wall was exposed this year. While evidence of wall plaster had been found along the inner and outer faces of the wall in 2014, the extension of the wall in 2015 revealed that the wall plaster along the outer face ended at a secondary wall that branched off to the east near the back of the building. This suggests that this space outside the eastern wall may be interior space within a room built against the main building. Excavations outside this building in future seasons should clarify this relationship between the large building and adjacent structures as well as the nature of the eastern and western walls toward the back of the building. The western wall of the building was in a much worse state of preservation, with only a few facing stones able to be identified among the collapse of the wall's lower stone courses. However, a few traces of wall plaster and mudbricks from a part of the superstructure were identified. In contrast, the northern wall of the building exhibited the best state of preservation of any of the building's walls. Its stone base was found still standing up to ten courses high, with three major leveling phases evident



*Figure 2. Resistivity survey on the slopes in the south-central portion of the city*



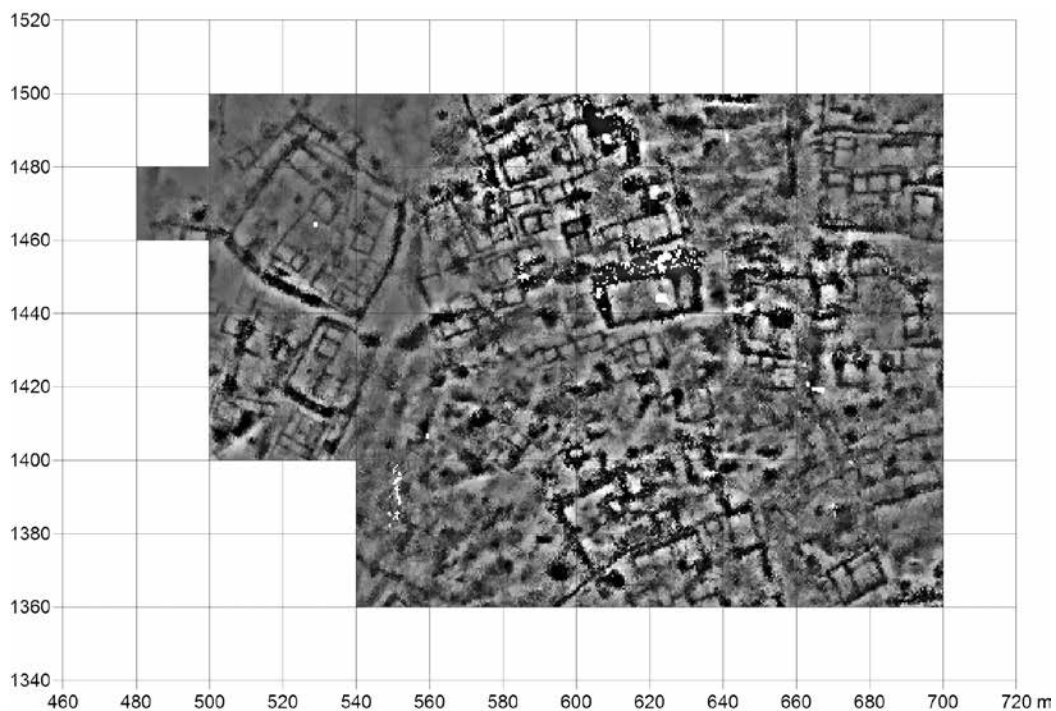


Figure 3. Results of resistivity survey in 2015



Figure 4. Photograph of Trench 40

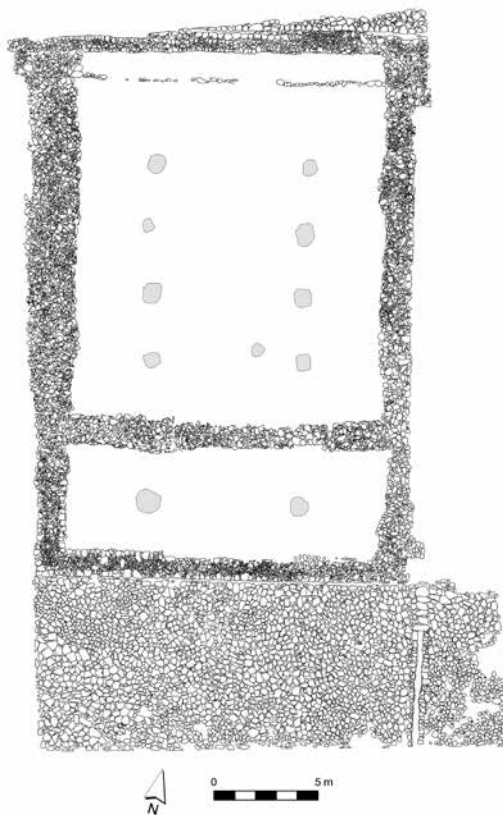


Figure 5. Plan of Trenches 33 and 40



Figure 6. Excavating on top of the north wall in Trench 40



Figure 7. Mudbrick collapse from the north wall in Trench 40

during its original construction. On top of this at least nine courses of mudbrick had originally stood, evidenced by fallen coursing found in the extensive mudbrick collapse in the back of the inner room of the building (fig. 7). This collapse was perhaps part of the reason for the impressive preservation of the north wall, but an additional factor was that the stone base functioned not only as the back wall for the building but also was a terracing wall supporting the leveling fill for the building just to the north that was partially excavated in 2011 and 2012.

The interior of this building is divided into two rooms, an antechamber in the front of the building that is 75 sq. m in size and a large interior room 260 sq. m in size (figs. 4–5). The entirety of the interior collapse within the antechamber was removed down to the heavily burnt plaster floor. Two column bases were found in the antechamber, in line with the rows of column bases in the interior room that were predicted from earlier geophysical surveys of the building. The extra heavy burning in the antechamber suggests a large amount of wood may have been used in the construction of the superstructure of the front of the building on top of the more modest stone foundations. In the interior room the collapse was removed down to the level of the column bases, a level just above the original floor level. Eight primary column bases were exposed in the interior room arranged in two rows of four columns each. Ten large wooden columns would then have originally stood here and would have held up the presumably pitched thatched roof of the building. Only one other installation of note was discovered this year in the back of the interior room. A line of raised stones lying 1.5 m from the face of the northern wall may define the front face of a slightly raised platform. Additional excavation down to the surface of the floor and this raised area should better define this feature next year.

In the building two primary activity areas have so far been identified. One of these activity areas is in the antechamber of the building where 348 more ivory and bone inlays were recovered in 2015 (fig. 8), bringing to over 800 the total number of inlays found in the antechamber. These pieces may be particularly important to understanding the activities of the people who inhabited this urban block, given the important carved ivory plaque that was also found in this urban block in 1996. Another item found within the antechamber was a looping piece of copper-alloy wire that may have been an earring (fig. 9). An almost identical piece, perhaps its matching pair, was found just in front of the same building last year. A small cluster of sherds and a largely melted copper-alloy piece that may have once been a fibula were also found in the antechamber (fig. 10). The second activity area, in the raised area at the back of the interior room, has only just begun to be investigated. A few pieces of worked stone and a large cluster of pottery were found here, including one group of nine sherds with ten repair



Figure 8. Selection of worked ivory and bone inlays from Trench 40



Figure 9. Copper-alloy spiral

holes. Some of the holes still held the lead staple pot menders that had been used for making these repairs (figs. 11 and 12). The ceramics are of particular interest given the start of a new program of ceramic analysis started in 2015 by Sarah Graff of Arizona State University. This work is focused on production, use, and post-depositional analysis of ceramics from the excavations and the comparison of the ceramic assemblages with those from excavations at other local sites and from Phrygian Gordion. Already from a preliminary analysis she's been able to identify significant weathering of ceramics suggesting that the building may have lain exposed for quite some time after its destruction and collapse.

While the main focus of work this season was in TR40, limited excavations were also undertaken in TR33. TR33 is located on a large stretch of stone pavement just outside the building's front doors. A portion of this trench extended beyond the eastern end of the building's façade and in 2014 had revealed a stone covered drain that appeared to connect to a drainage system along the eastern side of the building. In 2015 we excavated the exposed portions of the drain and collected the soil for flotation (fig. 13). Drains can be productive areas for the recovery of botanical or faunal material, clues that can aid in our understanding of the people and households that once used this urban block.

Beyond Urban Block 8, additional work was accomplished involving the conservation and maintenance of both objects and the larger archaeological site. The excavation's laboratory work was undertaken by our trained conservators on all excavated objects as soon as they were removed from the site. In addition, an ongoing program of rehousing iron objects for their long-term



Figure 10. Badly melted piece of copper alloy, perhaps a fibula





Figure 11. Group of sherds with repair holes and lead pot menders



Figure 13. Photograph of excavated drain in Trench 33

we returned to the excavation house at the start of the 2014 season, major leaks were discovered in the roof and around several windows that had developed during 2012–2013. Temporary repairs were conducted in 2014 to keep the leaks from becoming more substantial. During the 2015 season in partnership with the Sorgun Mayor, the Sorgun Regional Governor, and the Yozgat Governor we were able to replace the entire ceramic tile roof of the excavation house along with half of the windows, including all the leaking windows (fig. 14). We plan to continue to replace the remaining windows over the next few seasons. We also undertook necessary maintenance for all the project's buildings with a long-term view towards the use of these facilities for years to come.

In addition, in partnership with the Yozgat Governor and the Sorgun Regional Governor, major improvements were made to the road providing access to the archaeological site that is located on top of a high ridge above the village of Şahmuratlı. Under the direction of Metin



Figure 12. Side view of one of the lead pot menders

preservation was continued in 2015. On site in the Cappadocia Gate, ongoing assessment of previous restoration work was undertaken using photogrammetric methods begun in 2014. This work is being undertaken in collaboration with Abdullah Gül University in Kayseri and will help guide future restoration and conservation efforts in this area. Meanwhile, elsewhere in the city along the western city wall an illegal brick structure had been constructed in 2013, when our permission to work at the site was not approved. The Yozgat Museum had applied for permission to remove this illegal building in 2014, and once permission was granted we agreed to remove it on their behalf during the 2015 season.

## Facilities and Infrastructure Improvements

The excavation house, depots, and other facilities are essential to the successful operation of the Kerkenes project and represent significant investments over the years by the University of Chicago and our partner institutions and sponsors. They also require ongoing annual maintenance. When





*Figure 14. The new roof on the excavation house*



*Figure 15. Road extension created to allow better access to the northern and central portions of the city*

Kayhan, the Sorgun Special Administrative Director, the existing road was repaired and a 0.5 km extension was constructed outside the city walls to allow visitors increased access to the northern and central portions of the ancient city (fig. 15). This includes the area of the ongoing excavations in Urban Block 8. We hope to continue this program of road building and site improvements in future seasons.

Finally, planning is underway for a new archaeology museum that will be constructed in Yozgat. This wonderful new facility will include a new Kerkenes exhibit that is being designed to include a large-scale model of the Cappadocia Gate as part of the visitor experience. In 2015 we met with the exhibition designers and provided them with data and a personal site visit. We're very excited about the opportunities that the new museum will provide for tourists who come to visit Yozgat and Kerkenes.

## **Acknowledgments**

We are very grateful for the support of the Ministry of Tourism and Culture and especially the Yozgat Museum during the 2015 season. Hasan K. Şenyurt, Director of the Yozgat Museum, and the museum's staff facilitated this work under their museum permit. We are also grateful to Hüseyin Toprak of the Antalya Museum for serving as the Ministry Representative during the 2015 season. In addition, we received strong support from the Yozgat Governor Abdulkadir Yazıcı, the Sorgun District Governor Ali Arslantaş, the Sorgun Mayor Ahmet Şimşek, and the Yozgat Director of Culture and Tourism Lütfi İbiş. In addition to the University of Chicago, our team included collaborators and students from Istanbul Technical University, Abdullah Gül University, Koç University, UCLA, the University of Toronto, Şeyh Edebali University, and the University of Connecticut.

# KOM ED-DAHAB 2015 PRELIMINARY REPORT

Gregory Marouard

## Survey at Kom ed-Dahab

The site at Kom ed-Dahab, Menzala Lake, Damietta Inspectorate, is currently an isolated island in the proximity of the western shore of Lake Menzala (fig. 1), which has so far never been the object of any archaeological fieldwork or precise mapping.

Situated about 12 km south of Damietta and about 12 km to the east of Faraskur at the GPS coordinates 31°18.50'N–31°49.54'E. The site is registered by the MSA in the region of Daqahliya (Damietta Inspectorate) under the number 050105.

The maximum extension of the emerged area measures about 780 × 820 m. The island is circular in shape and has two triangular protrusions on the northern and the southwestern sides. The northern extension is clearly separated from the main site by a flooded area about 120 m long and 80 m wide. The archaeological remains cover an area of about 32 hectares. Be-



Figure 1. Map of the Egyptian Delta with the location of the Kom ed-Dahab in the Eastern Delta (map: G. Marouard)

cause it is still surrounded by water and reeds and can only be accessed by boat, this important settlement located about 2 km from the lake shore was completely untouched before 2015.

The site at Kom ed-Dahab is an early Roman town and an ex-nihilo foundation, which appears to have been established in the Menzala lagoon around the mid-first century BC. Its location and very peculiar installations indicate here a strategic harbor settlement located at the extremity of one of the Nile branches and once connected to a metropolis such as Mendes/Thmouis or Sebennytyos, which lie dozens of kilometers farther toward the center of the Delta. The site is currently threatened by the rapid progression of the cultivated areas, due to the regression of the water level in Lake Menzala (fig. 2).

The difficulty of access is the only reason for its seemingly excellent state of preservation. But the site is severely endangered by the fast-changing landscape and the development of the agricultural crops. Therefore an extensive survey has become urgent in order to record non-invasively the archaeological remains from the surface without digging.

The first survey season was conducted for a dozen days between September 28 and October 8, 2015, under the direction of Gregory Marouard, Research Associate at the Oriental Institute of the University of Chicago. This project was funded by the Oriental Institute of the University of Chicago and an additional grant from the Egypt Exploration Society's Delta Survey Program. Four team members participated in the fieldwork: Aude Simony (ceramicist, University of Poitiers), Robert Ryndziewicz (geomagnetic surveyor), Krzysztof Kiersnowski (geomagnetic surveyor), and Essam Nagy (archaeologist, fieldwork and engagement manager at the Egypt Exploration Society Cairo office).

Inspector Ibrahim Ezzat Ibrahim Ghoneim and inspector Ahmed Ibrahim Abuseer represented the Ministry of State for Antiquities. We would like to sincerely thank Mr. Sami Eid Salah Dohem, Director of the Damietta inspectorate, for his strong support and help in organizing this first season at the site.

An overview of the site was published in "Kom el-Dahab Interpreted," *Egyptian Archaeology* 45 (2014): 25–27, and some results of the geomagnetic survey are presented in the current issue of the *Oriental Institute News & Notes* 231 (Autumn 2016), pp. 16–21.

## A Site Recently Rediscovered

The introduction of high resolution and free online satellite images, such as Google Earth Pro, has allowed the discovery of many new sites or at least has helped to reveal new archaeological evidence at sites poorly known before. In 2011 a similar approach allowed us to re-evaluate the archaeological potential for Kom ed-Dahab.

Despite being registered for many years by the Antiquities Service (no. 050105) and inventoried by the Egypt Exploration Society Delta Survey (no. 321), the site was neither explored nor excavated by any archaeological mission. The only reference to it dates back to the inspection conducted in the 1890s by Georges Foucart, who reports on the site without having ever visited it: "Tell el-Dahab, [...] à six kilomètres environ de la limite des basses eaux [...] dans la région de Damiette et ne contient, à ma connaissance, aucune espèce d'antiquités" ("Notes prises dans le Delta," *Recueil de Travaux relatifs à la Philologie et à la Archéologie Égyptiennes et Assyriennes* 20 [1898]: 167; *Annales du Service des Antiquités de l'Égypte* 2 [1901]: 64). Another scholar, Albert Gayet, reported in his book *Coins d'Égypte ignorés* (1905) a very short description of the Geziret-el-Dahab area and noted some antiquities and a possible function of the harbor, considering its location.

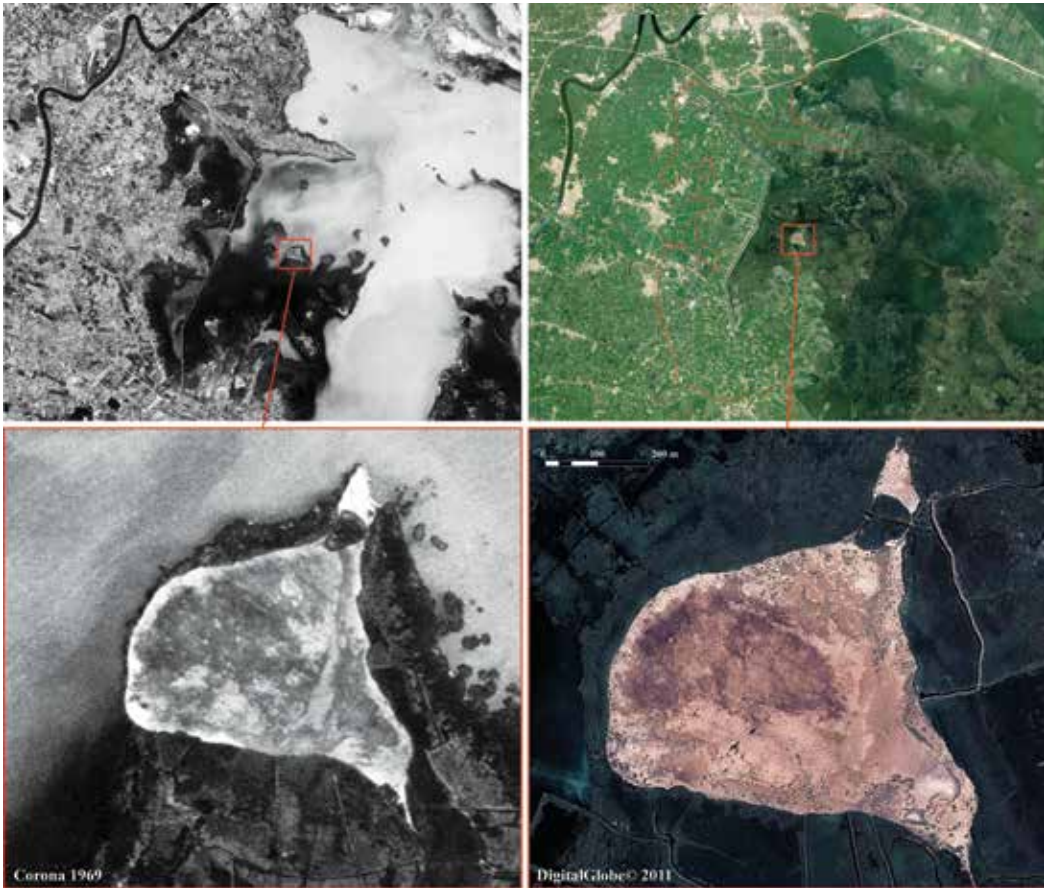


Figure 2. Comparison of satellite views of the Kom ed-Dahab island from Corona (1969) and Google Earth (2011) showing the progression of the fields and the drying process of the lake during the last 40 years (after DigitalGlobe© and Corona)

Only the satellite view of Kom ed-Dahab from 2011 shows on the surface extensive building remains, streets, and major buildings (fig. 2). The most densely urbanized area, with a regular and strictly orthogonal plan, and a hippodamian grid on the eastern part, covers an area of about 350 m from southwest to northwest for at least 450 m (about 16 hectares). At the center of the urban area, an east-west orientated street clearly dominates the grid. It is much wider and extends without interruption over 450 m, leading at its eastern end to a large building, one of the most important ones on site.

Except for a few holes from recent pillaging, some of which were made by using a bulldozer, the surface of the site is totally intact. The two largest looting holes, on the southern part, reveal some water filling which emphasizes the low elevation of the island and the immediate vicinity of the water from Menzaleh Lake at shallow depths. The site seems to have been strongly affected by both rainwater and a probable increase in the level of the lake, as well as, possibly, tsunamis – perhaps one of the reasons for the abandonment of the site, which has caused a very homogeneous leveling of all the archaeological structures, totally invisible on the very flat surface.





*Figure 3. Morning surface moisture bringing out the limits of a house and streets at the corner of a residential block (photo: G. Marouard)*



*Figure 4. Kite aerial view above the northwestern domestic area showing three Roman tower-houses and the limits of the streets and residential blocks (photo: G. Marouard)*

### Kite Aerial Photography

As a preliminary to the beginning of the geomagnetic survey, three series of aerial photography using a kite helped us to better illustrate the archaeological surface of the site before daily passage onto the surface produced dense circulation and visual pollution. Consisting of a time-lapse camera simply attached to a picavet suspension system and lifted by a traditional kite, the high-altitude pictures produced provide extremely valuable documentation for the areas that we expect to survey this season.

Due to the variability of hygrometry on the surface (fig. 3) and the different kinds of building materials used for construction — such as red bricks, limestone blocks, and mud-bricks, each of which maintains moisture differently — the surface shows significant differences in colors indicating the direction of the walls. As a result, the internal spaces inside the buildings, the streets, and sometimes the entire plan can be revealed for some important constructions.

This operation was particularly successful for covering areas such as the main buildings already indicated by the satellite images in Zones 1, 2, and 5, and it helped us to better understand the urban organization and the street patterns of the complex domestic areas mostly located on the western part of the settlement (fig. 4).

### Geomagnetic Survey

In 2015, an extensive investigation of the surface with a geomagnetic survey delivered much additional data and completed the excellent view of the site already available from the 2011 satellite pictures. The geomagnetic survey was conducted by the team of Tomach Herbich (Institute of Archaeology and Ethnology, Polish Academy of Sciences) represented this season by Krzysztof Kiersnowski and Robert Ryndziewicz. This operation covered a cumulative surface of about 3.6 hectares (36,000 sq. m) in six different zones, which were surveyed using two Geoscan Research FM 256 Fluxgate Gradiometers (fig. 5). All these areas have been mapped with a total station in order to relocate the work on a general map (fig. 6).

## Zone 1

Area covered: 3,600 m<sup>2</sup> (60 × 60 m)

This sector, clearly visible on the satellite images of 2011 and fully covered by kite images, revealed a massive rectangular construction measuring about 43 m long and 28 m wide. Located at the eastern extremity of the main axis of the town (470 m east-west), this major installation can be temporarily interpreted as a possible palatial building from the early Roman period, built with mudbricks and stones. The plan seems to be organized around a huge central peristyle courtyard, beneath which a pipeline system made with red bricks seems to run westward.



Figure 5. Ongoing geomagnetic survey along the grid axes in Zone 3 (photo: G. Marouard)

## Zone 2

Area covered: 8,000 sq. m (100 × 80 m)

This area seems to be mostly devoted to domestic installations, and the satellite images indicate here a strict orthogonal organization of the street layout. The geomagnetic survey confirmed the aerial images (fig. 7) and revealed in this grid two large and atypical buildings probably built with limestone: the bigger one on the north measures 33 × 16 m and the smaller one on the south 23 × 16 m (fig. 8).

## Zone 3

Area covered: 4,800 sq. m (80 × 60 m)

This large area was not clearly visible on the satellite images, but some very long walls were detected and two small looting holes on the surface indicate the use of half-columns in red bricks in the construction.

Here, the geomagnetic survey produced the plan of a large rectangular construction about 40 × 20 m in extension; mostly built by using red bricks. A large open area seems to stand on all the eastern side of the main building of this complex.

## Zone 4

Area covered: 8,000 sq. m (100 × 80 m)

A looting hole produced by bulldozers in 2007 and 2014 revealed in this area the remains of an important building in red bricks, limestone blocks, and red granite elements, but the geomagnetic survey conducted immediately on the eastern side mostly revealed houses and possible pottery kilns. This area should be enlarged in the future.

## Zone 5

Area covered: 10,000 sq. m (100 × 100 m)



Figure 6. Location of the six zones surveyed in 2015 by geomagnetic detection (plan: G. Marouard on DigitalGlobe© picture)

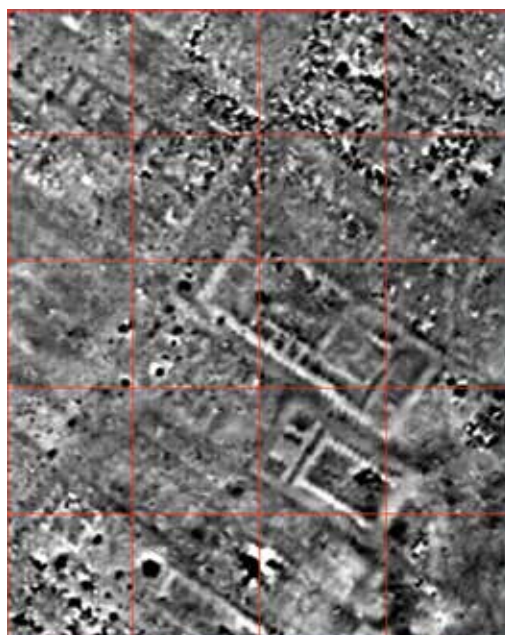


Figure 8. Magnetic map of Zone 2 (100 x 80 m) showing the orthogonal organization of the streets and residential blocks, and two peculiar large stone buildings



Figure 7. Kite aerial view above Zone 2 with the two main buildings before the geomagnetic survey (photo: G. Marouard)

On Google Earth© images, this large area is characterized by a large construction interpreted since the preliminary research as a theater from the Roman period. Both the aerial photography by kite and the geomagnetic survey clearly confirmed the existence of this building (fig. 9). It measures 56 to 58 m in length and has a maximum width of about 44 m. The *orchestra* must have had an original diameter of about 12 m. The hemicycle of the *cavea*, with a diameter of 58 m, is divided into two distinct zones of seats, which are visible due to an important concentration of vegetation on the surface. The *scaenae frons*, rectangular in plan, measures about 56 m long and 15 m wide.

This theater is only the fifth example identified so far in Egypt, including two examples at Pelusion, one in Antinoopolis, and one in Oxyrhynchus. Its dimensions are nevertheless very similar but slightly smaller than the two theaters at Pelusion (Tell el-Farama and Tell el-Kana'is). The plan is clearly in line with the imperial pattern and in the tradition of the installations from the Antonine period. This rare building marks the importance of the urban site at Kom ed-Dahab and it follows, at its own scale, the development of a classical monumental ornamentation that characterizes the Eastern Mediterranean towns during the course of the second century AD. The presence of this building also underlines the probable strong Romanization of the local population and its close contact and openness with the Mediterranean world.

## Zone 6

Area covered: 1,800 sq. m (60 × 30 m)

Located on the northern island of Kom ed-Dahab, this part of the site can be interpreted as the location of the main harbor installation, with long parallel rooms as possible magazines. The geomagnetic survey also revealed some large pottery kilns that could explain the huge amount of Egyptian amphora fragments observed in the dumps of recent lootings (2012).

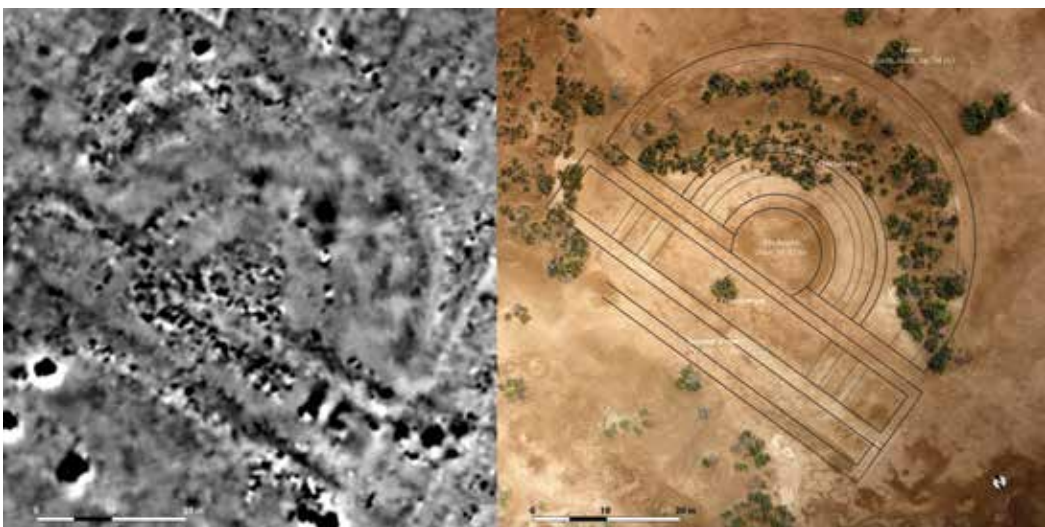


Figure 9. Magnetic map and interpreted aerial view of the Roman theater area in Zone 5 (plan: G. Marouard)



## Pottery Survey and Analysis

The study of pottery was conducted by Aude Simony (fig. 10). She devoted special attention to surveying the very recent looting areas concentrated mostly in the western periphery and the southern part of the site, where according to the satellite images, bulldozers excavated several deep trenches in 2007 and again in 2014.

Only a few pottery sherds have been collected from the surface in fourteen different sectors, in order to draw the forms, describe the fabrics, and to get a more accurate date for the general occupation. The preliminary analysis of the pottery at the site indicates an occupation exclusively from the early Roman period, limited to the period between the middle of the first century BC and the end of the second century AD. Despite few later pottery sherds, which indicates a light occupation until maybe the early fourth century AD, most of the Egyptian and imported productions clearly match this time frame.

Concerning the imported pottery, the surface regularly revealed in all the parts of the site a significant number of Eastern Sigillata fragments, a typical fine tableware production for the early Roman period, probably imported from such distant Eastern Mediterranean areas as Cyprus (Eastern Sigillata D) or Turkey (Eastern Sigillata C).

Finally, it should be mentioned that the recent lootings (between 2012 and 2013, according to satellite images) on the northern island located at the very north part of the Kom ed-Dahab revealed a significant volume of fragments of Egyptian amphora, mostly dated from the first century BC to the first century AD, which confirms the general dates observed on the main site.

## GPS Survey of Artifacts on the Surface

In order to complement the pottery survey, concentrations of other categories of artifacts were recorded in various areas of the settlement. All these objects were not collected, but were systematically photographed and geo-localized with GPS points (fig. 11).

Two main categories of diagnostic objects, glass and coins, were primarily recorded, because of their better state of preservation on the very exposed and washed surface of the site, where many other kinds of objects were not properly conserved.

Thirty-one concentrations of glass have been marked on the surface, all located in the central, higher, and more densely urbanized part of the site. Most of the forms recognized and colors identified belong to the Roman period (fig. 11, upper right), with a chronological frame situated between the middle of the first century BC and the end of the second century AD, as already underlined by the pottery sherds from the surface.

Some forms are more frequently observed, such as very typical ribbed bowls, narrow-necked jugs, spherical bottles, kohls flasks, unguentaria, and patella. The majority seem to be imported from the Levant (Syro-Palestinian) area, but some were apparently produced in Italy, Cyprus(?), or maybe Egypt (in this case intended for exportation).

Dozens of coins were located on the surface, most of them in a pretty poor state of conservation, but some are occasionally



Figure 10. Aude Simony recording and analyzing the pottery sherds on the spot (photo: G. Marouard)



Figure 11. GPS position of the glass fragments and copper coins on the surface (photo: G. Marouard)

better preserved on both faces, such as a coin from the reign of Claudius, ca. 50 AD (fig. 11, lower right).

## Training

This first season 2015 at Kom ed-Dahab was extremely well supported by a very nice and dynamic team of two young inspectors from the Damietta inspectorate, Ibrahim Ezzat Ibrahim Ghoneim and Ahmed Ibrahim Abuseer, who were already well experienced in field archeology from their work on the Late Period necropolis at Tell ed-Deir, a Ministry of Antiquities rescue excavation located west of Damietta and conducted by the head of the inspectorate. Our survey work on the Roman settlement at Kom ed-Dahab provided the occasion for them to learn how to use a Leica Total Station (fig. 12), to set a 100 × 100 m grid for the geomagnetic survey with a Leica distancemeter, and to do some pottery survey or experiment with pottery drawing with our ceramicist, Aude Simony.

We would like to sincerely thank both of them and the entire inspectorate for their help and their extremely valuable support, and we hope to be able to continue this training support in the future.



Figure 12. Inspectors Ahmed and Ibrahim learning the use of the Leica Total Station for setting a grid on Zone 6 (photo: G. Marouard)

## MODELING THE ANTIQUITIES TRADE IN IRAQ AND SYRIA (MANTIS)

Fiona Rose-Greenland, James Marrone,  
Oya Topçuoğlu, and Tasha Vorderstrasse

### Introduction

Founded in January 2016, MANTIS is an interdisciplinary research project consisting of archaeologists from the Oriental Institute and social scientists from the Neubauer Collegium for Culture and Society and the Department of Economics at the University of Chicago. With financial and administrative support from the Oriental Institute, the Department of Art History, and the Antiquities Coalition (Washington, D.C.-based non-profit), MANTIS hired five Research Assistants and two Research Directors in addition to the Principal Investigator, Fiona Rose-Greenland. The broad aim of the project is to combine excavation data and data from the antiquities market to understand more clearly the interconnectedness of archaeological materials and illicit economic activities. MANTIS is structured around an archaeological research team directed by Oya Topçuoğlu and market research team directed by James Marrone.

In the first half of 2016, MANTIS focused on the looting situation in the self-proclaimed Islamic State in Iraq and Syria (ISIS). The goal of this particular research is to create a model of systematic quantitative analysis that can generate a reliable estimate of the scope and value of the antiquities trade to insurgent groups in Iraq and Syria. Concrete steps taken toward this goal in 2016 included (1) designing and loading a database of excavated objects from a representative sample of sites in the region; (2) research papers with concrete methodological questions and demonstrations resulting in three public presentations and a journal submission; (3) engaging with cultural heritage scholars and social scientists outside the University of Chicago to enrich the theoretical basis of the project; and (4) collaborating with the OCHRE team to enhance the technical proficiency of the database.

We began the project with a presentation of our goals and methodology to the American Schools of Oriental Research (ASOR)/Archaeological Institute of America (AIA) Cultural Heritage Collaboration summit in December 2015. Fiona Rose-Greenland traveled to Washington, D.C. to speak about MANTIS as part of the Oriental Institute's delegation to the summit. The event was an opportunity for MANTIS to connect with other scholars and organizations about possible future collaborations. By February we had a project logo and website, thanks to the efforts of Oya Topçuoğlu, Knut Boehmer, Josh Tulisak, and Erik Lindahl.

The rest of this report focuses on our effort to build an estimate model. In late 2014 and much of 2015, mainstream media reported on ISIS's antiquities trade as a multi-billion dollar enterprise. Subsequent estimates were as little as \$4 million. The outcome of these stories was a fuzzy picture of the revenue stream from looted antiquities to ISIS and other insurgent groups. To arrive at a more accurate estimate, the basic idea behind MANTIS's first phase of work was to produce a parameterized model that yields a total estimated value for both the quantity and market value of looted artifacts. Critically, the model also allows sensitivity analysis to be conducted on its various inputs in order to understand how each input (and

the confidence with which each input can itself be estimated) drives the overall result. For example, how many sites are at risk? What types of objects are being looted from a particular region? Who is looting where, and what might they have excavated? We do our best to answer these questions, and account for uncertainties as accurately as possible.

## Report from the Archaeological Research Team

The archaeological research team is responsible for collecting data on objects systematically excavated at a representative sample of sites in Syria and Iraq, spanning the Early Bronze Age to the Islamic period, based on published information in excavation reports. The team consists of Oya Topçuoğlu (Research Director, PhD in Near Eastern archaeology), Tasha Vorderstrasse (Research Assistant, PhD in Near Eastern archaeology), Monique Vincent (Research Assistant, PhD in Near Eastern archaeology), and Teagan Wolter (Research Assistant, graduate student in Near Eastern archaeology).

The initial phase of the project was dedicated to the selection of archaeological sites from which to collect object data and the creation of a database where these data would be stored. Due to the extremely large number of known archaeological sites in the ISIS-controlled territories in Syria and Iraq, we selected ten sites as individual case studies, being fully aware of our bias towards large urban settlements. Several factors were influential in the selection of these sites:

1. Based on market data and general preferences of buyers, we decided to cover the period between the Early Bronze Age and the Islamic period and selected sites that were most representative of the individual time periods. Two sites were selected for each major period to reduce possible biases in artifact assemblages and publications.
2. Because our archaeological data regarding artifacts that have been excavated at these sites come from published excavation records, we leaned toward major sites that have a relatively good publication record.
3. Finally, we used satellite imagery and information published by the ASOR Cultural Heritage Initiative to narrow our selection down to sites that showed evidence of extensive looting since the beginning of the conflict in Syria in 2011.

The final selection of sites by period is as follows:

Bronze Age:	Tell Bi'a, Mari
Iron Age:	Nimrud, Khorsabad
Hellenistic/Roman periods:	Dura Europos, Palmyra
Byzantine period:	Qal'at Seman, Resafa
Islamic period:	Raqqa, Qasr al-Hayr al-Sharqi

Many of these sites are occupied in more than one period. However, for the purposes of the project data collection focused primarily on the main period of occupation at the site. Once the selection of sites was complete, we proceeded to compile a comprehensive bibliography of site reports, journal articles, and other relevant publications for each site. This bibliography is stored in a Zotero Group account and is updated regularly by the research assistants.



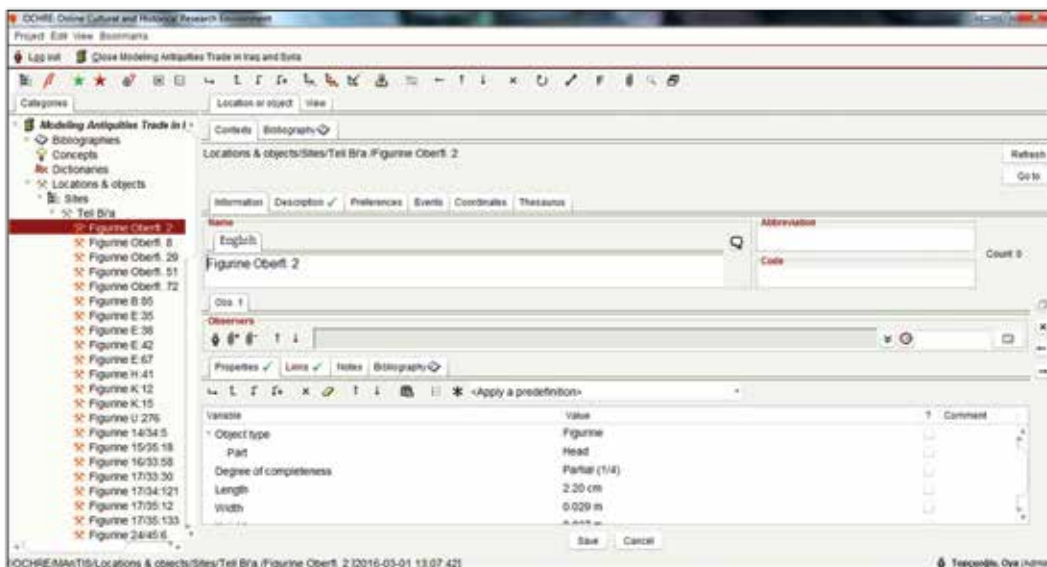


Figure 1. Customized database used by MANTIS

At the same time, we started building the MANTIS database on the OCHRE platform with the technical support of OCHRE Data Services (ODS) specialist Miller Prosser and ODS director Sandra Schloen, whose assistance and expert knowledge have been invaluable for the project. The database was customized to represent the archaeological data used by the project. The information collected by the research assistants from published site reports is stored on this platform and is updated on a regular basis as data-entry continues. The record for each artifact in the database includes findspot, object type and condition, size, material, and other relevant information such as decoration and treatment. Object photos and bibliographic information are also attached to each entry (see fig. 1).

So far we have been working on data collection from Tell Bi'a, Khorsabad, and Dura Europos. All known publications on Khorsabad were consulted by Monique Vincent, who entered 642 excavation objects from the site into the database and completed data-entry as of April 2016. Both Monique and Teagan Wolter are currently working on Tell Bi'a and have completed data-entry from several volumes of the site reports. Tasha Vorderstrasse has been working on entering in material from the site of Dura Europos. As of June 2016, 2,094 individual objects have been entered into OCHRE.

Finally, Monique Vincent, Tasha Vorderstrasse, and Fiona Rose-Greenland assisted the market research team led by James Marrone in manually cleaning up the Dura Europos excavation data gathered from the Yale University Art Gallery. They identified and hand-coded over 3,000 individual objects based on the photographic evidence made available online, which will allow the market research team to analyze the material more consistently. Tasha Vorderstrasse is also working on placing the excavated objects from Dura Europos back into their archaeological contexts with the help of site reports, which will help us understand the density of artifacts and the distribution of artifact types and assemblages across the various parts of the settlement and fill in the blanks in the unexcavated portions of the site.

In the coming months the archaeological research team will continue to focus its efforts on gathering and entering object data from the remaining archaeological sites selected for the project.

## Report from the Market Data Research Team

The market data research team is responsible for collecting and cleaning observations of market transactions involving antiquities listed with Middle Eastern provenance. The team consists of James Marrone (Research Director, PhD candidate in Economics), Ziv Dreyfuss (Research Assistant, BA in Economics), and Theodore Watler (Research Assistant, undergraduate major in Art History).

Making auction house records and online antiquities sales observations useful for systematic quantitative analysis involves a labor-intensive process of cleaning the data and making the different data types comparable. Specifically, we need observations of objects on the market and objects with known excavation records. Objects rarely fit both categories at once, and so it is necessary to develop a matching algorithm to impute prices of objects from archaeological records using observed prices of similar objects on the market.

To this end, the economics team compiled a database of 25,000 objects offered for sale at auction houses and dealers. The data consist of sales visible online or in published catalogs, of objects from Europe, the Near East, or North Africa. These objects are commonly sold together in the same auctions or by the same dealers, whereas they are rarely sold with antiquities from other regions — hence these data comprise objects that together form a somewhat isolated market. For each object, the data contain images, descriptions, an appraisal or asking price, and a sales price, if applicable. Descriptions, in particular, record the raw materials, dimensions, time period and culture of origin, type of object, and some additional detail — for instance, if the object is fragmentary or if it has written inscriptions.

To develop and test a matching algorithm between market records, the various data sources need to be commensurable. This is a non-trivial hurdle, as the descriptive language used by market dealers is different from that used by archaeologists. In addition, some dealers provide more detailed descriptions than others. Therefore it was necessary to standardize the language and develop a glossary of terms that can easily and objectively characterize any object, regardless of how it might be described in the data. This glossary comprises part of the empirical method.

For example, Apulian vases are variously characterized by dealers and auction houses. Sometimes they are said to be made of “terra-cotta,” other times “pottery,” and still other times they have no specific mention of material — in which case the fact of being an Apulian vase implies the physical medium. These ambiguities must be clarified. In addition, archaeologists would not apply the word “terra-cotta” to vases from the Apulian period; hence, everything must be standardized as “pottery.”

Many empirical exercises can be performed using the standardized descriptive variables. On a small scale, the market data can provide a quantitative and historical context for recent anecdotal evidence from the black market. We demonstrated this point by mining our data to assess a widely circulated report in April 2016 about a live auction in Raqqa in which two Palmyrene funerary busts supposedly offered for \$150,000. Using the MANTIS market database we found twenty-eight similar busts that had been purchased at legal auctions in the period 2003–2016. Only one sold for approximately \$90,000, and most were well below that figure. This simple analysis allows for more insightful conclusions about black market behavior than could be generated by the media reports alone. For example, if the reports are indeed true, then the black market may be generating higher prices than the normal market — which has different implications than if the pattern were reversed. Of course, this conclusion is specula-

tive at best; more evidence from auctions such as Raqqa would be necessary to confirm that this is truly a pattern.

On a larger scale, we are using the Syrian site of Dura Europos as our first major case study (see the following section for more information about the site and why we selected it). To evaluate all objects in the Dura Europos dataset, the archaeological data must be matched with the market data. It is important to determine the salient characteristics of each object from the point of view of the market. Strictly speaking, each object is unique; the goal is to determine what common characteristics can predict a price within a small margin of error. In addition, prediction should be done agonistically — rather than generating assumptions about whether or not two objects should be comparable, the data should yield the most predictive groupings. Machine learning techniques are most appropriate for this task, as they can yield rich predictive models with minimal assumptions.

After randomly splitting the market data into a training sample and a testing sample, multiple predictive methods were compared: linear regression; principal components analysis; lasso regression; random forests; Bayesian additive regression trees, and logic regressions. The latter three proved to offer the best fits. The next steps are as follows: the resulting predictive algorithms must be applied to the Dura data. These data will generate an estimated value of the Dura objects were they to sell on the legitimate market. This estimate can be scaled to the entire Dura site by comparing the area covered by archaeological excavations to the total area of the site.



*Figure 2. Aerial view of Dura Europos looking south (P. 35256)*

## Case Study: Dura Europos

We selected Dura Europos (fig. 2) as the first test of our methodology. Dura Europos has a number of advantages for a case study of this nature. First, the site was largely occupied from the foundation of a Hellenistic town at the end of the fourth century BC until the Sasanian sack of the city in the third century AD (for the limited evidence before and after see Baird 2012; Baird 2014, pp. 20, 29). Second, it offers a selection of antiquities that have been proven to have high collecting interest. Third, other scholars and cultural heritage organizations have documented the site's looting history via satellite images and ground surveys, allowing us to leverage their studies to strengthen our analysis.

Finally, due to the natural preservation conditions in this portion of eastern Syria, Dura offers up rare object types (basketry, leatherwork, papyri/parchment, and wall paintings) in addition to more standard artifact categories such as coins, ceramics, and glass (Leriche, Coqueugniot, and du Pontbriand 2011, pp. 15, 17; Brody 2014, pp. 6–7; see exhibition catalogs illustrating the finds in Brody and Hoffman 2011; Chi and Heath 2011). In addition to pagan temples, excavators found a synagogue with wall paintings from the third century AD (Kraeling 1956; Gutman 1992) and a third century AD house church, which also had wall paintings (Kraeling 1967; Peppard 2016), pointing to a diversity of religions at the site, while the different documents and inscriptions found point to a diversity of peoples and languages (Gascou 2011). These advantages also make Dura unrepresentative of archaeological sites in the region that are not in this climate zone, although finds of papyri from the region (Gascou and Feissel 1989) argue that there are other sites in the vicinity that have similarly well-preserved and



*Figure 3. Colorized version of Breasted's photograph of first century AD wall painting of the priest Konon sacrificing to the gods (P. 8853/N.3099)*



rare objects. Recent work on Roman coins suggests that Dura Europos has certain similarities (and some differences) to other Roman fortified sites along the Euphrates in the third century AD (Butcher 2013, pp. 1, 6–8, 12, 19). These are issues that we start to address in our analysis.

In 1920, James Henry Breasted, director of the Oriental Institute, was called in by the British army to investigate ruins they had uncovered while stationed at the site of Salihyah (ancient Dura Europos) on the Euphrates to the south of Deir ez-Zor. As he vividly describes, Breasted was only able to visit the site for a day and thus was hampered by a serious time pressure to record what he found, which were a number of well-preserved wall paintings (Breasted 1924). These unique wall paintings (fig. 3) attracted the interest of scholars and the site soon came under excavation by Franz Cumont in 1922–1923, since Breasted was unable to work at the site further. After two seasons, Cumont ceased to work at the site and the joint Yale University and French Academy excavated the site from 1928 to 1937. After a hiatus of almost fifty years, French excavations resumed in the mid-1980s, ceasing with the Syrian civil war in 2011 (Hopkins 1979; Leriche, Coqueugniot, and du Pontbriand 2011, pp. 15, 18; Baird 2014, pp. 4, 6–8; Brody 2014, p. 7).

There have been a variety of publications by the excavators of Dura Europos since it was excavated, from Breasted's *Oriental Forerunners of Byzantine Painting* (1924) to the Yale University-French Academy preliminary and final reports, as well as various studies done by the later French excavators. The material from Dura Europos can be primarily found in the Damascus Museum and the Yale University Art Gallery, along with a few other collections such as the Louvre and the Royal Ontario Museum in Toronto. The Yale University Art Gallery currently has 12,378 objects, primarily with photographs, on their website from the 1928–1937 excavations. In addition, Yale University houses the excavation archive from the Yale-French Academy work and many photographs and other documentation from the excavations are now on Artstor (which also has pictures of objects from the excavations held by the museum and the Beinecke Library). These different datasets, combined with the published reports, constitute an invaluable resource for anyone wishing to do work on the site (Baird 2011a; Brody 2011b; Leriche, Coqueugniot, and du Pontbriand 2011, pp. 17, 20; Baird 2014; Brody 2014, pp. 7–8).

The final phase of our work on Dura will focus on developing and testing methods for imputing numbers and types of objects potentially found in looters' pits, characterizing unobserved data more precisely than would be possible with only the market-data matching algorithm described above. We are collaborating on a number of papers with the intention of submitting them to peer-reviewed journals. We plan to make our data available to other scholars interested in questions related to archaeological materials and political and economic questions. Finally, we are focusing on new funding opportunities that would allow us to extend the project to test the price imputation method on additional sites.

## References

Baird, Jennifer A.

- 2011a "The Houses of Dura Europos: Archaeology, Archive, and Assemblage." In *Dura Europos: Crossroads of Antiquity*, edited by L. Brody and G. Hoffman, pp. 235–50. Chestnut Hill: McMullen Museum of Art.
- 2011b "Photographing Dura Europos, 1928–1937: An Archaeology of the Archive." *American Journal of Archaeology* 115: 427–446.
- 2012 "Dura Deserta: The Death and Afterlife of Dura-Europos." In *Vrbes Extinctae: Archaeologies of Abandoned Classical Towns*, edited by Neil Christie and Andrea Augenti, pp. 307–29. Aldershot: Ashgate.
- 2014 *The Inner Lives of Ancient Houses: An Archaeology of Dura-Europos*. Oxford: Oxford University Press.

- Breasted, James Henry  
 1924 *Oriental Forerunners of Byzantine Painting*. Oriental Institute Publications 1. Chicago: University of Chicago Press.
- Brody, Lisa R.  
 2011 “Yale University and Dura Europos: From Excavation to Exhibition.” In *Dura Europos: Crossroads of Antiquity*, edited by Lisa R. Brody and Gail L. Hoffman, pp. 17–32. Chestnut Hill: McMullen Museum of Art.  
 2014 “Excavations and Identities: Art from the Roman Provinces at the Yale University Art Gallery.” In *Roman in the Provinces: Art on the Periphery of Empire*, edited by Lisa R. Brody and Gail L. Hoffman, pp. 5–14. Chestnut Hill: McMullen Museum of Art.
- Brody, Lisa R., and Gail L. Hoffman, editors  
 2011 *Dura Europos: Crossroads of Antiquity*. Chestnut Hill: McMullen Museum of Art.
- Butcher, Kevin  
 2013 “Coins and Hoards.” In *Excavations at Zeugma: Conducted by Oxford Archaeology*, Volume III, edited by William Aylward, pp. 1–92. Los Altos: Packard Humanities Institute.
- Chi, Jennifer Y., and Sebastian Heath, editors  
 2011 *Edge of Empires: Pagans, Jews, and Christians at Roman Dura Europos*. New York: Institute for the Study of the Ancient World.
- Gascou, Jean  
 2011 “The Diversity of Languages in Dura-Europos.” In *Edge of Empires: Pagans, Jews, and Christians at Dura Europos*, edited by Jennifer Chi and Sebastian Heath, pp. 74–96. New York: Institute for the Study of the Ancient World.
- Gascou, Jean, and Denise Feissel  
 1989 “Documents d’archives romains inédits du Moyen Euphrate (IIIe s. ap. J.-C.)” *Comptes rendus des séances de l’Académie des Inscriptions et Belles-Lettres* 133: 535–61.
- Gutman, Joseph, editor  
 1992 *The Dura-Europos Synagogue: A Re-Evaluation (1932–1992)*. South Florida Studies in the History of Judaism 25. Atlanta: Scholars Press.
- Hopkins, Clark, edited by Bernard Goldman  
 1979 *The Discovery of Dura-Europos*. New Haven: Yale University Press.
- Kraeling, Carl H.  
 1956 *The Synagogue: The Excavations at Dura-Europos. Final Report Volume VIII, Part I*. New Haven: Yale University Press.  
 1967 *The Christian House: The Excavations at Dura Europos. Final Report Volume VIII, Part II*. New Haven: Yale University Press.
- Leriche, Pierre, Gaëlle Coqueugnot, and Ségolène du Pontbriand  
 2011 “New Research by the French-Syrian Archaeological Expedition to Europos-Dura and New Data on Polytheistic Sanctuaries in Europos-Dura.” In *Edge of Empires: Pagans, Jews, and Christians at Dura Europos*, edited by Jennifer Chi and Sebastian Heath, pp. 15–38. New York: Institute for the Study of the Ancient World.
- Peppard, Michael  
 2016 *The World’s Oldest Church: Bible, Art, and Ritual at Dura Europos, Syria*. New Haven: Yale University Press.

## MUMMY LABEL DATABASE (MLD)

François Gaudard

The academic year 2015–2016 was another busy one for the editors and collaborators of the Mummy Label Database and the Death on the Nile projects, who continued to complete the database by revising existing editions, as well as publishing still-unpublished labels. For details on these joint projects 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 should consult the *2008–2009 Annual Report*, as well as the other annual reports, available online in Adobe Portable Document Format (PDF):

<http://oi.uchicago.edu/research/projects/mummy-label-database-mld>

During the past year, our colleague Klaas Worp, one of the editors of the MLD and the Death on the Nile projects, revised his checklist of mummy labels, entitled *Greek, Greek/Demotic and Demotic Mummy Labels: A Survey*,<sup>1</sup> which is downloadable for free on our Death on the Nile website:

<http://deathonthenile.upf.edu/library/>

Since its publication in 2013, this ninety page survey has proved to be an invaluable resource for Greek papyrologists, Demotists, and other researchers worldwide, who study mummy labels. Indeed, it is not uncommon for such items to pass from one collection to another and sometimes to disappear and go missing for years, until they are eventually rediscovered later. Thanks to Klaas’s checklist, which he will keep updating on a regular basis, scholars can save precious time in identifying labels “missing in action,” as Klaas likes to refer to them. His most recent updates, some of which are still works in progress, include:

- TM 008717 = SB 1:3967 = C.E.M.G. 1668 (Oxford, Ashmolean Museum 1888.791).
- TM 026003 = SB 1:144 = C.E.M.G. 1 (formerly New York, collection Prime).
- TM 026004 = SB 1:145 = C.E.M.G. 2 (formerly New York, collection Prime).
- TM 029389 = SB 1:2057 = C.E.M.G. 2029 (formerly Dresden, Albertinum).
- TM 032108 = SB 1:2054 (cf. BL 7:180) = C.E.M.G. 2106 (formerly Cairo, collection Fouquet).
- TM 032811 = SB 10:10518 (formerly Cairo, collection Michaelides).
- TM 040342 = SB 1:3580 = C.E.M.G. 268 (formerly Paris, collection Egger).
- TM 040405 = SB 1:3934 = C.E.M.G. 335 (formerly Strasbourg, collection Forrer).
- TM 040586 = SB 1:5720 (cf. SB 2, p. 463) = C.E.M.G. 528 (formerly Freiburg, collection F. X. Kraus).
- TM 117641 = *Short Texts* 2:669 (formerly Bonn, collection Wiedemann [3 s]).

## Publications by Team Members, Related to the Projects

The following articles have been published, submitted, or are in press:

- Raquel Martín Hernández and Sofía Torallas Tovar, “Some Unpublished Greek Mummy Labels at the British Museum,” *Zeitschrift für Papyrologie und Epigraphik* 198 (2016): 173–89.
- François Gaudard, “A Greek-Demotic Mummy Label in the University of Cambridge Museum of Archaeology and Anthropology,” to be published in a Festschrift honoring a colleague (submitted).
- François Gaudard, “Funerary Shrouds from Dendera in the Oriental Institute Museum of the University of Chicago, Part I: OIM E4786,” to be published in a Festschrift honoring a colleague (submitted).
- François Gaudard, “On the Immortality of the God Seth.” In *Illuminating Osiris: Egyptological Studies in Honor of Mark Smith*, edited by Richard Jasnow and Ghislaine Widmer, pp. 93–98. Material and Visual Culture of Ancient Egypt 2. Atlanta: Lockwood Press, 2017.

### Note

<sup>1</sup> This checklist also includes late hieratic mummy labels.

---



## NIPPUR

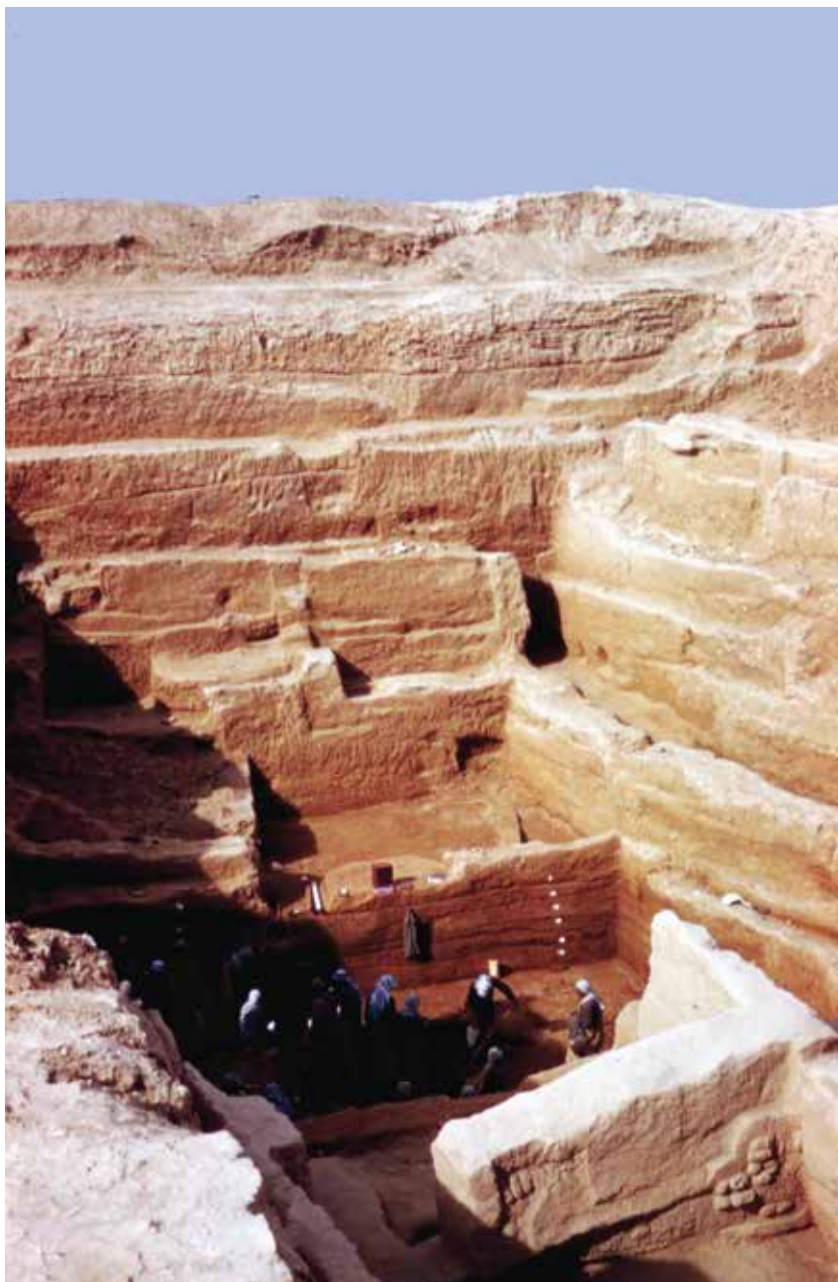
### McGuire Gibson

During the past year, the repairs and re-equipping of the dig house at Nippur were completed, and we expected to be in the field for the month of December to resume work at the site by doing a relatively short preliminary survey of the surrounding area, ground-checking locations of probable sites located by the study of satellite images. This was to be the main responsibility of Oriental Institute Research Associate Carrie Hritz. While doing this mapping work, we would also assess damage to the region from looting that took place in the 1990s and after 2003. I wanted especially to locate a site from which Kassite period (ca. 1400–1200 BC) cuneiform tablets might have come. Some stolen tablets with features that link them to Nippur surfaced a few years ago in private collections in Europe, and initially the scholars who looked at them thought they came from Nippur. Since I had been to Nippur a number of times throughout the 1990s and several times after 2003, and I had examined the mounds of Nippur thoroughly each time, I knew that the tablets could not have come from the city itself. Although there was a short period of a couple of weeks in 2003 in which men dug illegally on the north side of the West Mound, I looked over the holes and I could see that there were no Kassite pottery sherds around them, but only those of later periods. There are, however, several Kassite mounds within a few kilometers of Nippur, and we knew that we would be able to spot signs of looting and that we could suggest that one or the other of those sites was the source of the looted tablets.

As it happened, the visas for our proposed season at Nippur were not granted, so this survey and later projected excavations at the site will have to be delayed. I have to assume that the problem has to do with fears for our security.

Iraqi excavators are at work on a number of sites in the south of Iraq, and extremely valuable surface surveys by them have located more than 1,200 sites in and around what used to be the great marshes. Some foreign expeditions have been allowed to begin work in the southernmost parts of Iraq, where it is relatively secure, especially at and around Ur, and there is some news of excavations in the Lagash area. Perhaps Nippur can be added to that list in the coming year.

In the meantime, more than twenty groups are doing survey and excavations in the Kurdish Autonomous Region, and as a result we will know more in the next ten years about Assyria than we have since Layard first began to dig at Nimrud and Nineveh has been badly damaged. Speaking of those sites, while mounds in the entire area under control of ISIS are being looted, the Assurnasirpal palace at Nimrud has been obliterated with explosives and Nineveh has been badly damaged. Last year ISIS posted footage of the blowing up of the palace of Assurnasirpal at Nimrud. In the past few months, satellite imagery and ISIS propaganda videos show that, at Nineveh, winged bull figures in city gates have been destroyed and bulldozers have destroyed the massive stone and mudbrick city walls and gates that Iraqi archaeologists had spent many years and many dinars carefully reconstructing. Lately, a highway has been constructed across the site, and increasingly we see new houses built on the high mound, which has been kept relatively safe until now, although the lower, southern end of the city has been covered with houses.



*Inanna Temple excavations from the Surface to Level XVII, view from northwest (sm 2432)*

Here in Chicago, we continue to work on Nippur publications. As mentioned last year, the Inanna Temple final report is done and is now in the editorial process. It should appear in about a year. And I can now return in a major way to the Nippur reports that I left almost finished when I took on the commitment to publish reports of Iraqi excavations that had been damaged in the looting of the Iraq Museum in 2003. I hope to have one of the Nippur reports, probably on Area WG, in the editorial office by the end of the summer.

## ORIENTAL INSTITUTE NUBIAN EXPEDITION (OINE) PUBLICATION PROJECT

**Lisa Heidorn, Artur Obłuski, Alexandros Tsakos,  
Dobrochna Zielińska, Grażyna Zofia Żukowska,  
Barbara Wagner, Olga Syta, Bruce Williams,  
Donald Whitcomb, Tasha Vorderstrasse, and Carol Meyer**

With the submission of OINE volume 14, *The Second Cataract Fortress of Dorginarti*, by Lisa Heidorn, OINE volume 12, *Cerre Matto, the Christian Period Churches, Houses, Workshops, and Cemetery*, edited by Bruce Williams, and the major part of a catalog of beads by Joanna Then-Obłuska, the OINE publication project has fully resumed. The year 2015–2016 has been a landmark for us, and each volume represents a new departure, both for the project and Nubian studies.

The OINE Publication Project continues to have tasks in hand, some just begun, some partly completed, and some still to be planned in detail. Most immediately, Dorginarti and Cerre Matto's Christian Period town are being modeled in three dimensions, and to forward that end, the architect, Nadejda Reshetnikova, stayed some time in Chicago to work with Lisa Heidorn and Bruce Williams, and to present preliminary models to the Publications Office for discussion and review. A database needs to be established, to furnish an ordered and coherent repository for records, drawings, and photographs that could not be included in OINE volumes 12, 13, and 14. OINE 13, *Cerre Matto, the Christian Period Pottery, Small Objects, Glass, and Texts*, has yet to be completed, as is detailed below.

### **Dorginarti and Ongoing Research**

*Lisa Heidorn*

The manuscript of *The Second Cataract Fortress of Dorginarti* (Oriental Institute Nubian Expedition, volume 14) was delivered to the publications office in March. The excavation report comprises eight main chapters, including detailed discussions of the fortified enclosure and the architecture preserved within it, the Level II fortified platform construction, the pottery, and the objects. Specialists' studies of the beads, glass, inscribed pottery, and metallurgical equipment and objects are included, as well as an appendix on pottery groups from selected stratified areas. While the focus of the book is on the remains from Levels II, III, and IV, the topical studies also consider materials from the later use of the fort in the Meroitic and Christian periods.

The study of the material remains from the fortress has given rise to a number of research questions relating to the history of social and cultural interactions in the early first millennium in northeast Africa, that is, between Egypt and the Sudan, and the subtle ways that material remains might reflect genuine cultural affiliation. To this end, I plan to do further work on the pottery from the royal cemeteries of Kush at el-Kurru, Nuri, and Meroe in the Boston Museum of Fine Arts. Some pottery from the ancestral tombs, attributed to the

predecessors of the kings and queens of the Twenty-fifth Dynasty, was published in my 1994 article (“Historical Implications of the Pottery from the Earliest Tombs at El Kurru,” *Journal of the American Research Center in Egypt* 31: 115–31), while selected vessels from the tombs of the Kushite kings and queens is currently in press (“The Boston Museum of Fine Arts Pottery from the Twenty-fifth Dynasty Tombs at el-Kurru and Nuri,” in the forthcoming *Proceedings of the 13th International Conference for Nubian Studies, Neuchâtel, 1st–6th September 2014*). The next stage of this research focuses on additional unpublished pottery from the same tombs, as well as from royal tombs post-dating the Twenty-fifth Dynasty, when the Kushite kingdom was centered solely in the Sudan. The research is partly supported by the Shelby White-Leon Levy Program for Archaeological Publications grant that the project received in 2013–2014.

I am also currently working on an article for a forthcoming publication of *Cahiers de la céramique égyptienne*, the topic of which is ceramic imports found in Nubia. My article discusses the East Greek and Levantine amphorae from the sixth-century platformed fortress at Dorginarti.

### Qasr el-Wizz

*Artur Obłuski, Alexandros Tsakos, Dobrochna Zielińska, Grażyna Zofia Żukowska, Barbara Wagner, and Olga Syta*

Last year brought substantial progress in the study of the past of the Qasr el-Wizz monastery. At the moment, the catalog of pottery from the site, including both drawings and descriptions, is almost ready for publication. The textual finds are cataloged, transcribed, and translated. The painted wall decoration is cataloged and pigment samples are analyzed. The research on the history of the architecture of the monastic complex as well as its contextualization in a wider perspective of Nubian and north African architecture is in its final stages.

The chemical composition of pigments from the Qasr el-Wizz monastery was analyzed in order to evaluate the variability of the used materials and painting technology. The analytical procedure, consisting of non-destructive methods, was proposed for the comprehensive characterization of the samples. X-ray fluorescence spectrometry (XRF, for elemental information), was performed at the Interdisciplinary Laboratory of Archaeometric Research, Biological and Chemical Research Centre, University of Warsaw, and Raman spectroscopy (for molecular information), at the Faculty of Chemistry, Warsaw University of Technology.<sup>1</sup>

Plaster samples that refer to two developmental phases of the church were taken under consideration. Types A, B, C, and F can be linked to the original phase of the church in the fifth/sixth centuries, and type D comes from the constructions made at the beginning of the eighth century. Both groups of samples provided information about all pigments that were used in the painted decoration of the church. For yellow, the color massicot (lead pigment) was used, and iron oxide-based pigments like hematite were used for red and darker, brown and violet shades. For black color, carbon black (soot) was used. White pigments revealed a difference between samples that can be dated to the original phase and the later rebuilding in the eighth century. In both phases gypsum was used as a white pigment. Later samples contained calcium carbonate and magnesium and calcium sulphates exactly like pigments from the Paulos Cathedral that was raised in the neighboring Faras, the capital city of Nobadia. The cathedral was erected when Nobadia and Makuria merged into one political entity at the end of seventh/beginning of the eighth century. Another affinity is the use of magnesium based



pigments also present in painted decoration of both Wizz and Faras: a characteristic feature of the Makurian painters' workshop.

New, enhanced description and analysis of the monastic complex has been completed, as well as of the cemeteries and graves found around Qasr el-Wizz, not only by the Oriental Institute Nubian Expedition but also by the Harry Smith Egypt Exploration Society Survey in the early 1960s. Results of the analysis of the architectural development of the main monastic church have been presented to a wider audience in the largest publication devoted to Christianity in the Nile Valley in recent years: *Aegyptus et Nubia Christiana, Jubilee Volume for Professor Włodzimierz Godlewski*, edited by A. Łajtar, A. Obłuski, and I. Zych, Warsaw (2016). A new approach to the architectural remains of the church resulted in a more holistic view of the history of the building, from its initial phases as a small sixth-century Egyptian-patterned church for a small community to a double-church suited for the needs of pilgrims visiting the monastery in tenth–eleventh centuries.

This year, research on the textual record from Qasr el Wizz concentrated around two axes: study of the ostraca and paleographical analysis of manuscripts. As for the latter, Wizz offers very useful insights, since it provides a specific context (the monastery), quite good chronological limits for the Coptic material which constitute the vast majority of the texts found (between the sixth and the eleventh centuries), and very interesting comparanda to well-dated finds from Egypt (e.g., the manuscript with the fragment of *Sermo Asceticus* by Stephen of Thebes), as well as to dated paleographic practices from Nubia (the touching of the lobes of the letter phi with red/orange ink; see Tsakos 2016, [https://www.academia.edu/25932136/A\\_palaeographic\\_detail\\_from\\_Nubian\\_manuscripts\\_the\\_decoration\\_of\\_the\\_lobes\\_of\\_the\\_letter\\_Φ\\_with\\_red\\_ink](https://www.academia.edu/25932136/A_palaeographic_detail_from_Nubian_manuscripts_the_decoration_of_the_lobes_of_the_letter_Φ_with_red_ink)).

Readings of some of the ostraca were improved during two special meetings of the Coptic-reading seminar of professor Anastasia Maravela, where one ostrakon proved to be part of correspondence between the Qasr el-Wizz monastery and the bishop of Omboi on religious matters, while another was analyzed as a school exercise. This ostrakon is written in a very uncertain hand, combines single letters, and includes a list of Greek words beginning with the letter *ksi*. Interestingly, the letter *ksi* is not written in the casual Nubian manner, namely as a Coptic *hori* with a superlinear stroke, but in a Greek or Coptic manner. This constitutes a valuable insight into the way writing was learned in this Nubian monastery, and tells us that a non-Nubian was the teacher from whom the student at Wizz copied.

## Cerre Matto (Serra East)

*Bruce Williams*

*Cerre Matto, the Christian Period Pottery, Small Objects, Glass, and Texts* (OINE 13) has seven chapters, apart from the obligatory introduction and conclusion, reflecting the complex reality of medieval Nubia. The chapter on pottery covers the usual types of vessel found in archaeological contexts, made more interesting here by the prevalence of decoration that includes Byzantine, Arab, and African elements. Of special interest is the glazed pottery, several hundred pieces here being published by Donald Whitcomb and Tasha Vorderstrasse. There were some new discoveries in glass, which is being studied by Carol Meyer. Alexandros Tsakos has just completed a major contribution on documents and potmarks. Finally, Serra contained some very limited evidence of Ottoman period activity, after ca. 1563, which needed separate treatment.

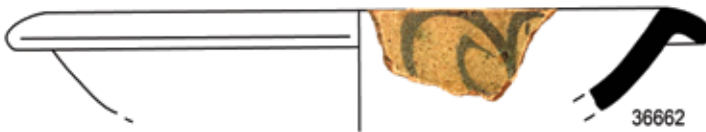
## ***Glazed Pottery from Cerre Matto***

*Donald Whitcomb and Tasha Vorderstrasse*

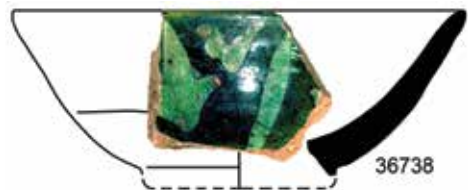
Although glazed ceramics have been found at a number of sites in Nubia, they are generally not found in large numbers. At Cerre Matto, however, the excavations uncovered a relatively large number of ceramics of different types which offers an opportunity to study the import of pottery into Nubia as well as possible signs of local production. The appearance in Nubia signals changes in the relationship between Nubia and Egypt, which provides new evidence for trade that occurred between the two regions. This connection has its focus on Aswan and, beyond this town, relations with Yemen and the Arabian coast of the Red Sea, pointing to Nubia as part of a larger regional trading network.

Although research by Greg Williams for his dissertation on Aswan ceramics at the University of Bonn suggests that polychrome glazed wares were common there by the ninth–tenth centuries (G. Williams, personal communication), these wares are not found at Cerre Matto. Rather, the glazed wares first appear in approximately the twelfth century, with the appearance of ceramics with underglaze painted designs, which is similar to types found farther north on Elephantine Island and in Aswan (G. Williams, personal communication). At least some of these may have been imports from the north, but the majority may have been produced locally. More study remains for this and the other glazed types found here.

The majority of glazed types are monochrome wares, some with graffiato decoration, on cream or frit fabric imported from Egypt. Sgraffiato or incised decoration becomes prevalent in the thirteenth–fourteenth centuries and are paralleled with slip-painted glazed wares; both of these types extend into the Mamluk and Ottoman wares of the fifteenth century. A very small number of sherds seem to be imports of these latest periods, decorated in blue and black underglaze painting on a white base. Two exceptional pieces may be mentioned: the first is black under blue painting probably from Syria, and the second is a fine lustre ware made in Andalusia, possibly Valencia, a long way from Cerre Matto but not unique. Large numbers of Spanish pottery were imported into Egypt and were presumably transshipped southwards.



*Figure 1. OIM E36662 — an orange-tan fabric with brown paint under a clear glaze; possibly twelfth century of local production*



*Figure 2. OIM E36738 — a dark red fabric with white slip paint under a green glaze; a thirteenth- or fourteenth-century Egyptian ware*

All this suggests that bulk trade in goods such as glazed pottery started in the twelfth century with a small amount of pottery, but increased considerably in the Mamluk period. This seems to reflect the historical situation in the region. The Ayyubids do not seem to have been particularly interested in Nubia aside from one large campaign against them, but Egyptian interest in the area increased in the Mamluk period and the area became, for a time, a subject state to Egypt. All this explains why the pottery increased through time, as ties between Egypt and Nubia became more pronounced and the two areas increasingly came into contact with one another.

### ***Glass from Cerre Matto***

*Carol Meyer*

The discovery of another box of glass sherds from Serra nearly tripled the corpus and resulted in a complete rewriting of the section on glass. It also permitted us to say much more about the corpus. Judging from the comparanda it fits well into the twelfth–fourteenth century range. The most common glass vessel type is a small vial for perfume or kohl, of a shape and decoration (if any) found in Egypt, the Sinai peninsula, and into the Palestinian area. Much of the glass is of poor quality, so bubbly and impure that it appears to be a local product manufactured from recycled glass. This speaks for a certain degree of glass working skill. One exception to this is a vial base made of a high-quality emerald green glass, probably with a high lead content, a type of glass found in small quantities from Kairouan in Tunisia to Fustat to Nishapur in Iran. Another unusual sherd has a very dark body decorated with vertical columns of short white stripes, a type of decoration attested, if sparsely, from Armant in middle Egypt to Hama in Syria.

### ***Texts from Cerre Matto***

*Alexandros Tsakos*

A visit to Oxford and the Griffith's archive launched a discussion concerning the provenance of the manuscripts for which Serra East has become renowned in the world of Early Christian literacy. The most valuable fruits from this often detective-like investigation are summed up by Bruce Williams in Appendix B of OINE volume 13. In the main body of chapter six dedicated to the textual record from Cerre Matto, the thorough edition of all unpublished texts illustrated the importance of private religious beliefs and practices among the inhabitants of



*Figure 3. Illustration from Serra Greek Manuscript 2S-95*

Cerre Matto. Against such a background, the examination of non-textual signs and symbols incised after firing on pottery sherds found at the site indicates means by which text and image correlated, and through the study of which our understanding of the development of Late Christian literacy and religion is enhanced.

### ***Illustrated Manuscript Page from Building SO at Cerre Matto***

*Tasha Vorderstrasse*

The illustrated manuscript page from Serra East (Serra Greek Manuscript 2S-95) comes from the Greek version of the *Liber Institutionis Michaelis*, which has been part of an ongoing research project by Alexander Tsakos (see Tsakos 2014, especially pp. 52–53, which refer to this manuscript). The illustration that appears here has thus far not received any comment, since previous publications have focused on the literary aspects rather than pictorial content, which is typical in studies of texts from Nubia, where illuminations on manuscripts have received limited scholarly attention. The illustration found at Serra depicts a man wearing blue striped pants sitting cross legged, pointing his right hand at something that is largely missing although it is in a circle (perhaps a cross?). He is looking to his left, however, possibly at a figure who is not well preserved. It is unclear whether the manuscript was in fact illuminated at Serra itself, as is the case of the Coptic manuscript in the British Library (British Library Or. 6799) that was to be deposited at Serra, but its place of production is not specified (Layton 1987, pp. 89–90, cat. no. 83). Nevertheless, an illuminated Old Nubian manuscript published by Griffith in 1913 (see Taf. II) was made at Serra, which shows there was a school of manuscript production there.

The studies of this manuscript illustration are ongoing, but thus far suggest a close connection with an Old Nubian illustrated manuscript page found at Qasr Ibrim, now in the British Museum (Frend 1965, p. 536, pl. 5; British Museum EA 82963). Neither of these manuscripts look like illustrated Coptic manuscripts from Egypt. Other illuminated manuscripts found in Nubia do however show parallels with Egyptian manuscripts such as the Qasr el-Wizz Coptic apocrypha (Hubai 2009, pp. 40–46), which could raise questions about where some manuscripts were actually made. Nevertheless, the close relationship between the Serra and Qasr Ibrim illuminations argues for a local manuscript production center in Nubia distinct stylistically from the one already identified at Serra. These questions continue to be investigated further for the final publication of the manuscript illumination.

## **Conclusion, the Publication Project, and the Future**

Beyond the immediate tasks, the work on the Middle Kingdom Fortress and its successor installations, OINE 11 must be completed. A number of smaller units and groups of finds from Qustul-Ballana, especially the Christian period, need attention, as do Meroitic and Christian remains from Dorginarti. Of special importance are the excavations by the Oriental Institute Nubian Expedition in the Fourth Cataract during 2007 and 2008, at Hosh el-Geruf, al-Widay, and Umm Gebeir — excavations that elicited interest from the *New York Times* for the discovery of the gold processing center of Hosh el-Geruf.



## Note

<sup>1</sup> The analyses were performed as a part of the project on the technology of Nubian murals, financed by the National Science Centre of the Republic of Poland (project no. 2011/01/D/HS3/0611).

## References

Frend, William H. C.

- 1965 "The Qasr Ibrim Expedition (Dec. 1963 – Febr. 1964)," in *Akten des VII. Internationalen Kongresses für Christliche Archäologie, Trier, 5-11 September 1965*, pp. 531–38. *Studi di antichità cristiana* 27. Città del Vaticano: Pontificio Istituto di archeologica Cristiana.

Griffith, Francis Llewellyn, editor

- 1913 *The Nubian Texts of the Christian Period*. Abhandlungen der Königlich Preussischen Akademie der Wissenschaften Jahrgang 1913. Phil.-hist. Classe 8. Berlin: Georg Reimer.

Hubai, Peter

- 2009 *Koptische Apokryphen aus Nubien. Der Kasr el-Wizz Kodex*. Translated by A. Balog. Texte und Untersuchungen 163. Berlin and New York: Walter de Gruyter.

Layton, Bentley

- 1987 *Catalogue of Coptic Literary Manuscripts in the British Library Acquired Since the Year 1906*. London: British Library.

Tsakos, Alexandros

- 2014 "The Liber Institutionis Michaelis in Medieval Nubia." *Dotawo* 1: 51–62.
-

## PERSEPOLIS FORTIFICATION ARCHIVE PROJECT

**Matthew W. Stolper**

To answer the first question posed by followers of the Persepolis Fortification Archive Project: the Other Shoe has dropped, at least part way (fig. 1). In mid-July 2016, just as this report was submitted, the US Court of Appeals for the Seventh Circuit affirmed the district court's summary judgment against the plaintiffs and in favor of the OI and Iran in the lawsuit over the Persepolis Fortification tablets (précis at <http://us7thcircuitcourtofappealsopinions.justia.com/2016/07/19/rubin-v-islamic-republic-of-iran/>, more at <http://www.chicagolawbulletin.com/Articles/2016/07/20/Museum-Persian-artifacts-7-20-16.aspx>). One of the judges on the panel dissented against obstacles to review by the whole circuit bench. Full review would have been desirable, as he observed, because in this decision the Seventh Circuit contradicts a Ninth Circuit interpretation of earlier rulings by the very same Seventh Circuit. This perhaps falls short of an actual "circuit split," a conflict between appellate rulings that would require Supreme Court review, but the difference in reasoning between the two circuits invites further appeal, and in October the plaintiffs filed a petition for a hearing before the US Supreme Court. Stay tuned to the PFA Project weblog (<http://perspolistablets.blogspot.com/>) for further developments

As the wheels of justice continue to turn, the Persepolis Fortification Archive Project continues to collect, correct, and display images, texts, seals, and catalog information. Dude-like, the editorial staff abides, sometimes daunted by the scope of the work to be done, sometimes delighted by fresh discoveries. As veteran student workers move on in their academic lives new students come into the Project, thanks to timely support from the Roshan Cultural Heritage Institute, and some student workers begin to build their own research with the products of the PFA Project.



*Figure 1. The Other Shoe: in a split decision, the Court of Appeals affirmed the summary judgment against the plaintiffs in the lawsuit over possession of the PFA*

When last year's *Annual Report* left graduate students Christina Chandler (Classical and Near Eastern Archaeology, Bryn Mawr) and Erin Daly (Classics), they were finishing the identification and recording of seals on the unpublished tablets being edited for publication by PFA Project editor Wouter Henkelman (École Pratique des Hautes Études, Paris). They were also beginning to make final collated drawings of selected new seals under supervision and instruction from PFA Project editor Mark Garrison (Trinity University, San Antonio). They focused first on seals with inscriptions in Aramaic or Elamite, typically used by offices and individuals of high administrative rank. By the end of summer 2015, they had completed drawings of about 50 tablets, and they are returning to this project during the summer of 2016. Daly has also begun to identify and record the seals on about 800 of the unpublished Elamite tablets and fragments whose texts I have recorded over the life of the Project. This complements identifications and records of seals on about 750 others already compiled by Tytus Mikołajczak (NELC). Garrison, Chandler, and Daly also continued to record seals on uninscribed Fortification tablets (PFUT), processing about 70 of the ca. 3,500 items with analytically useful seal impressions. Following up on the newly completed seal identifications, Garrison began to supplement and update earlier collated drawings of seals, drawings that were based on the smaller corpus of published documents. Mikołajczak did the same for seals impressed on the accounting tablets that are the focus of his dissertation work. The corpus of seals on Fortification tablets that the historian Albert Olmstead long ago foresaw as "a whole new museum of Achaemenid art" now includes more than 3,400 distinct legible images.

PFA Project editor Annalisa Azzoni (Vanderbilt University) finalized her readings of the ca. 245 Aramaic epigraphs (PFAE) identified so far on Elamite Fortification tablets, and she continues to add to this corpus as new items are identified.

During the past year she reviewed and finalized her readings of about 150 more of the monolingual Aramaic Fortification tablets. Her ongoing collaboration with Jan Tavernier (Catholic University of Leuven) on the Iranian names and words in the Aramaic Fortification material, and on the evidence of Iranian-Aramaic language interference, underpinned Tavernier's presentation at a conference in Leuven in February.

PFA Project editor Wouter Henkelman continued his work on the late Richard T. Hallock's draft editions of ca. 2,500 Elamite Fortification texts, collating and recollating the tablets, supplying textual and critical notes for a final, authoritative publication of this corpus. These notes sometimes draw also on his collations of additional related Elamite tablets and fragments that I have recorded in draft form.

I recorded first-draft editions of Elamite texts on about 30 more Fortification tablets and fragments, for a running total of about



Figure 2. A tablet nerd's garden of delight: a close parallel to a hitherto unique text. This damaged list of thousands of fruit seedlings or saplings — including apples, pears, dates, figs, olives, quince, mulberries, prune-plums, pomegranates(?), and others — and their nurserymen at several plantations ("paradises") corroborates Classical historians' descriptions of the lush paradises in the Persian heartland that Alexander the Great encountered

1,555 items (bringing the number of available Elamite Fortification texts to almost 6,400). Along the way, I encountered occasional surprises of the kind that warm the heart of a tablet nerd (fig. 2). Graduate students Teagan Wolter and Seunghee Yie imported about 300 of these editions, glossed and parsed in preliminary form, into the Online Cultural and Historical Research Environment (OCHRE), where PFA Project data is made public as it is captured and processed.

Most of my effort went toward collating my first drafts of previously recorded texts. This results in a humbling range and volume of corrections and a delightful range and number of connections to other PFA data. Beginning with the single-transaction memoranda, letters, and labels, I collated about 800 items. Graduate student Rhyme King (NELC) updated the editions, glossary entries, and links for about half of these in OCHRE. While doing so, he cleaned up inconsistencies in OCHRE data and display, revised and corrected entries in OCHRE's Elamite glossary, added new lemmas and newly attested forms to existing lemmas, and began to add bibliography to on-line editions.

Veteran photographer Ami Huang (graduate, NELC), mostly working alone, made more than 4,000 new conventional digital images of about 500 Elamite Fortification tablets, including supplementary images of about 400 previously documented items. Huang and Alexandra Hoffmann (graduate, NELC) edited about four-fifths of these in standard PFA Project format. In summer 2016, Hoffman also began to make conventional digital images of newly cataloged Elamite tablets and fragments, and Nilofar Mehdi Saraj (graduate, CMES) began to correct color and contrast issues in some previously edited images (fig. 3).

In August 2015, Edward Fernandez (graduate, CMES) left the Project after two years of productive, often solitary work in the high-resolution imaging lab. Jordan Johansen (graduate, Classics) and Emily Duzan (graduate, CMES) began work there in the autumn and Theresa Tiliakos (graduate, CMES) and Nathaniel Downey (first-year, College) in winter. Despite disruptions of staff turnover and training, they made dynamic polynomial texture mapping (PTM) image sets of about 1,100 surfaces from about 120 tablets and fragments (mostly uninscribed sealed documents and large-format Elamite tablets), and about 280 high-resolution, filtered-light scans to supplement records of about 210 monolingual Aramaic tablets and about 40 Aramaic epigraphs (fig. 4).

After years of cheerful, assiduous post-processing of PTM imagery, Aimee Genova (graduate, History) left for dissertation-related fieldwork in autumn 2015. Ashley Clark (graduate, History) and Timothy Clark (graduate, Classics), stepped up to continue processing the large backlog of these images, joined during summer 2015 by Project veteran Seunghee Yie (gradu-



*Figure 3. Updating images: Nilofar Mehdi Saraj (CMES) corrects and re-edits images of Elamite Fortification tablets*



*Figure 4. Documenting the Aramaic corpus: Theresa Tiliakos (NELC) makes filtered-light scans of an epigraph on a late-stage Elamite document*





Figure 5. Cutting the backlog: Ashley Clark (History) and Oliver Natarajan (Williams College) edit PTM images of Fortification tablets

ate, NELC) and during summer 2016 by Oliver Natarajan (undergraduate, Williams College) (fig. 5). Altogether, they processed about 1,750 image sets from about 200 tablets and fragments.

Since trials of the OI Conservation Lab’s portable X-ray fluorescence scanner described in last year’s *Annual Report* were promising, Shaheen Chaudhri (graduate, CMES) began to make pXRF scans of selected Fortification tablets (described and illustrated *infra*, in the *Annual Report* on Conservation). About 250 Elamite and Aramaic items selected by Henkelman and Azzoni have been scanned. Analysis and links to the other accumulated data on the tablets are deferred until

a large number of pieces have been scanned. These scans promise to add a new dimension to the documentation of the Fortification tablets, complementing images and editorial information with information on the material composition of the objects. Comparing the chemical signatures of the tablet clays with internal information of the texts, patterns of seal usage, and eventually with clay samples from Fars collected by recent archaeological projects should make it possible to refine our knowledge of the historical geography of Achaemenid Fars.

A new grant from the Roshan Cultural Heritage Institute has enabled the OI to take over the long-delayed publication of Mark Garrison’s monograph on *The Ritual Landscape at Persepolis: The Glyptic Imagery from the Persepolis Fortification Archive*, now scheduled to appear in the OI series *Studies in Ancient Oriental Civilization*. Noteworthy among ten other PFA-related articles published or submitted during the last year are substantially enlarged versions of papers on Achaemenid administration by Azzoni, Garrison, Henkelman, and me, first presented at the PFA anniversary conference in Basel in 2013, and now appearing as the

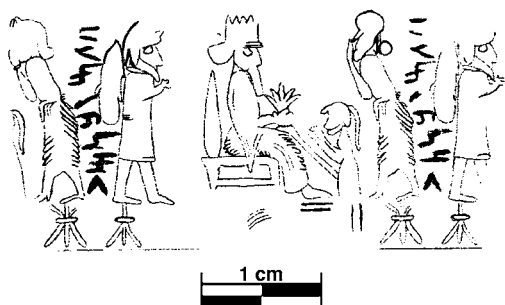


Figure 6. The enthroned king, his attendants, and a kneeling figure: working collated drawing of PFUTS 0305\*, the focus of Christina Chandler’s MA thesis

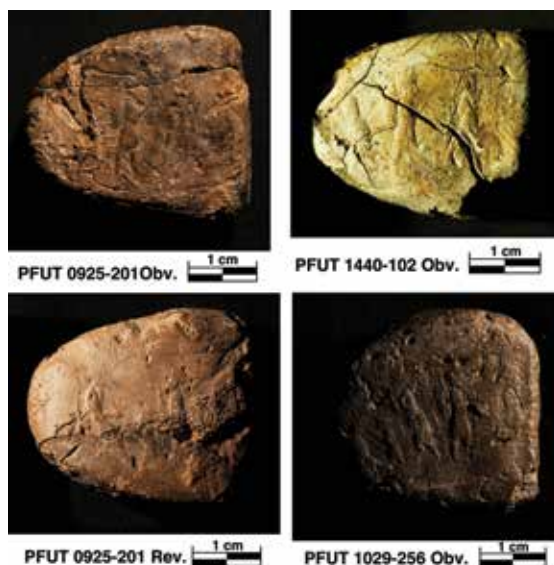


Figure 7. Pieces of the audience scene: some of the incomplete impressions from which Mark Garrison and Christina Chandler compiled the working drawing of PFUTS 0305\*

core of a conference volume to be published in the series *Classica et Orientalia*; surveys on art, administration, religion, and language by Garrison, Henkelman, and me, to appear in the *Oxford Companion to the Achaemenid Persian Empire*; and contributions by Dusinberre, Garrison, Henkelman, and me on art, chronology, recording methods and other topics, to appear in volumes that celebrate the careers of distinguished colleagues.

As publications like these make new basic evidence available, we are starting to see Project work bearing fruit in current published research and criticism by senior colleagues. At another stage of the research process, Christina Chandler and Rhyné King submitted MA theses at Bryn Mawr and University of Chicago, respectively, based on new data arising from the PFA Project, exemplifying a rising generation of Achaemenid scholars versed in the rich material of the PFA (figs. 6, 7, and 8).

PFA-related public lectures and presentations at academic meetings delivered by Project members include Henkelman’s lectures on “Granaries, Camels and Tablets” at Tehran University and on “Persepolis, Arachosia and Bactria” at UCLA; Tytus Mikołajczak’s presentations on seals used on the accounting texts of the Fortification Archive at the annual meeting of the American Oriental Society (Boston), the *Rencontre Assyriologique Internationale* (Philadelphia) and the University of Poznań; and presentations by Henkelman and me on aspects of Achaemenid Elamite writing, at the third installment of the Neubauer Collegium’s “Signs of Writing” project organized by Christopher Woods and Edward Shaughnessy, in Paris.

Since 2006, the PFA Project has increased the number of known Elamite Fortification documents (the largest Elamite language corpus anywhere) by more than 40 percent; increased the number of known Aramaic Fortification documents (the largest unpublished Imperial Aramaic epigraphic corpus) by about 80 percent; increased the number of known epigraphs on Elamite tablets (the largest corpus of such epigraphs anywhere) by about 300 percent; increased the number of identified Fortification seals (the largest corpus of Achaemenid art anywhere) by about 125 percent; increased the number of publicly accessible Persepolis Fortification tablets and fragments — via images, preliminary and advanced text editions, seal drawings, and/or cataloging information — by about 350 percent; and published many of the implications of this corpus for Achaemenid languages, art, religion, society, institutions, geography, and history (sometimes with effects beyond the ordinary limits of ancient philology, art, and history).



*Figure 8. The royal audience in monumental form: relief moved in antiquity from the Apadana staircase to the Treasury of Persepolis, where it was discovered by OI excavators in 1935-37*

Is this a comprehensive record of the PFA? Yes, in the broad sense that it has improved the breadth, depth, understanding, and availability of the corpus by orders of magnitude. Is it an accurate record? Not yet; it is a record compiled under emergency conditions and often released in first-draft form, so our focus turns increasingly to correction and consolidation of the records. Is it a complete record? No; as is true of all progressive research, the more we do and know, the more we can do and know. As we learn again every day, the results up to now make previously useless fragments into tractable data, and there will be years of fruitful original work to do even after the archive leaves the custody of the OI.

---

## IRRIGATION IN EARLY STATES: NEW DIRECTIONS

**Stephanie Rost**

The organization of ancient irrigation has been of considerable interest in the field of archaeology and anthropology because many early civilizations developed in large river valleys, such as in ancient Egypt, China, Mesopotamia, and the Indus Valley. Earlier approaches argued the civilizations that emerged in large river valleys followed a similar trajectory in their evolutionary history owing to their dependency on irrigation. Many scholars at the time assumed the organization of irrigation required centralized control, which had socio-political as well as economic consequences of a magnitude that led to the development of social and political complexity and eventually to the formation of the state. Scholars have tested this assumption and shown, based on the results of later studies, that centralized control is a choice rather than a necessity. Once the evolutionary perspective was taken out of the investigation of ancient irrigation, space was created for a renewed investigation of the multiple functions irrigation might have in the development and functioning of early states.

The conference made use of this space in conducting once more a cross-cultural study of ancient irrigation, with a larger quantity of data but, more importantly, with the goal of highlighting the diversity of functions that irrigation had in early states and the variety of conditions under which it developed. The examples presented at this conference took us around the globe, from South to North America, to Africa, to West, Central and Southeast Asia, and highlighted the diversity of how ancient irrigation was organized in various historical and cultural contexts. The papers were presented in four sessions, with the first session investigating the “Features of Irrigation,” highlighting the diversity of how irrigation systems are constructed and managed. The second session provided an overview of the data and methods used in the “Empirical Investigations of Ancient Irrigation.” The third session investigated the “Economic and the Socio-Political Function of Irrigation,” and the last session, the “Cosmological and Cognitive Dimension of Irrigation” in ancient states. The conference showed that irrigation systems are exceedingly well suited for a cross-cultural comparison, as they are both social and physical systems whose boundaries can be clearly delineated. Both water control technology and the managerial requirements are well understood, and when compared systematically, similarities and difference do become very apparent. Explanatory models on the differences and similarities between cases has the potential to shed light on many aspects of early states, far beyond the organization of irrigation. The conference is discussed in greater detail in “Irrigation in Early States: New Directions,” by S. Rost, *Oriental Institute News & Notes* 230 (Summer 2016): 16–19.

---



## TELL EDFU

**Nadine Moeller and Gregory Marouard**

In 2015, the archaeological work continued in two areas on the tell, in Zone 2 with Old Kingdom settlement remains, which is located to the west of the Ptolemaic temple, and in Zone 1, which is the area where we previously discovered a large silo court and an administrative building complex on top of the tell, along the eastern side. We also excavated three trenches in order to investigate several sections of town walls along the southwestern side of the tell. In addition, we also continued the documentation of the decorated stone blocks in the blockyard and the study of objects that are currently stored in the magazine of El-Kab. One of the main objectives of this season was to continue our investigation of the earliest settlement remains in the Old Kingdom zone (Zone 2) in order to get a better understanding of

the evolution of structures dating from the Fourth to Sixth Dynasties. Additionally, we decided to extend the excavation in Zone 1 to the north in order to reach the limits of the northern columned hall and to investigate possible additional silos, all of which are currently buried underneath later settlement remains. Another aim of the ongoing research concerning the long-term evolution of the ancient town of Edfu is the study and recording of the late Old Kingdom, First Intermediate Period, and Middle Kingdom town walls and precincts.

The 2015 season of excavations at Tell Edfu was directed by Nadine Moeller and Gregory Marouard, and took place from October 8 to November 14. The team consisted of Natasha Ayers (ceramics), Kathryn Bandy (sealings and small finds), Rose Campbell (anthropology), Aaron de Souza (Nubian pottery), Elise MacArthur (photography), Sasha Rohret (archaeology), Emilie Sarrazin (archaeology), Ariel Singer (blockyard), Oren Siegel (archaeology), and Jonathan Winnerman (blockyard).



*Figure 1. Overview of Zone 2 at the end of the 2015 season*

## Excavations in Zone 2 – Old Kingdom Settlement

This area (fig. 1) has been cleaned in previous years of several meters of sebakh debris which covered this zone.<sup>1</sup> In 2012 it was possible to start excavations on the northern side of Zone 2 which led to the discovery of three successive phases of enclosure walls and a large building of which only the entrance area has been preserved. The whole zone has suffered much from the removal of sebakh (fertilizer for agriculture) more than 100 years ago, but luckily enough is preserved to investigate the Old Kingdom settlement remains in much detail. This is especially important since only a few settlements of the early Old Kingdom are known in the south of Egypt dating to the early third millennium BC.

At the beginning of the season, the interior fill of several small round and oval shaped grain silos was excavated, which belong to the last preserved phase of occupation in this area during the Sixth Dynasty (fig. 2). This level of occupation had been most severely affected by the extraction of soil for fertilizer (sebakh), leaving larger holes and making the site look like “swiss cheese.” These small silos were most likely intended for domestic food storage. They had originally been built underground and seem to be part of a domestic settlement quarter that took over this zone after the earlier town walls had fallen out of use and the ground was leveled for new installations. This preparation of the ground involved the dismantlement of an older wall system, and the leveling operations can be witnessed by a thick layer of mudbrick demolition fill covering much of the surface in this area. These small silos contained different kinds of household refuse, in some cases a lot of ash, and mixed pottery fragments. No traces of the original material stored in them has been found and it is evident that they were filled in with trash when they fell out of use some time at the end of the Old Kingdom. According to a preliminary analysis of the ceramic material found in these fill layers, the material is relatively homogeneous and suggests the relatively quick dumping of material to fill up the by-then unused silos, which was probably also necessary in order to provide a stable ground level for later structures and foundations. The irregular shapes of these silos are quite noticeable (fig. 2), ranging from the better known round shapes with a small circular opening on the top that would have corresponded to the height of the above lying ground level from which these storage installations could be filled and emptied, to the more unusual shapes of some of the oval silos, which are probably the result of the older underlying wall systems these silos were built into, which restricted the available space underground.

These lower settlement layers were reached in 2014 in several deep trenches dug along the northern part, and those trenches were extended during the 2015 season in an area that measures 8 m × 4 m. It confirmed that even the oldest enclosure walls were not built on previously unsettled ground but are in fact covering older mudbrick walls that were directly built on the geological substrata (Nile sand and pebble deposits). Most of those are rather thin, and in most cases only one mudbrick thick (ca. 15 cm), but they are carefully built at right angles with good quality bricks giving the rooms a very structured appearance. A preliminary analysis of



*Figure 2. An oval grain silo of the Sixth Dynasty in Zone 2*



Figure 3. Overview of the late Fourth Dynasty remains in the northern part of Zone 2

the pottery fragments recovered from the associated floor levels revealed that they can be dated to ca. the second half of the Fourth Dynasty. These installations are the oldest settlement remains ever discovered so far in Edfu (fig. 3). They provide new evidence for the origins of the ancient nome capital dating back to the earlier part of the third millennium BC.

The finds from these deeper trenches revealing Fourth Dynasty remains include stone tools, flint chips and blades, many beer jars, bread-molds, and fine ware vessels. A significant amount of well-made red polished, carinated bowls, which are also known as “Meidumbowls” after their first discovery at the site of Meidum in the Memphite region by Flinders Petrie, were excavated. The shapes are typical for the second half of the Fourth Dynasty according to the preliminary analysis of the pottery assemblage. In addition to pottery, small pieces of copper and copper slag have been found and some fragments of crucibles, particularly for a phase that immediately followed the abandonment and the demolition of the Fourth Dynasty settlement remains. They attest to some metallurgical activity in this part of the ancient town which is an important attestation for a more “official” kind of activity, since metallurgy and copper



Figure 4. Émilie Sarrazin excavating a Fifth Dynasty pottery kiln set into the first phase of enclosure wall



smelting are mostly associated at these early times with administrative and official buildings instead of smaller household activities.

A pottery kiln, probably from the second half of the Fifth Dynasty, was also discovered in the eastern part of the Zone 2 area (fig. 4). The lower chamber of this structure was cut into the first phase of the enclosure wall and it is so far, with an example from the settlement at Elephantine in the First Cataract region, one of the oldest and unique examples for such an installation in Upper Egypt.

## Expansion of Excavation Area to Northern Side in Zone 1

This season we also decided to continue the excavation to the north of the silo court (fig. 5) and the underlying administrative building complex characterized by two columned halls. In 2011 we made the discovery of more than forty clay sealings naming the Hyksos ruler Khayan on a mudbrick bench in the northern columned hall. This year we decided to continue the excavation down to the northern columned hall floor in the northeast corner of the later silo court. There we were able to reach, in a small area measuring 5 × 2 meters, the mud floor of the northern columned hall. We also found two more holes in the floor, which are the negatives left when the stone column bases were ripped out after the abandonment of this building complex and before the large silos were built later, during the Seventeenth Dynasty, above it. We were also able to identify the layer of the final abandonment in this new trench, which is char-



*Figure 5. Overview of Zone 1 with the new excavation area to the north of the courtyard*





Figure 6. Ceiling fragments from the collapse of the northern columned hall roof

acterized by collapsed roof and ceiling plaster fragments that show the imprints of the wooden beams and reeds used for the roofing (fig. 6). Directly underneath it we excavated the layer that can be associated with the final occupation of the northern columned hall. It is characterized by several phases of renewal of the thick mud floor, which were excavated and entirely sieved in order to keep any of the finds that come from this level. We discovered several sealings with impressions of scarab seals; some of these are new motifs and others we already knew from the previous excavations of the other parts of this building. There was also a concentration of tiny amethyst and rock crystal chips in addition

to some pieces of carnelian, which indicate that some manufacturing activity, probably for beads, had been carried out in this part of the columned hall.

We also expanded the excavation beyond the large east–west running wall, which currently limits the silo court to the north (fig. 5). The first structures on the uppermost level of occupation that we found consist of walls dating to the Late Period. They were part of several domestic buildings, which are characterized by large open spaces and relatively thin walls that did not seem to have supported more than one story. These walls were already excavated by the French mission in the 1920s, who had removed the associated floor layers and only left the walls standing with little connecting stratigraphy. In the remains of a small square silo that belongs to a later phase of occupation of the Late Period houses, a partial skeleton of a child was found, but from the archaeological context it is not possible to determine exactly the date of its burial (fig. 7).

Underneath these house remains, a large trash deposit including many pottery vessels such as beer jars and bottles dating to the mid-Eighteenth Dynasty were excavated (fig. 8). A complete Nubian cooking pot was found in the same trash deposit which contained the burial of an infant.

Below this thick fill of pottery, further structures appeared, which belong to the early New Kingdom according to the pottery evidence. We were able to excavate two rooms with a connecting door, and the eastern one was equipped with two column bases. Remains of a staircase belonging to this house were found on its northern side (fig. 5). To the southern side a large open courtyard was found which contained four column bases made of sandstone in the southwestern corner. On its northeastern side, the remains of two circular bread ovens were found, which were still covered by white ash. The excavation of this building will be continued during the next season. As far as the preliminary analysis of the ceramic evidence stands, the house is likely to be contemporary to one of the last phases of the silo court, when the large east–west running mudbrick wall was built to limit the silos to the north. The function of this building, as far as can be seen from the excavated remains, seems to be domestic, but it is impossible to exclude that the owner or inhabitant was closely linked to the silo court and its supervision.



Figure 7. Parts of a skeleton found in Silo 802



Figure 8. Trash layer with mid-Eighteenth Dynasty pottery

## Study of the Enclosure Walls

In order to continue our study of the evolution of the various town walls at Edfu, three areas with enclosure walls were cleared on the southwestern side of the tell (fig. 9). They have been studied and recorded for further research conducted by Oren Siegel for his dissertation. Oren cleaned parts of these large mudbrick walls and excavated three small trenches in order to investigate the foundations of these walls, with the aim to determine the date of their construction by using pottery fragments from associated occupation and construction levels. Close to the Old Kingdom cemetery several town walls were analyzed which date to the end of the Old Kingdom/early First Intermediate Period. These walls follow a kind of irregular zigzag course adapting to the older mastaba superstructures, and they were later replaced by a thick wall dating to the Middle Kingdom. This sequence of enclosure walls has close parallels to the walls we investigated in Zone 3 last year along the northern side of the tell.



Figure 9. Oren Siegel and some of our workers clearing a section of an enclosure wall

## Study of the Pottery

The study of pottery which has been excavated in the late Middle Kingdom and early Second Intermediate Period administrative complex in Zone 1 was continued by Natasha Ayers and Aaron de Souza (fig. 10). The aim is to establish a new pottery sequence for the transition of the 13th Dynasty and the early Second Intermediate Period characterized by the reign of Khayan in the Delta. Another aim has been to investigate the Nubian pottery from the town which provides important new information about the differences between Nubian ceramics found in settlements and those vessels excavated from cemeteries situated along the margins of the Egyptian Nile valley.



Figure 10. Natasha Ayers and Aaron de Souza holding beer jars from the excavations

## Work in the Blockyard

The study and recording of decorated stone blocks in the Edfu blockyard area was continued by Jonathan Winnerman and Ariel Singer (fig. 11). The main aim of this season was to complete the photographic documentation of the blocks and to continue adding information to our database. In addition, more hand copies were made of those blocks that seem to belong to a small Roman chapel and which are decorated in a rather peculiar style with interesting motifs.

All the blocks had been mounted on benches and arranged in rows by the end of the 2014 season, and we therefore did not need to move or reorganize the blocks as we have had to do in previous years. Since we still needed to rotate blocks in order to properly document them, foam pads were used to prevent any damage to their bottom or sides. This methodology allowed for the easy and safe movement of the blocks.

Most of the epigraphic work focused primarily on a group of late Ptolemaic or early Roman blocks, which are displayed on the second bench in the blockyard. These blocks are

remarkable for their number but also the relatively poor quality of their carving. Many surfaces appear to have been unfinished or carved asymmetrically, yet they still reveal important and surprising information about the Greco-Roman period in Edfu. Several of these blocks are decorated on all four sides, which indicates that they belong to a previously unknown free-standing structure, probably a chapel or shrine, in Edfu. The combination of depicted human figures is also unique, as the reliefs show child gods, gods like Bes, elements of royal iconography, and festive processions.



Figure 11. Ariel Singer copying a block on a sheet of transparent plastic foil



## Small Finds and Work in the Magazine of El-Kab

The excavations in 2015 recovered seal impressions, ostraca, a scarab, miscellaneous beads, and many pieces of flint (mostly lithic debitage). All small finds were sorted, numbered, and documented in the field. More than 100 seal impressions were found during the excavations of the northern columned hall floor (see details above), with motifs that are typical for the late Middle Kingdom and Second Intermediate Period. Seven ostraca were found, all of which are broken. Five are inscribed with hieratic (dating from the Old Kingdom through New Kingdom) and two show Demotic texts. In addition, a scarab naming Thutmose III was found during the excavation of the New Kingdom settlement remains situated in Zone 1, north of the silo court. The excavations also yielded many small faience beads (ring, tube, and round beads) from various contexts.

In addition to the small finds objects, two boxes of animal bones were recovered from the excavations. Two human remains were also found, one of which was an infant burial in a Nubian cooking pot (see above). Both the faunal and human remains were studied during the 2015 season in the magazine of El-Kab and on site.

For two weeks — from October 28 to November 10, 2015 — the work on unregistered objects continued in the magazine of El-Kab, including the study, documentation, and photography of the seal impressions, ostraca, animal bones, and human bones. This work focused on finalizing documentation for publication. Rose Campbell continued the study of three skeletons, which were discovered in 2012 in a silo along the northern town wall in Zone 3. Kathryn Bandy worked on the analysis of the clay sealings showing seal impressions of the late Middle Kingdom and Second Intermediate Period, which were excavated in the columned hall complex during the 2010–2012 seasons in Zone 1. A selection of those sealings were photographed by Elise MacArthur. Sasha Rohret studied the faunal remains (animal bones), specifically the contexts from which hippopotamus bones were discovered in the 2009–2011 seasons in Zone 1. Sasha also started analyzing the faunal remains that were recovered during this season’s excavations in Zones 1 and 2 (fig. 12).



*Figure 12. Sasha Rohret holding a hippopotamus bone from the excavations in Zone 1*



## Acknowledgments

The directors of the mission, Nadine Moeller and Gregory Marouard, would like to thank the Edfu inspectorate for their support and collaboration, specifically Susi Samir Labib and our two inspectors on site. We would also like to express our gratitude to Hany Abu el-Azm for his help with our application to the Ministry of State of Antiquities. A special thank you also goes to Madame Amira, Jane Smythe, and Mary Sadek from the American Research Center in Egypt, Cairo office. We are of course also very grateful to the Oriental Institute, foremost Gil Stein (director of the OI), for his unfailing encouragement and help, in addition to the numerous Oriental Institute donors without whom this work would have not been possible.

### **Note**

<sup>1</sup> See Moeller and Marouard 2013; Moeller and Marouard 2015.

### **References**

Moeller, Nadine, and Gregory Marouard

2013 "Tell Edfu." *The Oriental Institute 2012-2013 Annual Report*: 113-25.

2015 "Tell Edfu." *The Oriental Institute 2014-2015 Annual Report*: 153-65.

---

# EXCAVATIONS AT ZINCIRLI HÖYÜK IN TURKEY: 2015 SEASON

Virginia R. Herrmann and David Schloen

## Introduction

Since 2006, the Oriental Institute has been excavating the Bronze and Iron Age site of Zincirli Höyük in Turkey, the ancient walled city of Sam'al, under the direction of David Schloen. The 2015 excavation season inaugurated a new phase of the excavations, which are now being conducted in partnership with the Institute for Ancient Near Eastern Studies of the University of Tübingen in Germany. The 2015 excavations at Zincirli were co-directed by David Schloen (Chicago) and Virginia Herrmann (Tübingen). In previous seasons, nine excavation areas (on the citadel, in the lower town, in the outer fortifications, and in two extramural buildings) had been opened (Schloen and Fink 2009a, 2009b; Herrmann and Schloen 2016), and a magnetometry survey of all accessible areas of the lower town and some extramural areas had been carried out in 2007 and 2009 (Casana and Herrmann 2010). In the 2015 season (July 20 to September 6), four areas (three existing and one new) were excavated by a team of eighteen archaeologists and students, supported by twenty-five local workers and fourteen specialists in ceramics, animal bones, plant remains, mapping, illustration, photography, and conservation (fig. 1). Previous seasons had concentrated on the period of Neo-Assyrian domination in the eighth and seventh centuries BC that is easily accessible in many places on the mound, but the current focus of excavations is the earliest Iron Age settlement. The aim is to investigate the process of Iron Age urbanization from a more holistic perspective that includes both elite/monumental and non-elite/non-monumental contexts. Unanticipated progress was also made this season on the long-term goal of tracing the full settlement history of Zincirli, back into the Bronze Age.

## Eastern Citadel: Area 2

Area 2 on the eastern side of the mound was previously excavated in 2012 and 2013. It is a narrow, 4 × 20 m step trench that runs northwest-southeast from the highest point of the mound down to the lower terrace to the south (fig. 2). In 2015, work in this area was supervised by Kate Morgan (PhD candidate, University of Pennsylvania), assisted by Olivia Hayden and Jane Gordon, and focused on a 3 × 7 m area in the center of this step trench (square 46.0). The goal was to reach below the Iron Age occupation to find out whether there were any Middle or Late Bronze Age levels above the Early Bronze Age occupation.

It was found that some fragmentary Iron Age II walls uncovered in 2013 were resting immediately on a thick layer of burnt destruction debris. When this destruction debris was excavated, parts of two rooms of a Middle Bronze Age building with mudbrick walls on stone foundations were uncovered. The building was terraced down the ancient slope, so that the floor of the lower room was ca. 60 cm below the floor of the upper room. The rooms were filled with intensely burnt debris and smashed pottery. The upper room contained fragments of

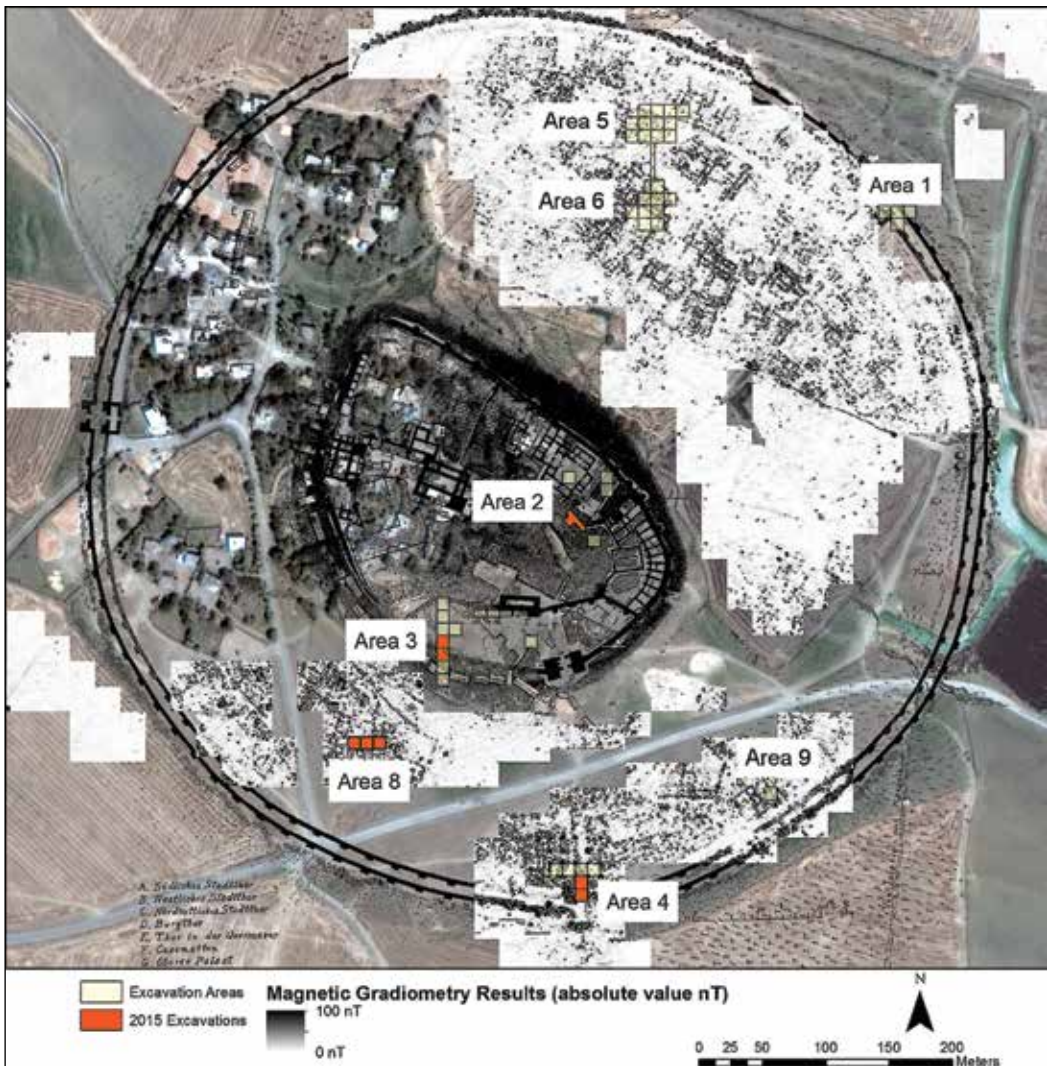


Figure 1. Zincirli Höyük, showing excavation areas, magnetic gradiometry results, and excavated architecture from the late nineteenth-century excavations (after von Luschan, Humann, and Koldewey 1898, pl. 29)

more than forty different vessels, including six storage jars, several jugs and juglets, several bowls, a flat baking tray, a lid, and a funnel (fig. 3). The lower room was greatly disturbed by a trench from the late nineteenth-century German excavations at Zincirli, but it also contained one storage jar that was full of burnt seeds of bitter vetch. Many of these vessels can be restored to a complete or nearly complete condition (fig. 4). They have parallels especially at nearby Tilmen Höyük (Duru 2003), but a particular painted jug type (fig. 5) has also been found at Middle Bronze Age Kültepe Stratum Ib (Emre 1995) and Tarsus (Goldman 1956, fig. 377). A mud-plastered feature that may have been an oven was also found in the upper room. Nearby were a stone hammer head, a bronze pin, a clay bulla with a stamp seal impression, and a clay figurine of a nude woman wearing a headdress and a necklace. This type of figurine

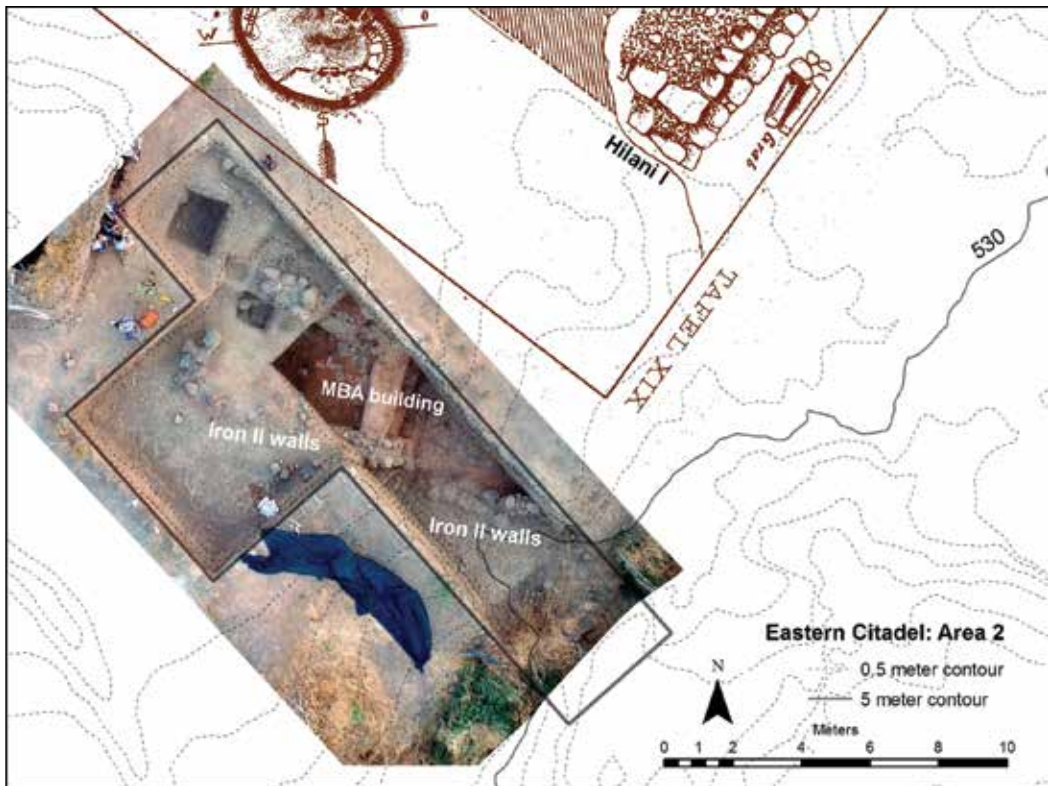


Figure 2. Area 2 on the Eastern Citadel, showing its proximity to Hilani I excavated in the late nineteenth century (von Luschan, Humann, and Koldewey 1898, pl. 19). Stone wall foundations of the Iron Age cut and covered a terraced Middle Bronze Age building that had been destroyed by fire

is found throughout the Levant in the Middle and Late Bronze Age. Two of the storage jars in the upper room bore cylinder seal impressions from the same seal, rolled along the rim before firing.

The burnt Middle Bronze Age building must have been eroding out of the slope of the mound for the centuries during the Late Bronze Age and Early Iron Age when the mound was unoccupied. In the Iron Age II, a stepped stone retaining wall was cut into the burnt debris in order to stop the erosion (fig. 2). At the base of the retaining wall, a 2-m wide level foundation of cobblestones was laid, perhaps as a base for a fortification wall. Parts of both of these stone walls were cut by the nineteenth-century German trench. This makes it difficult to know whether the two stone walls were contemporary, or if one was built after the other.



Figure 3. The upper room of the destroyed Middle Bronze Age building in Area 2. A number of smaller vessels fell on, in, and around a group of four storage jars in one corner





Figure 4. Cooking vessels from the Middle Bronze Age building in Area 2



Figure 5. A bichrome painted barrel jug from the Middle Bronze Age building in Area 2

The excavations in Area 2 this season revealed a Middle Bronze Age occupation of Zincirli that was previously unknown. Furthermore, the preservation of the contents of these rooms due to their violent destruction promises to reveal much new information about the Middle Bronze Age of this region in future seasons.

### Southern Citadel: Area 3

Area 3 is a long step trench down the southern edge of the citadel mound. It has been excavated every year since 2007 (except 2009 and 2014). In 2015, only squares 55.68 and 55.78 on the edge of the mound were excavated, supervised by Elizabeth Bloch-Smith (St. Joseph's University), assisted by Austin Terry, Martin Weber, Tuğba Gencer, and Barbara Bolognani. This season's goals were to better understand the dating and construction of the citadel fortifications and to expose occupation predating the Iron Age II–III citadel wall and relating to the earth rampart. The most significant result this season is that the Local Phase 5 citadel wall was constructed relatively late in the Iron Age (after ca. 750 BC), replacing an earlier fortification system. The remains excavated this season are described below from earliest to latest.

Local Phase (LP) 7 (Iron Age II) consists of an earthen rampart with a flat top ca. 4 m wide. It slopes down to the south on the edge of the mound and begins to slope down to the north as well, under the LP 6 occupation layers excavated this season. The top of the rampart was exposed beneath the later (LP 5) citadel wall, and a probe was made into it in the northeastern part of square 55.78. The rampart is constructed of layers of red, brown, and yellow clay and mudbrick containing Early Bronze Age and Middle Bronze Age pottery, alternating with layers of gravel containing a mix of Iron Age II–III and Early and Middle Bronze Age pottery (fig. 6a–b).

Local Phase 6 (Iron Age II) consists of buildings and occupation layers constructed after the rampart but before the later (LP 5) citadel wall (fig. 6a). Two walls with single-course stone foundations run up onto the Phase 7 rampart, but were cut by the LP 5 citadel wall foundation. They must have originally abutted an earlier fortification wall on top of the rampart



a



b

Figure 6a-b. (a) Area 3 on the Southern Citadel, showing LP 6 walls running up to the LP 7 earthen rampart. They may have once connected to an LP 6 fortification wall on top of the rampart, but were cut by the LP 5 citadel wall; (b) east section of square 55.78 in Area 3, showing the LP 5 citadel wall foundation cutting a wall foundation of LP 6 and the LP 7 earth rampart below

that was also removed by the construction of the LP 5 wall. Though it only has one course of stones, the eastern wall foundation is quite wide (1.5 m) and may have formed part of the fortifications — either part of a fortress on the edge of the mound, or one side of a casemate wall that ran along an earlier mound edge oriented northeast–southwest. The small area of beaten-earth floor exposed between these two walls produced no finds and very little pottery, but was covered with white decayed organic remains (phytoliths), probably from the collapse of the ceiling onto the floor. To the north, several mudbrick walls were outlined, and one room was partially excavated, though without reaching the floor. There may be two subphases of mudbrick walls. A large sherd of imported Cypriot Bichrome IV painted pottery was found in the green clay surface east of the wide stone wall foundation and below the LP 5 foundation trench. This suggests a date for the end of LP 6 no earlier than ca. 750 BC. Other Cypriot imports in this phase include sherds of Black-on-Red and White Painted wares, which can date to the ninth and eighth centuries BC.

Local Phase 5 consists of the Iron Age II–III citadel wall and associated architecture. The citadel wall with two courses of stone foundation below a course of timber beams was already exposed in 2007. The timber beams were no longer preserved, but were evident as linear spaces with cobblestone filling between them. This is the equivalent of the “Burgmauer” or “Rostmauer” excavated by the nineteenth-century German expedition (von Luschan, Humann, and Koldewey 1898, pp. 116–21). This season it was clear that the two foundation courses were laid in a foundation trench cut into the top of the earlier rampart (fig. 6b). As described above, this foundation trench also cut the earlier LP 6 walls and floors. The timber beams would have been at ground level when the wall was constructed. Inside the citadel, the LP 6 mudbrick walls were shaved down flat to form a floor for several LP 5 walls revealed already in 2013 in the northern half of the square. A grinding installation was found on this floor.

Local Phase 4 consists of Iron Age III occupation associated with the LP 5 citadel wall. The architecture of this phase was previously excavated in the 2010 and 2012 seasons. The only new LP 4 feature in 2015 was a large circular pit in the northeast corner of 55.68, cutting LP 5 and 6 walls (fig. 6a). Inside this pit were found a nearly complete painted juglet (probably a Cypriot import of the seventh century BC) and a stone spindle whorl.

## South City Gate: Area 4

Area 4 is located on the north side of the South Gate of the lower town wall, which was the main entrance to the city. It was previously excavated in 2007, and on a smaller scale in 2012 and 2013. This season, only square 76.59 just inside the entrance to the Gate from the lower town was excavated by Marina Pucci (University of Florence), with the assistance of Axel Bauron, Josif Atanasov, and Martina Candela. In 2013, several paving layers of the street leading into the town from the gate had been revealed. The goal for this season was to reach the earliest occupation layers in the south lower town and to understand whether the South Gate was constructed before or after the earliest occupation of the lower town.

Below the earliest street pavement connected to the Gate threshold, several stone wall foundations were uncovered (fig. 7). These ran at a different orientation than the Gate and below its foundation level, so they clearly predated the Gate’s construction. No floors were found with these walls, which were partially robbed when the Gate was built. A couple of Iron Age sherds were found in the foundations, suggesting that they were built in this period, sometime before the Gate, but it is not yet possible to be more specific about their date. Regardless, this

is the first indication of Iron Age occupation of the lower town prior to the construction of the circular double fortification wall with its three gates. Whether this was an earlier lower town or an isolated group of buildings is yet undetermined.

In one corner of the trench, a human burial was found in a pit that may have cut through a poorly preserved area of the later Iron Age street pavements, but was previously unidentified. The burial was of a single individual with the skull toward the east and facing south. The arm bones, the pelvis, and the leg bones were found in their correct anatomical positions, indicating primary burial, but the hands, ribs, and vertebrae were not preserved. As burial gifts, a bronze bowl, iron fibula, iron dagger, and several iron arrowheads were found placed at the waist. These are still undergoing conservation treatment and need further study.

The above-mentioned walls were set into a layer of burnt mudbrick debris. Below this debris were the smashed remains of several ceramic vessels of Early Bronze Age date lying on or set into a pebble floor (fig. 7). No associated architecture was found, but elsewhere in the trench a partially cobble-paved floor clearly ran below the walls that predated the Gate. While Early Bronze Age material was known already from the high central mound of Zincirli, this is the first evidence of a lower town occupation of this period. Two radiocarbon dates from the burnt debris confirm a date for this destruction in the mid-third millennium BC (personal communication, Sturt Manning).



Figure 7. Area 4 by the South City Gate. A sounding below the Iron Age II and III South Gate and associated street revealed wall foundations of an earlier Iron Age phase, set into a destruction layer of the Early Bronze Age

## Southwest Lower Town: Area 8

Area 8 is a new excavation area of 30 × 10 m in the southwest lower town of Zincirli (squares 64.41, 42, and 43) (fig. 8). In 2015, it was supervised by Laura Malric-Smith (Cambridge University), assisted by Nicole Herzog, Sarah Lange, Ebubekir Bayram, Marta Fernández-Poza, and Seda Sönmez. The geomagnetic map shows one or two buildings and an open area in this space. One goal of this new area is eventually to produce a full Iron Age occupation sequence for the south lower town and compare it to the occupation sequence already excavated in the north lower town. Another aim is to expand and diversify our picture of the social and economic organization of Sam'al's first Iron Age inhabitants.

The latest phase of architecture was not very well preserved, with areas of subsidence and some late robbing of stones and disturbance by plows. In the center of the area (square 65.42) was a large walled courtyard partially paved with pebbles and containing also some enigmatic stone features with depressions, possibly for liquid processing or drainage. A silver





Figure 8. Area 8 in the Southwest Lower Town, showing the latest two architectural phases dating to the Iron Age III and the probe in the central square that revealed an Early Bronze Age destruction layer below the Iron Age occupation

ring attached to a pinkish stone scaraboid seal, inscribed in Aramaic script with the name of the owner, was found in this courtyard. To the west (square 65.41), two semi-enclosed spaces each contained a bench with a lower grinding stone, and a variety of small hammerstones and pestles was found in the vicinity (fig. 9). A stamp seal was found in this area. To the east (square 65.43), a small building or portico was bordered by two walls with a post base in between. A sherd of an imported Ionian cup dates this phase to the late seventh century BC.

The earlier phase of architecture encountered this season was not fully excavated, but two elongated rooms on the same orientation as the later courtyard were beginning to emerge. To the west (square 65.41) was an open, external area that seems to have been used for trash disposal and produced a lot of pottery and bone. To the east (square 65.43) was an earth floor with several storage jars and smaller vessels embedded in it. On this surface were scattered more than a dozen clay loom weights. These probably fell from a higher level onto the floor.



Figure 9. A selection of grinding and pounding stones found near two grinding installations in the latest Iron Age III occupational phase of Area 8

An oval feature built from baked mudbricks may have been a washing basin, but it was very disturbed. This space seems to have been an unroofed interior courtyard.

In the southwest corner of square 65.42, a small probe of 2 × 2 m was excavated in order to get a preliminary view of the depth of the earliest occupation in this area and its date. The probe revealed at least one earlier surface belonging to the Iron Age II/III, but immediately below this phase another Early Bronze Age destruction layer was revealed. As in Area 4, burnt mudbrick debris covered several vessels smashed in situ. This suggests that the Early Bronze Age lower town occupation encountered in Area 4 was quite extensive. However, previous excavations to virgin soil in the north lower town produced no trace of Early Bronze Age occupation, indicating that the third-millennium settlement was confined to the south and southwest of the high mound.

Three significant conclusions can be drawn from the first season of excavations in Area 8. First, the open plan and “industrial” installations of the latest Iron Age phase show quite a different character than the contemporary seventh-century domestic occupation in the north lower town (Areas 5 and 6). Second, the Iron Age occupation of this part of the city consists of ca. three architectural phases over only 1.2 m depth from the surface, comparable to the results from Areas 5 and 6 in the north. Though the stratigraphic sequences of the northern and southwestern areas cannot yet be closely correlated, this suggests preliminarily that the entire lower town was settled at around the same time and continued to be occupied until the end of the Neo-Assyrian provincial period. Finally, the discovery of an Early Bronze Age destruction layer that seems to extend over a wide area (at least between Areas 4 and 8) immediately below the Iron Age occupation shows that Zincirli was a more significant settlement in this period than previously realized.

## Work by Specialists

In the 2015 season, ceramicist Sebastiano Soldi (National Museum of Florence), assisted by Benedetta Fiorelli, Guido Guidiccioni, and Livia Tirabassi, prepared previously excavated pottery from Areas 3A and 6 for publication, made preliminary observations of pottery excavated in 2015, and worked to document and begin restoration of the many vessels found in Area 2 this season, together with conservators Evren Kivançer and Güneş Acur. Zooarchaeologists Dr. Nimrod Marom (University of Haifa) and Laurel Poolman finished the recording of the animal bones excavated in the 2013 season and began the analysis of 2015 material. Special finds included a lion bone from Area 2 and a bear bone from Area 3. Archaeobotanist Doğa Karakaya (University of Tübingen) carried out water flotation of soil samples from the 2012–2015 seasons, producing many carbonized botanical remains for the study of environment and diet. Oriental Institute Museum conservator Alison Whyte performed exploratory analysis of the composition of numerous ceramic, metal, and stone artifacts excavated in previous seasons using the museum’s portable X-ray fluorescence (pXRF) machine. The documentation of the excavation trenches and finds was further supported by Jason Herrmann (spatial data manager, University of Tübingen), Lucas Stephens (field photographer), Leann Pace and Teagan Wolter (registrars), Karen Parker (illustrator), and Roberto Ceccacci (object photographer).

## Acknowledgments

The Zincirli expedition has been generously supported since 2006 by the Neubauer Family Foundation, the National Endowment for the Humanities, and the Oriental Institute. Additional funding in 2015 was provided by the Excellence Initiative of the University of Tübingen. The directors are grateful for the help of Assistant Director Makbule Ekici (Gaziantep University); our Ministry of Culture representative Murat Kırbaş; Gaziantep Archaeology Museum director Tenzile Uysal; Fevzipaşa village representative Ahmet Ersoy; and all the staff, students, and workers who participated. We also thank the Turkish General Directorate of Cultural Heritage and Museums. Finally, this research would not have been possible without the logistical support of our site guard Faruk Bolat, our supplier Bülent Terdi, and our camp manager Gazi Zeki Cemali.

## References

- Casana, Jesse, and Jason T. Herrmann  
 2010 “Settlement History and Urban Planning at Zincirli Höyük, Southern Turkey.” *Journal of Mediterranean Archaeology* 23: 55–80.
- Duru, Refik  
 2003 *A Forgotten Capital City: Tilmen. (Unutulmuş bir Başkent: Tilmen)*. Istanbul: Türsab Kültür Yayınları.
- Emre, Kutlu  
 1995 “Pilgrim-Flasks from Level I of the Karum of Kanish.” *Bulletin of the Middle Eastern Culture Center in Japan* 8: 173–200.
- Goldman, Hetty  
 1956 *Excavations at Gözlü Kule, Tarsus: From the Neolithic through the Bronze Age*. Princeton: Princeton University Press.
- Herrmann, Virginia R., and J. David Schloen  
 2016 “Assyrian Impact on Samʿal: The View from Zincirli.” In *The Provincial Archaeology of the Assyrian Empire*, edited by J. MacGinnis, D. Wicke, and T. L. Greenfield, pp. 265–74. McDonald Institute Monographs. Cambridge: McDonald Institute for Archaeological Research.
- Schloen, J. David, and Amir S. Fink  
 2009a “New Excavations at Zincirli Höyük in Turkey (Ancient Samʿal) and the Discovery of an Inscribed Mortuary Stele.” *Bulletin of the American Schools of Oriental Research* 356: 1–13.  
 2009b “Searching for Ancient Samʿal: New Excavations at Zincirli in Turkey.” *Near Eastern Archaeology* 72: 203–19.
- von Luschan, Felix; Carl Humann; and Robert Koldewey  
 1898 *Ausgrabungen in Sendschirli II. Ausgrabungsbericht und Architektur*. Berlin: W. Spemann.
-

## INDIVIDUAL RESEARCH

### Richard H. Beal

**Richard H. Beal** spent his time working on the *Chicago Hittite Dictionary*: first transliterating Hittite text fragments into Latin script, working from cuneiform 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. He is also revising the entries in the L volume (published in 1979) for inclusion in the electronic eCHD. This involves looking for newly found or newly published references, as well as new studies on the works we have already cited, adding new or differently understood meanings, adding dates to texts not previously dated, and rearranging the articles in accordance with the way we did things in later volumes.

This year also saw the publication in the *Reallexikon der Assyriologie* of his entry on the Hittite port city of Ura, to be found somewhere along the Cilician coast. One does not normally think of the Hittites as seafarers and merchants, but we know that the merchant sailors of this city were making so much money that the king of Ugarit begged his overlord, the Hittite Great King, to prevent the Urans from buying up all the real-estate in the kingdom of Ugarit. In volume 135 of the *Journal of the American Oriental Society* appeared his review of the book *Rêves hittites: contribution à une histoire et une anthropologie du rêve en Anatolie ancienne* by Alice Mouton, who had been a guest of the OI and the Hittite Dictionary for one year and has now become France's most learned and productive Hittitologist. His review of Christel Rüster and Gernot Wilhelm's *Landschenkungsurkunden hethitischer Könige* appeared in the first part of volume 136 of the same journal. The legal texts published in this volume document the Hittite king's conveyance of a number of plots of land (in many cases with people attached) from one owner to another. Generally the new owner is a man, but one plot of land goes to the wet-nurse of another female. He also completed a review for the *Journal of the American Oriental Society* of *Saeculum*, the Gedenkschrift (memorial volume) for the late German Hittitologist Heinrich Otten. Finally, he has been helping his wife, JoAnn Scurlock, edit Akkadian medicinal plant texts as part of the European Union's Floriental project.

---

### Robert Biggs

**Robert Biggs** continued to serve as co-editor of the series *Die babylonisch-assyrische Medizin in Texten und Untersuchungen* in which Markham Geller's *Healing Magic and Evil Demons: Canonical Udug-Hul Incantations* was published in spring 2016. He updated his chapter in the forthcoming publication of the Inanna Temple at Nippur as new information became available. He also worked on contributions to volumes honoring several colleagues.

---



## Fred M. Donner






Returned from a blissful year of leave in 2014–2015, **Fred Donner** was again engaged full-time in teaching and the regular activities of university life. Besides his regular four courses, he taught an additional intensive course in the study-abroad program for Chicago undergraduate students in Rabat, Morocco, in January, which was a pleasant change and quite satisfying, if a certain amount of extra preparation. Donner served on fourteen dissertation committees and saw four of these students satisfactorily defend their dissertations.

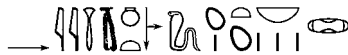
During the year, Donner presented lectures on various topics in early Islamic history. These were “An Enigmatic Arabic Papyrus from Early Islam” at Washington University in St. Louis and at the University of Helsinki; “The Concept of umma (community) in Early Islam” (keynote address) at a conference on “Chosen Peoples” at the University of Oxford; “Dīn, Islām, und Muslim im Koran,” (keynote address) at a conference on “Kritische Koranhermeneutik” at the University of Erlangen, Germany; “The Jews of Khaybar” at a workshop on early Islamic historiography at the University of Göttingen, Germany; “Western Studies of the Qur’an, from about 1900 to the Present,” at a conference on Qur’anic studies held at the National Islamic University of Indonesia in Yogyakarta, Indonesia; and “Early Islamic Studies since W. Montgomery Watt’s Publications” at the University of Edinburgh.

Donner revised and submitted for eventual publication the texts of the Erlangen, Göttingen, Yogyakarta, and Edinburgh talks noted above. He also submitted a review of Robert Hoyland’s *In God’s Path: The Arab Conquests and the Beginnings of Islam*, for *al-‘Usur al-Wusta: The Journal of Middle East Medievalists* (appeared online in November, 2015); an article entitled “Living Together: Early Muslims and Peoples of the Book,” for a Handbook on the Umayyads, to be published by Routledge; a brief analysis of a verse in the Qur’an (Q. 2:62), which he was invited to submit to the German radio station “Deutschlandfunk”; and an appreciation of two recently-deceased colleagues, his former teacher Günter Lüling (1928–2014) and Patricia Crone (1945–2015), perhaps the leading figure in early Islamic history of the 20th century. His article “Fragments of three Umayyad official documents,” an edition of three Arabic papyri, appeared in *The Heritage of Arabo-Islamic Learning. Studies presented to Wadad al-Qadi*, Maurice Pomerantz and Aram Shanin, eds. (Leiden: Brill, 2016), pp. 28–41.

Last but certainly not least: this year saw the appearance of the first volume in a new Oriental Institute publications series, entitled “Late Antique and Medieval Islamic Near East” (LAMINE). The first volume, edited and with an Introduction by Donner and his colleague Antoine Borrut of the University of Maryland, is a collection of essays originally read at a conference the two organized at Chicago several years ago. The new volume — LAMINE 1 — is entitled *Christians and Others in the Umayyad State*, and deals with the rule of the Umayyad dynasty (660–750) and their frequent employment of non-Muslims, especially Christians, in their army and government administration. It is hoped that the new series will attract other scholarly studies of the Near East between about 200 and 1000 C.E. Donner and Borrut wish to express their admiration and gratitude to the Oriental Institute Director, Gil Stein, for encouraging this new venture, and to the Publications office and staff, especially Tom Urban and Leslie Schramer, for their invaluable assistance and wise counsel in launching this new series.





## François Gaudard

**François Gaudard** completed his twenty-second year as part of the Oriental Institute scholarly community. Besides his personal research, he continued to work on his new project focusing on the publication of several Oriental Institute Museum funerary shrouds from the Graeco-Roman period (see the *2014–2015 Annual Report*). While studying shroud OIM E4786, Gaudard identified, among others things, an apparently unique writing of the toponym *Dp* “Dep” as  (X4A) instead of, for example,  or , as well as the strange hieroglyphic sign  used in the group , which he takes to be a writing of the word *ḥnw.t* “mistress” in the following passage:



*W3dy(.t) ḥnw.t nṯr.(w)t nb(.t) Dp*

“Wadjet, the mistress of the goddess(es), the lady of Dep.”

The sign  could be a poorly drawn *heset*-vessel  (W14), reading *ḥ* and used here instead of  (V28) (for the value *ḥ* of the sign , see François Daumas et al., *Valeurs phonétiques des signes hiéroglyphiques d'époque gréco-romaine*, Volume 4 [Montpellier, 1995], p. 795, no. 375; Dieter Kurth, *Einführung ins Ptolemäische: Eine Grammatik mit Zeichenliste und Übungsstücken*, Teil 1 [Hützel, 2007], p. 427, no. 27; id., *A Ptolemaic Sign-List: Hieroglyphs Used in the Temples of the Graeco-Roman Period of Egypt and their Meanings* [Hützel, 2010], p. 202, no. 27). A damaged passage of the same shroud also seems to include a rare Egyptian attestation of Nephthys as the mother of Anubis.

Gaudard also continued to work as a co-editor of the Mummy Label Database (MLD) (see separate report) and of the Death on the Nile Project, and to serve as an editorial consultant for Egyptology articles published in the *Journal of Near Eastern Studies* (JNES) and the *Journal of the Society for the Study of Egyptian Antiquities* (JSSEA).

At the request of Professor Janet Johnson and W. Ray Johnson, Field Director of the Epigraphic Survey, Gaudard, as a former epigrapher for this project, prepared and gave a lecture entitled “The Epigraphic Survey, Chicago House, and the Chicago Method” in honor of Professor Friedhelm Hoffmann, as well as his colleagues and students from the Institut für Ägyptologie und Koptologie of the Ludwig-Maximilians-Universität in Munich, who visited the Oriental Institute during their tour of the foremost American universities (February 22).

Four of Gaudard’s articles have been submitted this past year or are in press:

- “The Camel as a Sethian Creature.” In *Essays for the Library of Seshat: Studies Presented to Janet H. Johnson on the Occasion of Her 70th Birthday*, edited by Robert K. Ritner, pp. 39–51. *Studies in Ancient Oriental Civilization* 70. Chicago: The Oriental Institute (in press).
- “On the Immortality of the God Seth.” In *Illuminating Osiris: Egyptological Studies in Honor of Mark Smith*, edited by Richard Jasnow and Ghislaine Widmer, pp. 93–98. *Material and Visual Culture of Ancient Egypt* 2. Atlanta: Lockwood Press, 2017.
- “Funerary Shrouds from Dendera in the Oriental Institute Museum of the University of Chicago, Part I: OIM E4786,” to be published in a Festschrift honoring a colleague (submitted).

- “A Greek-Demotic Mummy Label in the University of Cambridge Museum of Archaeology and Anthropology,” to be published in a Festschrift honoring a colleague (submitted).

In addition, Gaudard has been working on the following articles:

- “Funerary Shrouds from Dendera in the Oriental Institute Museum of the University of Chicago, Part II: OIM E4788 (= OIM E42046)” (forthcoming).
- “Funerary Shrouds from Dendera in the Oriental Institute Museum of the University of Chicago, Part III: OIM E4789” (forthcoming).

Moreover, he also progressed with his long-term publication projects cited in previous Annual Reports.

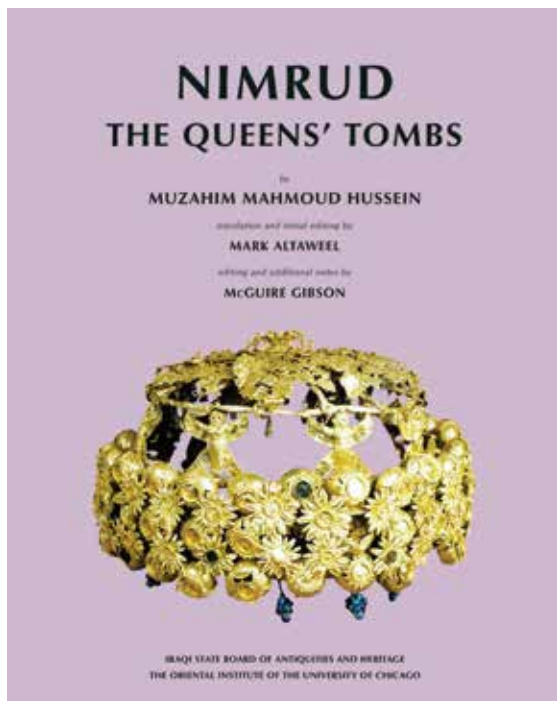
---

## McGuire Gibson

**McGuire Gibson** has finally witnessed the publication of Muzahim Mahmoud Hussein’s *Nimrud: The Queens’ Tombs*. Gibson edited and added significant information to a new English translation by Mark Altaweel of Muzahim’s Arabic manuscript. The book, with many color illustrations, was a joint publication of the Oriental Institute and the Iraqi State Board of Antiquities and Heritage, as a project of The American Academic Research Institute in Iraq (TAARI), which received funding for the book from the National Endowment for the Humanities and the U.S. Department of State. The book gives details on the finding of each of the royal tombs that were constructed of baked bricks under rooms of the Palace of Assurnasirpal, the Neo-

Assyrian king (883–859 BC). It also shows as much as possible where each item was located in each tomb or coffin, and provides an annotated catalog of the finds. The jewelry in these tombs is astonishing, with objects in styles that derived not only from Assyria but also from other kingdoms, presumably as part of the dowries of these royal wives. As we can see from recent satellite images, ISIS appears to have put extra explosives in each of the four main tombs when it totally destroyed the palace. Until someone, in future, can examine all the objects from the tombs and re-photograph them, do precise measurements, and analyze them in detail, this book will serve as the best source on these royal tombs, which brought into focus Assyrian queens whose names had been unknown before this.

The Nimrud book was the most time-consuming part of a project to publish re-



constructed Iraqi archaeological reports (nine articles and two books), on which Gibson and Altaweel have worked since 2003. The final publication, another book, relates to the Oriental Institute's own pioneering excavations in the Diyala region of Iraq in the 1930s. A joint volume is comprised of Salah Rmeidh's account of excavations at Tell Asmar (Eshnunna) in private houses very close to some trenches cut by Chicago in 1936, and a report by Hussein Ali Hamza of a site called Muqdadia, west of Tell Asmar. The volume is being presented as *Iraqi Excavations in the Diyala Region*, and, like the *Nimrud Tombs* book, will be a joint publication of the Oriental Institute and the Iraqi State Board of Antiquities and Heritage, with funding from the U.S. Department of State through TAARII.

Gibson still serves on the governing boards of TAARII and the American Institute for Yemeni Studies. Both institutions are struggling to foster research on their respective countries of interest, even though they cannot operate fully in either country for now. The magnificent traditional house of AIYS in Sana'a is still intact, and a Yemeni scholar carries on limited programs there. Both institutions give out fellowships to U.S. scholars for research done outside the host countries, but look forward to the day when peace comes and they can establish full programs.

---

## Petra M. Goedegebuure

**Petra Goedegebuure** continued her work on linguistic methods for extinct languages with relatively large text corpora. The linguist working with very extinct languages such as Hittite, Hurrian, or Hattian can be compared with the field linguist exploring a newly discovered or barely described language: both have to try to uncover the grammar of a language that they have no native competence in, that has no tradition of scholarship, and that perhaps does not have any known relatives to aid the linguistic description. Field linguists rely on the following four methods to explore their language: translation, elicitation to invite the grammatical judgment of native speakers, the staging of communicative events, and natural events. Only the first (sometimes) and the last (always) are available for text corpora. Petra explored these methods in a presentation and an article. The article described in-depth how to deal with topic and focus, relying on typology and semantic-functional approaches ("Pronouns in Narrow Focus — A Case Study in Hittite"). The presentation, on the other hand, focused on establishing the presence of split-ergativity and how to find the meaning of Hittite demonstratives ("Linguistic Methods for Extinct Languages. How to Elicit Data when Your Informants are All Dead," Connections Seminar, Oriental Institute).

Split-ergativity is also one of the topics of Petra's second book (*The Anatolian Core Cases*, in progress.) Whether or not split-ergativity is present in the Anatolian languages is currently one of the most debated topics of Anatolian syntax. Resolving the issue has consequences for the reconstruction of Proto-Indo-European. Petra shows how the New Hittite ergatives developed out of individualization markers in attested Middle Hittite. As a result, Hittite can no longer be used to reconstruct ergativity for Proto-Anatolian and certainly not for Proto-Indo-European.

Another area of Petra's research is Luwian, a sister language of Hittite. Hieroglyphic Luwian signs were the topic of a presentation and an article. The submitted article proposed readings for two hitherto undeciphered hieroglyphs, adding four new lexemes to the Luwian



lexicon (“The Hieroglyphic Luwian Signs \*128 (AVIS ‘bird’) = wa and \*30 = HAPA,” in *Acts of the IXth International Congress of Hittitology*, 2014). The lecture, “Luwian Hieroglyphs: An Indigenous Anatolian Syllabic Script From 3500 Years Ago,” was an introduction to the decipherment, function and origins of the hieroglyphs from Anatolia (Members Lecture Series, Oriental Institute, February 2016).

Aspects of the Luwian language itself were discussed in yet another presentation and a review. In the presentation Petra proposed a new analysis for a sequence of signs misunderstood as a river name, identifying yet another new Luwian lexeme. This new lexeme is a loan translation of the Akkadian geographical name *eber nāri* ‘Beyond-the-River’ (“Waraika, king of not only Hiyawa, but also of the lands west of the Euphrates?” 226th Annual Meeting of the American Oriental Society, March 2016).

Petra furthermore participated in the Chicago Hittite Dictionary Project, (see project reports) and, together with Theo van den Hout, started the preparations for the Xth International Congress of Hittitology, to be held in Chicago, August 28–September 1, 2017.

---

## Gene Gragg

**Gene Gragg’s** work on the AAMA (Afroasiatic Morphological Archive) continues. At this point the AAMA project data and application software are being put through their paces in the context of a forthcoming chapter on “Afroasiatic and Semitic,” and a project, with the working title “Morphology, Red in Tooth and Claw,” whose data is the disappearance of the “prefix conjugation” in Cushitic, and which examines some recently proposed Darwinian takes on cultural (and hence perhaps also linguistic) evolution.

The core of the archive is the available data on verbal and pronominal morphology for 39 Cushitic and Omotic languages (Afar, Alaaba, Arbore, Awngi, Bayso, Beja [5 varieties], Bilin, Boni [3 varieties], Burji, Burunge, Dahalo, Dhaasanac, Dizi, Elmolo, Gawwada, Gedeo, Hadiyya, Iraqw, Kambaata, Kemant, Khamtanga, Koorete, Maale, Oromo, Rendille, Saho, Shinassha, Sidaama, Somali, Tsamakko, Wolaytta, Yaaku, and Yemsa). In addition less complete data is included for five Semitic languages (Old Babylonian Akkadian, Arabic, Geez, Hebrew, and Syriac), as well as for Sahidic Coptic and Middle Egyptian — Berber and Chadic data will be added. All of the language data files, in a fairly intuitive EDN (Extensible Data Notation) readable-text format, are available for downloading from the project site: <https://github.com/aama>.

The language data is designed to be loaded into a RDF (“Resource Description Framework”) database, where the paradigm data can be queried, manipulated, and compared. The project site contains an application for searching and manipulating data (<https://github.com/aama/webapp>) which will run from a jar file on any Java-capable computer. An explanation of the data format, and instructions for downloading existing data files, creating new data files, setting up the database, and installing the application can be found at <http://aama.github.io>.

Although AAMA currently runs as a single-user application, we are looking into the possibility of making it available as an on-line application.

---

## Emily Hammer

**Emily Hammer** completed her second year as Director of the Center for Ancient Middle Eastern Landscapes (CAMEL). Much of her research effort was directed towards projects detailed in CAMEL's section of the Annual Report. A major goal of CAMEL's programs has been to encourage student publication. To this end, Emily jointly authored a paper for the journal *Antiquity* with graduate students Anthony Lauricella and Joshua Cannon, as well as former CAMEL Director Scott Branting, on the development of a method to automatically detect looters' pits on the surfaces of sites in Afghanistan.

Emily continued working on three personal projects concerning the history of pastoral land-use, political landscapes and land-use in Bronze and Iron Age Naxçivan, Azerbaijan, and southern Mesopotamian urbanism. In addition to the previously mentioned article, she submitted three other publications to appear in 2016–2017: a review of the history of pastoralism in southwest Asia from the Neolithic to the Bronze Age (coauthored with Benjamin Arbuckle for *Journal of Archaeological Research*); an overview of textual and landscape archaeology evidence for the political and economic role of irrigation systems in the Iron Age kingdom of Urartu (for the volume *Irrigation in Early States: New Directions*); and a survey of past approaches and fruitful future directions for landscape archaeology in Iran (for *Proceedings of the Young Archaeologists' Conference at Tehran University 2015*). In March, Emily and several graduate students traveled to Naxçivan to carry out magnetometry and ground-penetrating radar surveys of hilltop fortresses. In collaboration with geophysics expert Jason Herrmann, they were able to trace the subsurface remains of a huge wall that formerly surrounded two Iron Age fortresses and a lower town between them. They also identified a number of Middle Bronze Age kurgan burials. Emily has additionally been laying the groundwork for a new site-based survey project at Ur in southern Iraq. Newly acquired historical satellite imagery suggests that the site might be much larger than previously thought. The Ur survey beginning in winter 2017 will investigate the maximum size of the site at the height of its urban development and will also examine evidence for functional differences in neighborhoods of the city.

In the realm of teaching, Emily and Richard Payne received a Center for Disciplinary Innovation Grant from the Franke Institute for their jointly taught graduate seminar “Nomads, Networks, and Political Complexity in the Ancient Near East.” This course drew on both archaeological and historical approaches to examine the central role that pastoralists have played in the development of cities, states, and empires in the Near East and Central Asia. A second new course Emily offered in the winter quarter, “Water in the Middle East: Past and Present,” was an undergraduate seminar on the archaeology and anthropology of water exploitation and management over the last 9,000 years.

During the course of the year, Emily gave fourteen public lectures, including three invited lectures, nine conference presentations, and two campus talks. In February, she gave the opening lecture for the exhibit “Herzfeld's Pasargadae” at the Smithsonian Freer-Sackler Galleries. This lecture detailed continuity and changes in archaeological practice between early twentieth century Iran and today, and showcased CAMEL's modeling work using Erich Schmidt's 1936 aerial photos of Persepolis. In April, The Ohio State University's Anthropology Department invited Emily to give two lectures on the future of landscape archaeology in the Middle East and on her recent fieldwork in Azerbaijan. Emily gave conference papers at meetings organized by Tehran University, the LandCover6K Project, ASOR, ICAANE, ISAW/ARISC, and RAI on a variety of topics including new sources of declassified aerial imagery for archaeology, methods for mapping ancient land-use patterns, spatial relationships between

sites and mineral deposits in Afghanistan, local resistance at the edge of the Urartian empire, Urartian irrigation, and a reanalysis of settlement patterns surrounding Ur.

---

## Rebecca Hasselbach-Andee

**Rebecca Hasselbach-Andee** has worked on various projects during the last academic year. In terms of smaller projects that resulted in presentations at conferences and a few articles, her focus was on Akkadian and Akkadian grammar. She gave a presentation on the character of Akkadian as both being an archaic and at the same time highly innovative language at the meeting of the International Association of Comparative Semitics in Madrid. In this talk, which will now be reworked into an article to be published in the conference proceedings, Hasselbach-Andee looked at grammatical features in the phonology, morphology, and syntax of Akkadian that are innovative in the language, and tried to determine whether or not these features represent Proto-Akkadian features. This type of investigation is important in order to determine if Akkadian was innovative already at its earliest stage, or if its innovative character is a later, language internal development. Gaining these insights is crucial for understanding the position of Akkadian within the Semitic language family. Hasselbach-Andee further worked on a grammatical feature attested in Akkadian, the terminative-adverbial ending *-iš*. This ending has been interpreted as an original dative case marker by various influential scholars. The interpretation of the morpheme as a case marker has often uncritically been taken over and cited by subsequent scholars. In her talk that she presented at the annual meeting of the American Oriental Society in Boston, Hasselbach-Andee argued that *-iš* is not a case but simply an adverbial marker indicating direction toward an entity. Evidence for this interpretation comes from within Akkadian itself, the use of a related morpheme *\*-a(h)* in Hebrew and Ugaritic, and, most importantly, from non-Semitic Afroasiatic language families such as Berber, Cushitic, and Omotic, which attest to the same morpheme. This talk is likewise being reworked into an article at the moment.

In addition, Hasselbach-Andee wrote an article that is an overview of Akkadian, including its socio-linguistic role in the ancient Near East, for a volume that she is editing for Wiley Blackwell, a *Guide to Ancient Near Eastern Languages*. This volume is one of her ongoing book projects. It will contain thirty chapters on all sorts of aspects of ancient Near Eastern languages and writing. In particular, it will focus on socio-linguistic aspects such as language contact, *bi-* and multilingualism, and function of language — such as literary versus non-literary language, use as lingua franca, etc. Finally, Hasselbach-Andee continued to work on the translation and revision of Josef Tropper's grammar of Classical Ethiopic, a project that is scheduled to be finished by the end of the summer. Lastly, this year she published an article and a book review, the article being "Explicit Performative Utterances in Semitic" in *Arabic and Semitic Linguistics Contextualized: A Festschrift for Jan Retsö*, L Edzard, ed. (Wiesbaden: Harrassowitz), pp. 448–85, and the book review being on Amalia Catagnoti's *La grammatica della lingua di Ebla* (*JNES* 75:169–72).

---

## Janet H. Johnson

During the 2015–2016 academic year, **Jan Johnson** gave a lecture on “Identity, Some Preliminary Remarks” at the annual December OI Museum Docents Awards ceremony and talked about “Identity” for the OI Voting Members Connections Seminar in the spring. She also gave a talk on “Egypt during the Persian Empire” to the Chicago Chapter of the American Research Center in Egypt. She chaired one panel of presentations at the annual meeting of ARCE, held this year in Atlanta. In addition to teaching several of the core ancient Egyptian language classes, she taught a seminar on “Gender in Ancient Egypt(ian Texts)” and gave a lecture on “Gender Studies, from an Egyptian Perspective” for the “Approaches to the Study of the Ancient Near East” course for entering M.A. students. She was delighted that one student who was working with her completed her M.A. and that four students with whom she had been working completed their Ph.D. dissertations and graduated in the spring. Her articles “The Range of Private Property Envisioned in Demotic Documents Pertaining to Marriage and Inheritance” and “Women, Property, and Legal Documents: A Case Study from the Persian Period” appeared in *Festschriften* compiled in honor of Professors Ola el-Aguizy and Betsy M. Bryan, respectively. She submitted an article on “Compound Nouns, especially Abstracts, in Demotic” for a *Festschrift* honoring another colleague. She served on one OI/NELC tenure committee and wrote evaluations for three colleagues at other universities being considered for tenure. She also enjoyed her annual Skype discussion of things (ancient) Egyptian with 5th graders at the Science and Art Academy in Des Plaines, Illinois. She continued to oversee the activity of the Chicago Demotic Dictionary (see separate report).

---

## W. Raymond Johnson

This year **W. Raymond Johnson** completed his thirty-eighth year working in Egypt, his thirty seventh full year working for the Epigraphic Survey in Luxor, and his nineteenth season as Chicago House Field Director. This summer Ray was pleased to see the results of his identification of two joining Hadrianic Roman statue fragments reunited in a special exhibition at the Art Institute of Chicago entitled “A Portrait of Antinous in Two Parts.” This discovery and exhibition were the lead story of the University of Chicago website for the week of August 16 ([http://www.uchicago.edu/features/egyptologist\\_uncovers\\_ancient\\_puzzle/](http://www.uchicago.edu/features/egyptologist_uncovers_ancient_puzzle/)) as well as the cover story of *The University of Chicago Magazine*, Fall 2016.

In addition to reuniting ancient Roman sculpture fragments, Ray has continued to work with his Amarna Talatat Project with excellent results. This winter he was asked by the Egyptian antiquities ministry to coordinate and plan the joined Amarna talatat display galleries for the Akhenaten Museum in Minya, which gives an exciting, practical focus for the project. He is now working with the Egyptian antiquities ministry, the Berlin Egyptian Museum (Friederike Seyfried), and the Hildesheim Roemer-Pelizaeus Museum (Regine Schulz) on the development, completion, and exhibitions of the Minya museum. Publications that have come out in the last year include “Sexual Duality and Goddess Iconography on the Amenhotep IV Sandstone Colossi at Karnak,” in *The Art and Culture of Ancient Egypt: Studies in Honor of Dorothea Arnold*, edited by Adela Oppenheim and Ogden Goelet, *Bulletin of the Egyptological Seminar* 19 (2015), pp. 415–22; “Horemheb’s Saqqara Tomb: A New Discovery,” and entry VI.76, “Relief



Head of Amenhotep III from the Tomb of Kheruef,” in *Egypt: Millenary Splendour, The Leiden Collection in Bologna*, edited by Paola Giovetti and Daniela Picchi (SKIRA 2016), pp. 228–33 and pp. 370 and 552–53, respectively. In addition he has co-authored a study with Zahi Hawass entitled: “The Abusir Tutankhamun Relief Blocks — Origin and Context,” in *Another Mouthful of Dust: Egyptological Studies in Honour of Geoffrey Thorndike Martin*, Orientalia Lovaniensia Analecta 246 (2016), pp. 323–34.

---

## Charles E. Jones

*The Ancient World Online* ([ancientworldonline.blogspot.com](http://ancientworldonline.blogspot.com)) continues to thrive. During the past year, **Charles Jones** has added or updated more than fifteen hundred entries. Direct e-mail subscribership has increased to 7,694 addresses as of today, with about fifteen hundred of them added in the past year. More than fourteen hundred readers each are also subscribed to AWOL on Facebook and Twitter. AWOL now records in excess of a million page views each year. On the heels of receiving the Archaeological Institute of America’s Award for Outstanding Work in Digital Archaeology in early 2015, AWOL was nominated in the fall 2015 for the Digital Humanities Awards in the category of Best Blog Post or Series of Posts and was announced as the winner in February 2016.

Last summer Jones was invited to submit an article in a forum on Investing in the Future of the Past: Alternative Careers for Mediterranean Archaeologists, reflecting on his thirty years in an alt-ac career:

- “... or equivalent combination of experience and education.” *Journal of Eastern Mediterranean Archaeology and Heritage Studies* 3/3: 286–92, 2015. Invited. <http://www.jstor.org/stable/10.5325/jeasmedarcherstu.3.3.issue-3>

Working with a team at ISAW-NYU he produced a publication systematically describing ancient-world information resources on the world wide web. The bibliographic data presented there has been programmatically extracted from the content of AWOL — The Ancient World Online (ISSN 2156-2253) — and formatted in accordance with a structured data model. The AWOL Index is an experimental project, developed jointly by Jones and Tom Elliott, the Associate Director for Digital Programs at New York University’s Institute for the Study of the Ancient World (ISAW), with the assistance of Pavan Atri, Roger Bagnall, Dawn Gross, Sebastian Heath, Gabriel McKee, Ronak Parpani, David Ratzan, and Kristen Soule:

- *The AWOL Index*. New York, New York: Institute for the Study of the Ancient World, New York University, 2015. (Co-author.) Invited. <http://isaw.nyu.edu/publications/awol-index/>

In September 2015 he participated in a program organized by Edward Silver at Wellesley College, Erasing the Past: Da’esh and the Crisis of Antiquities Destruction. His contribution was a talk on “Iraq Crisis Twelve Years On ([http://networks.h-net.org/node/GROUP\\_NID/discussions/82529/conference-erasing-past-daesh-and-crisis-antiquities-destruction](http://networks.h-net.org/node/GROUP_NID/discussions/82529/conference-erasing-past-daesh-and-crisis-antiquities-destruction)).

In fall 2015 he initiated a new project, The History of the Study of Antiquity through the Lens of Autobiography. The blog of this project presents a working bibliography of the project, and provides a platform for comment and discussion of autobiographical writing by students and scholars of the ancient world: <http://antiqauto.blogspot.com/>.

He hopes also to develop a venue for the publication of new autobiographical essays in the form of an online open access periodical. He has been invited to deliver a talk on the project in the History of Archaeology session at the Annual Meeting of the American Schools of Oriental Research in San Antonio in November 2016.

---

## Walter Kaegi

Cambridge University Press published a very slightly revised paperback (late summer 2015) edition of **Walter Kaegi's** *Muslim Expansion and Byzantine Collapse in North Africa* (Cambridge University Press, 2010). He contributed an essay entitled "The Islamic Conquest and the Defense of Byzantine Africa. Reconsiderations on Campaigns, Conquests and Contexts," in the collective volume *North Africa under Byzantium and Early Islam*, Susan T. Stevens and Jonathan P. Conant, eds. (Washington: Dumbarton Oaks, 2016), pp. 65–86. He revised and expanded his updated contribution "Seventh-Century North Africa: Military and Political Convergences and Divergences" for the German Archaeological Society in Rome (DAIRome) collective volume, edited by Ralf Bockmann and Philipp von Rummel. He published a review of *Approaches to the Byzantine Family*, L. Brubaker and S. Tougher, eds., in the journal *Historian*. He completed several other book reviews, among which: (1) J. Harris, *The Lost World of Byzantium*, for publication in the journal *Sixteenth Century*, (2) A. Kaldellis, *The Byzantine Republic*, for *The American Historical Review*, and (3) *The Long Seventh Century: Continuity and Discontinuity in an Age of Transition*, Alessandro Gnasso, Emanuele E. Intagliata, Thomas J. MacMaster and Bethan N. Morris, eds. (Oxford, Bern, Frankfurt, New York: Peter Lang), which will be published in the journal *The Historian*. He lectured on Late Antique and Byzantine History at Fu-Jen Catholic University, New Taipei, Taiwan in summer 2015. He delivered an invited lecture at the Academic Sinica, Institute of History and Philology, Taipei City, on August 6, 2015, on "Reassessing Arnold J. Toynbee the Byzantine Historian." He participated in the Byzantine Studies Conference in New York, October 22–25 2015. He co-directed the University of Chicago Workshop on Late Antiquity and Byzantium. He continued to serve ex officio on the U.S. National Committee for Byzantine studies. He remained a member ex officio of the board of the University of Chicago Phi Beta Kappa Chapter. He reported a bibliography to *Byzantinische Zeitschrift* and edited the journal *Byzantinische Forschungen*. The *Chicago Journal of History* (undergraduate journal, University of Chicago) published an interview with him concerning the development of his own original interests in Byzantine history and his career as a Byzantinist, spring 2016, pp. 5-7. He developed a two-quarter seminar course on the "Late Antique Mediterranean," Autumn Quarter 2015 and Winter Quarter 2016. He performed editorial work for several presses and external fellowship selection committees. He continues to investigate Byzantine logistics in Syria in the late sixth and early seventh centuries C.E. and comparative historical notes on Byzantine and Tang Chinese military strategies and expenses, as well as preparing a study of Emperor Julian's unsuccessful campaign against Sasanian Persia in 363 C.E. He is also extending his research on Byzantine-Muslim military and political relations from the seventh through eleventh centuries; he is planning a book on the subject.

---

## Morag M. Kersel



Figure 1. Overview of Fifa 2016

During the 2015–2016 academic year **Morag Kersel** was appointed as a Visiting Fellow with the “The Past for Sale: New Approaches to the Study of Archaeological Looting” at the Neubauer Collegium at the University of Chicago. “The Past for Sale” brings together archaeologists, anthropologists, art historians, social scientists, public policy experts, and legal scholars in hopes of finding better answers to one of the most intractable problems facing those who care about culture: how to stem the worldwide epidemic of looting of archaeological sites and shrines ([http://neubauercollegium.uchicago.edu/faculty/past\\_for\\_sale/](http://neubauercollegium.uchicago.edu/faculty/past_for_sale/)). During her time

as a Neubauer Fellow, Kersel participated in a number of workshops and conferences related to the topics of cultural heritage protection, looting, and the antiquities trade. As part of this fellowship Kersel co-organized a conference, “Dealing with Heritage: New Policy Approaches” at the Neubauer Collegium for Culture and Society.

Kersel’s main project while a Neubauer fellow was to work on a manuscript, *License to Sell: The Trade in Holy Land Antiquities*, which addresses the core question of whether a legal market for antiquities contributes to archaeological site destruction or mitigates it. In March 2016, Kersel carried out ethnographic research in Jordan and Jerusalem where she interviewed collectors, dealers, government employees, looters, and tourists about the movement of archaeological materials. In June 2016, Kersel (with OI Research Associate Austin “Chad” Hill) carried out the fourth year of drone flyovers to monitor the change over time at the looted Early Bronze Age (3600–2000 BCE) site of Fifa on the Dead Sea Plain in Jordan (see fig. 1). Ceramic vessels, almost certainly from this site in Jordan, are on sale in the legal antiquities market in Israel; following these pots (<https://followthepotsproject.org>) is an element of this manuscript research. Her volume will bring together a suite of data (archaeological and ethnographic) from Israel, Jordan, and Palestine in order to examine artifact pathways — how artifacts get from the ground to the consumer (individual or institutional).

Morag continued to track Early Bronze Age grave goods from Jordan to the antiquities market in Israel and then on to collectors (museums, private individuals, and educational institutions) in Europe and North America, spending some time tracking tomb groups to various museums and educational institutions throughout North America. During the winter and spring Kersel documented the Bab adh Dhra’ tomb groups in the Oriental Institute collection. These groups are the focus of an upcoming (April–May 2017) exhibition at the Neubauer Collegium tentatively entitled “The Past Sold. Case Studies in the Movement of Archaeological Objects.” Case studies in this exhibit examine and assess the positive (legal) and the negative (illegal) movement of archaeological objects from the Middle East.

In summer 2015 the small crew, including two Metcalf interns from the University of Chicago, walked numerous transects and dug shovel test pits in order to determine site viability and extent. Geophysicist and remote sensing expert Thomas M. Urban of Cornell University joined the project, where he conducted Ground Penetrating Radar (GPR) and other subsurface

technologies in order to see what's below the ground, which aided in assessing future site excavation potential.

With the generous support of the Oriental Institute, the Galilee Prehistory Project hosted a workshop for most of the contributors to the Marj Rabba publication in November 2015–16. In the public part of the meeting participants presented their analyses and results of the six seasons of research. In closed door sessions project members worked together on phasing, stratigraphy, and related issues. The team met with Thomas Urban and Leslie Schramer of OI Publications to discuss a timeline for publication.

During 2015–2016 Austin “Chad” Hill, Yorke Rowan, and Morag Kersel presented the results of this field season at the annual meeting of the American Schools of Oriental Research. Project participants (undergraduate and graduate students) also produced a number of posters for the annual meeting of the American Schools of Oriental Research on various aspects of the Galilee Prehistory Project.

---

## Gregory Marouard

This year, and after many seasons devoted to multiple projects in Egypt, **Gregory Marouard** focused his fieldwork activities essentially on Oriental Institute projects, and particularly two new programs in Egypt that he brings to Chicago this year, the survey at Kom ed-Dahab (Eastern Nile Delta) and the excavation at Dendara (Upper Egypt).

During summer 2015 he focused his research on the completion and editing of several articles and on the processing of archaeological data from the previous 2014 season at Tell Edfu; he also organized the fieldwork operations for his two projects. He submitted in particular two articles: “Approches de l’espace « domestique » dans l’Égypte gréco-romaine et de son mobilier,” for the proceedings of the international colloquium “Les mobiliers archéologiques dans leur contexte, de la Gaule à l’Orient méditerranéen” (Poitiers: Laboratory HeRMA – IFAO, October 2014), co-authored with Pascale Ballet (U. of Poitiers) and Sylvie Marchand (IFAO); and “The Context of the Khayan Sealings from Tell Edfu and Further Implications for the Second Intermediate Period in Upper Egypt,” proceedings of the international colloquium “The Hyksos King Khayan – New Insights on the Chronology of the 13th and 15th Dynasties” (Vienna: The Oriental Institute and Österreichisches Archäologisches Institut, July 2014), co-authored with Nadine Moeller (Oriental Institute, University of Chicago). Last October, his article “New Evidence for a Harbor Basin at Dahshur,” (*Mitteilungen des Deutschen Archäologischen Instituts Abteilung Kairo* 69 [2013]: 171–78) was finally published in the German Institute journal.

For two weeks at the end of last September, Gregory conducted his first season of survey at Kom ed-Dahab, a newly discovered Roman harbor settlement located on an island in the Menzaleh Lake, in the Eastern Nile Delta (see separate report). With the support of ceramist Aude Simony, they surveyed the surface of the site for pottery sherds, coins, and glass evidence in order to better define the chronology of the occupation. A Polish team covered four hectares of geomagnetic survey on the main monuments detected at the site according to the satellite images.

Gregory presented an overview of his work in a brown bag lecture in early May 2016. The Kom ed-Dahab Survey, mostly funded by the Oriental Institute, was also supported by



the Egypt Exploration Society, London, and Gregory sent a poster for the session at the EES annual meeting in London in early July. A short notice about the results of the kite aerial pictures and geo-magnetic survey is also presented in the coming issue of the *Oriental Institute News & Notes* 231 (fall 2016).

From early October until mid-November 2015, Gregory supervised, as co-director together with Nadine Moeller, the latest season at Tell Edfu (see separate report). He was specifically in charge of Zone 2, focusing on the Old Kingdom settlement remains,

and he focused the investigation here on the very first phases of occupation, which can be dated now to the second part of the Fourth Dynasty.

From mid-November until the end of December, Gregory conducted his second campaign at the temple of Dendara in Upper Egypt, and for the first time as director of a new Oriental Institute project (see separate report). This project, which focuses on settlement archaeology, is conducted on the IFAO (French Archeological Institute in Cairo) archaeological concession, in close collaboration with the IFAO team (architectural study of the temples, directed by Pierre Zignani, CNRS) and the team of the Macquarie University in Sydney (archaeology of the necropolis, directed by Yann Tristant). This first OI season focused on the early phases of the settlement, in the intra-mural area next to the temples of Hathor and Isis. Nadine Moeller joined the mission as well as three graduate students from the NELC department.

Gregory published a short overview of this first season in the main article in the last spring issue of the *Oriental Institute News & Notes* 229.

Last February, Gregory joined the Epigraphic Survey at Chicago House (Luxor) in conducting a short archaeological evaluation of the “House of Butehamon” at Medinet Habu (see separate report), as a part of the Western Gate Project recently launched by Jennifer Kimpton, and the extensive site management project engaged in the southern and western parts of Ramesses III’s funerary complex. Over a dozen days he opened several trenches around the building and investigated the stratigraphic and architectural remains of this late and post-Ramesside construction, which was to a very large extent reconstructed after Uvo Hölscher’s excavations ca. 1930.

In March and early April, he joined the sixth season of excavations at Wadi al-Jarf (CNRS, Ifao project), the harbor of King Khufu on the Red Sea Coast. As Senior Archaeologist he supervised the fieldwork operation with a special focus in Zone 5 (fig. 1), characterized by an extensive construction, which measures 60 × 35 m, the largest building from the Pharaonic period ever discovered on the Red Coast. Last May, this project, engaged in 2011 with his colleague Pierre Tallet (Paris Sorbonne), was granted the prestigious Archaeological Prize



Figure 1. The building on Zone 5 at Wadi al-Jarf, Red Sea Coast, excavated by Gregory Marouard in April 2016. (photo: G. Marouard)

of the Simone and Cino Del Duca foundation, awarded yearly by the Institut de France, the French Academy.

Gregory was invited to Yale University last April to present the recent results of his work at Wadi el-Jarf. He then gave a lecture series about the past fifteen years of research on the Red Sea for the SSEA (Society for the Study of Ancient Egypt) in Canada, at the University of Toronto, then at the University of Quebec in Montréal.

He devoted the rest of spring and early summer to preparing various fieldwork reports and articles as an overview of the harbor installations at Wadi al-Jarf for the coming 2016 issue of *Journal of the American Research Center in Egypt*.

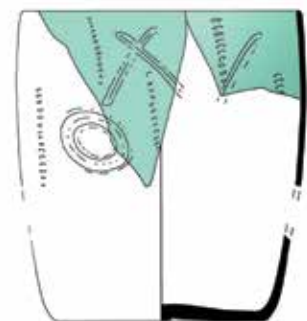
---

## Carol Meyer

**Carol Meyer** spent the bulk of the year working on Serra East for the publication of Oriental Institute Nubian Expedition volume 13, mostly on the pottery but also the glass corpus. With the discovery of another box of glass sherds that nearly tripled the size of the corpus, the “Glass” section in the “Objects” chapter had to be rewritten as a separate chapter. Meyer also received an invitation to present a summary of the work at Bir Umm Fawakhir at a colloquium on the last thirty years of archaeological research in the Egyptian Eastern Desert, held at the Collège de France in Paris at the end of March. The reformatted paper is scheduled for e-publication, to appear at the end of 2016. Meyer continued research on the massive glass corpus from Aqaba. This is a multi-year project that requires inspection of every sherd, tabulation on FileMaker Pro tables, key linked to files with drawings or photographs of the sherds or vessels. This is the first chance to study a very large early Islamic glass corpus from Jordan in its totality, rather than picking out intact vessels or special groups of decorated glass. One time-consuming feature of any glass corpus is that so much has to be drawn; photographs seldom show much, especially if the surface is devitrified to an iridescent sheen. See for example the deep bowl illustrated above. It shows the very distinctive pincer decoration (squeezed on with tongs) and was reconstructed from the sherds on the left (base not photographed). Under the yellow devitrification layer, the vessel is actually light blue-green.



14-01113 SQ-1-16 141104 L.L. blue-green; pitted; yellowish, opal, veeth. Pincer; design restored from 3 sherds.



14-01113 SQ-1-16 141104 L.L. blue-green; pitted; yellowish, opal, veeth. Pincer; design restored from 3 sherds.

## Nadine Moeller

**Nadine Moeller** was granted a one-year leave for the 2015–2016 academic year with the additional support of a fellowship awarded to her by the American Council for Learned Societies (ACLS).

She spent the autumn doing fieldwork and research in Egypt, first at the site of Tell Edfu and then, together with Gregory Marouard, at Dendara, which is a new project of the Oriental Institute (see separate reports). In January, she presented a paper with the title “The End of the Middle Kingdom in Upper Egypt: A View from Tell Edfu,” in conjunction with the exhibit “Ancient Egypt Transformed: The Middle Kingdom” held at the Metropolitan Museum of Art in New York. She also led a discussion in the scholars’ workshop that followed the symposium, presenting the current problems and priorities for future research on the history and chronology of the end of the Middle Kingdom. She spent the majority of her time during the winter and spring quarters working on two book projects in the Regenstein library, one of which is the second volume of her book *The Archaeology of Urbanism* and focuses on the towns and cities dating from the late Second Intermediate Period until the end of the Late Period. The other book deals with the New Kingdom Empire and is a textbook for Moeller’s College Core class, to be published by Cognella Academic Publishing. Since June she has also been involved in editing together with Irene Forstner-Müller the proceedings for the workshop on the Hyksos Ruler Khayan, which had been co-organized by the Oriental Institute and the Austrian Archaeological Institute in Cairo back in July 2014.



*Nadine (at front left) and students*

Her book entitled *The Archaeology of Urbanism in Ancient Egypt: The Settlements from the Predynastic Period to the End of the Middle Kingdom* finally appeared in April at Cambridge University Press, after some delay related to the re-structuring of this publishing house. Also in April, Moeller participated in the annual meeting at the American Research Center in Egypt (ARCE), held in Atlanta, where she presented a paper on Old Kingdom house layouts and participated in the Board of Governors meetings. In June she was invited to give a talk at the ARCE North Texas Chapter in Dallas.

---

## Brian Muhs

**Brian Muhs** corrected a sample copy-edited chapter of his book manuscript, *The Ancient Egyptian Economy, 3000–30 BCE*, in September 2015, then the art proofs in October, the copy-edited proofs in November, the index proofs in December, and the final page proofs in January 2016. Cambridge University Press sent the book to the press early in July 2016, and it is expected to appear later in the same month.

Two articles that Brian submitted in previous years appeared, namely “Transaction Costs and Institutional Change in Egypt, ca. 1070–525 BCE,” in *Law and Transaction Costs in the Ancient Economy*, Dennis P. Kehoe, David M. Ratzan, Uri Yiftach, eds. (Ann Arbor: University of Michigan Press, 2015), pp. 80–98 (Chapter 3), based on a paper presented in July 2009; and “Money, Taxes, and Maritime Trade in Late Period Egypt,” in *Thonis-Heracleion in Context*, Damian Robinson and Franck Goddio, eds. Oxford Centre for Maritime Archaeology Monograph 8. (Oxford: Oxford Centre for Maritime Archaeology, 2015), pp. 91–99 (Chapter 4), based on a paper presented in March 2013.

Brian traveled to London and Cambridge in September 2015 to check readings of ostraca in the British Museum and Cambridge University Library in preparation for a book project on accounting in ancient Egypt and the Nag’ el-Mesheikh ostraca. While in Cambridge, he was invited to give a paper for the Egyptian World Seminar Series at the McDonald Institute for Archaeological Research about the book project on “Ptolemaic Temple Accounting and Transaction Costs.”

Brian was invited to give a lecture on “Cartonnage from Papyri and Papyri from Cartonnage: Discovery and Destruction” for the 41st Annual Society for the Study of Egyptian Antiquities (SSEA) Symposium in Toronto in November 2015, and he gave another paper for the SSEA Scholar’s Colloquium about the book project on “An Egyptian Temple on the Eve of the Great Theban Revolt (205 BCE).”

Also in November, Jan Johnson and Brian presented the Chicago Demotic Dictionary Project at a James Henry Breasted Society event at the Oriental Institute, and with Tasha Vorderstrasse he gave a paper on “Economy, Documentation, and Coinage in Achaemenid and Hellenistic Bactria” at the American Schools of Oriental Research Annual Meeting in Atlanta, comparing economic texts and coin finds from Bactria and Egypt in the Achaemenid and Hellenistic periods.

Brian also gave a paper on ancient Egyptian legal scholarship titled “Egyptian Scholars, Priests and temples between autonomy and state authority” at the conference “Scholars, Priests and Temples — Babylonian and Egyptian Science in Context,” in Berlin in May 2016, and a lecture on “Crime and Punishment in Ancient Egypt” for the Consulate General of the Arab Republic of Egypt’s monthly ‘Learning Luncheon’ in June 2016.

---

## Kiersten Neumann

**Kiersten Neumann’s** research over the past year has continued to be grounded in theoretical approaches to ancient art. A recent peer-reviewed publication, “In the Eyes of the Other: The Mythological Wall Reliefs in the Southwest Palace at Nineveh,” published in the *Archaeological Review from Cambridge 30.1: Seen and Unseen Spaces*, considers the role of the gaze and visibility of figures in Mesopotamian visual culture. She is currently working on a book project that explores the degrees of ritualization and socially valued multisensory phenomena of the Neo-Assyrian temple. This project is a revision of her dissertation, “Resurrected and Reevaluated: The Neo-Assyrian Temple as a Ritualized and Ritualizing Built Environment,” which was awarded The American Academic Research Institute in Iraq (TAARII) Donny George Youkhana Dissertation Prize for the best US doctoral dissertation on ancient Iraq in 2015. She is also preparing an article on the visual culture and experiential qualities of the Nabu temple within



the sensory landscape of the Neo-Assyrian royal citadel. In May she published a review of David Kertai's book, *The Architecture of Late Assyrian Royal Palaces* (OUP 2015) in the College Art Association's *caa.reviews* ([caareviews.org](http://caareviews.org)).

Neumann continues to research and prepare for publication collections of the Oriental Institute, including materials from Khorsabad and archival photographs from the Achaemenid Persian center of Persepolis. The latter collection is the focus of the current special exhibit at the Museum, entitled "Persepolis: Images of an Empire," which Neumann curated. This exhibit explores the role of architecture and art as visual manifestations of imperial ideologies and cross-cultural interactions through a selection of archival photographs taken during the Oriental Institute Persian Expedition in Iran (1931–1939). Neumann contributed to the Museum's forthcoming collections highlights publications with entries for objects from Mesopotamia and continues to provide artifact highlights for the *Oriental Institute News & Notes*, a quarterly magazine. Four such features appeared over the past year: "Pazuzu: Friend or Foe," "What's in a Name? The Speckled-Lion Stone of Mesopotamia," "Eye of the Lion — A Stone Bowl from Chatal Höyük," and "Pearly White and Precious: A Duck-Shaped Vessel from Megiddo."

Neumann has presented several papers at academic conferences over the past year, including "Sensing the Divine in the Neo-Assyrian Temple: The Sights, Sounds, and Smells of the Divine Meal," at the 61st Rencontre Assyriologique Internationale in Bern, Switzerland (June 24), a revised version of which will be published by Eisenbrauns under the title "Sensing the Sacred in the Neo-Assyrian Temple: The Presentation of Offerings to the Gods" in the volume, *Senses in the Ancient Near East*; and "Dressed to the Divine Nines: Clothing the Gods of Assyria in the First-Millennium BCE," at the American Schools of Oriental Research Annual Meeting in Atlanta (November 21), to be published under the title "Gods Among Men: Fashioning the Diving Image in Assyria" in volume three of the Archaeological Institute of America's Selected Papers in Ancient Art and Architecture series, entitled *What Shall I Say of Clothes? Theoretical and Methodological Approaches to Dress in Antiquity*. Neumann continued as co-organizer of the ASOR-sponsored session "Art Historical Approaches to the Near East" and had a new member-organized session accepted for the 2016 meeting in San Antonio, "Senses and Sensibility in the Near East." In addition, Neumann taught an Oriental Institute course, "Art of Empires: Assyrian and Roman Monumental Relief Sculpture," and gave a number of public talks on the sensory experience of the Assyrian temple, German excavations in Mesopotamia, the Oriental Institute's Persepolis archival photograph collection, and cultural heritage in the Middle East.

---

## James Osborne

**James Osborne** was thrilled to have been hired this year at the Oriental Institute as Assistant Professor of Anatolian Archaeology. The OI has long been a major center of Anatolian studies — including archaeology but also art history and especially Hittitology — as witnessed, for example, by the institute's former excavation projects at, among other sites, Kerkenes Dağ, Alişar Höyük, and Tell Tayinat. The latter is particularly relevant to James, since the site was one of the capital cities of the Neo-Hittite city-states, the



*Satellite image of Tell Tayinat taken in the late 1960s. The excavation scar from the OI's 1930s Syrian-Hittite Expedition is visible in the left-center of the tell. The dark lower town and fortification wall investigated by TLTP are visible around the east side of the tell*

Iron Age culture that is his current specialty. In addition, the site, which was excavated by the OI in the 1930s as part of the Syrian-Hittite Expedition, is coincidentally also the archaeological site at which he currently conducts fieldwork. James is Director of the Tayinat Lower Town Project (TLTP), and in the summer of 2015 he completed a high-resolution intensive surface survey of the site's 16 ha lower settlement, which was occupied by the ancient city's non-elite residents. The results of this survey, which collected over 30,000 artifacts from the site's surface alone, will be published in forthcoming issues of the journals *Antiquity* and *Anatolica*.

One of TLTP's primary research questions surrounds the Neo-Assyrian forced migration event, in which up to four million people were deported and resettled across the ancient Near East; according to Assyrian inscriptions, Tayinat was one of the sites whose populations was treated this way. As part of this larger research project, James presented his TLTP results along with results from his survey in Kurdistan, the Erbil Plain Archaeological Survey, for which he was until 2015 the Associate Director, at the Annual Meetings of the American Schools of Oriental Research and the International Congress on the Archaeology of the Ancient Near East. A more substantive version of this paper was presented as an invited lecture in Jerusalem's Yad Ben-Zvi Institute,

where Israeli archaeologists organized a workshop on the provincial archaeology of the Neo-Assyrians empire. In recent years James has also become interested in the cross-cultural phenomenon of monumentality. He gave a broad introduction to how this topic intersects with urban planning, using the Neo-Hittite capital cities as a case-study, as an invited lecturer to the Free University of Berlin. Related lectures were also presented at the University of Chicago, including a lecture to the Interdisciplinary Archaeology Workshop, a university-wide initiative that seeks to provide an intellectual space to the campus's many archaeologists, and one introducing his research to the hardworking and devoted volunteers of the Oriental Institute.

In addition to the articles described above, James devoted much of his writing time to completing various commitments to edited volumes, including a festschrift for Near Eastern archaeologist Sam Paley, a volume on the Greek Iron Age, and an article on Hittite and Assyrian monuments for a volume on the topic of ancient communications. He also began writing his monograph, tentatively titled *The Syro-Anatolian City-States: Portraits of an Iron Age Culture*.

---

## Hratch Papazian

**Hratch Papazian** continues work at the Old Kingdom step pyramid of Sinki in South Abydos. A conservation and stability assessment of the structure was conducted in March 2016, and

future conservation work, intended to insure the long-term physical stability of the monument, will be carried out on the basis of that evaluation. A site preservation proposal was also prepared at the same time, which is intended to deal with the continued pressure of expanding agricultural fields on antiquities zones in Abydos, a major concern in its own right prevalent in many other parts of Egypt as well. Several steps have already been taken by the project in previous years to safeguard the pyramid zone from the illegal encroachment of fields onto the site. In November 2015, Papazian was invited to the Geography and Economy of the Ancient Nile Delta symposium organized by the Julius-Maximilians-Universität Würzburg, where he presented a paper on the governors of the Delta in the Old Kingdom, which he is now preparing for publication. His article on Old Egyptian converters is set to appear in *Essays for the Library of Seshat* (SAOC 70), a volume in honor of Janet Johnson. He is currently also preparing a study of the Old Kingdom Gebelein papyri.

---

### Susanne Paulus

**Susanne Paulus** joined the Oriental Institute in September 2015. She is an Assyriologist specializing in the legal, social, and economic history of Mesopotamia, especially that of the Middle Babylonian period, which spans the second half of the second millennium BCE. Despite the wealth of surviving documentation, this period is one of the least studied of Babylonian history, even though scholars have acknowledged its importance in bridging the epochs of the better understood Old and Late Babylonian periods. Although more than 12,000 texts have been recovered from cities such as Nippur, only 10–15 percent of these documents have been made accessible through publication. Her current book project, *Comparative Studies in Kassite Archives: Contributions to the Legal and Economic History of Babylonia*, aims to fill this gap of knowledge. For this project, she has translated and analyzed more than 100 legal and economic documents from Nippur in 2015 and has given two connected presentations, one at the American Oriental Society in Boston on the legal and administrative terminology of Kassite Nippur, and another at the Franke Institute for the Humanities on wealth in Babylonia. Furthermore, she is currently working on two additional articles. The first focuses on the transition between the Old Babylonian and Middle Babylonian Periods, while the second discusses the problems with the sources used to reconstruct early Kassite history.

To bring together scholars interested in the Kassite period, she is organizing a workshop at the *Rencontre Assyriologique Internationale* in Philadelphia in cooperation with Timothy Clayden (Oxford). Nine scholars from Europe and the USA will present papers on the archaeology, history, economy, art, and paleography of the Middle Babylonian period. Her own contribution, “Redistribution Revisited,” provides a new perspective on the practice of barley storage in Nippur. The workshop is funded by the prestigious Heinz Maier-Leibnitz-Prize that she was awarded in 2015.

She successfully completed an interdisciplinary project at the North Rhine-Westphalian Academy of Sciences that focused on the problems of an aging society. Her results were published in an article, “Alte Menschen im Alten Orient” (Old people in Mesopotamia), which appears in the anthology *Old Age and Society*. This peer-reviewed essay-volume reflects on the problems of modern society from the viewpoint of neurology, medicine, ethics, history, and law.

She has continued to cooperate with legal historians and was invited to present her work at the Institute of Legal History in Münster. She contributed two articles to a conference volume from Innsbruck. The first, “Ordal statt Eid — Das Beweisverfahren in mittelbabylonischer Zeit,” deals with the transition from oath to ordeal in the procedure of taking evidence in the Middle Babylonian period, while the second, “Die babylonischen Kudurru-Inschriften von der kassitischen bis zur frühneubabylonischen Zeit — Die wichtigsten Ergebnisse aus rechts-historischer Sicht,” highlights the most important legal-historical results of her research on the Babylonian *kudurrus*.

In June 2016, she was appointed Tablet Collection Curator, succeeding Walter Farber.

---

## Richard Payne

During the 2015–2016 academic year, **Richard Payne** continued to develop ongoing projects on the role of religion in Iranian imperialism and the interaction of the Near East with Central Asia. With the final appearance of *A State of Mixture: Christians, Zoroastrians, and Iranian Political Culture in Late Antiquity* (Oakland: University of California Press, 2015), a book focused on the late Sasanian period, he returned to the first two centuries of Iranian rule, the era of empire formation, with special attention to the Zoroastrian institutions and normative frameworks the early Sasanian kings of kings introduced. The book in progress, *Cosmological Politics: The Zoroastrian Institutions of Iranian Imperialism*, argues that the so-called Good Religion facilitated the consolidation of the aristocratic networks through which the Iranian court ruled its provinces. In sidelining religion, previous studies have ignored the incentives to participation in empire that the Iranian court — which included Zoroastrian priest-scholars — granted Parthian aristocratic houses. In an article that appeared in *Comparative Studies in Society and History*, “Sex, Death, and Aristocratic Empire: Iranian Jurisprudence in Late Antiquity,” Payne developed one aspect of the argument in a comparative direction, showing how aristocratic houses depended on Zoroastrian juridical institutions innovated in the early Sasanian period to reproduce themselves and to maintain power across generations. In demonstrating how Zoroastrian cosmological principles and rituals animated juridical institutions that maximized elite male access to female reproductive capacities, the article insists on the potential complementarity of bio-historical and bio-archaeological scholarship with cultural history. It also insists that sexual exploitation be considered alongside more conventionally economic forms of exploitation in the study of ancient imperial regimes. In terms of content and analytical framework, the article captures the state of the larger book project in progress.

At the same time, Payne has been working on the post-Iranian regimes of the Huns and the Turks in Central Asia. In “The Making of Turan: The Fall and Transformation of the Iranian East,” published in the *Journal of Late Antiquity*, he demonstrated the extent to which Hun and Turk conquerors adapted Iranian institutions to their own imperial projects, combining them with their own institutions of nomadic imperialism. He has also been actively working on the importance of trans-Eurasian commerce — the so-called “Silk Road” — crucial for the political economies not only of nomadic states, but also of the Iranian empire. An article on the topic, “The Silk Road and the Iranian Political Economy,” is currently being translated into Chinese for publication. Payne also finished editing a book, *Cosmopolitanism and Empire: Universal Rulers, Local Elites, and Cultural Integration in the Ancient Near East and Mediterranean*, which appeared in



September 2016. His book, *A State of Mixture*, received awards from the American Philosophical Society, the American Academy of Religion, the International Society for Iranian Studies, and the Middle East Studies Association.

Payne presented his work in Buenos Aires, Paris, Princeton, Mumbai, Abu Dhabi, Oxford, and Tübingen, as well as at various venues on campus.

---

## Hervé Reculeau

**Hervé Reculeau** joined the Oriental Institute in August 2015 as an Assistant Professor of Assyriology, in a joint appointment with the University of Chicago's Department of Near Eastern Languages and Civilizations, and the College. In the course of academic year 2015–2016, Hervé gave two lectures at the Oriental Institute: The first one was a Volunteer Day lecture entitled “‘I opened canals and got rid of the bucket.’ Water Management in Second Millennium BCE Northern Mesopotamia,” in fall 2015. The second one, “‘Opener of Canals, Provider of Abundance and Plenty.’ Royal Investment in Large-Scale Irrigation in Second Millennium BCE Upper Mesopotamia,” was presented in winter 2016 at the Twelfth Annual Oriental Institute Seminar on “Irrigation in Early States: New Perspectives, organized by Oriental Institute Postdoctoral Fellow Stephanie Rost. Another on-campus lecture was offered in spring 2016 as one of the Every Wednesday Luncheon Presentations at the The Franke Institute for the Humanities, and focused on “Mesopotamian Agriculture and Climate Change.” Outside of the University, Hervé gave a lecture on “Irrigation in the Middle Euphrates Valley: A View from the 18th c. BCE Mari Letters” at the 226th Annual Meeting of the American Oriental Society in Boston.

As can be inferred from these lectures, Hervé's research focuses on irrigation and agriculture in ancient Mesopotamia. Part of this year's activity was devoted to a long-term study on irrigation and water management in the kingdom of Mari (Syria), partly based on unpublished material that he is editing. It provides a comprehensive analysis of the terminology and uses of canals and other waterworks on the middle Euphrates valley in the early second millennium BCE, to appear in a forthcoming monograph, *Florilegium Marianum XVI. Irrigation et contrôle de l'eau au royaume de Mari* (Mémoires de NABU 20, Paris: Sepoa). He also submitted an article on the economic aspects of Northern Mesopotamian irrigation agriculture as his contribution to the *Proceedings of the Twelfth Annual Oriental Institute Seminar*, edited by Stephanie Rost.

Another aspect of Hervé's research focuses on ancient Mesopotamian notions of political space, which are the topic of an article finalized this year, “Claiming Land and People: Conceptions of Power in Syria and Upper Mesopotamia during the 2nd Millennium BCE,” in *Raum-Ordnung. Raum und soziopolitische Ordnungen im Altertum*, Sebastian Schmidt-Hofner, ed. (Heidelberg: Universitätsverlag, 2016). Finally, as an epigrapher and a specialist of the Old Babylonian period (early nineteenth century BCE), Hervé was invited by McGuire Gibson to publish the cuneiform tablets discovered at the Iraqi site of Tell Muqdadiya, in his forthcoming article “Twelve Early Old Babylonian Tablets From Tell Muqdadiya,” in *Tell Muqdadiya, Iraqi Excavations in the Diyala Region I*, by H. A. Hamzi, translated by Mark Altaweel, edited and annotated by McGuire Gibson (Chicago: Iraqi State Board of Antiquities and the Oriental Institute). He also pursued his long-term collaboration with French colleagues by joining Antoine Jacquet

(Collège de France, Paris) in a series of collations on Old Babylonian tablets in the Oriental Institute's collection, now available online at: <http://www.archibab.fr>.

---

## Robert K. Ritner

**Robert Ritner** was on sabbatical for the academic year. During this time he produced several articles now in press on topics ranging from religion and technology to philological studies of Semitic and Libyan tribal names. The study "Oriental Institute Museum Notes 16: Two Egyptian Clepsydrae (OIM E16875 and A7125)" represents the first scholarly examination of the large Oriental Institute water clock on display in the museum and corrects numerous errors in previous catalog entries and on the museum label. The correct date proves to be centuries later than the reign of Ptolemy II, as formerly assumed, and the object may be one of the last surviving examples of these temple instruments. In contrast, an unpublished fragment from another clock acquired in Mosul by H. Frankfort does date from that reign but is a direct copy of an Eighteenth Dynasty clock of Amenhotep III, produced over one thousand years earlier. The copy proves the use of textual "pattern books" in ancient Egypt. The use of a textual model complements further examples in his study "'King Petemenekh': New Kingdom Royal Sarcophagi Texts on a Private Coffin," published this year in Copenhagen.

For a *Festschrift* to be co-published in New York and Jerusalem, Ritner analyzed Egyptian topographical lists to produce "The Supposed Earliest Hieroglyphic Mention of Israel (Berlin ÄM 21687): A Refutation." The questionable place name proves to be Assyria and perhaps reflects a conflation with the tribe of Asher. "The Libyan Mahasun Tribe," to be published in *Göttinger Miszellen* 250 (2016), confirms the name of this Libyan group, mentioned only once in Egyptian texts but securely attested in the classical geography of Strabo. Two of his *Festschrift* articles were published; for Betsy Bryan he offered "Osiris-Canopus and Bes at Herculanium," and for Günter Vittmann he wrote "The Hound of Horus," a study of names and mythology. Regarding current events, he contributed "Ben Carson and the Myth of Joseph's Barns" to *News & Notes* 228 (Winter 2016), p. 20. Ritner's work as editor of Jan Johnson's *Festschrift, Essays for the Library of Seshat*, is completed, and the volume will appear as OIP 70. He is now working together with Foy Scalf on a Roman-era Demotic magical papyrus at the University of Michigan.

Ritner worked with the Membership Department to provide a unique format for this year's lecture series, adopting his idea of a formal debate from two scholarly viewpoints on the famous battle of Kadesh. On January 6, he represented Ramesses II in "The Battle of Kadesh: A Debate Between the Egyptian and Hittite Perspectives," together with Theo van den Hout speaking for the forces of Muwatalli II (full debate available for viewing online at: <https://www.youtube.com/watch?v=A1AGe2V0qHo&feature=youtu.be>). This first pairing of two Institute scholars in a contest of interpretation filled Breasted Hall with one of the highest attendance records for an evening lecture, particularly notable in the midst of winter. Online comments describe the event as fascinating and brilliant, with great performances and "lots of enthusiasm" by both speakers.

On January 25, Ritner served as lecturer for the Volunteers' field trip to "The Discovery of King Tut," an exhibit of replicas of Tut's tomb and his artifacts at the Grand Rapids Public Museum. Faultlessly organized by Sue Geshwender, the bus trip included good food, relaxed discussions on board and in the galleries, and even a concluding carousel ride. He served as a

reviewer for Egyptology grants by The Israel Science Foundation, and as manuscript reviewer for the *Journal of the American Research Center in Egypt* and the *Journal of the Society for the Study of Egyptian Antiquities*. He also began new duties as the Oriental Institute Representative for the American Research Center in Egypt.

---

## Stephanie Rost

**Stephanie Rost** started her position as the 2016–2017 postdoctoral fellow of the Oriental Institute of the University of Chicago in September 2015. She was in charge of organizing the twelfth annual postdoctoral conference of 2016, titled “Irrigation in Early States: New Directions,” which took place on March 3rd and 4th. The goal of the conference was to re-investigate the role of irrigation in early states by bringing together experts in the field of irrigation studies from a wide regional and temporal scope. The conference is discussed in greater detail in “Irrigation in Early States: New Directions,” by S. Rost, *Oriental Institute News & Notes* 230 (Summer 2016): 16–19.

Beyond organizing the conference Stephanie was in charge of organizing the Oriental Institute Connection Seminar, has completed three publication manuscripts, and received the 2016–2017 Mesopotamian Fellowship of the American School of Oriental Research to conduct a settlement survey in the Umma region of southern Iraq in 2017. Moreover, she was invited to present at the Topoi Research Group Workshop “Water Management in Ancient Civilisations” at the Free University of Berlin, Germany, February 11–12, 2016, and the Interdisciplinary Archaeology Workshop of the University of Chicago, May 19, 2016. Stephanie has also presented at the 10th International Congress of Archaeology of the Ancient Near East in Vienna, April 25–29, 2016. In addition she has given two guest lectures in seminars held by Emily Hammer and Brian Muhs.

---

## Yorke Rowan

During the 2015–2016 academic year, the next stage of the Galilee Prehistory Project (GPP) was initiated with a season of survey and test excavation along Wadi al-Ashert, a small wadi in the lower Galilee with remains dated to the Neolithic and Chalcolithic. With Oriental Institute Research Associates Chad Hill and Morag Kersel, the results were presented at the American Schools of Oriental Research (ASOR) meetings in Atlanta in November; three posters were also presented by GPP project participants. Also in November, **Yorke Rowan** organized a workshop hosted by the OI for the key members of the GPP in order to present and discuss the results of their studies from the six seasons of excavation and survey at Marj Rabba. The team met with Thomas Urban and Leslie Schramer to discuss the schedule and publication guidelines. In early July 2015, Yorke, with co-organizers Danny Rosenberg (Haifa University) and Tatjana Gluhak (Johannes Gutenberg University, Mainz), presided over Ground Stone & Society, the first international workshop for the newly formed Association for Ground Stone Research held at Haifa University, Israel. In addition to his role as conference organizer Yorke presented “Prestige, Ritual Practice, and Ground Stone: Late Prehistoric Stone Vessels,” as well as a poster (with former GPP intern and excavation crew member Blair Heidkamp) on spindle whorls

from Tel Yaqush. Many of the papers from the conference will appear in a special issue of the *Journal of Lithic Studies*, including the introductory paper by Rosenberg, Rowan, and Gluhak.

The Eastern Badia Archaeological Project (EBAP) selected a new excavation site on the slope of Mesa 7 along the Wadi al-Qattafi. During the 2015 field season a collapsed structure of basalt was sectioned and excavated, exposing half of a well-preserved Late Neolithic building. The results of that season were also presented at the ASOR meetings in Atlanta. Also related to EBAP, the article “Optically Stimulated luminescence (OSL) Dating and Spatial Analysis of Geometric Lines in the Northern Arabian Desert” which dated large “wheel” structures in Jordan’s Black Desert to late prehistory (one wheel is Late Neolithic, the other Chalcolithic/Early Bronze Age), was published in the *Journal of Archaeological Science* 64: 1–11. With colleagues, Yorke also published “Late Neolithic Architectural Complexity at Wisad Pools, Black Desert” in *Neo-Lithics* 1/15: 3–100, concerning W-80, the large Late Neolithic building at Wisad Pools. He also delivered a lecture, “Explorations in the ‘Black Desert’ of Jordan” to the Archeological Institute of America Rockford Society in November. With funding from the Brennan Foundation and through the crowdsourcing site [experiment.com](http://experiment.com), Yorke and Austin “Chad” Hill began their mapping project of the Wadi Qattafi using fixed wing and multi-rotor drones.

Other publications by Rowan included “The Judean Desert as a Chalcolithic Necropolis” with David Ilan, which was published in the *Journal of Mediterranean Archaeology* 28.2: 171–94, and “Feasting at Marj Rabba, an Early Chalcolithic Site in the Galilee” in the *Oxford Journal of Archaeology* 35: 127–41, co-authored with Max Price and Chad Hill. In October, Yorke gave an invited lecture to the Archeological Institute of America of Albany Society on “New Rituals, New Religion? Death’s Dominion during the Copper Age of the Southern Levant.”

---

## Foy Scalf

**Foy Scalf** continued to focus on the Research Archives and the Integrated Database Project (IDB) in 2015–2016. His leadership on the IDB was recognized by the Society of American Archivists who chose him to receive the Archival Innovator award for 2016. The award acknowledges the success and innovation of the project as it moves toward the end of its third consecutive grant from the Institute of Museum and Library Services. Further details can be found in the report for the Integrated Database Project.

In the autumn quarter, Foy co-taught a class with Brian Muhs and Janet Johnson on the history of ancient Egypt for NELC. As Robert Ritner was on sabbatical, Foy filled in for the lectures on New Kingdom, Third Intermediate Period, and Ptolemaic Egypt. With the help of OI IT Analyst Knut Boehmer, Foy ran one of the most popular Oriental Institute education classes to date. “Egyptian Hieroglyphs for Museum Goers” was taught in the spring as a hybrid course with both on-site and online content. Each week on-site classes were recorded and uploaded to the Chalk website for online access. Over thirty students registered for the class and ten students, some of whom flew in from as far as western Canada, attended post-class tours of the Egyptian collections on display in the Field Museum of Natural History and the Oriental Institute.

Foy returned to epigraphic work on behalf of the Ancient Egypt Research Associates (AERA) excavations at Giza. Having worked for a season in 2007 at the site, he was invited



to collaborate on an incredible corpus of Old Kingdom sealings by AERA sealing specialist Ali Witsell. The material is currently being analyzed in preparation for several final reports as well as for future publication. He ushered the Oriental Institute Demotic Ostraca Online (OIDOO) project through its relaunch via the Online Cultural Heritage Research Environment (OCHRE), which is now available through the project webpage. In addition, he recruited the help of several NELC Graduate students — Ariel Singer, Theresa Tilliakos, and Sunwoo Lee — to help process photos and perform data entry. At this time, nearly half (~430) of the 900 Demotic ostraca in the Oriental Institute collections are now available online through the project's database.

Preparation began in earnest on a special exhibit currently scheduled for October 2017 about the ancient Egyptian Book of the Dead. Foy will edit a catalog of essays from leading specialists and curate the exhibit. Researching items for the exhibit led directly to two publications now in press. A papyrus formerly in the Newberry Library, but whose location is now unknown, was discovered among the digital archival files of the OI. The papyrus belonged to a man named Iry-iry and contained a Memphite hymn to Osiris and the beginning of BD 168, a composition otherwise known as the Book of Caves. An article publishing the papyrus and analyzing the texts was submitted to the *Journal of Egyptian Archaeology*. A kind invitation from colleague and Book of the Dead exhibit catalog contributor Rita Lucarelli led to a publication covering “The Funerary Literature Related to the Book of the Dead,” which is set to appear in *The Oxford Handbook to the Ancient Egyptian Book of the Dead*.

In addition to these publications, Foy's article mentioned in last year's report on Demotic funerary texts appeared in *Journal of Ancient Near Eastern Religions* 15/2 (2015): 194–215, and a short highlight on the IDB project called “Managing Our Past for the Future,” co-written with Anne Flannery, appeared in the *Oriental Institute News & Notes* 228 (2016): 10–13. He gave several talks over the year, including a paper at the 41st Annual Symposium of the Society for the Study of Egyptian Antiquities and an information session on the IDB for the University of Cincinnati Department of Design, Architecture, Art, and Planning at the OI.

---

## Gil J. Stein

As Principal Investigator of the Oriental Institute's Partnership with the National Museum of Afghanistan (see separate report), **Gil Stein** made three trips to Afghanistan in 2015–2016 to assess project progress, coordinate with the National Museum staff, and to work with Field Director Alejandro Gallego-Lopez and the Kabul team of registrars, conservators, and consultants. Alejandro and his team have now inventoried over 109,000 objects in the bilingual database — constituting 99% of the holdings of the National Museum of Afghanistan in Kabul.

Gil continued working with Belinda Monahan on the final publication of the Late Chalcolithic ceramics from his 1992–97 excavations at the fourth millennium BCE Uruk Mesopotamian colony site of Hacinebi.

Gil presented four academic papers during the 2015–2016 academic year:

- “The Complex Origins of Complex Societies: Alternative Pathways to the Emergence of Social Inequality and Political Centralization across the Near East in the 6th–5th millennia BC,” at the 5th International Congress of Young Iranian Archaeologists, Tehran University, Tehran (October 11, 2015)

- “The Origins of Social Complexity in Chalcolithic Northern Mesopotamia: Excavations at Surezha,” at the Society for American Archaeology Annual Meeting, Orlando, Florida (April 7, 2016)
- “Cultural Heritage Work in Afghanistan,” at the ASOR-Smithsonian World Heritage Day Workshop, Smithsonian Institution Freer Gallery, Washington, DC. (April 18, 2016)
- “Producing Income and Reproducing Identity: The Long-Term Trajectory of a Mesopotamian Trade Diaspora in the Fourth Millennium BC,” at the Anthropology Department, University of Illinois Urbana-Champaign Globalization Seminar (April 28, 2016)

Gil had five single-authored and co-authored publications in 2015–16:

- Michael Fisher and Gil Stein, “Aks of War: A Digital Museum Inventory for a War-torn Afghanistan,” in *Proceedings, 9th ICAANE, Basel 2014*, (Basel, 2016), pp. 453–67
- Alexia Smith, Philip Graham, and Gil Stein, “Ubaid Plant Use at Tell Zeidan, Syria,” *Paléorient* 41/2 (2016): 51–69 (2016)
- Gil Stein, “Tony Wilkinson (1948–2014),” *Iraq* 77 (2016): 1–3
- Gil Stein, “The Oriental Institute Partnership with the National Museum of Afghanistan 2014–2015 Report,” *Oriental Institute Annual Report 2014–2015*, (University of Chicago The Oriental Institute, 2015), pp. 139–43
- Gil Stein “The War-ravaged Archaeological Heritage of Afghanistan: An Overview of Projects of Assessment, Mitigation, and Preservation,” *Near Eastern Archaeology* 78/3 (2015): 187–95

---

## Emily Teeter

**Emily Teeter** continues to work with objects in our collection and in other collections throughout the world. She is presently researching stelae originally from Deir el Medina that were excavated by the Oriental Institute at Medinet Habu in the 1920s and 1930s. Surprisingly, considering they have been unstudied for many decades, some of them were commissioned by very well-known individuals. She continues to work on an embalming cache in our collection and she, along with Kierra Foley and Rozenn Bailleul-LeSuer, are finishing the complete re-cataloging of the Egyptian holdings of the Art Institute of Chicago. Emily is also completing a chapter on forms of Egyptian worship for the *Oxford Handbook of Ritual and Worship*. She recently submitted manuscripts for publication to Palgrave/MacMillan, and to the French Institute in Cairo, as well as a brief entry on Felix Teynard for the catalog of the Smart Museum’s exhibit of The Guttman Collection of Photography. Publications that appeared this last year include *In the Shadow of a Pyramid: The Egyptian Collection of L. V. Holzmaister* (Prague: National Museum), for which she served as co-editor and contributor. She reviewed articles being considered for publication in *Journal of Near Eastern Studies* and *Journal for the Study of Egyptian Antiquities* and she also reviewed several book proposals for major academic publishers.

Emily spoke at the College of William and Mary, the History Museum of Mobile, and the Field Museum. She continues to serve on the Boards of CIPEG (the International Committee for Egyptology), CAORC (Council of American Overseas Research Centers), and ARCE (American Research Center in Egypt), finishing her term as ARCE's Vice-President. She served on a committee reviewing the governance of CAORC, and she was part of an ARCE delegation that visited Washington, D.C., to visit with American and Egyptian officials. Emily attended the International Congress of Egyptology in Florence in August, and she continued to the CIPEG meeting in Munich where she delivered a paper on the Egyptian collection of the Oriental Institute.

---

## Theo van den Hout

In his first year not being department chair, **Theo van den Hout** was able to devote more time to the Chicago Hittite Dictionary project (CHD, see separate report) and teaching. Besides teaching classes on Hittite and Anatolian topics, the Common Core course in the College, "Reading Cultures," proved to be a very rewarding experience. As usual, there was also some committee work to be done. Theo submitted manuscripts for three entries for the *Reallexikon der Assyriologie*: "Waškuwatašši" (a deity), "Weihgabe" (votive gift), and "Ziege" (goat). Great fun was giving the joint Oriental-Institute lecture with Robert Ritner on the Battle of Kadesh in the winter (see below). In April Theo was elected a 2016 Fellow of the John Simon Guggenheim Memorial Foundation in New York City. This past year he also corresponded with author Stephen King who asked him some questions on ancient Near Eastern demons.

Theo was happy to see his book *Keilschrifttexte aus Boghazköi, Achtundsechzigstes Heft: Texte aus dem Bezirk des Grossen Tempels XX* (Berlin: Gebr. Mann Verlag) published: hand copies of 317 cuneiform fragments that he had worked on for the last few years. Articles that came out this year are "Memorization and Hittite Ritual: New Perspectives on the Transmission of Hittite Ritual Texts" (with Hannah Marcuson), *Journal of Ancient Near Eastern Religions* 15: 143–68; "A New Hieroglyphic Luwian Inscription from Pancarlı Höyük, Near Zincirli, Turkey, and its implications for the Early Iron Age in Sam'al-Y'DY" (with Virginia Rimmer and Ahmet Beyazlar), *Journal of Near Eastern Studies* 75: 53–70; "Purandamuwa, der Verlorene Sohn Mittannamuwas?" in *Anatolica et Indogermanica. Studia linguistica in honorem Johannis Tischler septuagenarii dedicata*, H. Marquardt, S. Reichmuth, and J. V. García Trabazo, eds. (Innsbruck), pp. 343–48.

In addition there were five encyclopaedia entries in the *Reallexikon der Assyriologie* on "Vergöttlichung" (deification), "Versammlung" (assembly), "Wächter, Wache" (guard, watch), "Wagen, -modell" (wheeled vehicle and models thereof), and "Walwazidi" (PN), that appeared in print. Especially interesting turned out to be the article on vehicles, on which nothing systematic had been written so far. This is a subject Theo might return to in the not too far future with chariotry and horse specialist Peter Raulwing (San Francisco), who was instrumental in writing this longer entry.

Theo gave the following presentations: "Is Absence of Evidence Evidence of Absence? oder die Frage nach dem Anders-sein der Hethiter," (keynote lecture) *Stand und Perspektiven der Hethitologie. Kolloquium zum Abschluss des Projekts "Hethitische Forschungen," Akademie der Wissenschaften und der Literatur, Mainz* (September 7–8); "The Battle of Kadesh: A Debate between the Egyptian and Hittite Perspectives," with Robert Ritner, *The*

Oriental Institute (January 6; see <https://www.youtube.com/watch?v=A1AGe2V0qHo&feature=youtu.be>); “Neue Gedanken zu den Tonbullien aus dem Nişantepe-Archiv in Hattusa,” Ludwig-Maximilians-Universität München (July 5).

---

## Tasha Vorderstrasse

In 2015–2016, **Tasha Vorderstrasse** received the Oriental Institute Museum Collections Research grant. Her work focused on the Islamic levels at the site of Alishar Höyük, located in central Turkey, that was excavated by the Oriental Institute in the 1920s and 1930s. Although some of the Islamic material had appeared in the publications of the excavations, this material has never been studied as a whole. It represents an important corpus of material from the twelfth/thirteenth centuries as well as the Ottoman period. Central Turkey has not been the subject of extensive archaeological research in the Islamic period and this project builds on previous work done by the author in the area, most notably at the site of Komana. She looked at a large quantity of small finds, glass, and pottery in order to come to a better understanding of the site and how it fits into wider regional trends.

In January 2016, she became part of the MANTIS project at the Oriental Institute (see separate) and has been working largely on the site of Dura Europos since then. This has included doing data entry in OCHRE and conducting research on the site. She was one of the presenters at a brown bag lecture on the project at the Oriental Institute in June.

Her research outside of the University of Chicago focused on continued work at the excavations at the site of Komana, near Tokat, where she worked again on the pottery in the summer of 2015. She also returned to the Louvre to complete the work on the Qoueiq survey material for publication. In March, she looked at coins and unpublished manuscripts from the site of Alishar Höyük at the American Numismatic Society and examined material from the Dura Europos in the Yale University Art Gallery as comparanda for material from the sites of Antioch and Alishar Höyük. She also examined the papers of Ellsworth Huntington concerning his research in Turkey in the late nineteenth/early twentieth centuries at Yale University Library.

She was the co-organizer and co-chair of the ASOR 2015 session “Archaeology of the Crusader Period,” and gave a talk on “Archaeology and Charters in the Principality of Antioch and the County of Tripoli” at the conference as well as another lecture, “Economy, Documentation, and Coinage in Achaemenid and Hellenistic Bactria” with Brian Muhs. She gave a talk on “Reliquary Crosses in the Middle Byzantine Period” at the Late Antique and Byzantine Studies Workshop, University of Chicago (December 2015) and gave an invited lecture “Ways of Seeing in Frescoes in Georgian Churches: Past, Present, and Future” at the Yale University symposium “‘Georgian Orthodoxy’: Revival of Art and Religion in the Caucasus” in March 2016.

She was appointed to the editorial board of the journal *Near Eastern Archaeology*, and the following articles were published: “Re-Constructing a Medieval Tomb from Antioch,” in *Le patrimoine architectural de l’Église orthodoxe d’Antioche. Perspectives comparatives avec les autres groupes religieux du Moyen-Orient et des régions limitrophes*, M. Davie, ed. (2015); “Medieval Pits of Komana,” in *The Medieval Settlement at Komana*, D. B. Erciyas and M. N. Tatbul, eds. (Istanbul:

Ege Yayinlari, 2015), pp. 181–92; “A Yezidi Sanctuary in Armenia” in *Oriental Institute News & Notes* 227 (2015): 20–21.

---

## John Z. Wee

**John Wee** is author of the following academic articles and essays in 2016: “Virtual Moons Over Babylonia: The Calendar Text System, Its Micro-Zodiac of 13, and the Making of Medical Zodiology,” in *The Circulation of Astronomical Knowledge in the Ancient World*, J. M. Steele, ed. (Time, Astronomy, and Calendars 6; Brill), pp. 139–229; “A Late Babylonian Astral Commentary on Marduk’s Address to the Demons,” *Journal of Near Eastern Studies* 75/1: 127–67; and a trade essay on “Wretched Subjects, or: How I Learned to Stop Worrying and Love Ancient Science,” *Oriental Institute News & Notes* 230: 4–14. In press and forthcoming are “Earthquake and Epilepsy: The Body Geologic in the Hippocratic Treatise on the Sacred Disease,” in *The Comparable Body: Imagination and Analogy in Ancient Anatomy and Physiology*, John Z. Wee, ed. (Studies in Ancient Medicine; Brill); and “Five Birds, Twelve Rooms, and the Seleucid Game of Twenty Squares,” in an edited volume by Brill.

In the past year, John presented the following lectures and conference papers: “Mapping Stars and Planets Until the Zodiac” at the 37th Annual Humanities Day at the University of Chicago (October 17, 2015); “An Esoteric Babylonian Commentary, Explained,” at the 226th Meeting of the American Oriental Society, Boston (March 18–21, 2016); and “How to Play the Mesopotamian Game of Twenty Squares,” at an invited lecture for the Oriental Institute Volunteer Program, University of Chicago (April 11, 2016).

In addition, he is preparing papers for these upcoming presentations: “Pan-astronomical Hermeneutics and the Arts of the Lamentation Priest,” at the Workshop for Project on Pre-Medieval Commentaries in Medicine and Mathematical Sciences, Max Planck Institute for the History of Science, Berlin (August 25–27, 2016); “On Mesopotamian Planets and Star Maps,” at the Wednesday Lunch Series for Faculty at the Franke Institute for the Humanities, University of Chicago (October 12, 2016); “The Mesopotamian Diagnostic Series Sa-gig as Handbook,” at the Conference on the Form, Utility, and Professional Technê of Practical Handbooks in the Ancient World as part of the Magical Knowledge Project sponsored by the Neubauer Collegium, University of Chicago (November 12, 2016); and “From the Babylonian Micro-Zodiac to Dodekatemoria in Late Antiquity,” at the Workshop on Ancient Astrology, aligned with the 2016–2017 Research Theme of Scale, Institute of Advanced Study at Durham University (Dec 9–10, 2016).

---

## Donald Whitcomb

This year has been one of changes of fortune, the conclusion of the Jericho Mafjar Project, the opening of new fieldwork projects, and cautionary physical events. For someone who started in Middle Eastern archaeology in Iran, an opportunity to return was remarkable. In early October, **Donald Whitcomb** flew to Tehran for the International Congress of Young Archaeologists at University of Tehran. Don gave a lecture on “Archaeology of Sasanian Cities” and came to realize that he had the earliest Iranian field experience of the foreign archaeologists there.



At a dinner feted by Dr. Hamideh Choobak, director of the Iranian Center for Archaeological Research (ICAR), she suggested that Don excavate Jundi Shapur with direction of Negin Miri. Negin and Don discussed this huge, complex urban site and agreed on approaches — thus begins a new dream.

Following the conference, Abbas Alizadeh organized an overnight train to Shush (Susa, some sixteen hours). They lived in the chateau (the old French archaeological center) and Abbas gave them tours of ancient Susa and Iwan-I Karkheh, an important Sasanian city. The next day they visited Jundi Shapur, and Don saw Robert Adams' trenches of the 1960s. Don had studied that project and made startling new discoveries on the basis of its reports (*Oriental Institute 2003–2004 Annual Report*, p. 93). The day ended with a picnic above the falls of Shushtar. Back in Tehran, Don visited the ceramics study rooms with Majid Arfaee, an old friend from the Oriental Institute and again chatted with Negin and her husband Abbas about Iranian archaeology.

In November Don participated in the American Society of Oriental Research meetings in Atlanta. Don responded to an interesting set of papers on the “11th c. decline” organized by Katia Cytryn-Silverman and Gideon Avni; this was a fine opportunity to continue discussion of what Don called the “second transition” in Islamic Archaeology, from Early into Middle Islamic periods. Then they had a panel on Khirbet al-Mafjar, where Don spoke on the four mosques that have now been discovered. The other papers in the panel seemed to turn around Ignacio Arce's new hypothesis, that the site has an earlier Roman occupation. They put together a series of papers on their excavation experiences and this is now published in the journal *Near Eastern Archaeology* 79/2: 78–87.

As it turned out, this article is a sort of “swan song” for the Jericho Mafjar Project. The new director and a committee decided that the five-year Memorandum of Understanding was finished and no further excavations were necessary. This termination of the Jericho Mafjar Project now seems to be a matter of departmental politics and not a dissatisfaction with our fieldwork. Nevertheless, Don went to Jerusalem feeling some umbrage and looking for a new project. This became a tour of Tiberias, with a long visit to Sinnabra (Khirbet al-Karak) led by Rafi Greenberg, and the Jezreel valley, hosted by Matt Adams. The most exciting information came from a visit to al-Quds University, where the archaeologists treated him to information on several early Islamic sites of extraordinary value and potential.

April proved a deciding month, as Don went to Cairo to be keynote speaker for a Fatimid ceramics conference sponsored by the French and German Institutes. After a day of fine papers, Don became hobbled with a bad hip and returned to Chicago. The wages of so much travel this last year included more serious health problems that kept him in the hospital for a month and then on a slow road to recovery. Don was home by early June and returned to the Oriental Institute, waiting for a new hip and more field opportunities.

---

## Karen L. Wilson

During the past year, **Karen Wilson** has been finalizing the manuscript for *Nippur VI: The Inanna Temple* that will appear in the Oriental Institute Publications series. *Nippur VI* 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.

This past year, Karen also continued to serve as Kish Project Coordinator and Research Associate at the Field Museum, preparing aspects of the publication of the work of the joint Field Museum and Oxford University expedition to Kish in 1923–1932. 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. The volume presents the results of a symposium conducted in November 2008 that focused on current research and updated excavations at the site. Chapters cover studies of the human remains, textual evidence, lithics, animal figurines, seals, stucco, and stratigraphy as well as a catalog of portions of the Field Museum holdings from the sites of Kish and Jamdat Nasr.

---

## Christopher Woods

**Christopher Woods** devoted much of this past year to continuing work on a number of long-term projects, completing publications, and presenting papers at several international conferences. Chris chaired the search committee that recommended the appointment of Jean Evans, PhD, as Chief Curator and Deputy Director for Collections and Exhibitions of the Oriental Institute Museum. He continued his editorship of the *Journal of Near Eastern Studies* and oversaw the Oriental Institute's Postdoctoral Scholars Program.

This year has also seen the conclusion of Chris' 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* was 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 was 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 took place November 8–9, 2014; a second conference took place in China on June 25–30, 2015, and was hosted jointly by the Chicago Center in Beijing and Fudan University in Shanghai. Our third conference took place July 25–27, 2016, with two days at the University's Paris Center and a third at the Sorbonne (co-hosted by the École Pratique des Hautes Études and the University of Basel). Following the format of our Chicago and China meetings, the theme of our Paris conference was, broadly, script, society, and literature, within the context and process of the invention of writing. Specific topics included scribal transmission and education, the development of literacy, the rise of literature from earlier genres and the extension of incipient writing systems to serve this purpose, the materiality and archaeological contexts of writing, as well as the relationship between writing and the non-linguistic symbolic systems that preceded visible language. It bears mentioning in this connection that our *Signs of Writing* conferences represented the most extensive forum to date for the study of early writing systems, having collectively offered more than one hundred presentations given by some fifty scholars representing not only the different civilizations that independently invented writing (Mesopotamia, Egypt, China, and Mesoamerica), but also various disciplinary

approaches such as number systems, pedagogy, cognitive psychology, in addition to such traditional disciplines as archaeology, history, linguistics, and religion. We also hosted at the Collegium several visiting scholars in connection with our project, for periods ranging from two weeks to two months. Xianhua Wang, Director of the Institute of Afrasian History and Philology at the School of History and Culture, Sichuan University, spent much of the winter quarter (January–March) with us. He was joined in February by Amalia Gnanadesikan of the University of Maryland. Wang is an Assyriologist working primarily on issues of writing in third-millennium Mesopotamia; Gnanadesikan is a linguist and world-authority on writing systems broadly. In March we hosted our close collaborator Andréas Stauder, an Egyptologist at the École Pratique.

Chris presented at both Signs of Writing conferences this past year, speaking on “Contingency Tables and Economic Forecasting in the Earliest Texts from Mesopotamia” at Shanghai and on “Determinatives in Sumerian Writing from the Perspective of Noun Classifier Systems” at the Paris meeting. At the Rencontre Assyriologique Internationale meeting in Philadelphia in July, Chris spoke in a session honoring Oriental Institute Professor Emeritus Miguel Civil on “In the Mind’s Eye: Possible Mental Abacus Calculations in Mesopotamia.” In March, at the American Oriental Institute meeting in Boston he presented on “The Abacus in Mesopotamia: Considerations from a Comparative Perspective.” At this year’s annual Oriental Institute Symposium, organized by Stephanie Rost on Irrigation in Early States, Chris spoke on “Where the Rivers Meet Language: Topographical Deixis in Sumerian.” Finally, in June Chris spoke on “Gilgamesh in Its Ancient and Modern Contexts” at the Assyrian Legacy: From Ancient Civilization to Today’s Cultural Revival conference at the Library of Congress and participated in the workshop “Interdisciplinary Approaches to Cuneiform Studies and Ancient Societies” (Ann Arbor) in honor of Piotr Michalowski.

---



**RESEARCH SUPPORT**







*Above and overleaf: Worker standing beside a doorway relief of the King with attendants from the Central Building at Persepolis. Schmidt Expedition, 1935 (D. 13314)*

## **RESEARCH SUPPORT COMPUTER LABORATORY**

**Knut Boehmer**

I started as IT Support Specialist of the Oriental Institute in October 2015, replacing Paul Ruffin after a one-month hiatus. Initially a bit nervous, since I had never worked in a non-German environment before, the welcome I received from all staff and faculty alike was overwhelmingly positive and a great incentive to hit the ground running, helping to improve everyone's work environment as much as possible. While I have collaborated with almost everyone in the Oriental Institute by now, the biggest changes so far took place in the OI-IT/Computer Laboratory-related workflow.

### **Workflow Changes**

#### ***Oriental Institute IT Inventory***

One of the biggest challenges I faced during the first few months was getting a good overview of the resources in place — what computers, printers, etc., were being used around the building — as well as a good understanding of what the server structure looked like. Since that was also a great opportunity to get to know almost everybody in the building, I decided to start from scratch, going from room to room and creating a detailed list of everything I came across. This list has kept growing and already proven to be a valuable tool. As of mid-July 2016, this list contains information about over 175 computers.

#### ***Improving Working Conditions for Everyone***

One of my primary goals for the IT department is to be able to provide the best support possible for everyone, using all resources at our disposal and making sure nothing goes to waste by sitting on a shelf or in a drawer while there is someone in the building that could benefit from it. As such, any machines that were replaced by newer or refurbished ones were checked against the inventory list; if they would be a step up for someone else, the computer was wiped, provided with a new clean installation, and repurposed. If that is not the case, all working parts were set aside before decommissioning the rest. These spare parts have helped many people across the building, often providing same-day improvements to their workplaces.

#### ***Change from Ticketing System to Direct Support***

The old ticketing system that was in place before was retired. The Oriental Institute's size is something that should allow (and even encourage) personal contact, and IT Support should be present and approachable around the building, not hidden behind an e-mail. While it can be a challenge to keep an eye on multiple requests on a busy day or week, constant contact throughout any support process has proven highly effective and appreciated by everyone.

### ***Purchase Processes***

Extending the existing services, the purchase of computers and software has been streamlined, so that now a large majority of all new IT-related purchases are processed through the Computer Laboratory. This includes preliminary meetings to discuss the required needs, research to find the best solutions, ordering, checking everything upon arrival, and setting up all required parts, as well as giving a brief introduction to any changes, if necessary. The reception of this new service-oriented approach was very positive.

### ***Recycling Pickups***

Starting in spring 2016, semi-annual recycling pickups will be organized to prevent old electronic waste from piling up in the Oriental Institute. The first pickup removed a complete van-full of old electronics from the building, the second one is to take place in late July and will likely have a similar volume.

## **Projects**

### ***Project Support***

As mentioned in the introduction, there are few projects or parts of the Oriental Institute that have not been in contact for help in one form or another over the last couple of months. For projects, the Integrated Database Project should be mentioned as one of the most constant interactions, but other projects like (but not limited to) CAMEL, the Persepolis Fortification Project, the Demotic and Hittite Dictionaries, OCHRE, the Epigraphic Survey, and others have been supported in a multitude of ways.

### ***Oriental Institute Website***

In spring 2016, a website committee consisting of staff from Membership, Development, Education, the Research Archives, and OI-IT was formed to discuss long-term strategies for the Oriental Institute's website. While the Content Management System "Drupal" makes it easy to change the website's content, it is important to keep everyone else in the loop about changes to prevent conflicting information. Throughout the year, the website also was expanded in several areas, including new projects like MANTIS, and improvement of underlying code.

### ***Hybrid Classes***

Starting with Foy Scalf's "Egyptian Hieroglyphs for Museum Goers," a mobile computer setup was created that allowed the recording of the complete on-site class. The day after each session was held at the Oriental Institute, the full video was uploaded and provided to the participants via CHALK, allowing them to experience a realistic idea of what it would have been like had they been there.

Initial feedback after the class concluded was encouraging, and with a complete overhaul of the classrooms happening in summer 2016, including the installation of hardwired webcams, the possibilities of this will further increase in scope in the near future. A long-term goal here is to allow live-streaming of classes and interaction with online participants in real-time.

### ***FileMaker Upgrade Process / Haccinebi Project***

The FileMaker databases that are used in-house have slowly been outdated, to the point that the system requirements to run the server software are so outdated that it is starting to become a security risk. To combat this threat, hardware that was bought but never set up has been repurposed with the newest 2016 FileMaker Server software. The databases of various OI projects will be moved over this summer. This setup will also serve as the backbone of a few new database projects, with Gil Stein's Haccinebi slide database spearheading the development of a process to ease future "photo slide-to-internet" transformations.

### ***"The Suq" POS System***

Starting in spring 2016, the OI-IT and the Suq Team began to work with the University's Web Security and Procurement offices to find a reliable new partner for a modern point-of-sale and inventory system that is able to integrate with the University's systems. This process should hopefully be finished by late summer 2016.

### ***Identity Finder***

Working in cooperation with the Bursar's Office, a tool called "Identity Finder" has been rolled out to all Oriental Institute staff machines. The purpose of "Identity Finder" is to point out confidential information that was accidentally stored locally, thus in an unsecured environment.

The above points highlight only a few of the tasks that I have worked on since October 2016; for additional details please contact me directly.

---

# INTEGRATED DATABASE PROJECT

Foy Scalf

## Introduction

With each passing day the Integrated Database Project (IDB) becomes more integral to the operations of the Oriental Institute. Every registered object in our collection is now being carefully tracked and assessed with it. Human research capital is being captured as we log the visits of scholars studying material under our roof. New data concerning individual items continues to be collected and stored in this growing institutional repository. As befits the trends of the information age, the IDB's digital format allows for the easy storage and manipulation of complex information networks of the kind that are revolutionizing how we do our work, both in terms of the staff managing collections as well as the researchers working on them. However, Big Data projects also come with big price tags, substantially larger than old paper based methods. Startling are the administrative costs of maintaining servers and websites, as well as storing and backing up enormous quantities of data. We must as an institution ensure a firm financial footing for such projects for the long-term future, as we have come to rely on them like never before. In that regard, we must extend our thanks here to the Institute for Museum and Library Services, the University of Chicago, the Oriental Institute, and Aimee Drolet Rossi for providing us with that firm future. In addition to funding, we must thank the ever-growing staff who work on the IDB. The IDB's tentacles reach into every department in the building and include over a dozen staff members. This report will provide only a summary of the year's successes, and details about individual departmental progress can be found in their respective reports. Nevertheless, our sincerest thanks extend to the staff and volunteers who make this project possible. Without them far less, if anything, would be accomplished.

As a whole, the IDB has made incredible advances over the last year. We have nearly finished with the digitizing and cataloging of the approximately 75,000 registration cards. We have scanned and cataloged over two-thirds of the museum's acquisition records. Nearly 30,000 records from the Museum Archives have been cataloged and made available online. The papers of Seton Lloyd have been completely cataloged and digitized and are now available online. Over 2,200 book covers have been digitized and added to the database. Hundreds of new PDFs are available to internal scholars. Of course, the most important development over the last year was the migration of the data from the Center for Ancient Middle Eastern Landscapes (CAMEL), which is discussed further below. These are just a few of the advances the project has made, resulting in the following chart, which, if compared to last year's report, will show starting improvements:

## Phase Three

As discussed in last year's *Annual Report*, the IDB is currently in phase three of a four-phase implementation plan. Phase three will come to an end on September 30, 2016. We hope to begin phase four in October 2016. As part of phase three, we succeeded in customizing our Axiell EMu software platform for cataloging our Museum Archives data, finishing that part of



Table 1. Total Records in the Integrated Database

Department	Records in EMu	Records on Website
Research Archives	509,757	509,433
Museum Registration	272,915	225,278
Photographic Archives	188,627	99,235
CAMEL	38,890	—
Museum Archives	29,024	29,024
Museum Conservation	9,844	—

the project in record time under the leadership of Anne Flannery, John Larson, and Kiersten Neumann. Since implementation, cataloging material from the archives has made rapid progress, as the numbers demonstrate in table 1. To emphasize again a point made last year, this is the first time in the 100 year history of the Oriental Institute that a catalog of our archival collections is available to anyone — inside or outside of the building. We have made many amazing discoveries during this work, including the find of the papers of Benno Landsberger (fig. 1), which were unknown until this time, and we are proud to make it available to researchers and the general public.

The major portion of the last year was spent preparing to migrate CAMEL into the IDB. Anne Flannery, our IMLS-funded Project Manager for the Integrated Database, led CAMEL Director Emily Hammer and CAMEL Co-Director Tony Lauricella through the process of making the necessary customizations to the EMu backend client software to accommodate their data.

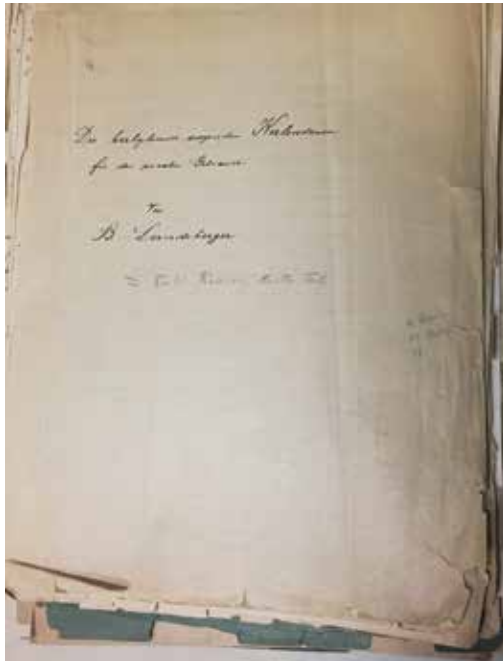


Figure 1. Title page of Benno Landsberger's handwritten thesis in the Archives

CAMEL had nearly 20 terabytes of files to migrate along with a Microsoft Access database to track them. Many improvements were made in the process, including a very useful media export button to get media files out of EMu, a way to catalog all the various tasks performed by staff into a single location, and interoperability between EMu and ArcGIS. After many rounds of testing and tweaking, over 20,000 CAMEL records and their associated media files were successfully migrated into the IDB by May 2016. By the time you read this report, the fruits of these labors will be available publicly on the Search Our Collections website ([oi-idb.uchicago.edu](http://oi-idb.uchicago.edu)). As in the case of the Museum Archives, these advances represent a qualitative shift from years past. CAMEL is a tremendous repository of geographical information, storing vast quantities of digitized maps and satellite images. This digital material has been available to internal staff members and via individual

research requests for many years, but this will represent the first time that the material is offered directly to researchers and the public via the internet. By early September 2016, thousands of maps and satellite images, along with their related GIS files and leaflet maps, will be available for public download. It is a good chance to remind the reader that the IDB has two primary functions. First, to serve as the institutional repository for all data about the collections in our care. However, once that data is captured in digital form, it allows us to easily make it available to others. The second function then is to provide a vehicle to distribute this knowledge as publicly as technological resources allow, following the overall mission of the Oriental Institute, best demonstrated by its free online publishing program, to provide complete access to its resources in order to advance the science of the ancient Near East.

## Online Collections Search (oi-idb.uchicago.edu)

Following the face-lift and implementation of a tab for the Museum Archives as announced in last year’s report, the Search Our Collections site (fig. 2) continued to be developed over the last year. The redesign from last year provided us with a stable graphic user interface allowing us to focus on functionality developments this year. Readers should further be aware that we’ve updated our instructional Wiki page (<http://oicollectionsearch.wikispaces.com>) to include video tutorials for making the most productive use of the Search Our Collections page. Users can navigate to the Wiki by simply clicking the “Search Tips and Instructions” link next to the “Submit” button on the Search Our Collections page.



Figure 2. Homepage of the online collection search

You searched for: **tutankhamun statue**

[Home / Search Our Collections](#)

[Begin a New Search](#)

[Revise Your Search](#)

[Search Within Results](#)

[View Citations](#)

[Research Archives](#)

[Museum Collection](#)

[Photo Archives](#)

[Return to Search Results](#)

**Statue, Human**

Classification/Broad: Sculpture

Classification/Specific: Statue, Human

Material/Broad: Stone or Rock

Material/Specific: Quartzite

Measurements: 5257 H mm, 5447 kg

Description: Tutankhamun, head and torso, crown. Reconstructed are the base, lower legs, and queen's statue, arms beard and nose. Painted, inscribed on plinth.

Region: Upper Egypt: Thebes

Country: Egypt

On Display: Egyptian Gallery

Registration Number: E 14088

Accession Number: 1490

Field Number: P509, 509A

Click the image to view full size



Slide 1 of 52  
D. 19245

[View Photo Archive record.](#)

**— View References**

1. Teeter, Emily. <i>Ancient Egypt: Treasures from the Collection of the Oriental Institute</i> . Oriental Institute Museum Publications 23. Chicago: Oriental Institute of the University of Chicago, 2003. See: pp. 52-54.	<a href="#">View Entry</a>
2. Teeter, Emily. "Update on the Egyptian Gallery." <i>The Oriental Institute News and Notes</i> 159 (1998): 17-21. See: pp. 17-18.	<a href="#">View Entry</a>
3. Wilson, Karen L. <i>The Oriental Institute Museum: Highlights from the Collection</i> . Chicago: Oriental Institute of the University of Chicago, 1989. See: p. 8.	<a href="#">View Entry</a>
4. Mumane, William J. <i>Colossal Statue of Tutankhamun from West Thebes</i> . Oriental Institute Museum Featured Object 5. Chicago: Oriental Institute Museum Education Office, 1986. See: pp. 1-4.	<a href="#">View Entry</a>
5. <i>The Oriental Institute of the University of Chicago: Handbook and Museum Guide</i> . 1941. Chicago: University of Chicago Press, 1941. See: p. 18.	<a href="#">View Entry</a>
6. Holscher, Uvo. <i>The Temples of the Eighteenth Dynasty</i> . Oriental Institute Publications 41. Chicago: Oriental Institute of the University of Chicago, 1939. See: p. 104, fig. 87, pls. 45A-B, 46B, 47A-B.	<a href="#">View Entry</a>

Figure 3. Museum collection record for OIM E14088 showing attached bibliography

[Return to Search Results](#)

---

Type: Journal Volume Article  
 Author: Scalf, Foy D. (Author)  
 Title: Magical Bricks in the Oriental Institute Museum of the University of Chicago  
 Subtitle: --  
 Published in: Studien zur Altägyptischen Kultur 38  
 Issue: --  
 Date: 2009  
 Pages: 275-295, pls. 9-18  
 Location: Journal Steeds  
 Call Number: J5AK38  
 Web Access: Online  
 Permission: Open Access  
 Acronym: --  
 Acronym Source: --









---

PDFs  
 1 PDF is available to download.

- Full Text: Journal Volume Article: Scalf, Foy D. "Magical Bricks in the Oriental Institute Museum of the University of Chicago," 275-295

---

→ View Museum Collection Items in this Publication

1.	 Base only, rectangle, hole for insertion of statuette. Used as magic brick Registration Number: E 6401	<a href="#">View Entry</a>
2.	FRAGMENT, USED AS MAGIC BRICK Registration Number: E 6330 B	<a href="#">View Entry</a>
3.	 Rectangular, hieratic inscription on two sides. Used as magic brick Registration Number: E 6330 A	<a href="#">View Entry</a>
4.	 Base only, rectangular, feet of statuette left. Used as magic brick Registration Number: E 6785	<a href="#">View Entry</a>
5.	Rectangular, broken. Used as magic brick Registration Number: E 6798	<a href="#">View Entry</a>
6.	 Rectangular, name of Pa-Herj(b)-Mer. Used as magic brick Registration Number: E 6780	<a href="#">View Entry</a>
7.	 Base only, rectangular, center hollowed out, with inscription around. Used as magic brick Registration Number: E 6786	<a href="#">View Entry</a>
8.	 Rectangular, hieratic text in ink associated with "northern brick inscription", for Wasir Nes-Ka-Shuti Registration Number: E 6776	<a href="#">View Entry</a>
9.	 Rectangular, hieratic text in ink associated with "southern brick inscription", for Wasir, Nes-Ka-Shuti, hole through center Registration Number: E 6777	<a href="#">View Entry</a>
10.	 Jackal couchant, base only, tail complete, incised with 4 lines of inscription in front of jackal, includes name of Thutmose III, also cursive hieroglyphic in white. Used as magical tablet. Registration Number: E 10544	<a href="#">View Entry</a>

[See the full list of items](#)

---

→ View Citations of this Publication

Figure 4. Research Archives record for publication showing objects published in it

[Return to Search Results](#)

**Type:** Series Volume

**Authors:** Ritner, Robert K. (Author)

**Title:** The Mechanics of Ancient Egyptian Magical Practice

**Subtitle:** -

**Series:** Studies in Ancient Oriental Civilization: - 54:-

**Publication City:** Chicago

**Publisher:** Oriental Institute of the University of Chicago

**Date:** 2008

**Extension:** 1 volume (xviii + 322 pages [including 22 figures, 2 tables])

**Location:** Series Stocks

**Call Number:** S/SAOC/54

**Web Access:** Online

**Permission:** Open Access

**ISBN:** 978-0-918986-75-7

**Acronym:** SAOC 54

**Acronym Source:** -

**PDFs**

1 PDF is available to download.

- Full Text: Series Volume: SAOC 54: The Mechanics of Ancient Egyptian Magical Practice

Return to Series Results

Type	Journal Volume Article
Authors	Károlyi, László (Author)
Title	Review of Ritner, Robert K. The Mechanics of Ancient Egyptian Magical Practice in <i>Journal of the American Research Center in Egypt</i> , 36 (1997)
Subject	-
Published in	<i>Journal of the American Research Center in Egypt</i> 36
Issue	-
Date	1997
Pages	223-225, ill. -
Location	Journal Stocks
Call Number	JUMCE/36
Web Access	Online
Permissions	Access via JSTOR
Acronym	-
Acronym Source	-

[View Items Reviewed in this Publication](#)

1. Ritner, Robert K. The Mechanics of Ancient Egyptian Magical Practice. Studies in Ancient Oriental Civilization 54. Chicago: Oriental Institute of the University of Chicago, 2008. [View Entry](#)

**View Reviews of this Publication**

1. Károlyi, László. "Review of: Ritner, Robert Kriech. The Mechanics of Ancient Egyptian Magical Practice. Studies in Ancient Oriental Civilizations 54 (Chicago: Oriental Institute of the University of Chicago, 1997)." *Journal of the American Research Center in Egypt* 31 (1994): 223-225. [View Entry](#)
2. de Meulenaere, H. "Review of: Ritner, Robert Kriech. The Mechanics of Ancient Egyptian Magical Practice. Studies in Ancient Oriental Civilizations 54 (Chicago: Oriental Institute of the University of Chicago, 1997)." *Chronique d'Égypte* 73, no. 146 (1998): 282-287. [View Entry](#)

Figure 5. Research Archives records showing attachments between books with reviews and reviews with book inset



Before embarking on any major new features, some maintenance was necessary on our server. We upgraded our Solr platform to 4.10.4 from September to October 2015. With the maintenance behind us, we embarked on the first major project for the year — what we called the “Cross-Silo Join.” The purpose of this was to display elements of the information network we are building in the IDB by sharing and connecting data across departments. After several months of planning, designing, and testing, the “Cross-Silo Join” features were launched at the beginning of February 2016. Features now available are the following: For each object in the Museum Collection, users can view the complete bibliography as currently known for that item (fig. 3). Likewise, there is a vice versa relationship; that is, not only can users view all the bibliography for a museum object, they can also view all the museum objects published in a given book or article (fig. 4). The bibliography materials that are attached to the museum collection records derive from the catalog of the Research Archives, allowing users a seamless experience when navigating between departmental records via hyperlinks labeled “View Entry.”

Further revealing the integrated data web we are weaving, users can now see all the cataloged reviews we have for each book and vice versa — the book record associated with a given review. Figure 5 juxtaposes these two record types, showing the easy navigation between them via the same “View Entry” hyperlinks previously mentioned. A similar feature is now visible via an expandable menu at the bottom of Research Archives records labeled “View Citations of this Publication.” Through this, users can see other bibliographic works that have cited the item being viewed. The potential for this tool is wide-ranging; however, it is uncertain as yet how we will develop it since the labor needed to catalog every citation from even a selection of important works is so great as to make the project potentially untenable. At the very least, the capability is now there and we will continue to brainstorm methods to put it to use.

With our data consolidated from the previously disbursed silos, we are now seeing the many benefits of integration. Information from across departments can be linked together for the purposes of our own knowledge about our collection, but these links can then be exposed through the website so that researchers can make discoveries that they may not have made otherwise. Currently, the only records that can be downloaded from the Search Our Collections site belong to the Research Archives library catalog. However, we are hoping to expand this capability for all information available, including expressing the data as RDF triples for inclusion in the larger world of Linked Open Data online. Stay tuned!

## Acknowledgments

As Head of the IDB, I would like to take this opportunity to publicly thank my colleagues, coworkers, and volunteers who have helped make this project such a resounding success. From its inception as an “integrated” project, the IDB was founded on the principle of close collaboration. None of it would be possible alone. We owe an enormous debt to the staff, students, faculty, and volunteers doing the daily dirty work of data entry, information cleansing, scanning, and photography. Without these “bodies-in-seats” using human intelligence and labor to get the job done, all the fancy technology would be nothing more than an empty shell.

In June the fruits of our labor were recognized when the IDB project won the Archival Innovator Award bestowed by the Society of American Archivists at their annual conference (fig. 6).



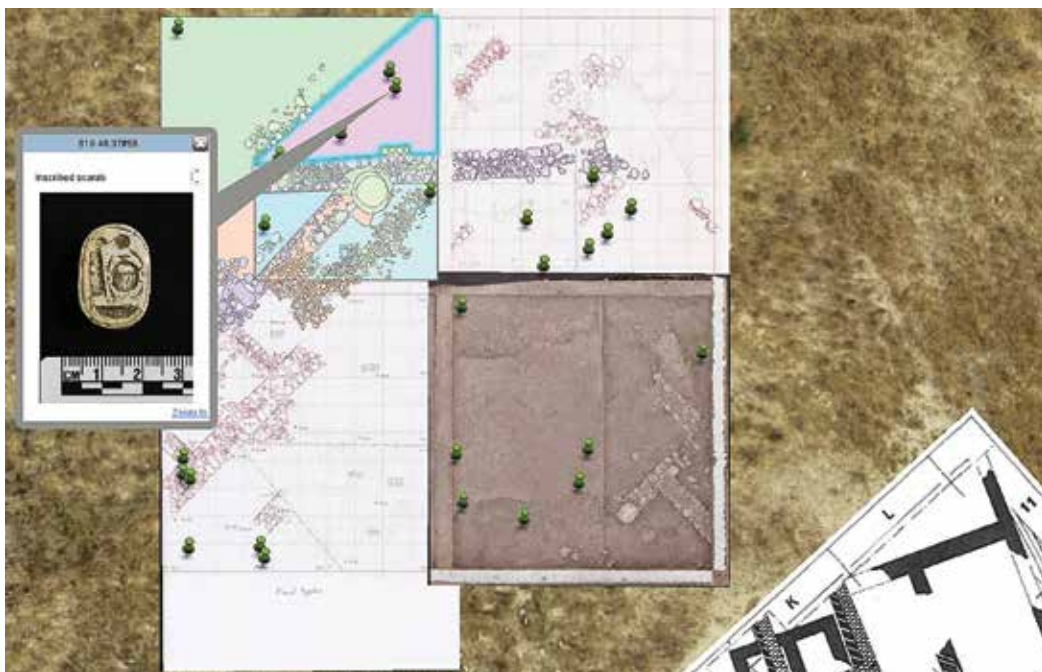
Figure 6. Archival Innovator Award for the IDB

## OCHRE DATA SERVICE

Miller Prosser and Sandra Schloen

### Reversal of Fortune

The smashed pots and debris on the earthen floor being uncovered at Tell Keisan bear witness to a reversal of fortune for the inhabitants of this ancient city. The research database specialists of the OCHRE Data Service, Miller Prosser and Sandra Schloen, were on hand to assist in the data capture of present day investigations intended to reveal events that unfolded in the past. Field supervisors, carrying \$149 red-hot colored Lenovo computers running full Windows 10, recorded details of the excavation using a new-and-improved version of the Online Cultural and Historical Research Environment — OCHRE. Only in this case without Internet access on the tell in rural northern Israel, the team was not “online.” Running OCHRE in offline mode, the excavators recorded new excavation features, logged pails of pottery, detailed small finds, and composed their notes in extensive daily journal entries. After each morning’s work, back at the ranch — or rather back at the kibbutz guesthouse — the data was uploaded into the OCHRE master database running on a University of Chicago server, hosted by the Digital Library Development Center based at Regenstein Library. By the time the Keisan excavation staff rose from afternoon naps, the data was in a safe and secure context, available for that evening’s work session. Each day’s data was integrated with the full range of data being amassed by the project, joining with the content contributed by the registrar, photographer, surveyor, and pottery and bone specialists as they too worked to record and process the daily finds.



This first season at Tell Keisan, summer 2016, was also the pilot season for the new Geospatially Enabled OCHRE, or GEOchre, a version that features an interactive map-based interface, enabling users to bypass traditional lists and tables, fields and forms, and work directly with views that show the data in place on a map. OCHRE presents a geospatially aware backdrop onto which small finds can be located, elevations recorded, raster images overlaid with partial transparency, and shapefiles superimposed, visually confirming the dig's progress in real time. After years of struggling to use computers in the field to best advantage, it seems that finally the technology has caught up to our expectations and ambition for it!

Throughout 2015, the OCHRE Data Service has been stretched by new challenges, partly in response to a reversal of fortune that has positively impacted our ability to take on new projects and new student assistants as we work to seek better ways to apply modern technology to further the cause of humanities-based research. Our aspirations to apply more scientific approaches to studies in the humanities were recognized by the National Science Foundation. An ambitious grant proposal by the OCHRE Data Service faculty supporter, David Schloen, was awarded \$1.5 million by the NSF. Aptly named CRESCAT — A Computational Research Ecosystem for Scientific Collaboration on Ancient Topics — this project features several distinct case studies that illustrate the use of a comprehensive and collaborative approach to data management as offered by OCHRE. Collaborating with Alain Bresson of the Classics department in a study of Greek coin hoards from the ancient Mediterranean region, and with Kathleen Morrison of the Anthropology department in a study of medieval South Indian temple inscriptions, OCHRE is providing network analysis and statistics-based features to explore questions of distribution, interaction, and relationships within very different sets of data.

We are also happy to be collaborating with Kathleen Slane of the University of Missouri, who was fortunate to receive significant support to work on the publication of tons (literally!) of Roman pottery from years of excavations at the site of Corinth. This project, affiliated with the American School of Classical Studies in Athens, will test the OCHRE data model's ability to capture the variety and complexity of this detailed analysis, and will serve as a pilot for OCHRE's new web-based publication strategy.

We have also been supporting a new OCHRE project dubbed MANTIS — Modeling the Antiquities Trade in Iraq and Syria. Fiona Rose-Greenland, based at the Neubauer Collegium for Culture and Society, leads a multidisciplinary team of archaeologists from the Oriental Institute and economists from the University of Chicago's Economics department, tasked with analyzing the unfortunate problem of the illegal trade of antiquities. Combining traditional archaeological records of artifacts from several key sites with economic data pertaining to the sale of such artifacts in the modern market, this project seeks to gain a better understanding of the financial incentives for looting and dealing in antiquities. OCHRE's highly flexible and uniquely generic data model readily supports the capture and analysis of this unusual combination of data.

This brief report highlights only a few of the many interesting and complex projects whose data we are managing and whose research we are supporting. We are particularly happy for the good fortune of working with wonderful students who share our office, brighten our days, stimulate our thinking, and unfailingly work hard to help us accomplish the goals of the OCHRE Data Service.

For more details on our projects and our approach to research data management, please visit <http://ochre.uchicago.edu>.

## PUBLICATIONS OFFICE

Thomas G. Urban

The full-time staff of the Publications Office remains Leslie Schramer (twelfth year) and Thomas G. Urban (twenty-eighth year). Part-time staff includes Assistant Editor Rebecca Cain (seventh year) and Editorial Assistants Ariel Singer and Emily Smith, both in their second year.

This was another busy year. We published twenty-six new titles and reprinted two others. Three new publications were added to our usual set: *Volunteer Voice* PDFs (monthly), *Program & Events* (quarterly), and *Lecture Series* flyer (yearly; to begin August 2016).

A good amount of time continues to be spent assisting the Chicago Demotic Dictionary (CDD). A new Unicode version of the font Gentium Plus was made, and it contains the glyphs for Coptic, Demotic, Egyptian hieroglyphs, and Greek, with bold and bold-italic faces. The characters were added to Gentium Plus using the software FontForge. Ariel continues to rename the image files so when we assemble the CDD in InDesign we'll be able to place the image files in their proper places.

### 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, 1950 Lawrence Road, Havertown, PA 19083; telephone: 1.610.853.9131; fax: 1.610.853.9146; e-mail: [info@casemateacademic.com](mailto:info@casemateacademic.com); website: [www.casematepublishers.com](http://www.casematepublishers.com).

Information related to the sale and distribution of Oriental Institute titles may also be obtained via email: [oi-publications@uchicago.edu](mailto:oi-publications@uchicago.edu).

### Electronic Publications

The Publications Office continues to upload PDFs of new publications simultaneously with the corresponding printed books. Downloads of printed materials remain complimentary.

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/catalog-publications>

### Volumes Published (In Print and Online)

1. *Christians and Others in the Umayyad State*. Edited by Antoine Borrut and Fred M. Donner. Late Antiquity-Medieval Islam in the Near East (LAMINE) 1
2. *Nimrud Queens' Tombs*. By Muzahim Mahmoud Hussein, translated by Mark Altaweel, edited by McGuire Gibson. MISC
3. *The Oriental Institute 2014–2015 Annual Report*. Edited by Gil J. Stein. AR 2014–2015
4. *Chicago House Bulletin* 26. Edited by W. Raymond Johnson. CHB 26
- 5–8. *Oriental Institute News & Notes*. Edited by Amy Weber and Jennie Myers. NN 227–230. Quarterly



9. *Field Trip Planning Guide*. Edited by Carol Ng-He. Education
- 10–21. *Volunteer Voice*. Edited by Sue Geshwender et al. Volunteers. Monthly
- 22–25. *Programs and Events*. Edited by Carol Ng-He, Kiersten Neumann, Jennie Myers. Education, Museum, Membership. Quarterly
26. 2016 Postdoc Seminar Poster, Program, Name Tags, etc.

### Volumes Reprinted

1. *Religion and Power: Divine Kingship in the Ancient World and Beyond*. Edited by Nicole Brisch. 2008. OIS 4
2. *The Architecture of the Oriental Institute and Museum*. Brochure. Museum Office. Edited by Kiersten Neumann.

### Volumes in Preparation

1. *Great Hypostyle Hall in the Temple of Amun at Karnak, Volume 2. Translation and Commentary*. Peter J. Brand, Rosa Erika Feleg, and William J. Murnane†
2. *The Early/Middle Bronze Age Transition in the Ancient Near East: Chronology, C14, and Climate Change*. Edited by Felix Höflmayer.
3. *Essays for the Library of Seshat: Studies Presented to Janet H. Johnson on the Occasion of Her 70th Birthday*. Edited by Robert K. Ritner
4. *The Sheik's House at Quseir al-Qadim: Documenting a Thirteenth Century Red Sea Port*. Katherine Strange Burke
5. *Excavations in the Plain of Antioch III: Stratigraphy, Pottery, and Small Finds from Chatal Höyük in the Amuq Plain*. By Marina Pucci, with contributions by John A. Brinkman, Günther Hölbl, Theo van den Hout, and Dominique Collon
6. *Kerkenes Final Reports 1. Excavations at the Cappadocia Gate*. By Geoffrey D. Summers, with contributions by Yılmaz Selim Erdal, Susanne Berndt Ersöz, Evangelia Ioannidou-Pişkin, Yasemin Özarslan, Françoise Summers, Robert Tate, Nilüfer Baturayoğlu Yöney, with Introduction by David Stronach, and Turkish summary by Güzin Eren
7. *From Sherds to Landscapes: Studies on the Ancient Near East in Honor of McGuire Gibson*. Edited by Mark Altaweel and Carrie Hritz
8. *Where Kingship Descended from Heaven: New Light on Ancient Kish*. Karen L. Wilson and Deborah Bekken
9. *Nippur VI: The Inanna Temple*. By Richard L. Zettler and Karen L. Wilson, with contributions by Jean M. Evans, Robert D. Biggs, Richard C. Haines†, Donald P. Hansen†, McGuire Gibson, James Knudstad†, and John C. Sanders
10. *The Demotic Dictionary of the Oriental Institute of the University of Chicago*. Edited by Janet H. Johnson

## Volumes in Backlog

1. *The Palace of the Rulers: Ešnunna Administrative History from the Ur III to the Old Babylonian Period.* By Clemens Reichel
  2. *Unpublished Bo-Fragments in Transliteration.* By Oğuz Soysal. CHDS 3
  3. *Structures of Power: Law and Gender across the Ancient Near East and Beyond.* Edited by Ilan Peled.
-

# RESEARCH ARCHIVES

Foy Scalf

## Introduction

Libraries are facing some very challenging times. On the one hand, there has been a lot of media attention over the last decade about the changing of the role of libraries in our society, given the nature of technology and especially the internet. Librarians and teachers are facing similar struggles against simplistic attitudes, unfortunately rather pervasive, that these professions are old fashioned and no longer needed. Nothing could be further from the truth. If there is any time that could benefit from more nuance, from more thinking, from more careful consideration, from more exposure to the thought of other cultures, from more reading, it is now. Our current cultural climate is made that much worse by the accompanied budget crises affecting so many educational and cultural institutions throughout the nation. We must use this time as an opportunity to reflect, to realize that our positions are not self-justified, but require our active justification — just as any social and cultural construction. Ultimately, the teachable moments this provides us should demonstrate the error of simplistic notions that go little further than the bottom line. It should be easy to make apparent to any who will listen the value and necessity of repositories of history, culture, thought, and society.

The Research Archives has remained very lucky throughout the financial crises of 2008 and the current budget cuts facing departments across the university. Our director, Gil Stein, and executive director, Steve Camp, realize that the library is at the heart of the academic institution.

They have provided the Research Archives with great support and I hope to be guiding it with the appropriate leadership for a healthy future to serve many generations of scholars who study the ancient world, and with it, the impacts on today's society. We hope that some of the projects detailed in this year's report go some way to helping inform, not just scholars, but also the general public about the history of past civilizations. Under our watch — those who study the ancient Middle East — the body politic was born, money came into existence, and legal systems were created. How could it be possible that we do not have relevant things to say about current policies, foreign affairs, and cultural norms? The answer is that it is impossible. We have much to say. Making the fascinating material about these cultures and times more broadly known, as well as the implications for the current state of affairs, can only aid in creating a well-informed public in their quest to make rational decisions. Here in the



*Figure 1. Recent Acquisitions in the Research Archives*

Research Archives, we are adding to that potential education, one step, one PDF, one book, one resource at a time.

## Acquisitions

Due to a number of factors, including several donations, acquisitions were very strong for the Research Archives in the past academic year. We acquired 1,430 volumes, nearly 50% more than our historical average of roughly 1,000 volumes per year (see table 1). These numbers represent print volumes as the Research Archives remains dedicated to building and maintaining a primarily print based collection for the reasons outlined in past annual reports. Such growth is even more important in the current financial climate at the University where shrinking budgets have become the norm. Despite these conditions, we are absolutely committed to maintaining and growing these precious resources for the benefit of current and future generations.

*Table 1. Research Archives acquisitions July 2015–June 2016*

<i>Month</i>	<i>Number of Accession Lots</i>	<i>Monographs, Series, Pamphlets</i>	<i>Journals</i>	<i>Total Volumes</i>
July 2015	29	44	56	100
August 2015	22	52	36	88
September 2015	51	147	46	193
October 2015	60	156	54	210
November 2015	26	96	42	138
December 2015	19	40	35	75
January 2016	41	70	82	152
February 2016	29	92	48	140
March 2016	41	58	37	95
April 2016	26	28	31	59
May 2016	19	55	17	72
June 2016	33	83	25	108
Totals	396	921	509	
		<b>Total Volumes</b>		<b>1,430</b>

### **Online Catalog**

Since fall 2007, the online catalog has grown by over 330,000 records, averaging over 30,000 records per year (see table 2). This average has declined since the apex in 2008–2009, which had been due primarily from the processing of backlogged data migrated from old databases. In 2015–2016, we added another 15,000 records; all processed and cataloged manually by the staff and volunteers of the Research Archives. That means 1,250 records per month, roughly 42 records per day, are being added to the catalog. A major and complex cataloging project awaits us once we tackle the massive pamphlet files.

*Table 2. Catalog Records*

<i>Year</i>	<i>Number of Catalog Records Added</i>	<i>Total Number of Catalog Records</i>
2015–2016	15,000	525,000
2014–2015	20,000	510,000
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

Analytics from the Research Archives catalog show the breakdowns in the types of material in the collection (see table 3). Readers immediately see that journal articles represent well over half the total number of database records (301,113 of 525,000). Scholars will find especially useful our indexing of journals, conference proceedings, and festschriften, all the records of which are available for download through our online catalog ([oi-idb.uchicago.edu](http://oi-idb.uchicago.edu)) in formats compatible with major bibliographic software platforms (e.g., EndNote, Zotero).

*Table 3. Research Archives analytics*

<i>Type</i>	<i>Total Number of Catalog Records</i>
Total Volumes	61,941
Monographs	15,757
Monograph Sections	61,979
Series	1,286
Series Volumes	19,646
Series Volume Sections	81,129
Journals	927
Journal Volumes	27,169
Journal Volume Articles	301,113
Thesis	1,013
Pamphlets	2,469
Reviews	115,580
Festschriften	545
Authors	
Digital Invoice Records	908
Digital Cover Art Records	3,554
Adobe PDF	3,208



Among those items cataloged in the past academic year, a selection of interesting material completed by Oriental Institute scholars can be highlighted.

- Abbas Alizadeh. “Approaches to Social Complexity in Kura-Araxes Culture: A View from the Köhne Shahar (Ravaz) in Chaldran, Iranian Azerbaijan.” *Paléorient* 41:1 (2015): 37–54.
- Nadine Moeller. *The Archaeology of Urbanism in Ancient Egypt: From the Predynastic Period to the End of the Middle Kingdom*. Cambridge: Cambridge University Press, 2016.
- Brian P. Muhs. *The Ancient Egyptian Economy 3000–30 BCE*. Cambridge: Cambridge University Press, 2016.
- Gertrud Farber. “Das Lied von der Hacke.” In *Erzählungen aus dem Land Sumer*, edited by Konrad Volk and Karl-Heinz Bohny. Wiesbaden: Harrassowitz, 2015, pp. 69–76.
- Janet H. Johnson. “Women, Property, and Legal Documents: A Case Study from the Persian Period.” In *Joyful in Thebes: Egyptological Studies in Honor of Betsy M. Bryan*, edited by Richard Jasnow and Kathlyn M. Cooney. Atlanta: Lockwood Press, 2015, pp. 283–92.
- Kiersten Neumann. “In the Eyes of the Other: The Mythological Wall Reliefs in the Southwest Palace at Nineveh.” *Archaeological Review from Cambridge* 30:1 (2015): 85–93.
- Susanne Paulus. “Ordal Statt Eid – Das Beweisverfahren in Mittelbabylonischer Zeit.” In *Prozessrecht und Eid: Recht und Rechtsfindung in antiken Kulturen*, edited by Heinz Barta, Martin Lang, and Robert Rollinger. Philippika 86. Wiesbaden: Harrassowitz, 2015, pp. 207–25.
- Richard Payne. *A State of Mixture: Christians, Zoroastrians, and Iranian Political Culture in Late Antiquity*. The Transformation of the Classical Heritage 56. Oakland: University of California Press, 2015.
- Hervé Reculeau. “Middle Assyrian Agrarian Management in the West in the Light of Its Forerunners.” In *Understanding Hegemonic Practices of the Early Assyrian Empire: Essays Dedicated to Frans Wiggermann*, edited Bleda S. Düring. PIHANS 125. Leiden: NINO, 2015, pp. 199–219.
- Robert K. Ritner. “Osiris-Canopus and Bes at Herculaneum.” In *Joyful in Thebes: Egyptological Studies in Honor of Betsy M. Bryan*, edited by Richard Jasnow and Kathlyn M. Cooney. Atlanta: Lockwood Press, 2015, pp. 401–06.
- Oğuz Soysal. “Einige Beispiele mit abweichender Position und Funktion des Zeichens L. 312 ‘VIR’ in den hieroglyphischen Siegelinschriften.” In *Saeculum: Gedenkschrift für Heinrich Otten anlässlich seines 100. Geburtstags*, edited by Andreas Müller-Karpe, Elisabeth Rieken, and Walter Sommerfeld. StBoT 58. Wiesbaden: Harrassowitz, 2015, pp. 269–78.
- Gil J. Stein. “The War-Ravaged Cultural Heritage of Afghanistan: An Overview of Projects of Assessment, Mitigation, and Preservation.” *Near Eastern Archaeology* 78:3 (2015): 187–95.
- Matthew W. Stolper. “Three Personal Reflections on Elias Bickerman.” In *Writing History in Time of War: Michael Rostovtzeff, Elias Bickerman and the “Hellenization of Asia,”*

edited by Joseph G. Manning. *Oriens et Occidens* 24. Stuttgart: Franz Steiner, 2015, pp. 45–61.

- Theo van den Hout. “Zu einer Stratigraphie der hethitischen Totenrituale.” In *Saeculum: Gedenkschrift für Heinrich Otten anlässlich seines 100. Geburtstags*, edited by Andreas Müller-Karpe, Elisabeth Rieken, and Walter Sommerfeld. *StBoT* 58. Wiesbaden: Harrassowitz, 2015, pp. 301–06.
- John Wee. “A Late Babylonian Astral Commentary on Marduk’s Address to the Demons.” *Journal of Near Eastern Studies* 75:1 (2016): 127–67.
- Donald Whitcomb, Michael Jennings, Andrew Creekmore, and Ignacio Arce. “Khirbet al-Mafjar: New Excavations and Hypotheses for an Umayyad Monument.” *Near Eastern Archaeology* 79:2 (2016): 78–87.
- Christopher Woods. “Contingency Tables and Economic Forecasting in the Earliest Texts from Mesopotamia.” In *Texts and Contexts: The Circulation and Transmission of Cuneiform Texts in Social Space*. SANER 9. Boston: De Gruyter, 2015, pp. 121–42.

We continue to add links to online material, both new and old (see table 4). Currently, there are over 118,000 links to online material in the Research Archives catalog (roughly 23% 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 4. Links to journal articles

Journal	Links	Access
<i>Journal of the American Oriental Society</i>	15,477	JSTOR
<i>Catholic Biblical Quarterly</i>	12,471	Ebsco
<i>American Journal of Archaeology</i>	11,628	JSTOR/AJA
<i>Antiquity</i>	11,324	Antiquity
<i>Zeitschrift für Papyrologie und Epigraphik</i>	7,841	JSTOR
<i>Syria</i>	5,990	JSTOR
<i>Journal of Near Eastern Studies</i>	5,385	JSTOR/JNES
<i>Journal of Egyptian Archaeology</i>	4,409	JSTOR
<i>Biblica</i>	3,910	Open
<i>Bulletin of the American School of Oriental Research</i>	3,797	JSTOR
<i>Palestine Exploration Quarterly</i>	3,516	Ebsco
<i>Zeitschrift für Assyriologie</i>	3,292	Open
<i>Göttinger Miszellen</i>	3,056	DigiZeitschriften
<i>Zeitschrift der Deutschen Morgenlandischen Gesellschaft</i>	2,903	Open
<i>Near Eastern Archaeology (formerly Biblical Archaeologist)</i>	2,545	JSTOR
<i>Académie des inscriptions et belles-lettres. Comptes rendus</i>	2,346	Open

Table 4. Links to journal articles

Journal	Links	Access
<i>Bulletin de l'Institut Français d'Archéologie Orientale</i>	2,003	Open
<i>Journal of the Economic and Social History of the Orient</i>	1,496	JSTOR
<i>Journal of the American Research Center in Egypt</i>	1,346	JSTOR
<i>Bibliotheca Orientalis</i>	1,143	Peeters
<i>Aula Orientalis</i>	1,132	Open
<i>Journal of Cuneiform Studies</i>	1,126	JSTOR
<i>Iraq</i>	1,126	JSTOR
<i>Review of Biblical Literature</i>	1,092	Open
<i>Studien zur Altägyptische Kultur</i>	907	JSTOR
<i>Anatolian Studies</i>	847	JSTOR
<i>Polish Archaeology in the Mediterranean</i>	805	Open
<i>Iran</i>	729	JSTOR
<i>Forschungen und Berichte</i>	698	JSTOR
<i>Oriental Institute News &amp; Notes</i>	546	Open
<i>Orient: Report of the Society for Near Eastern Studies in Japan</i>	469	Open
<i>Journal of the Ancient Near Eastern Society</i>	378	Open
<i>Sudan and Nubia</i>	355	Open
<i>Bulletin: Societe d'Egyptologie Geneve</i>	315	Open
<i>Ars Orientalis</i>	240	JSTOR
<i>Journal of Hebrew Scriptures</i>	236	Open
<i>Aeragram</i>	223	Open
<i>Cahiers de Karnak</i>	189	Open
<i>British Museum Studies in Ancient Egypt and Sudan</i>	134	Open
<i>Égypte Nilotique et Méditerranéenne</i>	104	Open
<i>Achaemenid Research on Texts and Archaeology</i>	102	Open
<i>Cuneiform Digital Library Notes</i>	88	Open
<i>Cuneiform Digital Library Journal</i>	57	Open
<i>Lingua Aegyptia</i>	47	Open
<i>Cuneiform Digital Library Bulletin</i>	42	Open
<i>ASDIWAL: Revue Genevoise d'Anthropologie et d'Histoire des Religions</i>	41	Open
<i>Studia Orontica</i>	37	Open
<i>Mitteilungen der Sudanarchäologischen Gesellschaft zu Berlin</i>	29	Open
<i>Zeitschrift für Antikes Christentum</i>	25	De Gruyter
<b>Total</b>	<b>117,997</b>	

## Resources on the Web

In addition to the online catalog, the Research Archives maintains a series of open access online resources.

### ***Introduction & Guide***

[https://oi.uchicago.edu/sites/oi.uchicago.edu/files/uploads/shared/docs/research\\_archives\\_introduction%26guide.pdf](https://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***

<https://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***

<https://oi.uchicago.edu/research/research-archives-library/research-archives-annual-reports>

Annual Reports for the Research Archives are available from 1969–2014.

### ***Oriental Institute Staff Newsletter***

<https://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***

<https://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. Recent additions to this page include the following:

- Solange Ashby. Colling Out to Isis: The Enduring Nubian Presence at Philae

- Rozenn F. Bailleul-LeSuer. *The Exploitation of Live Avian Resources in Pharaonic Egypt: A Socio-Economic Study*
- Cameron Lindley Cross. *The Poetics of Romantic Love in Vis & Rāmin*
- Michael Dean Jennings. *Beyond the Walls of Jericho: Khirbet al-Mafjar and the Signature Landscapes of the Jericho Plain*
- Stephanie Lesan Selover. *Excavating War: The Archaeology of Conflict in Early Chalcolithic to Early Bronze III Central and Southeastern Anatolia*

### ***Dissertation Proposals***

<https://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***

<https://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>

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. 3,374 individuals currently follow the Research Archives through this presence on Facebook.

## **Donations**

Donations continue to play an important role in the acquisition efforts of the Research Archives. A number of books are received through the *Journal of Near Eastern Studies* and through the Oriental Institute Museum as the Research Archives receives copies of publications that contain images of objects in our collections. Several journal subscriptions are maintained solely through donations of individual library patrons. In the realm of preservation, tattered and aging volumes can often be replaced or supplemented through book gifts and donations to help fill in past gaps in the collection. We would like to extend our sincere thanks to the following individuals and institutions for their generous gifts and exchange agreements this year: British Institute at Ankara, Deutsches Archäologisches Institut, Israel Antiquities Authority Library, Marc Coenen, Joan Fortune, Gene Gragg, Elise MacArthur, Catherine Mardikes, Kiersten Neumann, Patrizia Piacentini, Seth Richardson, Robert Ritner, Seth Sanders, Martha Roth, Andreas Schachner, David Schloen, Emily Teeter, Tom Urban, Donald Whitcomb, Terry Wilfong, Bruce Williams.



## Internship and Practicum Program

The Research Archives was proud to Scott Shoger this year as a practicum student from the Library and Information Sciences program at Dominican University. Among the various tasks Scott accomplished during the semester was the complete cataloging and digitization of the archives related to Seton Lloyd, a famous Near East archaeologist and scholar. Thanks to Scott, the papers of Seton Lloyd, including correspondence, archival photos, and manuscripts, have been cataloged and digitized. All this material is available through the Search Our Collections / Integrated Database website.

## Volunteer Program

Research Archives volunteers continue to be a staple labor force for helping us progress on so many different fronts, from cataloging the Museum Archives to scanning accession files for Registration, from digitizing books in the Research Archives to writing descriptions for our Google Arts & Culture site. Much of the success we have had over the last nine years since I became Head of the Research Archives is due to their hard work, sweat, and hopefully few tears. The measly pizza parties and thanks in the annual report are nowhere near sufficient for their deeds. Nevertheless, I would like to thank them all, not only for their diligence, but also for their collegiality: Eric Aupperle, Rebecca Binkley, Ray Broms, Betty Bush, Gaby Cohen, Sequoia Chun, Kim Crawford, Irene Glasner, Kate Hodge, Kat Jarboe, Peter Johnson, So Hyeon Kang, Elisa Landaverde, Kristin Leasia, Marge Nichols, Brian Porrett, Roberta Schaffner, Gabriele Correa da Silva, Ian Williams, Amy Zillman.

## 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: Chris Fincham, Julia Gruhot, David Mackin, Mitchell Miranda, William Osborne, Patrizia Piacentini, Amanda Roy, Paul Sereno, David Thomas, Jennifer Westerfeld, Avi Winitzer, Yoshifumi Yasuoka, Martina Ullmann and Egyptology students from Ludwig-Maximilians University Munich, and the Great Chicago Libraries class of Elmhurst College.

## Acknowledgments

The Research Archives runs on the collaborative effort of our office team. I couldn't do it without the help of my staff. Laura Krenz, Rebecca Segall, Yishu, Deng, Lindsey Lindsey Pettitt, and Kierra Foley have all been there throughout the year, helping our patrons and generally running things in my absence. I offer my sincere thanks for all that they do to make the Research Archives such a wonderful place to work.

---

## TABLET COLLECTION

### Walter Farber and Andrew Wilent

The Tablet Collection and its study space, the Tablet Room, were once again very active throughout the 2015–2016 academic year. We want to mention here but a few of the more extensive visits by scholars using our unique collection for their own research: In August 2015, Richard Zettler of the University of Pennsylvania visited to continue his study of tablets from Nippur excavated by the Oriental Institute. Antoine Jacquet of the Collège de France visited in November to collate Old Babylonian texts from the collection included in the ARCHIBAB online database ([www.archibab.fr](http://www.archibab.fr)). In May 2016, Nicole Brisch of the University of Copenhagen and Piotr Michalowski of the University of Michigan each visited, also to study tablets from Nippur. During the same month, Nicholas Kraus, from Yale University, came here to study Old Akkadian school texts in the collection. In addition to these visits, Andrew Wilent, the assistant curator of the Tablet Collection, provided digital photographs of objects for several scholars who were unable to visit the Oriental Institute in person.

As always, the Tablet Collection also served as a source for in-house research and teaching. For example, the curator Walter Farber prepared an edition of two Old Babylonian incantation tablets in our collection, and faculty member Hervé Reculeau used Old Babylonian letters from Bismaya and Tell Asmar in a class on cuneiform epigraphy offered during the Spring Quarter. This course provided students with an opportunity to learn how to read original cuneiform texts, and to produce hand copies of them.

A famous inscribed cylinder of Sargon II excavated by the Oriental Institute at Khorsabad that mentions king Mita (Midas) of Phrygia was loaned to the University of Pennsylvania Museum of Archaeology and Anthropology for the 2016 exhibit “The Golden Age of King Midas.” The Adler Planetarium in Chicago returned three astronomical tablets to the collection that had been on loan there since 2012 (see the *2011–2012 Annual Report*). A collection of over fifty tablets, dating mostly to the Ur III period but including objects from a variety of periods, was returned to the W. H. Over Museum in Vermillion, South Dakota. These objects had been on loan to the Oriental Institute since 1971. In two forthcoming articles, Robert Biggs will treat aspects of the Ur III tablets, while Walter Farber will publish the remaining tablets in the collection. A small collection of tablets from Northwestern University Library in Evanston, Illinois, was also loaned to the Oriental Institute for study and publication by Gertrud and Walter Farber, and subsequently returned.

Through the efforts of the curator, a donation of ten cuneiform tablets from the Ur III period was received from Mrs. E. Bingham, Louisville, Kentucky (see also Kiersten Neumann’s account of Museum activities). These tablets are being prepared for publication by Gertrud Farber. Preparations for a donation of one very interesting additional tablet by its present owner were also made. In this case, the process is still pending due to a technicality. Also, an item from our collection that since 1973 had been on loan to Hanover College in Hanover, Indiana, was returned to us and safely brought back to the Oriental Institute by the Farbers.

Looking to the future, a major new project got under way to publish the remainder of the Ur III tablets in the Oriental Institute collection, following upon the three prior volumes (in Oriental Institute Publications series) of Drehem tablets prepared by Markus Hilgert. Magnus

Widell of the University of Liverpool will lead the project in cooperation with Christopher Woods and Gertrud Farber of the Oriental Institute.

***Additional Note by Walter Farber***

After fourteen years as the Tablet Curator, I have been asked to step aside and make room for one of my younger colleagues, Susanne Paulus, to take over the responsibility for the Tablet Collection and Tablet Room. I want to thank all my previous and current assistants and collaborators, as well as all the scholars who through their correspondence, visits, and publications made the life of the Tablet Collection Curator at the Oriental Institute so interesting, for their patience and understanding, whenever there were any glitches in our daily operations. I hope that my assistants and myself were ultimately successful in supporting their research goals, while keeping a human face on the administrative necessities of a major collection of cuneiform documents, and I wish Susanne the same pleasure for the future that this work has given me in the past.

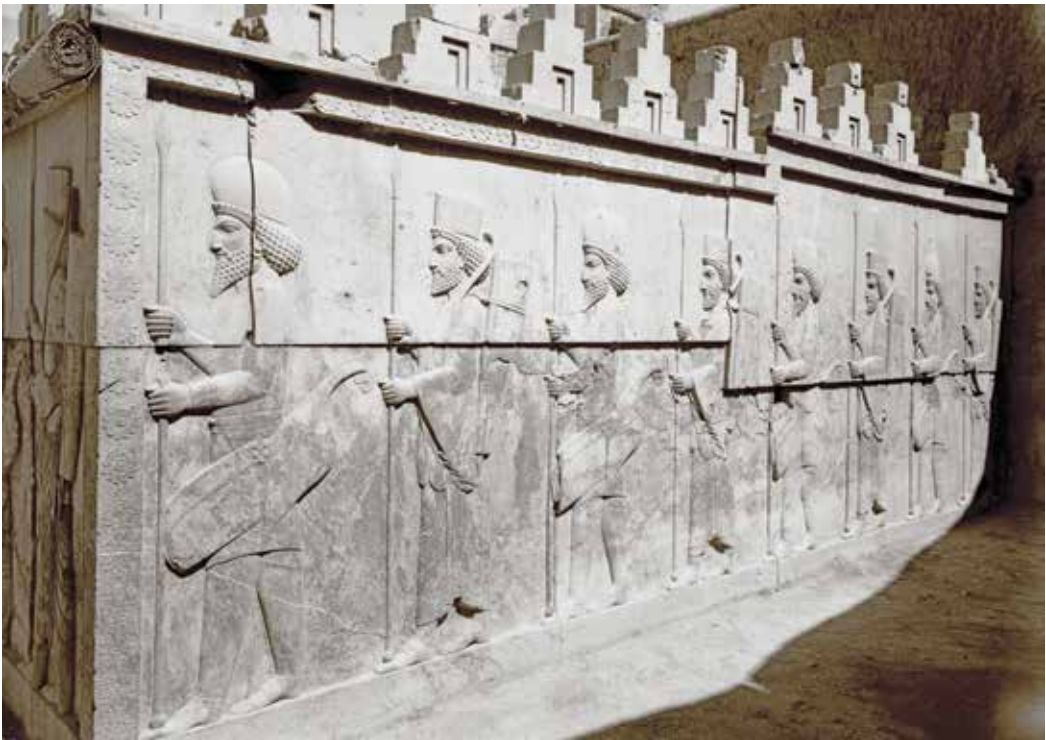
---





**MUSEUM**





*Above and overleaf (detail): Relief of Persian and Median guards from the Central Building at Persepolis. Schmidt Expedition, 1936 (D. 13312)*

## MUSEUM

### Kiersten Neumann

The past year has been a productive and exciting one for the Oriental Institute Museum, with the ongoing growth of our special exhibits program, updates to our Orientation Area, strong progress on our Gallery Enhancements Project, and an increase in public engagement and outreach. The Oriental Institute and the Museum also continue to play an important role in offering support to cultural heritage projects and the preservation of archaeological heritage in the Middle East as devastating news of loss and destruction continues to come out of the region.

### Museum Attendance

The Museum continues to see an increase in visitors to the galleries, with the total number in the past financial year (July 1, 2015–June 30, 2016) seeing a 7.7% rise to 55,308. We attribute the increase to our continued efforts in marketing and publicity, as well as tours, programs, and events that draw in repeat and new visitors. The kiosks that were installed in June 2015 in front of the Museum continue to have a positive impact on numbers, yet this is not reflected in an increase in donations, which has remained stable over the past couple of years. Many thanks to our head of Visitor Services and Security, Adam Finefrock, who joined us last June, for recording and circulating visitor numbers; and to Knut Boehmer, who joined us in October as the new IT Support Specialist, for his aid in problem solving our iPad-based visitor guide survey and reviving it with the new Feed2Go app.

### Gallery Enhancements Project

In 2014 the Oriental Institute Museum initiated the Gallery Enhancements Project, the principal aim of which is to improve visitors' experience in the galleries and the display of the collections by way of updated graphics, new lighting, and new free-standing display cases. The project has been made possible by the generosity of an anonymous donor, with additional funding to be raised. We look forward to completing the project in time for the celebration of the Oriental Institute centenary in 2019. Over the past year we have made significant progress in all aspects of the project. After meeting with several case vendors, both national and international, we selected two vendors to produce three prototype display cases: Helmut Guenschel Inc., an American company based in Baltimore, Maryland, to produce a table case; and Cäse[werks], LLC, the North American agent for Vitrienen- und Glasbau REIER, GmbH of Lauta, Germany, to produce a wall and pedestal case. The cases were delivered to the Museum in May and now stand in their respective galleries: the pedestal case has replaced a case in the Haas and Schwartz Megiddo Gallery that holds a recumbent sphinx carved in stone; the wall case has replaced the mummy trappings case in the Joseph and Mary Grimshaw Egyptian Gallery; and the table case stands in the Robert F. Picken Family Nubian Gallery, where it holds ceramics from the A-Group culture (fig. 1).



*Figure 1. Reinstalled Guenschel display case, Nubian Gallery (photo: D. 13358, by K. Bryce Lowry)*

Our assessment of these cases and the feedback we receive from Oriental Institute staff, faculty, volunteers, visitors to the gallery, and our anonymous donor will make a significant contribution to the project's next steps. Our overall objective for the design of new free-standing cases is to acquire cases with improved display and functionality, yet which at the same time preserve the existing aesthetics and traditional style of the Oriental Institute Museum. We continue to work closely with Elizabeth Kidera, the exhibit designer and architect whom we hired to work with us at the outset of the project. In addition to helping with the prototype case designs, Liz has created numerous gallery mockups and drawings of custom cases that have proven invaluable for envisioning possibilities for enhancing the display of different object groups. We look forward to finalizing the list for the full order of display cases by the end of the summer.

In the last year, we also acquired professional input for enhancing the lighting scheme in the galleries from lighting consultants Lightswitch Architectural. Drawing on this feedback, we have started to replace the overhead gallery lights and in-case lighting of our existing Guenschel cases with LED lighting. This transition has already had a noticeable impact on visibility and the display of objects in the galleries. Many thanks to Erik Lindahl for working with University Facilities to obtain funding from the University as a result of the savings on energy the change in lighting will have.

A third area of progress has been the redesign of the south alcove of the Robert F. Picken Family Nubian Gallery. In addition to the replacement of the old free-standing table case with the Guenschel prototype case, the neighboring existing Guenschel cases are receiving updated



*Figure 2. Redesigned orientation area, including a map of the ancient Middle East and timeline (photo: D. 16997, by Austin M. Kramer).*

graphics based on our new graphic hierarchy, LED lighting, and a slight reconsideration of the arrangement of objects. The impact of these enhancements on the display of the Nubia collection has already received very positive feedback.

## Orientation Area Redesign

In December 2015 we completed improvements to the Orientation Area (fig. 2). Upon entering the Mesopotamian Gallery, visitors are now welcomed by a series of introductory panels on the history of the Museum and Oriental Institute, its ongoing projects, and a large-scale plan of the Museum galleries. This section is followed by a 12' wide by 8' 6" tall map of the ancient Middle East, the highlight of which is the identification of all of the sites that have been excavated by the Oriental Institute since the early twentieth century. Beginning on the neighboring wall and following a curve in the corner is an 18' 5" long timeline of the ancient Middle East. The timeline is separated into bands that correspond to the geographical regions represented by our museum galleries: Mesopotamia, Anatolia, Levant/Megiddo, Egypt, Nubia, and Persia. Each band includes events and objects that highlight themes and innovations that took place in the ancient Middle East from around 10,000 BC to AD 1000. All of the objects pictured on the timeline are on display in the Museum's permanent galleries.

The new didactics in the Orientation Area have been well received by visitors and by our volunteers and docents, who engage with these materials when leading tours. In addition to providing a welcoming introductory space, the area is a great multipurpose space for

education programs, membership events, and receptions. We would like to thank graphic and exhibit designers Elizabeth Kidera, Karen Backe, and Jason Gagovski. We would also like to thank Emily Hammer and her team at the Center of Ancient Middle Eastern Landscapes (CAMEL) for their contribution to the map, and Oriental Institute faculty and scholars for their input.

## Special Exhibitions

Our special exhibits program has had another successful year. In September 2015 “A Cosmopolitan City: Muslims, Christians, and Jews in Old Cairo” closed and was followed by “Persepolis: Images of an Empire” in October, curated by Kiersten Neumann. The exhibit, which features large-format prints of archival photographs taken during the Oriental Institute Persian Expedition (1931–1939), has made available to the public a selection of images that have never been seen before, either in exhibition or publication (see *Special Exhibits*, below).

We have held a range of academic, public, and community events and programs in association with “Persepolis.” In November we welcomed Alexander Nagel, Research Associate, National Museum of Natural History, Smithsonian Institution, as part of the Oriental Institute Member’s lecture series, to speak on “Taking Care of Color in Persepolis: New Research on Painters, Palaces and Polychromies in Achaemenid Persia, c. 520–330 BCE.” This was followed in March by two events held in celebration of the Persian New Year, a Nowruz-themed Epic Wednesday and Ancient Game Day. Both programs were generously supported by the Federation of Zoroastrian Associations of North America, the Zoroastrian Association of Chicago, and the Iran House of Greater Chicago. In May, Emily Hammer, Director of the Center of Ancient Middle Eastern Landscapes (CAMEL), led a lunchtime gallery talk in the exhibit space, entitled “Persepolis from the Air: Aerial Imagery and Archaeology.” Since the opening of the exhibition Kiersten Neumann has given a number of public talks on the significance of photography to the Persepolis excavations. The exhibit has also received positive media attention, including a highlight in the *University of Chicago Magazine’s* Original Source (Winter 2016), the University of Chicago’s homepage feature story, entitled “Preserving Persia’s Glorious Past” (May 16, 2016), and most recently in the *Biblical Archaeology Review*, “Picturing Persepolis” (July/August 2016).

The lower level of the Oriental Institute has seen two exhibits over the past year, including an abbreviated version of “Our Work: Modern Jobs, Ancient Origins,” and a new student exhibition, “Don’t Take My Stuff. Tell My Story.” in collaboration with Dream Rocket. The exhibition opening took place on May 18 as part of the Oriental Institute Teacher Appreciation Night & Award Ceremony, drawing fifty-eight educators to the event.

## Outgoing Loans

The Museum continues to support an active lending program, including both small-scale loans and renewals, as well as contributions to large-scale special exhibitions (see Registration below). Our Neferhotep statue (OIM E8303) was prominently featured in the Metropolitan Museum of Modern Art exhibit “Ancient Egypt Transformed: The Middle Kingdom” (October 12–January 24). We contributed a barrel cylinder of King Sargon II from Khorsabad (OIM A17587) to the University of Pennsylvania Museum exhibit “The Golden Age of King Midas” (February 13–November 27). We are happy to announce the renewal of a loan of thirty objects to the Booth School of Business at the University of Chicago, which are featured as part of a



satellite exhibit “Doing Business in the Ancient World,” co-curated by Jack Green and Brit-tany Hayden.

## Museum Acquisitions

Acquisitions to the Museum (see *Registra-tion*, below) include the Bingham Collection, a group of ten cuneiform tablets that were generously gifted to the Oriental Institute by Ms. Edith Bingham of Louisville, Kentucky (fig. 3), wife of Robert W. Bingham. The tablets had been in the Bingham family since 1919 and were discovered by Ms. Bingham in a vintage wooden box in the former house of her husband’s grandfather. Nine of the tablets date to the Ur III period, and one is a standard inscription of Sin-kashid. Wal-ter Farber, Curator of the Tablet Collection, with the aid of Miguel Civil, was able to track down the original sale of the tablets. On May 7, 1919, the sale ledgers of Edgar Banks, the well-known archaeologist and dealer in cuneiform tablets, record the sale of eleven cuneiform tablets to Robert W. Bingham for the sum of \$33. The date of the sale explains the *New York Times* newspapers dated to May 5, 1919, in which the tablets were wrapped inside the box. The group will be published in an article by Gertrud Farber. The Museum also acquired a collection of Fustat sherds that were gifted by Erik Gronberg and which will be added to the sherd teaching collection. Mr. Gronberg was a member of the first season of George T. Scanlon’s excavations in 1964, which laid the founda-tion for this long and very important archaeological project at Fustat, Egypt. The Museum Archives (see *Archives*, below) received a generous gift from the Baramki family, a collection of slides and prints, as well as published and unpublished writings belonging to Palestinian archaeologist Dimitri Constantine Baramki (1909–1984). Baramki conducted excavations at Khirbet al-Mafjar (north of Jericho) from 1935 to 1948, accompanied by Robert Hamilton from 1944 to 1948; and then at Jumeirah, Dubai, from 1971 to 1975. This collection will be useful for a definitive biography of Baramki in the future.



*Figure 3. Bingham Collection recently gifted to the Tablet Collection at the Oriental Institute (photo: Gertrud Farber)*

## Conservation of the Coffin of Ipi-ha-ishutef

In September 2015, the First Intermediate Period cedar coffin of the Commander of Troops and Scribe, Ipi-ha-ishutef (OIM E12072) was reinstalled in the Egyptian Gallery after an extensive conservation assessment and treatment. The coffin, purchased by Breasted in 1923, had been off exhibit since 1996 awaiting the opportunity and funding for its treatment. In 2014, we received a generous grant from the Antiquities Endowment Fund of the American Research Center in Egypt that allowed the work to proceed. Preliminary reports on the project can be seen at <https://oi.uchicago.edu/collections/coffin-project>, and a final report will appear soon in the *Bulletin* of ARCE. See *Conservation*, below.



Figure 4. Coffin of *Ipi-ha-ishutef*, Egyptian Gallery (photo: D. 13355, by K. Bryce Lowry)

Following its treatment by Conservators Simona Cristanetti and Alison Whyte, the coffin was photographed by Austin Kramer and Jeffrey Newman. Some of those images were included in a new detailed label designed by Josh Tulisiak. The coffin is now prominently displayed between the mummies of Meresamun and Petosiris in the Joseph and Mary Grimshaw Egyptian Gallery, giving our visitors a better idea of the development of Egyptian coffins (fig. 4). Following the completion of the conservation project, Simona Cristanetti left the Oriental Institute and now works at the Arthur M. Sackler and Freer Gallery of Art at the Smithsonian Institution.

## Integrated Database Project (IDB)

Over the last year, the Museum, in conjunction with the Integrated Database team, has made great progress inputting and updating records of our collections, which are available online through the “Search Our Collections” feature on the Oriental Institute website: <http://oi-idb.uchicago.edu>. Incomplete records in our Photo Archives collection were updated with images and descriptions, including 2,916 photographs from the Anatolian Expedition, 1,220 photographs from Megiddo, 402 photographs from Tell Asmar, 94 photographs from Jerwan, and 1,299 from Luristan. New records were created for archival photographs of objects from the Diyala expeditions, including 978 from Tell Agrab, 114 from Ishchali, and 1,519 from Khafajah. New records were also created for the digital images now on display in the current special

exhibit “Persepolis: Images of an Empire,” which were created from scans of the original negatives from the Oriental Institute Persian Expedition in the 1930s. Further, over 200 new records were created for the new object photography to be included in the upcoming publications *Highlights of the Oriental Institute Museum* and *Ancient Mesopotamia*. Over 23,000 new Museum Archives records were created. This process has involved not only cataloging collections old and new into the Integrated Database, but also reorganizing the physical space of the Museum Archives in order to provide better access to researchers in-house and online. See further Archives below.

As of August 2015, all image requests received by the Oriental Institute are processed exclusively through the Integrated Database, with new records being created and updated by our Photographic Archives Assistant, with support from Kiersten Neumann, Curator, and John Larson, Head of Museum Archives. In transferring our workflow to the database, we have been better able to monitor past requests and have seen a greater number of requests fulfilled through the delivery of complimentary copies of publications to the Museum Office, which are then incorporated into the Research Archives (library) for use by resident and visiting scholars. The number of requests we fulfilled has risen by 26 percent compared to last year, with a total of 166 since the beginning of June.

## Oriental Institute’s Achemenet Project

The Oriental Institute’s Achemenet Project wrapped up its activities in March 2016. Over the past year, Project Researcher Tytus Mikołajczak, with help of Jack Green, former Chief Curator, and Kiersten Neumann, Curator, as well as the Photography Department, completed, exported, and transferred to Achemenet detailed descriptions and photographs of more than 600 objects (fig. 5). Among these objects are some of most spectacular and important finds from the Oriental Institute excavations at Persepolis in the 1930s, many of which have never been published or documented since their arrival to Chicago. The updated descriptions and photographs of the objects are available online through the Oriental Institute website’s “Search Our Collections” (<http://oi-idb.uchicago.edu>) and at [Achemenet.com](http://Achemenet.com). We are grateful for the opportunity to collaborate with our partners at the Musée du Louvre on this project and for the support from the France Chicago Center of the University of Chicago, Roshan Cultural Heritage Institute, and the Oriental Institute.



*Figure 5. Gold pendant with granulated decoration and garnet pendant, Persepolis, 550-330 BC (OIM A19575). Photograph taken as part of the Achemenet Project (photo: D. 16026, by Austin M. Kramer)*

## Museum Publications

We have made significant progress with preparations of highlight volumes of our permanent collections, including our Mesopotamia and Syro-Anatolia collections, as well as an all-Museum volume. Our sincerest thanks go to the contributors and editors of these volumes, as well as to the Photography, Conservation, and Registration departments for their assistance. We are look-



Figure 6. Front cover of the redesigned Oriental Institute Visitor Guide. Design by Kiersten Neumann and Hannah Linton

ing forward to having these volumes available to the public, both in print and as complimentary downloadable PDFs from our website. In November the Museum launched a new Oriental Institute Visitor Guide, which can be picked up on site and downloaded online (<https://oi.uchicago.edu/galleryguide>) (fig. 6). The redesigned guide features updated graphics, museum plan, gallery images, and descriptions, as well as links to further information. Thank you to Hannah Linton, Josh Tulisak, and Leslie Schramer for their help with the design.

### 3D Scanning Projects

The Oriental Institute continues to make advances in the area of 3D scanning using an ARTEC Spider portable unit. Josh Cannon (PhD candidate, NELC) has been scanning second-millennium ceramics from the Alişar Höyük collection housed at the Oriental Institute in order to measure their proportions with a high degree of accuracy (0.05 mm). His research, which is for his dissertation, consists of comparing this assemblage to that of Çadır Höyük, an Oriental Institute sponsored archaeological excavation near to and contemporaneous with Alişar Höyük. We again would like to thank Katherine Tsiang and Charles Crable of the Center for the Art of East Asia for their collaboration and support.

Josh Cannon is also working with Emily Teeter on additional scanning projects to produce 3D prints of objects in our collection for use in the Public Education and Outreach Department's programs for low-vision visitors. We hope to use these scans to create reproductions for sale in the Suq. The 3D printing is being done at the University's Chicago Innovation

Exchange, using several different types of printers (a Stratasys Connex3 and a Uprint ES) to test the resolution of the prints. Emily and Carol Ng-He are also working on printing parts of the skeleton of our mummy Meresamun for use in science-based programs for families and adults.

### Collections Research Grant

We were honored to be able to continue the Oriental Institute Collections Research Grant program in 2015–2016 thanks to the generous support of O. J. Sopranos. Three applicants were awarded funds to carry out research on the Oriental Institute collections for their proposed projects: Moujin Matin (University of Oxford), “The Origins of Tin Glazed Pottery: A Technological Examination of 8th–10th Century Ceramics from Islamic Lands”; Yael Rotem (Tel Aviv University), “Nahal Tabor Cemetery in the Central Jordan Valley during the Early Bronze Age I–II: Burial Customs and Death Rituals at the Transition to Urban Life”; and Tasha Vorderstrasse (University of Chicago), “Material Culture from Medieval Anatolia in the Ori-

ental Institute Museum.” We are looking forward to the next round of innovative research projects as we continue the grant through 2016–2017.

## Museum Staff

Thank you to all of the Museum Staff, work-study interns, graduate students, and volunteers for their commitment and hard work over the past year. In December we welcomed two new full-time additions to the Museum team: Joshua Tulisak as Graphic Design and Preparation Assistant, with a focus on the Gallery Enhancements Project, and Jennifer Castellanos as Assistant Manager for the Suq. We have since also welcomed Erin Bliss and Kathleen Cescon as Assistant Preparators. In July our Photographer Anna Resson left the Oriental Institute. We have since been contracting with Austin Kramer, a University of Chicago Alumnist and former work-study student of the Oriental Institute. Completing the photography team were work-study students Bryce Lowry and Jeffrey Newman. Additional work-study interns from the University of Chicago, as well as part-time employees and summer interns who assisted the museum in the past year include: Michelle Farley, Elisa Landeverde, Andrew Wright, and Maria Mosso (Integrated Database/Image Requests); Joseph Hermiz (Museum Archives); Kathleen Cescon, Jordan Galcynzski, Danielle Zwang, Tine Rassall (Registration Department); Benham Taleblu (Suq).

In December we said goodbye to our Chief Curator, Jack Green, who now holds the position of Deputy Director at the Corning Museum of Glass. In September Jean Evans will be joining us as Chief Curator and Deputy Director for Collections and Exhibitions. Jean is currently a Postdoctoral Fellow at Ludwig Maximillian University in Munich and prior to that was an Assistant Curator in the Department of Ancient Near Eastern Art at the Metropolitan Museum of Art for over nine years. Jean also currently holds a Research Associate appointment at the Oriental Institute and has worked on multiple exhibits in the museum and with faculty on field projects in Syria and Turkey. I want to give special thanks to everyone on the Museum team for their support and assistance in ensuring the smooth operation of museum programs and projects in the interim period between Chief Curator appointments. The initiation of a bi-weekly Senior Staff Meeting was very helpful in this respect. I also wish to express my sincere gratitude to our Director Gil Stein and Executive Director Steven Camp for their advice and support, in particular with my appointment as Curator and Research Associate at the beginning of the calendar year.

In sum, the year has presented many opportunities and welcome challenges for the Museum, and we look forward to another fulfilling year complete with gallery enhancements, research on the collections, programs and publications, and expanding our public outreach. We also look forward to continuing to engage with the academic community and public on matters of cultural heritage and preservation.



## SPECIAL EXHIBITS

### Emily Teeter

“A Cosmopolitan City: Muslims, Christians, and Jews in Old Cairo,” which opened February 17, continued on view through September 13, 2015. For that exhibit, see the *2014–2015 Annual Report*, pp. 240–42. “Persepolis: Images of an Empire,” curated by Kiersten Neumann and designed by Josh Tulisiak, opened to our members on October 11, 2015, and to the public two days later. Members and their guests filled Breasted Hall to hear Professor Matthew Stolper speak about the site and its history (fig. 1). The presentation was followed by hors d’oeuvres in the Mesopotamian Gallery and a viewing of the exhibit.

For the Persepolis show, the gallery was painted a dark royal purple that contrasted with the black and white images (figs. 2–3). Quotes from early visitors to the site ring the top of the walls. A stunning panoramic view of the stairway of the Apadana that Josh flawlessly stitched together from five separate negatives covered almost one whole wall. A large panel addressed different opinions about the function of Persepolis, with quotes from Gil Stein, Abbas Alizadeh, Donald Whitcomb, and Matt Stolper. A small display case contextualized the expedition, with a vintage typewriter and pages from the photographic register. A large box camera on a tripod, similar to that used by the expedition (sourced on-line by Erik Lindahl), gives our visitors a deeper appreciation of how laborious photography used to be. Kiersten worked with Matt Stolper and with Emily Hammer and Jennifer Altman-Lupu of our CAMEL lab on a 12-minute video on the topography of the site that is shown in a continuous loop in the gallery (it is also available on the exhibit’s website). A brochure, rather than a catalog,



*Figure 1. Professor Matthew Stolper speaking at the members’ opening of the Persepolis exhibit*



Figures 2-3. Views of “Persepolis: Images of an Empire” (photos: Austin M. Kramer)

was issued in conjunction with the show. “Persepolis: Images of an Empire” was made possible by generous support from Guity Nashat Becker, the Federation of Zoroastrian Associations of North America, the Zoroastrian Association of Chicago, and the Iran House of Greater Chicago, as well as the continued support of the members of the Oriental Institute. In kind support was kindly provided by Darioush Winery.

We continued to show an abbreviated version of “Our Work: Modern Jobs, Ancient Origins,” photos by Jason Reblando, on the lower level of the institute through August 15, 2015. A selection of the images was loaned to the Bade Museum at the University of California at Berkeley where it will be on view to the end of 2016.

“Don’t Take My Stuff. Tell My Story.” went on display in the lower level on May 1, 2016, and continues through October 30. This show (fig. 4) is composed of forty-eight colorful works, each 24 × 24 inches on paper or fabric by K through 12 students from a variety of schools, most



Figure 4. View of the “Don’t Take My Stuff. Tell My Story.” exhibit (photo: David Turner Photography)

in the Chicago area, but also farther afield. Each piece is accompanied by a statement about the work that reflects the student's response to the impact of the looting of archaeological sites and the data that is lost (hence the name of the show). One statement reads:

“Title: Missing a page torn from a book of fairy tales.

Stained, vandalized and missing several words, this piece is symbolic of the importance of artistic and context. It is only through fully intact works and collections that we can achieve understanding of the literal and cultural meaning of art.”

— Cecilia Lira, Skinner West Classical Fine Arts and Technology School, Chicago  
(for her artwork, see fig. 3, lower left)

The project created valuable new links between Chicago-area educators and the Oriental Institute. The project was organized by Dream Rocket and coordinated by Moriah Grooms-Garcia and Carol Ng-He in our Public Programs office.

“A Threatened Heritage,” a series of panels that address threats to cultural heritage through the Middle East, continue to be displayed in the galleries. “Doing Business in the Ancient World,” featuring artifacts that relate to commerce and trade and finance, presented in the lobby of the Booth School of Business, was also renewed for another loan term.

The 50th anniversary of the foundation of our volunteer program was marked by the placement of a small display in the lobby. Designed by Josh Tulisaiak and Erik Lindahl, the display features photos that reflect the many roles that our volunteers play for the Institute, including assisting faculty research, giving tours, working in the shop or Research Archive, acting as a spokesman for us, and participating in field work. The anniversary was also commemorated by a banner at the front door (fig. 5) and the production of lapel buttons designed by Josh. The celebration continues through 2016, culminating with a special program on December 4.

The special exhibits program will temporary slow down so that the museum staff can focus on the project to refresh the permanent galleries (see Museum report). The Persepolis exhibit will be extended into the new year. But planning for the future still proceeds. We are working on an exhibit on the Egyptian Book of the Dead (curated by Foy Salf) that opens for our members on October 2017, and we are already giving thought to our exhibit for 2019 — our centennial year.

The special exhibits program continues to fulfill its goals: promoting research on the collections; expanding our library of new photography; giving faculty, staff, and students the opportunity to curate an exhibit; and of course, encouraging the public to return to our galleries to see what is “new.”

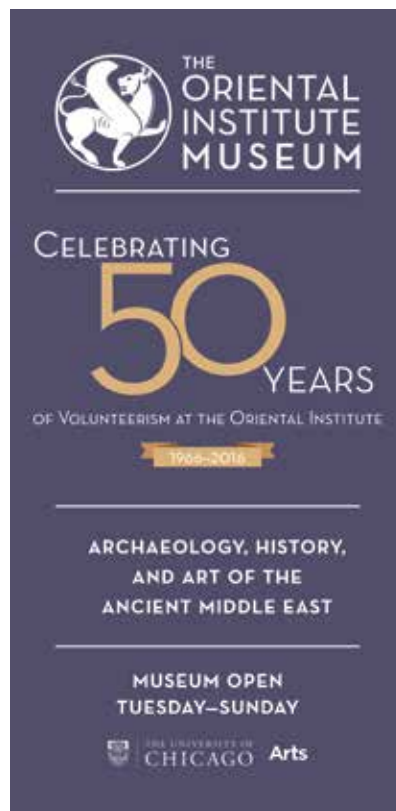


Figure 5. Banner by front door announcing the Volunteers' 50th anniversary and mini-exhibit, designed by Josh Tulisaiak

## PUBLICITY

Emily Teeter

We continue to combine strategies for publicizing Oriental Institute programs — primarily paid advertising, along with obtaining press coverage. Among the venues for paid advertising this year were *Footlights* (the program for Court Theatre), *Time Out Chicago*, the program for the Black Harvest Film Festival, the *Hyde Park Herald*, *Chicago Life*, and *UChicago Arts* quarterly magazine. We also ran a series of sponsorship messages on WBEZ public radio for both the Persepolis exhibit and the museum generally. Our new account executive at WBEZ was so impressed by a tour of our galleries that she persuaded the station to donate additional spots.

Rack cards continue to play a role in our effort to raise awareness of our galleries and programs. This year, we had a general museum card featuring King Tut and another for the Persepolis exhibit (fig. 1). Wahied Helmy continues to distribute the cards for us. This has become more difficult with the closure of the three downtown Chicago tourist information centers that served as major outlets for our material. The cards continue to be distributed at airports, hotels, restaurants, community centers, arts fairs, and at many other venues.

The Oriental Institute was featured on a wide range of media, including three brief stories on WCIU TV in March by reporter Chris DeRose about our artifacts and events. *Archaeology Magazine* (May–June 2016) ran an article, “The World’s Oldest Writing,” with comments from

Professor Martha Roth about texts on the Hammurabi stela. The Art Institute of Chicago, the Getty Institute, and the Oriental Institute shared credit for a video featuring the work of Associate Professor Ray Johnson and his colleagues, who discovered that a fragment of a statue of Antinous, part of which is in Chicago, part in Rome, joined each other. Other coverage included a lengthy story, “Preserving Persia’s Glorious Past,” by our good friend William Harms, that appeared on the University’s main webpage in May 2016. The humorous historical website Atlas Obscura ran a feature on August 12, “The Real Housewives of Ancient Egypt Had 8-Foot Long Prenups,” focusing on our Demotic annuity papyrus. The celebration of the Volunteers’ 50th anniversary led

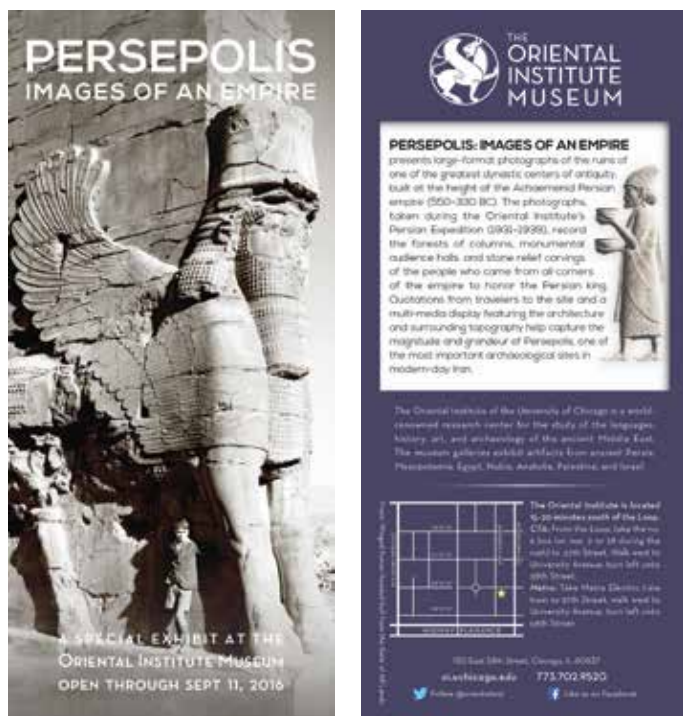


Figure 1. Rack card for Persepolis exhibit, designed by Josh Tulisiak



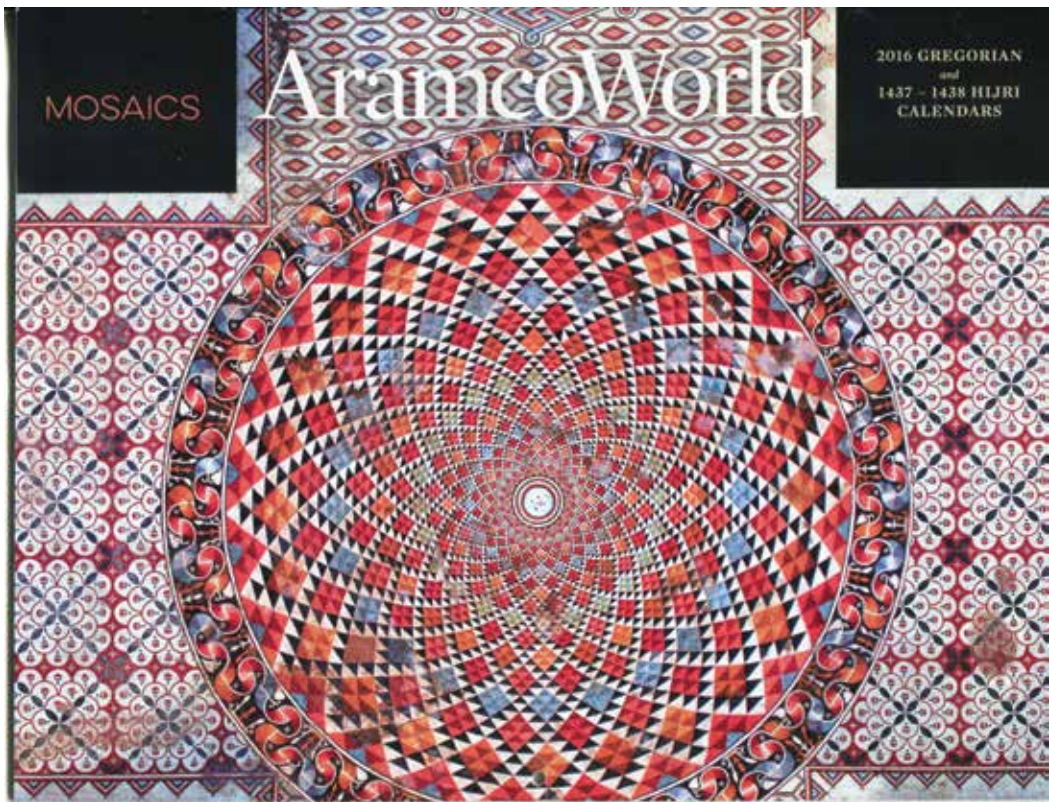


Figure 2. Cover of the ARAMCO world 2016 calendar featuring images from Donald Whitcomb's project at Hisham's Palace, Jericho-Mafjar

to a wonderful interview with Carlotta Maher on the local NBC channel followed by an extensive feature in *Classic Chicago Magazine*, "Carlotta Maher, Queen of the Nile," by Judy Carmack Bross. We thank volunteer Deborah Halpern for the success of that coverage.

Other press coverage included an extensive story in the January/February 2016 issue of *ARAMCO World* (print circulation 500,000) about the "Cosmopolitan City" (Fustat) exhibit. While touring the Oriental Institute Museum, the magazine's editor noticed the recent publication by Donald Whitcomb documenting the decoration of Hisham's palace at Jericho-Mafjar, and he decided to use the images for their 2016 calendar (fig. 2). This was incredibly valuable exposure for our research and publications. We were also included in the 2016 edition of the "Daily Art History Calendar," with six of our objects featured (fig. 3).

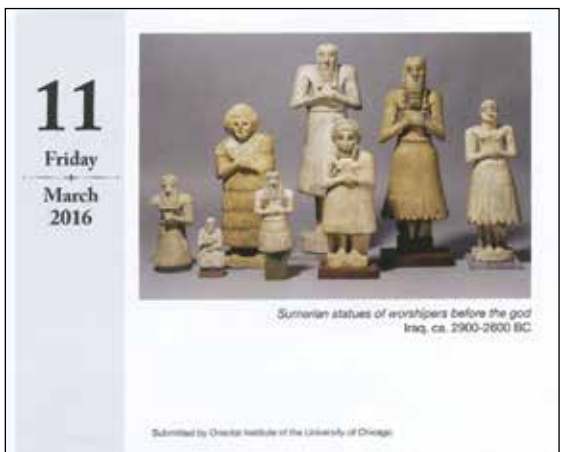


Figure 3. Calendar page featuring a group of our Sumerian statues



We have engaged Moriah Grooms-Garcia, CEO and founder of Social Media Moo, LLC, to handle our online profile and communications (see *Social Media*). Moriah was a former member of our Public Education and Outreach Department and an important member of the team that managed our social media, so it has been a seamless transition. Watch for her witty and interesting posts and tweets.

The galleries continue to be in demand for filming. During the last year we had film crews in the Nubian, Mesopotamian, and Egyptian galleries. Although filming can be disruptive and a draw on staff time, it provides additional exposure and a modest stream of revenue.

Collaboration plays an important role of our publicity efforts. We have developed close relations with the Egyptian consulate here in Chicago, working on a series of programs. One that got off the ground in February 2016 is their “Learning Lunch,” an informal lunchtime program in which Oriental Institute faculty, staff, and graduate students give a talk accompanied by Egyptian food prepared by the consulate’s chef. We continue to work with the Consul General, Mr. Mohamed Abu el-Dahab, and the Deputy Consul General, Mrs. Heba M. Zaki, on additional programs including an Egyptian film festival and, hopefully, teachers’ program.

Another longer-standing collaboration is our partnership with Museum Campus South, a consortium of seven local cultural institutions. Last year, we offered a popular “Nights at the Museums” event that we are repeating this summer, and we continue the “passport program” (see *2014–2015 Annual Report*, p. 245). Thanks to a generous grant from Boeing, the consortium has engaged a marketing team, TeamWorks Media, to help shape our message and future publicity efforts.

In the coming year, we hope to develop new ways to reach out to potential visitors and those who are interested in the work and mission of the Oriental Institute.

---

## SOCIAL MEDIA

### Kiersten Neumann

The Oriental Institute has continued to have a strong social media presence, sharing information about our research, museum, and events to a broader and more diverse audience. This growth has been possible over the past year thanks to the ongoing efforts of the cross-departmental social media committee, consisting of Moriah Grooms-Garcia, Kiersten Neumann, and Amy Weber, who came from the Public Education and Outreach, Museum, and Membership departments, respectively.

The Oriental Institute has maintained a strong presence in the major social media networks, including Twitter, YouTube, and Facebook. Our Facebook fan base has risen 15 percent from last year, bringing it to a total of 19,193 fans from across the globe. We had a bit of fun on April Fool's with an alert that the Museum was closed due to a mummy uprising; the corresponding post on Facebook was seen by over 19,000 people. Our well wishes for a "Happy Akitu" (Assyrian New Year!) from our Lamassu over Facebook in April was also very well received, reaching more than 44,000 people, making it the Oriental Institute's #1 most engaging post. On YouTube we have increased our subscription base to 4,662, up a significant 154 percent from last year. One of our greatest draws has been postings to our Oriental Institute Lectures playlist; we now have a total of fifty-six videos, and this number will continue to grow in the coming year thanks to the generous financial support of Oriental Institute members, sponsors, and partners. On Twitter, @orientalinst now has 6,834 followers.

Although we were sorry to see both Amy and Moriah leave the Oriental Institute this past spring, we are happy to continue a collaborative relationship with both. Amy has remained with the University of Chicago, as the Associate Director for Regional Programs in University Central Development, and we are contracting with Moriah's company, Social Media Moo, LCC, to help us manage our social media communication for the next year. We are excited to have Social Media Moo coordinate and maintain all of our social media networks and marketing emails and hope that by centralizing this process, we can continue to build a strong and loyal following.

---

## REGISTRATION

### Helen McDonald and Susan Allison

The Gallery Enhancement Project to replace our smaller free-standing cases began this year (see *Museum*, above). Registration's main role in this project is to assist with the de-installation and reinstallation of the gallery display cases. We produce a list and labels for each object in a case. As Conservation and Preparation de-install the objects, Registration inventories and provides a label for the objects. Once the case is empty, we check the registration numbers on the case labels to make sure they match the numbers on the objects and in the database. When reinstallation is complete, we do another inventory to verify every object is back on display.

We continue to add more data to the object-related parts of the Integrated Database (IDB) and to improve the data already there. This year the registrars and their various helpers have continued to take digital photographs of newly registered material for inclusion in the IDB. Once again, Registration would also like to express its gratitude to Foy and his volunteers for their progress in scanning the original registration cards for the IDB. All the cards of the A Collection (Asiatic), C Collection (casts), and X Collection (areas outside the Near East, like the Aegean) are now scanned and in the IDB, and the E Collection (Egypt and Nubia) cards are in process. The assistant registrar has uploaded over 17,000 scans of registration cards into the IDB. Another Research Archives volunteer has been scanning our accession files which are then checked by the registrars; about half of them have now been scanned and added to the IDB as PDFs. The registrar has been scanning and uploading the permit to publish forms filled in by researchers. In total over 46,000 multimedia records relating to registration have been added to the IDB this year. Of these over 33,000 are registration card scans and more than 13,000 are images, 400 are scans of accession folders, and over 160 are scans of permit to publish applications.

A large number of objects have been on the move for a variety of photography projects this year and the assistant registrar has been particularly active in this regard. Photography for the Achemenet website (Persepolis objects) was completed and the material rehoused and relabeled before being put away. Objects have also moved to be photographed for the forthcoming Mesopotamian gallery guide, the highlights of the galleries guide, and now the Syro-Anatolian gallery guide.

The special exhibit "A Cosmopolitan City" was de-installed in September 2015, with three loan objects borrowed from the Walters Museum of Art (Baltimore), including the fragile wooden door panel from the Ben-Ezra synagogue, being returned. The publicity prompted a small gift of Fustat sherds from a team member of the Scanlon excavations, Erik Gronberg; these will be added to the sherd teaching collection.

Preparations for the next special exhibit on the Egyptian Book of the Dead with guest curator Foy Scalf and special exhibits curator Emily Teeter have begun. Nearly 200 objects have been pulled from museum storage and display for consideration in the exhibit. This phase of exhibit preparation is almost complete and the curators will soon have a preliminary object list.

Our Neferhotep statue (E8303) went out to the Metropolitan Museum of Art in September for a Middle Kingdom exhibit titled “Ancient Egypt Transformed: The Middle Kingdom,” and returned in February. Getting it on and off display involved a team of art handlers from Terry Dowd and a forklift. The loan of three astronomical tablets to the Adler Planetarium returned to us in January. Two objects on loan to the DuSable Museum of African American History returned (an A-group Nubian pot and an ushebti). Also in January a barrel cylinder (A17587) went out on loan to the Penn Museum for the exhibit “The Golden Age of King Midas.” At the same time some pots from the Tut embalmer’s cache on loan to the Penn Museum came back to us. There was a changeover of Islamic bookbindings on loan to the Art Institute of Chicago; one came back in November (A12151B–C) and was replaced by a different one (A12107). The Field Museum has been in touch with us about the return of some Egyptian pots on long-term loan from us; these are no longer on display and will return home sometime this year. We also assisted in a small way with an incoming tablet loan from the library at Northwestern University and the return of a tablet loan to the W. H. Over Museum in South Dakota (these loans were principally the business of the Tablet Collection). On campus we have renewed a loan to the Chicago Booth School of Business for a case in their lobby on “Business in the Ancient World.”

A loan of three hundred Amuq obsidian tools for XRF analysis went out in October to Tristan Carter of McMaster University, Canada. This is part of an ongoing project of obsidian analysis and sourcing that has previously borrowed and analyzed Abu Hureyra obsidian from the Museum collection and is being carried out with the involvement of OI Research Associate Yorke Rowan. Another project for analysis involved the pXRF analysis of around 450 Cypro-geometric sherds from some of the Amuq sites carried out by James Osborne and Steve Karacic (Oct/Nov and March).

The Registration Department has moved or inventoried over 16,000 objects this year (making a total of almost 21,000 object movements). Just under 4,000 objects had their locations updated, checked, or corrected. Over 6,800 objects have been registered and 23 temporary storage boxes of sherds were unpacked, registered, and rehoused. Just over 650 individual objects and 28 drawers of sherds were the subject of research of all kinds. Around 120 objects were moved for photography of various sorts. Over 230 individual objects and 55 containers of sherds were moved for teaching.



*Figure 1. Head of Conservation Laura D'Alessandro and art handlers from Terry Dowd removing the Neferhotep statue (OIM E8303) from display for a loan*

## Visiting Researchers

- Alex Tsakos (Athens, Greece, Serra publication, Bruce Williams' colleague, June 2015)
- Jakob Anderson (Uppsala University, inscribed objects from Nippur, Bismaya and Diyala, July 2015)
- Yael Rotem, collections grant recipient, (Tel Aviv University, Nahal Tabor material, October 2015)
- Martina Renzi (University College London, Qatar, Dorginarti metalwork, October 2015)
- Moujan Matin (University of Oxford, glazed Islamic sherds for possible analysis, November 2015)
- Erica Hunter (SOAS London, incantation bowls, November 2015)
- Liat Niah (The Hebrew University, Jerusalem, Fakhariyah ivories, December 2015)
- St. John Simpson (British Museum, Sasanian Istakhr material, December 2015)
- Peter Dorman (American University of Beirut, Egyptian textiles and pottery, December 2015)
- Alexandra Hallman (Polish Academy of Sciences, Egyptian textiles, January 2016)
- Frauke Pumpenmeier (LMU Munich, Kenamun ushebtis, February 2016)
- Roman Gundacker (University of Vienna, Egyptian false door, April 2016)
- Katerina Athanasaki (courier visiting the Field Museum from Greece, Cypriote sherds, April 2016)
- Henry Wright (University of Michigan at Ann Arbor, Late Uruk bottles from Nippur, May 2016)
- Irving Finkel (British Museum, gameboards, June 2016)
- Noha Abou-Khataf and Iman Abdulfattah (Mamluk Studies conference, University of Toronto, Arabic manuscripts, June 2016)

## Classes

- Natasha Ayers (sherd drawing evening class, September 2015)
- Morrie Fred and Jack Green (Museum class, October 2015)
- Sofia Torallas Tovar (Egyptian scripts class, October 2015)
- McGuire Gibson (Mesopotamian pottery class, Spring Quarter 2016)
- Brian Muhs (Middle Egyptian and Coptic classes, March 2016)
- Gil Stein and Belinda Monahan (Hacinebi/Gritille bone class, March 2016)
- Randy Silverman (Dominican University preservation class, Arabian Nights, October 2015)



## Oriental Institute Faculty, Staff, Researchers, and Students

- Foy Scalf (Gardiner papyrus publication, July 2015–March 2016)
- François Gaudard (Egyptian shrouds, March 2016)
- Annalisa Azzoni (Persepolis Fortification Archive Project, sherds with inked Aramaic inscriptions, ongoing)
- Tasha Vorderstrasse (Research Associate, collections grant recipient, museum registration volunteer registering Islamic material and working on a publication of coins from the Amuq sites, ongoing)
- Lisa Heidorn (Research Associate, Dorginarti publication, ongoing)
- Karen Wilson (Research Associate, Nippur and Abu Salabikh, ongoing)
- Bruce Williams (Research Associate, Serra publications, ongoing)
- Carol Meyer (Research Associate, drawing Serra and other Nubian material for publication and studying glass objects, ongoing)
- Tytus Mikołajczak (NELC PhD candidate, Achemenet project, headed by Pierre Briant of Paris, project ended December 2015)
- James Osborne and Steve Karacic (NELC faculty, Koç University; Amuq Cypro-geometric sherds for pXRF and NAA, Oct/Nov and March)

## Students Using the Collection

- Ariel Singer (Egyptian coffin for Middle Kingdom class, ARCE paper and stela publication, ongoing)
- Kierra Foley (Egyptian containers, ongoing since September 2015)
- Andrew Wright (Cypriote material, November 2015)
- Jordan Galczynski (MA thesis, Hathor banners, November 2015)
- Lynn Welton (post-grad, studying Amuq pottery, ongoing since January 2016)
- Nicholas Posegay (Quran fragments, February 2016)
- Josh Cannon (PhD, 3D scanning of Alishar sherds, ongoing since April 2016)
- Melissa Horn (ivory figurine, May 2016)

Various students have written papers on our objects for the Middle Kingdom material culture class: in addition to Ariel Singer, mentioned above, Sasha Rohret, Emilie Sarrazin, and Kierra Foley; Sasha also wrote a paper on some Islamic objects for the Islamic archaeology class.

Our volunteers, interns, and work-study students have all been busy this year. Kierra Foley has registered sherds from Dorginarti and photographed obsidian tools for a loan. Terry Friedman continued to register Nippur sherds to be published in the forthcoming volume on the Inanna temple sounding. Toni Smith registered Nippur tablet casts for the tablet collection. Jim Sopranos continues to register Tell es-Sweyhat sherds (Syria) from Tom Holland's published excavations at the site. Tasha Vorderstrasse has continued with the registration of Islamic material. Museum Registration has had the assistance of two work-study students



*Figure 2. Summer intern Tine Rassalle registering a Megiddo skull*



*Figure 3. Tasha Vorderstrasse working on Islamic sherds from Alishar as part of her Collections Research Grant*

this academic year: Kathleen Cescon completed the inventory of the Aqaba material and then moved on to register sherds from Nippur and Alishar; Jordan Galcynzski continued with the registration of Behbahan (Iran) survey sherds, among other tasks. Danielle Morgan Zwang (Columbia University) joined us as summer intern in 2015. She registered the last of the Nahal Tabor sherds, rehoused and relabeled pots and objects from the site of Tall i-Geser, and helped us sort out, register, rehouse, and photograph three transit cabinets of miscellaneous material. This summer Tine Rassalle (University of North Carolina at Chapel Hill) has joined us and is busy registering Megiddo human bones and sherds and photographing Megiddo small finds, among other projects. Assistant Registrar Susan Allison is currently working with Conservation on the registration of the textiles from Semna South (Nubia), described in more detail in the Conservation report. Once again it has been a busy and productive year.

## ARCHIVES

### John A. Larson

As of December 2015, John Larson has served as Head of the Archives for thirty-five years. As he writes this, it is with the knowledge that this annual report is to be his swan song, because he is retiring at the end of December 2016.

Scholars visiting the Oriental Institute Archives during fiscal year 2015/2016 included Patrizia Piacentini, Professor and Scientific Director of the Archives of Egyptology at the University of Milan, who stopped in on July 16, 2015, during her visit to Chicago; Thomas L. Gertzen, Research Associate at the Moses Mendelssohn Center for European-Jewish Studies, Potsdam, Germany, who looked at the correspondence of Nathaniel Reich on October 23, 2015; Alexander Nagel, Research Associate at the Smithsonian Institution, National Museum of Natural History, who dropped by to do some research on Persepolis on November 5, 2015; Robert Bewley of the EAMENA Project (Endangered Archaeology in the Middle East and North Africa), who came to look at Aerial Survey of Iran photographs on November 16–17, 2015; Kathleen Sheppard of the Missouri University of Science and Technology, who returned to do research on Caroline Ransom Williams in James Henry Breasted's correspondence on December 7–8, 2015; during the week of May 9, 2016, Melissa Cradic came to do research in the Megiddo Archive on her dissertation topic, "Transformations in Death: Funerary Practices and Personhood in the Bronze Age Levant" at the University of California, Berkeley; and, beginning on June 28, 2016, for two weeks, Azra Dawood, a graduate student in the History, Theory and Criticism of Architecture and Art program and the Aga Khan Program for Islamic Architecture at the Massachusetts Institute of Technology came to do research on her dissertation topic, "John D. Rockefeller, Jr. and the Architecture of 'Protestant Modernism' (1919–1946)."

From within our own Oriental Institute community, Jennifer Kimpton, Kiersten Neumann, Tasha Vorderstrasse, Bruce Williams, and Karen L. Wilson have conducted research using Archives materials.

Several acquisitions were made by the Oriental Institute Archives during this fiscal year. On December 3, 2015, Professor Emeritus John A. Brinkman presented to the Archives some papers of the late Professor Edward Chiera. On May 31, 2016, we received the gift of two lithographs by E. F. Beaumont from Shelley H. Wilson of Henniker, New Hampshire: "Sunrise on Galilee" and "Beside the Still Water"; both date to 1935. They will join the other works by E. F. Beaumont, which came into the collections in 2014. On June 23, 2016, David C. Woolman and his wife Ina donated some letters, a diary, and some other materials belonging to his parents, Laurance C. and Janet Woolman, who worked at Megiddo (Palestine) and Chicago House (Luxor, Egypt) in 1929–1932.

Carole Yoshida has continued as an Archives volunteer during fiscal year 2015/2016 and has scanned a large number of lantern slides for the Integrated Database (IDB) Project. We are grateful to have benefited from the help of this dedicated volunteer, and we thank her here for all of her efforts on behalf of the Archives. Rebecca Wang, a NELC graduate student, has been assisting John since February 2016, by scanning Robert K. Ritner's collection of 35mm color transparencies. Anne Flannery has been assisted on the IDB Project during this

academic year by Middle East Center graduate student Joseph Hermiz. We would like to thank him for his efforts.

During the past fiscal year, the Oriental Institute Archives and the IDB Project have performed a physical reorganization of the Oriental Institute Archives, including shelf labeling, collections re-organization, and the installation of an IDB workspace in the Archives storage room. To date, we have cataloged over 23,000 Oriental Institute Archives records (up from 7,500 records last year) into the Integrated Database. This has been done by the IDB Project Manager, Anne Flannery, under the general direction of Foy Scalf, and six student workers and volunteers. Anne worked with Foy Scalf to develop “Crystal Reports” to generate finding aids for cataloged collections. We implemented the Oriental Institute Archives online interface in summer 2015. This allowed Oriental Institute Archives records to be searchable by the public for the first time. We cataloged the Khorsabad Archive down to the item level, and this is available online. We cataloged a few collections, such as the Diyala Archive and the Persepolis Archive, down to the folder level, but others, such as the Director’s Office Correspondence Files, are being cataloged down to the box level. This is all done in order to give a general sense of what is available to researchers. We started workflows to incorporate new collection items into the Integrated Database and the Oriental Institute Archives storage room, such as materials from the Epigraphic Survey, the WARKA Survey, Oriental Institute Financial Records, and the Syriac Manuscript Project. In May 2016, the Oriental Institute Archives met their IMLS grant requirements four months ahead of schedule. The Oriental Institute Archives IDB team will use summer 2016 to add information to already existing records and to continue to catalog the records of field expeditions and faculty/staff papers.

We have accomplished a great deal. Though just in its initial stages, the launch online of the Oriental Institute Archives has enabled greater awareness of the Oriental Institute Archives to both internal and visiting researchers. Special thanks are due to Anne Flannery and Foy Scalf for a job well done.

---

## CONSERVATION

Laura D'Alessandro

One of the highlights of the past year was the conclusion of the year-long project to conserve the coffin of Ipi-ha-ishutef and return the coffin to public display. The conservation treatment, led by Assistant Conservator Simona Cristanetti, was generously supported by the American Research Center in Egypt (ARCE). Associate Conservator Alison Whyte also played a significant role in the project, which concluded in August. Conservation was ably assisted by Erik Lindahl, Head of Preparation and Exhibit Design. Erik developed an innovative platform for the coffin that allowed conservators to actually work inside the coffin while they stabilized the interior painted surface. The return of the coffin to the Joseph and Mary Grimshaw Egyptian Gallery was a process that involved many of the museum's staff (fig. 1). A more complete description of the project, with detailed images of the process, can be found on the Oriental Institute's website in the Conservation Laboratory section: <http://oi.uchicago.edu/collections/coffin-project>. At the end of summer, just as the coffin project came to a close, Simona announced that she and her family would be returning to the East Coast, where Simona had accepted a position at the Arthur M. Sackler and Freer Gallery of Art at the Smithsonian Institution. We were very sorry to see Simona leave but wish her all the best in her new position.



Figure 1. The Conservation Department works with other museum staff to install E12072, the coffin of Ipi-ha-ishutef





Figure 2. OIM E9385 before (left) and after (right) being treated and moved to a new mount

A significant portion of conservation's focus for much of the past year has been on activities associated with the Gallery Enhancement Project. This ongoing project, which entails the replacement of the older Kensington cases in the museum galleries and a refurbishment of the newer Guenschel cases thanks to a generous donation, involves the entire collections staff. As the objects are removed from their display cases, each one is brought to the Conservation Laboratory where their current condition is assessed and any needed minor treatments are carried out. This may also include modifying the mount (fig. 2). As hundreds of objects may be de-installed at any one time, this creates a significant amount of work. Another important component of the Gallery Enhancement Project is ensuring that the products and materials used inside the display cases do not give off harmful vapors that may contribute to the degradation of the artifacts. Conservation is responsible for ensuring that all the materials used inside the display cases meet established conservation standards. Alison is in charge of conducting testing of any materials that have not previously been approved for such use.

This project also provides us with the opportunity to confirm the identification of the material from which an object is made. In the past, many of the stone and metal objects were identified solely by means of a visual assessment. As we have learned, many materials are difficult, if not impossible, to correctly identify by this method. With the help of the Oriental

Institute's Bruker Tracer, a handheld portable x-ray fluorescence spectrometer, Conservation has been able to correct many of the historically misidentified materials. The new information is entered into the Museum's database and the labels in the display cases are corrected as the cases are reinstalled with the newly designed labels. One of the more dramatic changes in identification concerned the composition of the Chicago Stone (A25412) on display in our Edgar and Deborah Jannotta Mesopotamian Gallery. Look for a *News & Notes* article later in the year about the results of this analysis as well as some of



Figure 3. Shaheen Chaudhri uses the Bruker Tracer XRF spectrometer to analyze clay tablets from Persepolis

the more interesting work that Conservation is doing to support the Gallery Enhancement Project.

Various researchers have taken advantage of the Bruker Tracer over the course of the year, both our own faculty and research associates as well as outside researchers. In addition, we are indebted to the work of Shaheen Chaudhri, working on behalf of Matthew Stolper and the Persepolis Fortification Archive Project, for his patient work in gathering data on the clay content of the Persepolis tablets (fig. 3). This ongoing analysis project, spearheaded by Bruker Application Scientist Lee Drake, will help to identify clay groupings among the thousands of tablets in the collection. As the project moves forward, the ultimate goal is to identify the location of the clay sources from which the tablets were made, allowing researchers to better understand the context of the texts and the history surrounding the tablets.

Over the past year, Alison was kept busy traveling with the Tracer in support of two research projects: the Neubauer Expedition to Zincirli in Turkey, directed by Virginia Herrmann and David Schloen, and a research project in Israel on behalf of Yorke Rowan. At Zincirli, Alison carried out analyses on glazed ceramics, copper alloys, iron objects, and other materials. While in Israel, Alison analyzed Chalcolithic ossuaries excavated from Peqi'in Cave in the 1990s as part of a larger research project (fig. 4).

Alison was able to take time away from her busy schedule to attend an advanced XRF workshop on quantification and calibration techniques for the analysis of archaeological and historic metal objects held in Buffalo, New York. Closer to home, Alison presented her work on the exhibit "A Cosmopolitan City" at the November Breasted Society event. She also gave a workshop on art conservation-oriented science topics to high school science educators at the December STEAM event.

Alison continued in her role as lead conservator for special exhibits. She has been working with the exhibit team to make preliminary assessments of objects considered to be critical to the upcoming exhibit, "Book of the Dead." This will be followed by a more formal conservation review of all the objects requested for the new exhibit.

Conservation also assisted our photographers with the handling of the more fragile and delicate objects requiring photography for projects ranging from the Achemenet website project to the numerous gallery guides currently under production.

The wonderful textiles from the Semna South Nubian excavations, conducted by Louis Žabkar in the 1960s, were brought to the museum a few years ago. Beautifully conserved and housed by Louis' wife and colleague, Joan, they have been temporarily stored in the Conservation Laboratory awaiting registration. These textiles represent all the distinctive textile



*Figure 4. Alison Whyte carries out XRF analysis in Israel*

features found during the Semna South excavations and as such are an important resource. They are being registered in the lab by the assistant registrar, Susan Allison. Due to the textiles' fragility, the fragments are only handled by Conservation. Each textile is carefully laid out so that the new registration number can be assigned in conjunction with the field number and then both numbers and the textile fragments are photographed. Conservation and Registration then place the fragments in state-of-the art textile cabinets in Museum storage.

While most of the collections staff focus remains on the Gallery Enhancement Project, a few active loans were made during this period. Alison acted as the courier for the Islamic bookbindings on loan to the Art Institute of Chicago for their new Islamic galleries. Earlier in the year, Alison and Susan couriered the return of loaned materials from the DuSable Museum. Laura traveled to the University of Pennsylvania Museum of Archaeology and Anthropology in January to escort a baked clay barrel cylinder from Khorsabad from the OI's Tablet collection on loan to UPenn for their exhibit "The Golden Age of King Midas." The trip was also an opportunity to bring home a long-standing loan of King Tut's funerary cache of vessels that had been at UPenn for over thirty years.

Laura was also involved for much of the year with arranging for the delivery of the last of the chemicals, archival rehousing supplies, shelving, and cabinets for the OI-NMA joint project at the National Museum of Afghanistan. Ordering and overseeing the movement of supplies from a variety of manufacturers and locations (including chemicals from Italy) to Kabul made for a very interesting experience. She thanks all of her colleagues at the Oriental Institute who assisted in this process.

The past year has been a busy one for all. I thank Alison and Simona for all their hard work. Particular thanks go to Alison for her assistance with this report. We look forward to the new year and eagerly await the arrival of Jean Evans, the new Chief Curator, to take us into the next year and the exciting projects that await.

---

## PREP SHOP

**Erik Lindahl**

This has been another exciting year for the Exhibits Preparation shop at the Oriental Institute Museum. The year started with the production of a design brief for the planned replacement of our free-standing display cases and ended with installation of refreshed exhibits in three new prototype display cases and 25 percent of the Robert F. Picken Family Nubian Gallery. By this time next year the Museum will have completed the Nubian gallery and made substantial progress on the rest of the galleries. The Prep Shop played a key role in the design and coordination of the prototype display case production and installation.

The Prep Shop has also been involved in many other projects this year. The most substantial of these were the design, production, and installation of the Persepolis photo exhibit; the development and implementation of a new lighting master plan; the redevelopment of the orientation area; the installation of an Egyptian coffin recently conserved by the Conservation Lab with assistance from ARCE; and the production and installation of a selection of fifty-eight archival photographs in the halls of the second and third floors of the Oriental Institute.

The display cases are not the only thing changing around the Museum and Prep Shop: Chief Curator Jack Green resigned and will be replaced by Jean Evans; Josh Tulisak has transitioned into a full-time role as Graphic Design and Preparation Assistant; halfway through the year we took on Erin Bliss as Assistant Preparator; and at the end of the year we took on Kathleen Cescon as Assistant Preparator. With these changes and recently added help we hope to complete the Gallery Enhancements Project by the 100th anniversary of the Oriental Institute in 2019.

---

## SUQ

### Denise Browning

This year for the first time ever we hired a full-time Suq assistant, Jennifer Castellanos, who comes to us from the Hellenic Museum here in Chicago. She started on December 1 and immediately stepped in to help cover our Suq holiday sale, where she proved to be a natural in the store and with the volunteers.

Jennifer helped us recover from the backlog caused by the hard drive crash that disabled our POS system, which runs the cash register in the store and our inventory/ordering system. So we have been working this entire year with out an adequate inventory system. Everything is done the old-fashioned way: by hand. Kudos to our volunteers and students who stepped right in and didn't miss a beat. So this year our main focus has been working with the University to investigate a POS system for the Suq.

This year we welcomed a new student assistant, Behnam Taleblu. Behnam's Persian background and academic interests proved a great help with our new exhibit on Persepolis. He sold more of our Seneh rugs than anyone and was a great help with our Nowruz merchandise. Behnam graduated this June and has moved on, but he will be missed. Holly Rapp also graduated this year. We will miss her sunny disposition and her accuracy!

We had the good fortune to welcome two wonderful new docents, Alice Mulberry and Louise DesPres! They both have proved to be wonderful additions to our regular volunteers, Ray Broms, Jane Meloy, and Norma van der Meulen. Special thanks to Norma, who still designs many of our wonderful necklaces!

We had a book signing for Irving Finkel's new book, *The Ark Before Noah: Decoding the Story of the Flood*, when he was here for a Members' Lecture in May. It was nice to see him back at the OI. We also carried all the books for the new Book Club started by OI Volunteer Coordinator Sue Geshwender.

We developed a new Lamassu necklace and lapel pin for the Suq. It is an exact replica of our own forty-ton Lamassu.

Carol Johnson, a former Suq volunteer, has started doing some photography for our website that should prove to be quite helpful.

For OI outreach and sales, the Suq attended three neighborhood festivals this summer: the Green Music Fest, the Logan Arts Fest, and the Wicker Park Fest. We spent most of our time educating the public about our wonderful Oriental Institute!







# **PUBLIC EDUCATION AND OUTREACH**

---

## **VOLUNTEERS**





*Above and overleaf (detail): The Palace of Darius and columns of the Apadana at Persepolis. Schmidt Expedition, 1935 (D. 13310)*

# PUBLIC EDUCATION AND OUTREACH

Carol Ng-He and Leila Makdisi

This year we are proud to make new marks while continuing to refine and expand existing programs for adults, families, and teachers.

## Adult and Community Programs

Carol Ng-He

Our focus for public engagement this year was to broaden our audience base by bringing the Oriental Institute into local neighborhoods, enhancing accessibility, and maximizing our reach on campus (figs. 1–2).

	Totals		Family & Youth		Adults		Educators	
	No. of Programs	Attendance	No. of Programs	Attendance	No. of Programs	Attendance	No. of Programs	Attendance
<b>TOTALS</b>	<b>88</b>	<b>2945</b>	<b>30</b>	<b>1862</b>	<b>36</b>	<b>599</b>	<b>22</b>	<b>484</b>

Figure 1. Master attendance for public programs by audience type, Fiscal Year 2015–2016

### Program Highlights

#### Community Scholars Program

This new public engagement program brings research associates, museum curators, and graduate students to local communities that we may not typically reach out to otherwise. We scheduled thirteen talks in different suburban public libraries and senior residences. Our Community Scholars presented on themes ranging from exhibition highlights to our archaeological research and discoveries. Interested parties can submit requests for Community Scholars on our website: [oi.uchicago.edu/communityscholars](http://oi.uchicago.edu/communityscholars) (fig. 3).

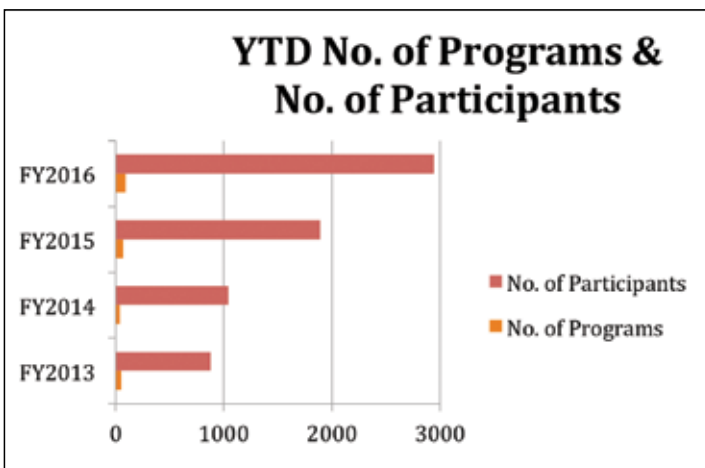


Figure 2. Year-to-date comparison of number of participants and number of programs



Figure 3. Sam Harris, PhD candidate at the University of Chicago and one of our Community Scholars, giving a talk at the Admiral at the Lake senior residence



Figure 4. Visitors in the Multisensory tour



Figure 5. Joey Cross, PhD student at the University of Chicago, giving the Stroller Tour

highlights in the permanent galleries (fig. 5).

### Stroller Tour

This new quarterly program is a 30-minute thematic tour with a social component that engages caregivers and their pre-toddler age (18 months or younger) babies.

### Continuing Education Courses, Workshops & Gallery Talks

We stabilized and refined the frequency and topical diversity of multi-week and single-day programs. Our highest attended programs include:

- Life in the Bible World (on-site course)
- The Archaeology of Iraq (on-site course)
- Egyptian Hieroglyphs for Museum-Goers (hybrid course)
- Archaeological Reconstruction Drawing (workshop)
- Aerial Perspectives: Documentary Photography Workshop (workshop)

### Low Vision/Multisensory Program

We formed a new Access Advisory Group, comprised of individuals who have low vision or are blind and staff from various local organizations, such as the Blind Services Association. This group meets periodically to evaluate and advise the Oriental Institute's low-vision programs. Additionally, we launched a series of Multisensory Tours for blind visitors in which they explore the museum collections through scent, audio, and touch (fig. 4). We piloted a training program with a small group of docents on giving Visual Imaging Tours that provided blind visitors detailed verbal descriptions of the artifact



- The Uruk World (gallery talk)
- Nubia in Chicago: Celebrating Ten Years of the Robert F. Picken Family Nubian Gallery (gallery talk)
- A Gateway to the West (gallery talk)

### ***On the Horizon***

Building on the strong foundation of adult continuing education courses, we revamped the popular Cuneiform by Mail course by introducing a new online course, Introduction to Sumerian Cuneiform, which is offered in fall 2016.

## **K-12 Educator Programs**

*Carol Ng-He*

The focus of this year was to diversify the program types available to classroom teachers locally and nationally. We launched new membership, developed online teacher courses, furthered our relationships with select schools, and implemented new teacher awards.

### ***Program Highlights***

#### Field Trip Planning & Exhibition Guide

This new forty-page guide aims to help teachers plan a meaningful and enriching learning experience for students before, during, and after their visit to the Oriental Institute Museum. It includes recommended teaching strategies and ready-made student worksheets that align with Common Core State Standards.

#### Educator Pass

We introduced a new teacher membership to K-12 teachers, school administrators, and home-school educators. For \$25 per year, Educator Pass subscribers receive all the benefits of the Family Membership rate, plus a print copy of Field Trip Planning & Exhibition Guide and special discounts offered at the Hyde Park Art Center. Since its inception, we have thirty new Educator Pass subscribers.

#### Investigating Nutrition Online Course

We continued collaborating with nationally recognized Project Archaeology this year by co-facilitating a new eight-week online course for classroom teachers. The course is based on the new curriculum guidebook *Investigating Nutrition: The Advent of Agriculture in Mesopotamia*, which the OI co-sponsored in spring 2015. A participant commented on the course: “I learned a great deal about using data as a primary source and analyzing it in the classroom. I was already familiar with most of the content but found the course very helpful in terms of how to look at the content in a more authentic and analytical way.” We plan to offer the course annually in the coming years.

#### STEAM-focused Teacher Cohort Academy

In this pilot professional-development program, teachers followed a structured pathway to engage students in exploring STEAM subjects in the ancient world. Teachers first participated in a series of training sessions in the fall guided by our graduate student content specialists,



Figure 6. Teacher cohort at Teacher Appreciation Night



Figure 7. "Don't Take My Stuff. Tell My Story." student exhibit

museum curators, and education staff members to learn about innovations in ancient Mesopotamia and Egypt. In the spring, the teachers brought their students to the Oriental Institute Museum for a field trip and participated in our new student interactive program, "Ancient Innovators," as part of their curriculum. This Common Core-aligned program immersed teachers in making connections across disciplines as they helped students build essential skills, such as interpersonal communication, critical thinking, problem solving, reading, and writing. By the end of the school year, teachers created new lesson plans that incorporated the Oriental Institute's collections and research, and presented it at our annual Teacher Appreciation Night (fig. 6); concurrently, a student exhibit titled "Don't Take My Stuff. Tell My Story." was on display in the lower level in collaboration with the Dream Rocket as a response to the lost history due to looting and destruction of cultural heritage (fig. 7).

Our partner schools of this program were Ellen Mitchell Elementary School, John W. Garvy Elementary School, John Hancock College Prep High School, and Ivy Hill Elementary School/ Arlington Heights School District 25. A total of 230 students participated in the program.

### The Griffin Award for Teachers of Excellence

The Griffin Award for Teachers of Excellence was established to recognize outstanding teachers in social studies, art, and world history in the states of Illinois and Indiana. Three winners, selected from nominations, received the inaugural award: Shana Pearlmutter, art teacher at Bell Elementary School; Janet Roller-Schmidt, art teacher at Hinsdale South High School; and Scott Zagalak, 5th grade teacher at Alcott College Prep Middle School. Winners received an engraved plaque, a complimentary one-year Educator



Figure 8. Winners of the inaugural Griffin Award for Teachers of Excellence

Pass, and an invitation to become a member of the Oriental Institute's Teacher Advisory Council for the following school year, to advance our school engagement initiatives (fig. 8).

### ***On the Horizon***

*Investigating the Neolithic Dwelling at Jarmo* is a new investigation packet that will be published in collaboration with Project Archaeology. We are in the process of creating a student notebook and a teacher's instruction book using Project Archaeology's *Investigating Shelter* curriculum guidebook as the framework. The packet will be released in fall 2016 for the new eight-week online teacher course *Knowing Shelter, Knowing People: Learning from Prehistoric Dwelling*. Additionally, as part of the UChicago Arts Partners network (known as Amplify), we will develop a cross-campus arts education plan that serves primarily K-12 audiences on the south side of Chicago.

## **Youth and Family Programs**

*Leila Makdisi*

I am reporting on the successful year of my colleague and predecessor Moriah Grooms-Garcia. Moriah stepped out of her role as Youth and Family Programs Manager in March 2016. This report is a testament to her great work and dedication to the Education Department of the Oriental Institute. She will be greatly missed; we continue to badger her through social media (fig. 9).

Interest in youth and family programming rose this past year; 2015-2016 saw larger audience attendance through a focused programming plan. We reached over 1,800 attendees,



*Figure 9. A fun moment at Ancient Game Day/Nowruz Celebration in which Moriah Grooms-Garcia, former Youth & Family Program Manager, tests the photo op station*

a 23 percent increase from last year, which indicates significantly increased attendance at each of the thirty programs we offered. Focusing on the aspects of the Oriental Institute that make us unique from other institutions — from our collections and depth of knowledge to our dusty dig site and goofy staff — has proved favorable to our visitors. We intend to keep it up by offering a varied and well-advertised selection of programs, backed by our repertoire of recurring, replicable workshops and drop-ins.

### **Program Highlights**

*“The docent and instructors were great. Brought deeper understanding to ancient history and writing.” — participant evaluation from Little Scribe*

We further expanded our relationship with the Girl Scout Organization by attending their Cookie Kickoff Rally Outreach event and creating new Fun Patches that can be earned at our paid programs. Four Fun Patches now exist: Ancient Gamer, Ancient Scribe, Junior Archaeologist, and Mummy (connected to our Mummy Science program). Junior Archaeologist continues to be the big hit; we are looking to advertise our other patch-worthy programming through their organization this year (fig. 10).

Our quarterly family programs continue to exceed expectations. Mummies Night, the Halloween edition, culminated in a participant attendance of over 500. For the first time this year, Ancient Game Day partnered with Persian Nowruz for a joint celebration (fig. 11).

### **Workshops and Fee-based Programs**

This year saw the full integration of our homeschool groups into the Family Workshops audience. They continue to participate in our traditional school offerings as well, specifically the Junior Archaeologists, Artifact Analysis, and Time Travelers Programs, reaching a combined audience of nearly 1,300 students.

### **On the Horizon**

In this new fiscal year, we are looking toward expanding and revamping school group offerings. A new offering, Ancient Innovators, is moving out of the prototype stage and into our active repertoire (fig. 12).



Figure 10. All four Girl Scout patches



Figure 11. Snapshot of Ancient Game Day/Nowruz Celebration





*Figure 12. Students participating in prototype Ancient Innovators field trip program*



*Figure 12. Little Scribe in action*

We also hope to expand our programming partnerships with other UChicago arts partners (Amplify), by calling out and acknowledging how archaeology uses art as a scientific tool. We plan to prototype this approach within the framework of the Junior Archaeologists and/or Artifact Analysis, asking students to do a close reading of the relationships between artifacts and further cementing the STEAM partnership currently being adopted in K-12 learning.

Looking to expand on our youngest audience, we are coordinating a tweaked version of LamaSeuss in conjunction with our Stroller Tours to give that audience another reason to come out on these days. Maybe even getting the little ones to connect with artifacts through yoga. LamaSeuss-asana, anyone?

As always, we are also continuing the development of the Discovery Cart and other tangible instances of object-based learning throughout our galleries to promote interactivity with the general public.



## VOLUNTEER PROGRAM

Susan Geshwender

### Celebrating 50 Years!

This is a milestone year for the Volunteer Program, as we proudly celebrate our 50th anniversary. Founded in 1966, the Oriental Institute's Volunteer Program shares the distinction of being the oldest in Chicago along with that of the Art Institute and the Chicago Architecture Foundation. The volunteer program was started as a docent program by the late Carolyn Livengood, who was the Museum secretary. We still have two active volunteers from the first volunteer class of 1966: Carlotta Maher and O. J. Sopranos. On December 4, 2016, the Volunteer Program will hold a celebration and reunion of all those who have served as volunteers.



### Some of the Year's Highlights

For this year's enrichment field trip, we chartered a luxury coach bus and traveled to the Grand Rapids Public Museum in Michigan to see a reproduction of King Tut's tomb. Robert Ritner graciously donated his time and filled our heads with information during the three-hour bus trip. Professor Ritner even joined us on a carousel ride at the museum (figs. 1-2), proving there is nothing he won't do for our volunteers!

The Book Club has continued to grow in attendance and our discussions have been further enhanced by having experts from the OI join us, including McGuire Gibson, John Larson, and Emily Teeter. Director Gil Stein vacated his office so we could discuss *Pioneer to the Past* in James Henry Breasted's original office, providing a great atmosphere for that discussion (figs. 3-5).

A new Hospitality Committee was started with members Dee Speich, Peg Romm, Marilyn Murray, Kirsten Leasia, and Hilda Schlatter. This group organizes snacks and treats for the



Figure 1. Robert Ritner and Margaret Foorman



Figure 2. Robert Ritner and King Tutankhamun



Figure 3. The OI Book Club in the Director's Office! Left to right: Christel Betz, Stephen Ritzel, Shirlee Hoffman, Margaret Schmid, Marilyn Murray, John Larson, Sue Geshwender, Jean Nye, Deloris Sanders, Nancy Baum, and Semra Prescott



Figure 4. Left to right: Janet Helman, Larry Lissak, Deloris Sanders, Margaret Schmid, Emily Teeter, Jean Nye, Roberta Buchanan, Semra Prescott, Craig Tews, Irene Glasner, Nancy Baum, and Debby Halpern



Figure 6. UChicago Student Docents Emily Boak, Michael Goodyear, and Nick Posegay



Figure 5. Left to right: Deloris Sanders, Stephen Ritzel, Sue Geshwender, Carole Yoshida, Irving Finkle (author), Semra Prescott, Shirlee Hoffman, Christel Betz, Irene Glasner, and Gabriele Da Silva



Figures 7 and 8. Potluck luncheon for volunteers

monthly Volunteer Days and has been responsible for some delicious spreads. We need to make special mention of Stephen Ritzel's carrot cake, which has become a much requested favorite.

## Docent Training

We started our year with the successful training and certification of several new docents: Luella Adan, Joe Barabe, Roberto Cepeda, Lauren Friesen, Brian Porrett and Darren Vilmin. We also certified three University of Chicago student docents this year, Emily Boak, Michael Goodyear, and Nick Posegay (fig. 6). To celebrate the completion of Docent Training 2016, we brought back an old tradition of the volunteer-catered potluck luncheon (figs. 7-8).

## Volunteer Projects

Volunteers have logged in over 2,000 hours in the Research Archives, primarily on the Integrated Data Base Project under the supervision of Foy Scalf. This small army of volunteers includes Eric Aupperle, Joe Barabe, Rebecca Binkley-Albright, Ray Broms, Betty Bush, Gaby Cohen, Kym Crawford, Sequoia Chun, Gabriele Correa Da Silva, Irene Glasner, Katherine Hodge, Katherine Jarobe, Peter Johnson, Elisa Landaverde, Kristin Leasia, Michael McCarthy, Marge Nichols, Brian Porrett, So Young Oh, Roberta Schaffner, Ian Williams, Scott Vokes, and Amy Zillman. Additionally, Foy had grad students Theresa Tiliakos, Sunwoo Lee, and Ariel Singer working on the OI DOO Project.

Volunteers also have helped in several other areas. The Suq has benefited from the help of Ray Broms, Louise Despres, Jane Meloy, Alice Mulberry, and Norma van der Meulen. Museum Registration has been aided by Terry Friedman, Kierra Foley, Toni Smith, Jim Sopranos, Tasha Vorderstrasse, and interns Danielle Zwang and Tine Rassalle. Special thanks to Shirlee Hoffman for writing the quarterly Volunteer Spotlight articles in *News & Notes*. The Chicago Hittite Dictionary has had Barbara Jillison working diligently all year. George Sundell logged in over 700 hours on the Diyala Project. The Hacinebi Project continued to receive the attentions of Fred Eskra, Michael Goodyear, and Steve Scott. Carole Yoshida continued her project for John Larson, Larry Lissak continued his project for Bruce Williams, and Rebecca Wang started on a project for Robert Ritner. These are just a few of the different areas where volunteers help out.

## Farewell

We were deeply saddened in October when we suddenly lost one of our well-loved docents, Don McVicker (fig. 9). He was a regular at the Oriental Institute, giving tours, discussing books, working as a guard, and eating his lunch in the Docent Library. We all miss him greatly. A generous donation to the Docent Library for new book acquisitions was made from Don's estate.

The volunteer program has a long history and continues to grow and enrich the lives of volunteers while adding value to faculty, staff, researchers, and the visiting public at the Oriental Institute.



Figure 9. Don McVicker



## Photo Gallery



*The OI welcomed over 1,000 visitors during October's Open House Chicago. Volunteers Lauren Friesen, Susan van der Muelen, Rebecca Binkley-Albright, Gaby Cohen, Alice Mulberry, Michael Goodyear, and Sarah Jung were on hand to give tours*



*Jean Nye, Wahied Helmy, and Marilyn Murray*



*Nancy Baum, Shirlee Hoffman, Christel Betz, and Carlotta Maher*

VOLUNTEER PROGRAM



*Roberta Buchanan, Mylicent Buchanan, and Peg Romm*



*Fun in the Docent Library! Stephen Ritzel is covering the Field Museum logo on his shirt and Carole Yoshida is dropping off some cookies for the volunteers. Also pictured are Terry Friedman, Carol Ng-He, and Moriah Grooms-Garcia*



*Denise Browning, Roberta Schaffner, and Daila Shefner*



*Waiting for a tour group to arrive. Joe Barabe, Luella Adan, Steve Scott, Shirlee Hoffman, Brian Porrett, Jean Nye, Nancy Baum, and Gabriele Da Silva*



*Mummies Night! Darren Vilmin, Rebecca Binkley-Albright, and Stephen Ritzel*



## Volunteer Recognition

In December we held our annual recognition ceremony and holiday luncheon. Congratulations to those who celebrated a milestone year in their volunteer service to the Oriental Institute.

<b>5 Years</b>	<b>15 Years</b>	<b>25 Years</b>
Jean Nye	Dario Giacconmoni	Nancy Baum
	Nancy Patterson	
	Semra Prescott	
	Joy Schochet	
	George Sundell	
<b>10 Years</b>		
Margaret Bolton		
Gabriella Cohen		
Andrea Dudek		

### *Museum Docents*

*\* Denotes active docents who are also project or event volunteers*

Luella Adan	Margaret Foorman	Nancy Patterson
John Aldrin	Terry Friedman*	Brian Porrett
Rev. Dennis Bailey	Lauren Friesen	Nick Posegay
Joseph G. Barabe*	Dario Giacconmoni	Semra Prescott
Nancy Baum	Michael Goodyear*	Stephen Ritzel
Susan Bazargan	Wahied Helmy	Peg Romm*
Craig Bean	Lee Herbst	Deloris Sanders
Rebecca Binkley-Albright*	Shirlee Hoffman*	Hilda Schlatter
Daniel Bloom	Dennis Kelley	Margaret Schmid
Margaret Bolton	Ralph Klein	Joy Schochet
Emily Boak	Stuart Kleven	Stephen Scott*
Myllicent Buchanan	Panagiotis Koutsouris	Mary Shea
Roberta Buchanan	Alfia Lambert	Toni Smith*
Roberto Cepeda	Laurence Lissak*	Dee Speich
Gabriella Cohen*	Paul Mallory	Craig Tews
Gabriele Da Silva*	Sherry McGuire	Darren Vilmin
John DeWerd	Marilyn Murray	Ron Wideman
Cathy Duenas*	Jean Nye	Steve Wolfgang
Fred Eskra*	Mary O'Shea	Carole Yoshida*

***Volunteers***

Laura Alagna	Ian Hafley	Sara Mohr
Eric Aupperle	Calgary Haines-Trautman	Marge Nichols
Doug Baldwin	Janet Helman	Brandy Norton
Ray Broms	Katherine Hodge	So Young Oh
Elizabeth Bush	Katherine Jarboe	Karen Righheimer
Sequoia Chun	Barbara Jillson	Sasha Rohret
Kim Crawford	Peter Johnson	Roberta Schaffner
Andrea Dudek	Sarah Jung	O. J. Sopranos
Mariola Dudzicka	Kristin Leasia	George Sundell
Kierra Foley	Katherine R. Lieber	Rebecca Wang
Bill Gillespie	Carlotta Maher	Ian Williams
Terry Gillespie	Billie Males	Agnes Zellner
Irene Glasner	Sophia Mo	Amy Zillman

***Suq Volunteers***

Ray Broms	Jane Meloy	Norma van der Meulen
Louise Despres	Alice Mulberry	

---



**DEVELOPMENT**



**MEMBERSHIP**





*Above and overleaf: Winged sphinx from the Palace of Darius, Persepolis. Schmidt Expedition, 1935 (D. 13316)*

## DEVELOPMENT

### Brittany F. Mullins

Through the support of our generous friends and contributors, the Oriental Institute was able to continue our mission to understand the development of the ancient civilizations of the Near East through innovative research methods and make possible the exciting new discoveries found in these pages. Consistent donor support totaled more than \$2.8 million, allowing us to continue archaeological excavations in Egypt, Israel, Turkey, and the Palestinian Territories, and to begin a new project in Iran, in addition to allowing us to sustain long-term research projects such as the Chicago Hittite Dictionary. We recently received an anonymous gift to begin enhancements to the Museum, including the installation of new cases to house our collections, lighting to better highlight each piece, and updates to the object cards, graphics, and case descriptions. This gift will truly improve the visitor experience, as well as our ability to care for the collections with easier access to objects for conservation and the ability to enclose conservation materials in each case.

Through the creation of an innovative research fund by yet another anonymous friend, we are able to provide support for our projects in Egypt. Projects supported by this fund include a new excavation at the site of Dendara, the continued work of Nadine Moeller and her team at Tell Edfu, as well as the meticulous documentation and conservation work of the Epigraphic Survey team in Luxor. We are especially thankful for the support of our government and foundation partners, including the National Science Foundation (NSF), the National Endowment for the Humanities (NEH), the United States Embassy in Kabul, the Roshan Cultural Heritage Foundation, and one of our newest supporters, the Whole Kids Foundation, among others, for their continued investment in the Oriental Institute.

Diverse sources of funding provide the Oriental Institute with the flexibility to respond to pressing institutional needs, sustain long-term projects, such as our dictionary projects, and take advantage of new research opportunities as they arise. This past year, we received over \$1.6 million in pledged commitments and planned gifts. We are honored by our dear friends who have decided to remember the Oriental Institute in their estate plans, including Sharukin and Elizabeth Yelda and the Yelda family, Alwin Clemens Carus, William A. Hoffman, Neil C. Miller, and Chester D. Tripp. These gifts create a foundation of support, ensuring the future of the Oriental Institute.

#### *Current Income*

	2016	2015	2014
Outright Gifts	\$780,451	\$839,310	\$635,753
Realized Bequests	\$267,629	\$1,595,689	\$686,753
Payments on Multi-Year Pledges	\$1,819,112	\$4,221,727	\$671,430
<b>Totals</b>	<b>\$2,867,192</b>	<b>\$6,656,726</b>	<b>\$1,993,936</b>



*Future Commitments*

	2016	2015	2014
Pledged Commitments	\$763,400	\$2,004,400	\$2,002,500
Planned and Deferred Gifts	\$887,500	\$125,000	\$4,112,120
<b>Totals</b>	<b>\$1,650,900</b>	<b>\$2,129,400</b>	<b>\$6,114,620</b>

*Figures above do not include foundation and federal/non-federal grants*

Each gift made is an investment in the future of the Oriental Institute and our understanding of the cultures of the ancient Middle East. On behalf of our faculty and staff, thank you for becoming partners in our discoveries, and for your continued support of the Oriental Institute.

## VISITING COMMITTEE

### The Oriental Institute Visiting Committee 2015–2016

— Harvey Plotnick, Chairman —

Marilynn Alsdorf	Doris Holleb*
Guity Nashat Becker	Roger David Isaacs
Gretel Braidwood*	Neil J. King
Catherine A. Novotny Brehm	Aldis Liventals
Andrea Dudek	Carlotta Maher*
Marjorie M. Fisher*	John W. McCarter Jr.
Margaret E. Foorman	Kitty Picken*
Joan Fortune	Crennan M. Ray
Isak V. Gerson*	Aimee Drolet Rossi
Nancy Gerson*	John W. Rowe*
Peggy Grant*	Roberta Schaffner
Byron Gregory	Robert G. Schloerb*
Lewis Gruber*	Lois M. Schwartz*
Misty Gruber*	Charles N. Secchia
Howard G. Haas	O. J. Sopranos*
Howard Hallengren	Rebecca Wilson Stein
Deborah Halpern	Walter Vandaele
Thomas C. Heagy*	Anna M. White
Janet W. Helman*	Nicole S. Williams
Arthur Lee Herbst*	

*\*Denotes Life Member*

## MEMBERSHIP

### Jennie Myers

Oriental Institute membership remained strong in fiscal year 2016, with over 1,800 Membership households representing more than 3,500 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.

### Special Interest Groups

Membership also includes two special interest groups which have their own special events and programs.

#### *Young Professional Members*

The Oriental Institute's Young Professional (YP) membership 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. YP Membership 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.

YP members use their creativity, knowledge, innovation, and professional skills to advance the Oriental Institute and serve as ambassadors, increasing awareness of the institute's work and engaging new audiences through outreach events. The group hosted several successful YP Member events throughout the year, including:

- Private tour of the special exhibit "A Cosmopolitan City: Muslims, Christians, and Jews in Old Cairo," led by Tasha Vorderstrasse (Monday, July 13, 2015)
- Field Museum visit of Ancient Egypt, guided Emily Teeter with lunch at the Bistro Café (Saturday, September 19, 2015)
- Epic Wednesday: Afterlife Afterparty (Wednesday, October 28, 2015)
- Field trip to the Art Institute's Islamic art galleries, followed by drinks at Terzo Piano (Thursday, December 17, 2015)

#### *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 2016, the Institute had over 1,900 University of Chicago student members, more than any other campus organization.

## Young Professional Members' Event Photos



*Special Exhibit tour: YP members in the Yelda Khorsabad Court, guided by Oriental Institute Research Associate Tasha Vorderstrasse (right)*



*Special Exhibit tour: YP members visit the Robert and Deborah Aliber Persian Gallery*



*Special Exhibit tour: YP members view the Sennacherib Prism in the Dr. Norman Solhkhah Family Assyrian Empire Gallery*



*YP members visit the Ancient Egypt exhibit at the Field Museum, guided by Research Associate, Emily Teeter (photo: ©Field Museum)*

Through partnerships with the UChicago Arts Pass associates, the Membership Office was able to host several successful student member events throughout the year:

- Bulls 'n' Buns (September 2015) — a tour of the Museum for new college students as part of O-Week activities (co-sponsored by Public Education, Museum, and Volunteer Program)
- Study at the OI (December 2015, March and June 2016) — quarterly, late-night study hall hosted in the Museum galleries
- Screening of *Raiders of the Lost Ark* (February 24, 2016)



## Member Publications

With the assistance of the Publications Office, the Membership Office continues to publish *News & Notes*, the quarterly Members' magazine. 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 Events

Members enjoyed an exclusive preview of the special exhibit "Persepolis: Images of an Empire" on Monday October 5, 2015.

In addition, Oriental Institute members supported a comprehensive lecture series during the year with topics ranging from a debate between the Egyptians and the Hittites on the Battle of Kadesh to Luwian Hieroglyphs to the Sumerian account of the building of the Ark.

- Joseph W. Wegner, "Discovery of a Lost Pharaoh in Abydos" (September 2, 2015)
- Alexander Nagel, "Permanent Shades of Blue: New Research on the Palace Painters of Achaemenid Persepolis" (November 4, 2015)
- St. John Simpson, "Unlocking Stories from Objects: Some Ancient Near Eastern Case-studies Based on New Research at the British Museum" (December 2, 2015)
- Robert Ritner & Theo van den Hout, "Battle of Kadesh from the Perspectives of Egyptians and Hittites" (January 6, 2016)
- Petra Goedegebuure, "Luwian Hieroglyphs" (February 3, 2016)
- Carter Lupton, "The Long Winding Crossroads: The Evolution of an Exhibition Concept" (March 2, 2016)
- Gil Stein, "Sweet Honey in the Rocks: Honey, Bees, and Beekeeping in the Ancient Near East" (May 4, 2016)
- Irving Finkel, "The Ark Before Noah: Decoding the Story of the Flood," and book signing (June 1, 2016)

A very special thank you is in order for all of our lecturers, co-sponsors, and members for participating the 2015–2016 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 line-up for the 2016–2017 series, which begins in October 2016. If you missed a lecture from last season, please go to the Oriental Institute channel at [YouTube.com/JamesHenryBreasted](https://www.youtube.com/JamesHenryBreasted) to view them online.

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 2015–2016 events season.

## Member Travel

The Oriental Institute offered the Wonders of Ancient Egypt tour in March 2016, led by Lanny Bell (Associate Professor Emeritus of Egyptology, AB'63). Over two weeks participants experienced the Pyramids of Giza, Sakkara, a private night visit to the Egyptian Museum in Cairo, Abu Simbel, Luxor, Medinet Habu, a Nile cruise, a special visit to the Oriental Institute's Chicago House, and more. A total of twenty-one members and patrons participated in the tour.

Oriental Institute travel programs are 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](mailto:oi-membership@uchicago.edu) or visit our website at [oi.uchicago.edu/travel](http://oi.uchicago.edu/travel) or visit the OI Members Travel page at [facebook.com/OIMemberTravel](https://www.facebook.com/OIMemberTravel).

---

## SPECIAL EVENTS

### Brittany F. Mullins

During the 2015–2016 academic year, we hosted a variety of events at the Oriental Institute and off-site for our members, donors, and the general public. This year was a success for our continuing programs as we saw the twelfth year of our annual Postdoctoral Seminar, the fourth year of the annual David A. Kipper Ancient Israel Lecture Series, and the second year of our biennial Braidwood Visiting Scholar Program. In addition, we continued to develop unique programming, collaborating with the Adler Planetarium for our off-site James Henry Breasted Society event, and with Atlas Obscura to host their Illinois Chapter's inaugural celebration entitled "Egypt Mania: A Festivity for the Pharaohs." We hope you were able to enjoy some of the brilliant events, a few of which are highlighted below. We would like to thank our generous donors and members, whose support makes our exhibits, programs, research, and special events possible.





*Dancing in the Suq at the Atlas Obscura Egypt Mania event (photo: Michael Wilson/Stage Photographic)*



*Guests enjoying the Oriental Institute collection at the Atlas Obscura Egypt Mania event (photo: Michael Wilson/Stage Photographic)*

## Atlas Obscura's Egypt Mania: A Festivity for the Pharaohs

On the evening of July 31, 2015, the Atlas Obscura Society celebrated the opening of their Illinois Chapter by hosting an Egyptian-themed fête at the Oriental Institute. Guests came donned in attire prevalent at the height of “Egyptomania,” sipped on Prohibition-era cocktails, and danced to live jazz music in our Suq. Emily Teeter regaled guests with stories of our founder James Henry Breasted’s travels in Egypt and the foundation of our collection, as well as those of Robert Braidwood, the real-life inspiration for the fictional Indiana Jones. Flappers, dandies, and guests in masquerade were found exploring the galleries, in awe of the breadth of the collection, which many guests had never seen.

Thank you to Atlas Obscura for introducing many new friends to the Oriental Institute.

## “Persepolis: Images of an Empire” Exhibition Preview



*Members and their guests enjoy a preview of the “Persepolis: Images of an Empire” special exhibit in the Doris and Marshall Holleb Special Exhibit Gallery (photo: Robert A. Reddy)*

On October 11, 2015, members and their guests joined us for an exclusive preview of the special exhibit “Persepolis: Images of an Empire” in the Marshall and Doris Holleb Family Special Exhibits Gallery. Professor Matthew W. Stolper delighted guests with details of and discoveries made during the Oriental Institute excavations at Persepolis in the 1930s. Curator Kiersten Neumann led members and friends on private tours of the exhibit, which not only demonstrated the art historical importance of the imperial ideology expressed in the architectural and sculptural elements at Persepolis, but also emphasized the importance of the Oriental Institute’s own Museum

Archives collection for the study of this great city and the Persian empire at large. The Persian influence extended into our reception held in the Edgar and Deborah Jannotta Mesopotamian Gallery, with wine provided by Darioush Winery and Persian-themed hors d'oeuvres.

This exhibit was made possible with generous support from Guity Nashat Becker, the Federation of Zoroastrian Associations of North America, the Zoroastrian Association of Chicago, and the Iran House of Greater Chicago, as well as the continued support of the members of the Oriental Institute. In-kind support was kindly provided by Darioush Winery.

## James Henry Breasted Society Event: Beyond the Galleries II

On November 11, 2015, we continued our expedition, begun in 2014, to venture beyond the collection and the galleries of the Oriental Institute Museum. This year, our many project directors and researchers shared first-hand their current research and discoveries. Our archaeologists took us across the ocean to experience their discoveries at our excavations in Israel, Jordan, Egypt, Turkey, and the Palestinian Territories. We journeyed into the world of our philologists and learned what the Demotic, Hittite, Elamite, and Aramaic languages can tell us about the ancient cultures of the Middle East from the directors of the Demotic and Hittite Dictionaries and the Persepolis Fortification Archive. Lastly, our JHBS members explored the world of the Integrated Database and Center for Ancient Middle Eastern Landscapes (CAMEL) labs to see how these two unique resources contribute to scholarship, collections research, publications, and archaeological heritage preservation.

The research of Oriental Institute scholars and this event was made possible by the generous support of our James Henry Breasted Society members.



*Professor David Schloen discusses findings at the archaeological site of Tel Keisan, Israel, to James Henry Breasted Society members at the Beyond the Galleries event (photo: UChicago Creative)*

## 2016 Twelfth Annual Postdoctoral Seminar

Postdoctoral Fellow Stephanie Rost organized the twelfth annual postdoctoral seminar, hosted at the Oriental Institute on March 3–4, 2016. This year's conference, titled "Irrigation and Early States: New Directions," brought together domestic and international scholars to explore the role of irrigation management in early complex societies. Conference speakers and panelists received a curator-led tour of the Oriental Institute and attended a dinner hosted in the Director's Suite, former office of Oriental Institute founder James Henry Breasted. This provided the speakers and those participating in the conference with the opportunity to discuss their research with their colleagues.

Each year the conference seminar, presented by an expert on the conference topic, is free and open to our members and the public thanks to the generous support of Arthur and Lee Herbst. A publication of the conference proceedings is currently in production.

## Braidwood Visiting Scholar Program

On May 11, 2016, the Oriental Institute welcomed Holly Pittman, Bok Family Professor in the Humanities, Department of the History of Art, University of Pennsylvania, as the second Braidwood Visiting Scholar. As part of the Braidwood Visiting Scholar Program, Dr. Pittman delivered one public lecture, titled “From Mesopotamia to the Oxus through Iran: Shifting the Center in Bronze Age Trade,” and two workshops intended for graduate and undergraduate students, as well as faculty and staff, titled “Case Study in Glyptic Art: Evaluating the Place of Arslantepe in the Late Chalcolithic and the Late Uruk World” and “Excavations at the Site of Konar Sandal South.” Following the public lecture, Dr. Pittman answered questions regarding her excavations at Konar Sandal South in southeastern Iran and how the seals and seal impressions found there contribute to our understanding of complex Bronze Age trade networks. Afterward, guests enjoyed a reception in the galleries.

The Braidwood Visiting Scholar Program in Archaeology aims to encourage and perpetuate the educational values of Robert and Linda Braidwood, particularly their commitment to the mentorship and training of graduate students specializing in the archaeology of the ancient Near East.

## David A. Kipper Ancient Israel Lecture Series

Assaf Yasur-Landau, Associate Professor of Mediterranean Archaeology, Department of Maritime Civilizations, University of Haifa, gave the fourth lecture in the annual David A. Kipper Ancient Israel Lecture Series, on May 16, 2016, entitled “Red Wine and Minoan Frescoes: The Canaanite Palace at Tel Kabri.” Dr. Yasur-Landau focused on excavations at the palatial site of Tel Kabri, located in the Galilee, and how analysis of those excavations help us to understand the life of Canaanite elite and the political economy of the region during the Middle Bronze Age.

During a workshop, Dr. Yasur-Landau met with graduate students from the Near Eastern Languages and Civilizations Department, the Divinity School, and the Anthropology Department, as well as faculty and staff from the Oriental Institute, to discuss how connections through maritime trade and relations were deliberately used as an adaptive form of risk-management strategy and resilience in Israel.

The David A. Kipper Ancient Israel 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 workshop for faculty, graduate, and undergraduate scholars at the Oriental Institute.

## James Henry Breasted Society Event: The Unwearying and Imperishable Stars

On the thunderous and rainy Chicago evening of May 25, 2016, the ancient Egyptian sky could still be seen clearly at the Adler Planetarium. During a reception, co-hosted by the Oriental Institute’s James Henry Breasted Society and the Adler Planetarium’s Webster Institute, in the Daniel F. and Ada L. Rice Solarium, members viewed artifacts from the Adler’s collection and a stunning view of the Chicago skyline during the storm. Following the reception, Sarah L. Symons, Associate Professor of the Integrated Science Program and School of Interdisciplinary



*Photos from The Unwearying and Imperishable Stars: The Night Sky of Ancient Egypt, a James Henry Breasted Society event held at the Adler Planetarium on May 25, 2016 (all photos: David Turner Photography)*

Science at McMaster University, recreated the Egyptian sky, the same stars we see today, in the Adler's Grainger Sky Theater, to illustrate the relationship between the ancient Egyptians and astronomy. The regularity of the star cycles and the constancy of their relationships with one another were noted by the ancient Egyptians and described, explained, or used in stories, images, instruments, and tables, a few of which survive today.

This event was sponsored by the members of the James Henry Breasted Society, who provide an annual, renewable source of unrestricted support for the most pressing research projects of the Oriental Institute.

## HONOR ROLL OF DONORS AND MEMBERS

The Oriental Institute gratefully recognizes the many donors who have furthered the mission and impact of the OI with a gift of \$100 or more from July 1, 2015 to June 30, 2016. 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!

### \$50,000 and Above

Anonymous, Chicago, Illinois  
 Alwin Clemens Carus Mineral Trust, Dickinson, North Dakota  
 Carnegie Corporation of New York, New York, New York  
 Mr. Joseph Neubauer and Ms. Jeanette Lerman-Neubauer, Philadelphia, Pennsylvania  
 Ms. Kathleen Picken, Chicago, Illinois  
 Roshan Cultural Heritage Institute, Washington, D.C.  
 Mr. and Mrs. John W. Rowe, Chicago, Illinois  
 Ms. Flora Yelda, Chicago, Illinois  
 Dr. and Mrs. Sharukin Yelda, Chicago, Illinois

### \$25,000-\$49,999

Mrs. Guity Nashat Becker, Chicago, Illinois  
 Dr. Marjorie M. Fisher, Birmingham, Michigan

### \$10,000-\$24,999

American Research Center in Egypt, Atlanta, Georgia  
 Antiquities Coalition, Washington, D.C.  
 Ms. Andrea M. Dudek, Orland Park, Illinois  
 Mr. Philip Elenko, New York, New York  
 Harvard University, Cambridge, Massachusetts  
 Lucia Woods Lindley and Daniel A. Lindley, Jr., New York, New York  
 Mrs. Malda S. Liventals and Mr. Aldis V. Liventals, Wilton, Connecticut  
 Mrs. Lois B. Schwartz, Los Angeles, California  
 The Honorable H. Warren Siegel and Mrs. Janet Siegel, San Juan Capistrano, California  
 Mr. O. J. Sopranos and Mrs. Angeline Buches Sopranos, Winnetka, Illinois  
 Mrs. Lorna Puttkammer Straus, Mackinac Island, Michigan  
 Mr. Matthew Whealton, San Francisco, California  
 Mrs. Nicole S. Williams and Mr. Lawrence Becker, Glencoe, Illinois

### \$5,000-\$9,999

Ms. Gwenda Blair and Mr. Matthew W. Stolper, Chicago, Illinois  
 Dr. Bruce E. Caswell and Mrs. Carol S. Cohen Caswell, Philadelphia, Pennsylvania  
 Mr. James L. Foorman and Mrs. Margaret E. Foorman, Winnetka, Illinois  
 Mrs. Nancy H. Gerson and Mr. Isak V. Gerson, Chicago, Illinois  
 Mr. Walter M. Guterbock and Mrs. Susan E. Guterbock, Anacortes, Washington



**\$5,000-\$9,999 (cont.)**

Mr. Thomas C. Heagy and Ms. Linda H. Heagy, Sea Island, Georgia  
Mr. and Mrs. Robert A. Helman, Chicago, Illinois  
Mrs. Barbara Kipper, Chicago, Illinois  
Joseph T. Lach, PhD and Ms. Carol C. Albertson, Evanston, Illinois  
Ms. Catherine Novotny, Chicago, Illinois  
Ms. Susan Padula and Mr. Richard Padula, Barrington, Illinois  
Mr. and Mrs. Harvey B. Plotnick, Chicago, Illinois  
Mr. and Mrs. Norman J. Rubash, Evanston, Illinois  
Mr. Robert G. Schloerb and Mrs. Mary W. Schloerb, Chicago, Illinois  
Mr. William R. Suddaby, Sugarloaf Key, Florida

**\$2,500-\$4,999**

Anonymous, Kempton, Pennsylvania  
Dr. Miriam Reitz Baer, Chicago, Illinois  
Curtiss T. & Mary G. Brennan Foundation., Inc., Santa Fe, New Mexico  
Mr. Edward A. Cuellar, Canandaigua, New York  
Dr. Erl Dordal, Atlanta, Georgia  
Mrs. Anita Dulak and Mr. James Dulak, Mohawk, New York  
Dr. Janet K. Fair-Christianson and Thomas W. Christianson, Chicago, Illinois  
Mrs. Margaret H. Grant, Chicago, Illinois \*  
Mrs. Mary L. Gray and Mr. Richard Gray, Chicago, Illinois  
Mr. Byron Gregory and Mrs. Sue Gregory, Wilmette, Illinois  
Mrs. Deborah G. Halpern and Mr. Philip Halpern, Chicago, Illinois  
Mr. Roger David Isaacs and Mrs. Joyce R. Isaacs, Glencoe, Illinois  
Dr. Janet H. Johnson and Dr. Donald S. Whitcomb, Chicago, Illinois  
Dr. Morag M. Kersel and Dr. Yorke M. Rowan, Chicago, Illinois  
Mr. Neil J. King and Mrs. Diana H. King, Chicago, Illinois  
Mr. Michael L. Klowden and Ms. Patricia D. Klowden, Santa Monica, California  
Mr. Richard Kron and Mrs. Deborah A. Bekken, Chicago, Illinois  
Mr. Julius Lewis, Chicago, Illinois  
Mr. Norman Lyster, Greeley, Colorado  
Mr. Barry L. MacLean, Mundelein, Illinois  
Mr. Andrew P. Olonko and Ms. Elizabeth L. Kaltman, Wilmington, North Carolina  
Ms. Virginia O'Neill, Littleton, Colorado  
Arthur E. Ostergard, MD, Lake Oswego, Oregon  
Kate Pavlou, Bloomington, Illinois  
Mrs. Crennan M. Ray, Santa Fe, New Mexico  
Ms. Roberta Schaffner, Chicago, Illinois  
Mr. and Mrs. Thomas J. Schnitzer, Chicago, Illinois  
Mr. James E. Schwinn, Houston, Texas  
Ms. JoAnn Scurlock and Mr. Richard Henry Beal, Chicago, Illinois  
Mr. Charlie Secchia and Mrs. Elizabeth Secchia, Grand Rapids, Michigan  
Coleman R. Seskind, MD, Chicago, Illinois  
Ms. Carole J. Shore and Mr. Michael J. Shore, Chapel Hill, North Carolina  
Ms. Rebecca Wilson Stein, Grand Rapids, Michigan  
Mr. Raymond D. Tindel and Ms. Gretel Braidwood, Earlysville, Virginia  
Ms. Anna M. White, Terre Haute, Indiana  
Mr. Charles Mack Wills, Jr., East Palatka, Florida

**\$1,000–\$2,499**

Professor Robert Z. Aliber, Evanston, Illinois  
 Anonymous, Chicago, Illinois  
 Ms. Kieran M. Arens, Chicago, Illinois  
 Mrs. Margaret Campbell Arvey, Santa Barbara, California  
 Roger Atkinson and Janet Arey, Sebastopol, California  
 Mr. and Mrs. Ronald R. Baade, Winnetka, Illinois  
 Mr. Sun Bok Bae, Chicago, Illinois  
 Mr. Stephen W. Baird and Mrs. Susan Baird, Winnetka, Illinois  
 Ms. Judith Baxter and Mr. Stephen Smith, Oak Park, Illinois  
 Mr. Bruce L. Beavis and Dr. Kathleen G. Beavis, Chicago, Illinois  
 Mrs. Jean M. Brown and Mr. Cameron Brown\*, Lake Forest, Illinois  
 Dr. Susan Carroll Connor, Monroe, Washington  
 Mr. John Cook and Mrs. Marcia Cook, Belvidere, Illinois  
 Dr. Laurence D. Cooper and Mrs. Victoria L. Cooper, Northfield, Minnesota  
 Mr. Antonio M. Cruz-Uribe, Chicago, Illinois  
 Mr. Michael J. Demarco and Ms. Kelly DeMarco, Spring Lake, New Jersey  
 Mr. and Mrs. E. Bruce Dunn, Chicago, Illinois  
 Ms. Celia C. Eckert, Chicago, Illinois  
 Ms. Delores Eckrich and Mr. Richard Eckrich, Denver, Colorado  
 Ms. Diana Elghanayan and Mr. Frederick Elghanayan, New York, New York  
 Mr. Gene F. Fama and Mrs. Sallyann Dimeco Fama, Chicago, Illinois  
 Jerry J. Felmley, USAF, Ret., Tucson, Arizona  
 Mrs. Judy Fitz and Mr. Thomas R. Fitz, West Bend, Wisconsin  
 Ms. Joan S. Fortune, New York, New York  
 Ms. Elisabeth R. French, Washington, D.C.  
 Elizabeth R. Gebhard, PhD and Mr. Matthew W. Dickie, Glenfarg, United Kingdom  
 Mr. and Mrs. James J. Glasser, Chicago, Illinois  
 Mr. Donald M. Green, Coral Gables, Florida  
 Mr. and Mrs. Dietrich M. Gross, Wilmette, Illinois  
 Dr. Petra Maria Blix and Dr. Benjamin Gruber, Chicago, Illinois  
 Ms. Louise Grunwald, New York, New York  
 Ms. Nimet Habachy, New York, New York  
 Mr. Collier Hands, Lovell, Maine  
 Ms. Patty A. Hardy and Mr. Andrew Nourse, Redwood City, California  
 Ms. Doris B. Holleb†, Chicago, Illinois  
 Ms. Patricia A. Holst and Mr. Stephen L. Holst, Westport, Massachusetts  
 Ms. Amy M. Hulthen, Westerville, Ohio  
 Dr. Joseph W. Jarabak and Dr. Rebecca R. Jarabak, Chicago, Illinois  
 Dr. Vinita Juneja and Mr. Charles D. Pevsner, Riverside, Connecticut  
 Mrs. Christine S. Kamil and Mr. Waheeb N. Kamil, Westfield, New Jersey  
 Ms. Theo M. Kassebaum, Chicago, Illinois  
 Mr. and Mrs. Michael L. Keiser, Chicago, Illinois  
 Mr. Hunter P. Kennedy, Chicago, Illinois  
 Mr. Young Bok Kim, Chicago, Illinois  
 Mr. Robert R. King, Chicago, Illinois  
 Mr. Theo A. Knights, Chicago, Illinois  
 Mr. Dennis G. Lagory, Evanston, Illinois  
 Mr. James Keith Lichtenstein, Chicago, Illinois  
 Mr. Jeremy Lobbezoo, Dekalb, Illinois

**\$1,000-\$2,499 (cont.)**

- Mr. Albert Wallace Lyons and Ms. Margaret C. Brandt, Eminence, Kentucky  
Mr. George MacDonald, Largo, Florida  
Mr. and Mrs. David W. Maher, Chicago, Illinois  
Mr. and Mrs. John W. McCarter, Jr., Northfield, Illinois  
Mr. Richard A. Miller, Oak Lawn, Illinois  
Mostafa Family Charitable Lead Trust, Pasadena, California  
Ms. Demetria D. Nanos, Chicago, Illinois  
Mr. James F. Nelson and Mr. Yongqiang Zhang, San Antonio, Texas  
Mr. and Mrs. Roger R. Nelson, Mount Pleasant, South Carolina  
Mr. and Mrs. William J. O'Neill, Chicago, Illinois  
Ms. Julia L. Oran, Chicago, Illinois  
Mr. and Mrs. Robert Parrillo, Fort Lauderdale, Florida  
Ambassador Anne Patterson and Mr. David R. Patterson, Falls Church, Virginia  
Dr. and Mrs. Harlan R. Peterjohn, Bay Village, Ohio  
Mr. Spencer K. Pevsner, Chicago, Illinois  
Dr. Audrius Vaclovas Plioplys and Dr. Sigita Plioplys, Chicago, Illinois  
Mr. Benjamin A. Poulson and Mrs. Kate C. Poulson, Issaquah, Washington  
Ms. Lauren A. Poulson, Chicago, Illinois  
Mrs. Carol E. Randel and Mr. Don Michael Randel, Ithaca, New York  
Reverend Randell R. Richter and Ms. Vickie L. Richter, Green Bay, Wisconsin  
Ms. Frances F. Rowan, Potomac Falls, Virginia  
Dr. Bonnie M. Sampsell and Mr. R. B. Sampsell, Chapel Hill, North Carolina  
Mr. and Mrs. Harold Sanders, Chicago, Illinois  
Mr. Kirk Lee Schmink, San Francisco, California  
Dr. Karen Z. Schulte, Janesville, Wisconsin  
Mr. Nicholas Z. Schulte, Janesville, Wisconsin  
Ms. Alice Sgourakis, Oakland, California  
Mr. Charles M. Shea and Mrs. Mary G. Shea, Wilmette, Illinois  
Mrs. Charlotte Mailliard Shultz and The Honorable George P. Shultz, San Francisco, California  
Clyde C. Smith, PhD, River Falls, Wisconsin  
Ms. Kimberly M. Snyder, Charlottesville, Virginia  
Dr. Norman Solhkhah, Lincolnwood, Illinois  
Mr. John Sprung and Ms. Lowri Lee Sprung, San Pedro, California  
Mr. and Mrs. Solon A. Stone, Portland, Oregon  
Ms. Kathleen Sumner, Columbus, Ohio  
Ms. Emily J. Thomassen, Chicago, Illinois  
Dr. and Mrs. Walter H. A. Vandaele, Washington, D.C.  
Mr. Gregory L. Vogel, Naperville, Illinois  
Mr. and Mrs. Robert Wagner, Perrysburg, Ohio  
Mr. John Walker and Ms. Mary Bea Walker, Urbana, Illinois  
Mr. Alexander R. Ward, Chicago, Illinois  
Mrs. Carolyn O. Ward and Mr. Joseph A. Ward, Bethesda, Maryland  
Mr. George M. Whitesides and Ms. Barbara Breasted Whitesides, Newton, Massachusetts  
Dr. Katherine A. Wier, Naperville, Illinois  
Dr. Wendall W. Wilson, Victoria, Texas  
Zoroastrian Association of Metro Chicago, Burr Ridge, Illinois  
Ward O. Zumsteg and Diane Zumsteg, San Francisco, California

**\$500-\$999**

- The Ancient Egyptian Heritage & Archaeological Fund, Albany, New York  
 Dr. Thomas W. Andrews, Hinsdale, Illinois  
 Anonymous, Sacramento, California  
 Anonymous, Hickling, United Kingdom  
 Anonymous, Chicago, Illinois  
 Ms. Kathleen F. Barrett, Pleasant Hill, California  
 Ms. Priscilla Bath, Trenton, New Jersey  
 Ms. Julia A. Beringer, Western Springs, Illinois  
 Mr. James Henry Breasted III, Carbondale, Colorado  
 Mr. Bruce P. Burbage, Venice, Florida  
 Ms. Heidi Camp and Mr. Steven H. Camp, Winnetka, Illinois  
 Ms. Elizabeth F. Carter, Los Angeles, California  
 Mr. Steven Anthony Clark and Ms. Janet L. Raymond, Oak Lawn, Illinois  
 Dr. Isaac Cohen, Chicago, Illinois  
 Mr. Baird Cook, Fort Collins, Colorado  
 Ms. Kimberly Cook, Chicago, Illinois  
 Mr. Lawrence Curry, Ames, Iowa  
 Mr. Charles F. Custer, Chicago, Illinois  
 Ms. Elizabeth A. Fama and Professor John H. Cochrane, Palo Alto, California  
 Mr. William A. Farone and Ms. Cynthia H. O'Donohue, Irvine, California  
 Mr. Barry Fitzpatrick, Sutton Coldfield, United Kingdom  
 Mr. and Mrs. Charles Barry Friedman, Chicago, Illinois  
 Mr. Wolfgang Frye, Phoenix, Arizona  
 Mr. Alexander Gancarz and Mr. Jonathan Carlton, Santa Fe, New Mexico  
 Mr. John R. Gardner and Ms. Dorothy Hannon Gardner, Chicago, Illinois  
 Ms. Sarah Glynn and Mr. William Glynn, Dekalb, Illinois  
 Ms. Michele Gressett, San Antonio, Texas  
 Ms. Barbara J. Hall, Chicago, Illinois  
 Mr. Richard S. Hardwood, Colorado Springs, Colorado  
 Mr. Lawrence F. Herbolsheimer and Dr. Pia M. Herbolsheimer, Mc Lean, Virginia  
 Mr. and Mrs. Scott E. Hertenstein, Cary, North Carolina  
 Mr. Douglas Hoffman and Ms. Shirlee A. Hoffman, Chicago, Illinois  
 Mr. Derrick Holland, Chicago, Illinois  
 Iran House of Greater Chicago, Lincolnwood, Illinois  
 Journeys of the Mind, Oak Park, Illinois  
 Professor Gerald E. Kadish, Binghamton, New York  
 Mr. Alexander Kintner, Evanston, Illinois  
 Mr. and Mrs. Robert Klinzing, Leawood, Kansas  
 Mr. Morris Knutsen, West Des Moines, Iowa  
 Mr. Peter Lacovara, Albany, New York  
 Ms. Phoebe Stone Liebig, Culver City, California  
 Mrs. Bonnie E. Lilienfeld and Mr. Damon Darlin, Alexandria, Virginia  
 Dr. and Mrs. John M. Livingood, Bethesda, Maryland  
 Mr. Daniel R. Malecki, Kensington, California  
 Mr. Raymond McBride, Chicago, Illinois  
 Ms. Mary F. McVicker, Oak Park, Illinois  
 Mrs. Semra Prescott, Chicago, Illinois  
 Mr. Percy Mwanzia Wegmann and Ms. Karen M. Rexford, Austin, Texas  
 Mr. Fen Rhodes, Long Beach, California

**\$500-\$999 (cont.)**

Mr. and Mrs. John F. Richards, Wilmette, Illinois  
Ms. Anne N. Rorimer, Chicago, Illinois  
Mr. and Mrs. John Eric Schaal, Burr Ridge, Illinois  
Ms. Lynne F. Schatz and Mr. Ralph Arthur Schatz, Chicago, Illinois  
Mr. Kurt G. Seidensticker and Ms. Laura C. Seidensticker, Glenview, Illinois  
Ms. Dolores Stevens, Burlington, North Dakota  
Mrs. Peggy Lewis Sweesy, San Diego, California  
Ms. Tracy Tajbl and Mr. Neil K. Jones, Chicago, Illinois  
Dr. Willard E. White, Phoenix, Arizona  
Mr. Ralph E. Wiggen, Los Angeles, California  
Mr. Robert I. Wilson and Mrs. Sharon Wilson, Peoria, Illinois  
Ms. Debra F. Yates, Chicago, Illinois  
Ms. Lorien Yonker, Chicago, Illinois

**\$250-\$499**

Mrs. Karen B. Alexander and Mr. Walter Alexander\*, Geneva, Illinois  
Mr. Arthur H. Anderson, Jr. and Mrs. Rebecca E. Anderson, Chicago, Illinois  
Mr. Barry Atkinson and Mrs. Carol E. Atkinson, Port Orange, Florida  
Mrs. Lorraine Barba and Mr. Randolph Barba, Chicago, Illinois  
Ms. Rebecca L. Binkley, Chicago, Illinois  
Mr. and Mrs. Merrill Blau, Highland Park, Illinois  
Mr. Andrew T. Bouwkamp and Ms. Barbara Bouwkamp, Laurium, Michigan  
Mr. Daniel G. Cedarbaum and Ms. Caryn Jacobs, Evanston, Illinois  
Mr. Patrick Francis Conway and Mrs. Jeanne M. Conway, Rocky River, Ohio  
Barbara E. Corkey, Boston, Massachusetts  
The Honorable Barbara F. Currie, Chicago, Illinois  
Mr. and Mrs. Mark D. Dawson, Chicago, Illinois  
Mr. Robert O. Delaney, Winnetka, Illinois  
Mrs. Gwendolyn P. Dhesi and Mr. Nirmal Singh Dhesi, Santa Rosa, California  
Mr. and Mrs. Pedro A. Duenas, Chicago, Illinois  
Ms. Maggie A. Elmarakby, Chicago, Illinois  
Mrs. Amy S. Farriornd and Mr. Edward H. Farrior, Tampa, Florida  
Ms. Rosanne Fitko Mr. James L. Padgett, Lake Forest, Illinois  
Mr. Gary Fountain, Brooklyn, Connecticut  
Ms. Patty Gerstenblith and Rabbi Samuel Gordon, Wilmette, Illinois  
Mr. and Mrs. Frederick J. Graboske, Rockville, Maryland  
Dr. Barton C. Hacker, Washington, D.C.  
Mrs. Melody Hainline and Mr. T.R. Hainline, Jacksonville, Florida  
Ms. Margaret B. Handelman, San Francisco, California  
Mr. Edward Day Hatcher and Ms. Valerie Hoffman Hatcher, Morris, Illinois  
Ms. Lynne Pettler Heckman and Mr. James J. Heckman, Chicago, Illinois  
Mrs. Mary P. Hines, Winnetka, Illinois  
Mr. Paul Houdek and Ms. Linda Houdek, Berwyn, Illinois  
Ms. Mary L. Jackowicz, Chicago, Illinois  
Mrs. Angela C. Jacobi and Mr. George Thomas Jacobi, Milwaukee, Wisconsin  
Mr. Erwin Jaumann, Gaithersburg, Maryland  
Mr. Thomas Jedeled and Dr. Nancy J. Skon Jedeled, Tucson, Arizona  
Ms. Sona Kalousdian and Mr. Ira Lawrence, Chicago, Illinois



**\$250-\$499 (cont.)**

Professor Anne Draffkorn Kilmer, Tucson, Arizona  
 Mr. Henry B. King, III and Ms. Margaret L. King, Evanston, Illinois  
 Mr. Gregory Gene Knight and Ms. Constance Gordon, Eagle, Idaho  
 Roger Konwal and Karen Konwal, Elmhurst, Illinois  
 Mr. Martin Koslin, Houston, Texas  
 Mr. and Mrs. Martin J. Kozak, Wilmette, Illinois  
 Mr. Bernard L. Krawczyk, Chicago, Illinois  
 Ms. Nancy J. Landauer, San Bruno, California  
 Mr. Richard Lann, Colorado Springs, Colorado  
 Mr. Antwane O. Lee, Chicago, Illinois  
 Mr. Charles Lindsey and Mrs. Zikri Yusof, Des Plaines, Illinois  
 Ms. Elizabeth J. McCarthy, Olney, Maryland  
 Sarah Meisels, Wheaton, Illinois  
 Dr. Ronald Michael and Mrs. Zena Michael, Hammond, Indiana  
 Mr. Dean Miller and Ms. Martha H. Swift, Chicago, Illinois  
 Vivian Mosby, Woodland, Washington  
 Mr. David J. Pichurski and Marilyn Murray, Chicago, Illinois  
 Ms. So Young Oh and Mr. Woo Yong Cha, Chicago, Illinois  
 Mr. Larry Paragano, Basking Ridge, New Jersey  
 Mr. Nazario Paragano, Basking Ridge, New Jersey  
 Mrs. Charlene H. Posner and The Honorable Richard A. Posner, Chicago, Illinois  
 Mrs. Barbara Roshangar and Mr. Tony Roshangar, Skokie, Illinois  
 Mr. Gregg Alan Rubinstein and Ms. Andrea C. Blackburn, Washington, D.C.  
 Dr. Randi Rubovits-Seitz, Washington, D.C.  
 Mr. Dan Saltzman, Portland, Oregon  
 Mr. and Mrs. Robert Eliot Shapiro, Chicago, Illinois  
 Mr. Gary N. Smith, Sacramento, California  
 Ms. Toni S. Smith, Chicago, Illinois  
 Dr. Joe Smolik, Coppet, Switzerland  
 Mr. and Mrs. Hugo F. Sonnenschein, Chicago, Illinois  
 Mr. Patrick J. Spain, Wilmette, Illinois  
 Mr. George R. Sundell, Wheaton, Illinois  
 Ms. Emily Teeter and Mr. Joseph Daniel Cain, Chicago, Illinois  
 Dr. Robert Y. Turner, Haverford, Pennsylvania  
 Mr. and Mrs. Russell H. Tuttle, Chicago, Illinois  
 Nancy E. Warner, MD and Ms. Christine Reynolds, Pasadena, California  
 Mr. and Mrs. Wayne L. White, Rockport, Texas  
 Mr. Ted Williams, Hot Springs, Arkansas  
 Dr. and Mrs. Jerome A. Winer, Chicago, Illinois  
 Mr. Thomas K. Yoder, Chicago, Illinois

**\$100-\$249**

Anonymous, New York, New York  
 Dr. Charles M. Adelman, Cedar Falls, Iowa  
 Mr. John C. Aldrin and Mrs. Sylvia K. Aldrin, Gurnee, Illinois  
 Mr. William H. Alger III and Ms. Judith N. Alger, Santa Fe, New Mexico  
 Mr. and Mrs. Brian Robert Alm, Rock Island, Illinois  
 Ms. Arlene Alpert-Mehlman and Dr. David J. Mehlman, Chicago, Illinois

**\$100-\$249 (cont.)**

- Ms. Salwa Alwattar, Deerfield, Illinois  
 Mr. Jeffrey Amelse, Batavia, Illinois  
 Dr. James H. Andrews and Dr. Donna M. Avery, Chicago, Illinois  
 Mrs. Julie Antelman, Santa Barbara, California  
 Mr. Gregory Anthony, Minneapolis, Minnesota  
 Dr. and Mrs. Barry Arnason, Chicago, Illinois  
 Dr. Eugene L. Balter and Mrs. Judith R. Phillips, Chicago, Illinois  
 Mrs. Jane B. Barabe and Mr. Joseph Barabe, Oak Park, Illinois  
 Mrs. Joan R. Barghusen, Portage, Indiana  
 Mr. Anthony J. Barrett and Ms. Marguerite Kelly, Harpswell, Maine  
 Mr. Douglas Baum and Mrs. Lynne M. Wait, Homewood, Illinois  
 Mr. and Mrs. Richard W. Baum, Chicago, Illinois  
 Norma Baxa, Twin Lakes, Wisconsin  
 Mr. John M. Beal, Chicago, Illinois  
 Ms. Susan Bender, North Garden, Virginia  
 Mr. Roy Benedek, Riverside, Illinois  
 Mr. Frederick N. Bates and Dr. Ellen J. Benjamin, Chicago, Illinois  
 Mr. and Mrs. John F. Benjamin, Jupiter, Florida  
 Mr. Clive Davies and Ms. Phoebe Bennett, Arlington, Virginia  
 Mr. and Mrs. Mark Bergner, Chicago, Illinois  
 Mr. R. Stephen Berry and Ms. Carla F. Berry, Chicago, Illinois  
 Mr. and Mrs. David M. Bevington, Chicago, Illinois  
 Mr. Roger J. Bialcik, Downers Grove, Illinois  
 Ms. Ananda Beth Billings, Chicago, Illinois  
 Mr. Edward C. Blau, Alexandria, Virginia  
 Mr. Henry E. Bliss and Mrs. Joan P. Bliss, Chicago, Illinois  
 Mr. and Mrs. Richard D. Bliss, Excelsior, Minnesota  
 Mr. Alan Blum and Ms. Mary Alyce Blum, Chicago, Illinois  
 Mr. Fred Botha, Sun City West, Arizona  
 John W. Boyer, PhD and Mrs. Barbara A. Boyer, Chicago, Illinois  
 Mr. O. John Brahos, Chicago, Illinois  
 Mr. Nicholas Bratsafolis and Ms. Michelle S. Bratsafolis, New York, New York  
 Mr. Jerald C. Brauer, Chicago, Illinois  
 Mr. Bob Brier, Bronx, New York  
 Ms. Dawn R. Bronson, Palos Heights, Illinois  
 Ms. Marilyn A. Brusherd, Sugar Grove, Illinois  
 Mr. and Mrs. John Buchanan, Evanston, Illinois  
 Ms. M. Kennedy Buchanan, Chicago, Illinois  
 Dr. Martin P. Buchheim and Dr. Cynthia Jurisson, Chicago, Illinois  
 Ms. Frances E. Cahill, Long Beach, California  
 Mr. Andrew Call, Chicago, Illinois  
 Mr. Matthew Call, Roanoke, Virginia  
 Mrs. Patricia L. Callis and Mr. James Nicholson, Pickerington, Ohio  
 Ms. Rosemary Carroll, Western Springs, Illinois  
 Ms. Nancy Carter and Mr. Robert L. Carter, Ottawa, Illinois  
 Mrs. Marianne Carus and Mr. M. Blouke Carus, Peru, Illinois  
 Ms. Talarah Cataldi, Chicago, Illinois  
 Ms. A.J. Cave, San Mateo, California  
 Mr. John L. Cella, Jr. and Ms. Laura Prail, Duluth, Minnesota

**\$100-\$249 (cont.)**

- Ms. Kavitha Chandran and Mr. Ravi Chandran, Hawthorn Woods, Illinois  
 Ms. Elizabeth Cherry, Ithaca, New York  
 Mr. Brian L. Cochran, Tucson, Arizona  
 Mrs. Zdzislawa Coleman, Chicago, Illinois  
 Ms. Jane Comiskey, Chicago, Illinois  
 Mr. David L. Crabb and Mrs. Dorothy Mixer Crabb, Chicago, Illinois  
 Ms. Carolyn Dorothy Cracraft, San Francisco, California  
 Ms. Hazel M. Cramer, Darien, Illinois  
 Mr. Steven Crane, Chicago, Illinois  
 Dr. Eugene D. Cruz-Uribe and Dr. Kathryn Cruz-Uribe, Richmond, Indiana  
 Ms. Helen M. Cunningham, Arlington Heights, Illinois  
 Mr. Edwin L. Currey, Jr., Napa, California  
 Ms. Barbara Wilson D'Andrea, Wainscott, New York  
 Ms. Diane L. Dau-Koos and Mr. Robert A. Koos, Kenosha, Wisconsin  
 Mrs. Joanne Davies and Mr. Stratton Davies, Deerfield, Illinois  
 Mr. Claude Davis and Mrs. Linda Davis, Hillsborough, North Carolina  
 Ms. Deborah J. Davis and Dr. John M. Davis, Chicago, Illinois  
 Ms. Maybrit S. De Miranda, Rancho Palos Verdes, California  
 Mr. Leoti de Vries-Mostert, Waalre, Netherlands  
 Ms. Catherine Deans-Barrett, Corrales, New Mexico  
 Mr. Jadran Lee and Ms. Rebecca E.B. Deaton, Chicago, Illinois  
 Mr. Robert Demos, Chicago, Illinois  
 Dr. Pablo Denes and Dr. Lucia B. Rothman-Denes, Chicago, Illinois  
 Mr. Kevin M. Dent, Las Cruces, New Mexico  
 Mr. Anurudha Dharmapala, Chicago, Illinois  
 Ursula Digman, Elgin, Illinois  
 Mr. Henry S. Dixon and Ms. Linda Giesen, Dixon, Illinois  
 Mr. J. McGregor Dodds and Ms. Christine Allen Dodds, Saline, Michigan  
 Ms. Leora Douraghy and Mr. Mehdi Douraghy, Chicago, Illinois  
 Mr. David Dudley and Ms. Elizabeth Zenick Dudley, East Boothbay, Maine  
 Mr. Christopher Boebel and Ms. Glenna Eaves, Chicago, Illinois  
 Egypt Exploration Organization of Southern California, Los Angeles, California  
 Mr. Richard A. Ehlert, Des Plaines, Illinois  
 Mr. and Mrs. Lawrence R. Eicher, Charlottesville, Virginia  
 Anonymous, Edgewater, New Jersey  
 Mr. Fred Eskra, Palos Park, Illinois  
 Mr. Thomas Evans, Walker, Louisiana  
 Ms. Elizabeth A. Byrnes and Mr. Barton L. Faber, Paradise Valley, Arizona  
 Dr. Valerie Fargo and Dr. John A. Roper III, Midland, Michigan  
 Mr. John P. Farris, Homewood, Illinois  
 Dr. Martin J. Fee and Dr. Janis D. Fee, North Tustin, California  
 Ms. Mary G. Finn, Chicago, Illinois  
 Mr. and Mrs. John H. Fisher, River Forest, Illinois  
 Dr. Michael S. Flom, Boynton Beach, Florida  
 Mrs. James R. Ford, Chicago, Illinois  
 Ms. Carol L. Forsythe and Mr. Scott M. Forsythe, Forest Park, Illinois  
 Ms. Ann L. Foster and Mrs. Gloria W. Foster, Evanston, Illinois  
 Dr. Samuel Ethan Fox, Chicago, Illinois  
 Mr. and Mrs. Charles J. Fraas, Jr., Jefferson City, Missouri

**\$100-\$249 (cont.)**

- Mr. and Mrs. Jay B. Frankel, Chicago, Illinois  
 Mrs. Susan S. Freehling and Mr. Paul E. Freehling, Chicago, Illinois  
 Mr. Kere Frey, Chicago, Illinois  
 Mr. and Mrs. Thomas F. Frey, Sarasota, Florida  
 Mr. Robert Gaines, Fort Mill, South Carolina  
 Mr. Gregory J. Gajda, Mt Prospect, Illinois  
 Dr. Maria-Luisa Alegre and Dr. Thomas Frank Gajewski II, Chicago, Illinois  
 Mr. George Ganat, Long Island City, New York  
 Ms. Moriah S. Grooms-Garcia and Mr. Victor J. Garcia, Olympia Fields, Illinois  
 Ms. Leanna Gaskins, San Francisco, California  
 Dr. Francois P. Gaudard, Chicago, Illinois  
 James Gaynor and Mrs. Jill W. Gaynor, Richmond, Virginia  
 Mr. Ted Geiger and Ms. Hildegard H. Geiger, Lake Villa, Illinois  
 Mr. Kevin S. Geshwender and Ms. Susan Geshweader, Barrington, Illinois  
 Dr. Margot Getman, Evanston, Illinois  
 Ms. Judith A. Gillespie, Alexandria, Virginia  
 Mrs. Terry Gillespie and Mr. William H. Gillespie, Flossmoor, Illinois  
 Mrs. Giedre Gillespie and Mr. Thomas J. Gillespie, Chicago, Illinois  
 Mr. Lyle Gillman, Bloomingdale, Illinois  
 Glencoe Public Library, Glencoe, Illinois  
 Mr. Jerome Godinich, Jr., Houston, Texas  
 Msgr. Raymond Goehring, Lansing, Michigan  
 Mr. William H. Gofen and Mrs. Ethel Gofen, Chicago, Illinois  
 Mr. and Mrs. Howard Goldberg, Chicago, Illinois  
 Dr. Helen T. Goldstein, Iowa City, Iowa  
 Mr. Gene B. Gragg and Mrs. Michele J. Gragg, Chicago, Illinois  
 Mr. and Mrs. Charles W. Graham, Camden, Maine  
 Mrs. Tasha Alexander and Mr. Andrew Grant, Chicago, Illinois  
 Mr. Jan M. Grayson, Louisville, Kentucky  
 Mrs. Catherine T. Green and Francis P. Green, Lake Geneva, Wisconsin  
 Ms. Margaret F. Green, Yuba City, California  
 Dr. Joseph Adams Greene and Mrs. Eileen Caves, Belmont, Massachusetts  
 Ms. Ann C. Gunter, Evanston, Illinois  
 Ms. Dianne S. Haines, Naperville, Illinois  
 Mr. and Mrs. Richard C. Haines, Atlanta, Georgia  
 Ms. Holley Hall, Morton Grove, Illinois  
 Mr. and Mrs. M. Hill Hammock, Chicago, Illinois  
 Mr. Joel L. Handelman and Ms. Sarah R. Wolff, Chicago, Illinois  
 Dr. Lowell Kent Handy and Ms. Erica Lynn Treesh, Des Plaines, Illinois  
 Dr. W. Benson Harer, Seattle, Washington  
 Mr. Bill Harms and Mrs. Myra Harms, Brentwood, California  
 Mr. Richard G. Harter, Chicago, Illinois  
 Ms. Mary Jo Hartle and Mr. James B. Hartle, Santa Barbara, California  
 Ms. Lynn Carol Harvey, Chicago, Illinois  
 Dr. and Mrs. Robert Haselkorn, Chicago, Illinois  
 Mr. Matthew Hedman, Moscow, Idaho  
 Dr. and Mrs. H. Lawrence Helfer, Pittsford, New York  
 Mr. John P. Henry and Ms. Jan Isaacs Henry, Colorado Springs, Colorado  
 Mr. Leonardo Herzenberg and Dr. Caroline L. Herzenberg, Chicago, Illinois

**\$100-\$249 (cont.)**

- Mr. and Mrs. David C. Hilliard, Chicago, Illinois  
 Ms. Eileen M. Hoefler, Campbell, California  
 Mr. Walter Holden, Skokie, Illinois  
 Ms. Susan T. Hollis, Penfield, New York  
 Ms. Gail Holmberg, Oak Park, Illinois
- Mr. Rasheed I.C. Hosein and Ms. Carla Christina Hosein, Washingtonville, New York  
 Dr. Herbert B. Huffmon, Easton, Pennsylvania  
 Mr. Arthur T. Hurley and Mrs. Susan L. Hurley, Napa, California
- Mr. Jack David Hurwitz and Ms. Penelope Ingalls, Black Mountain, North Carolina  
 Dr. Kamal N. Ibrahim and Dr. Lucy W. Ibrahim, Chicago, Illinois  
 Mr. Alvin James, Cedar Hill, Texas  
 Ms. Caroline C. January, New York, New York  
 Dr. William R. Jeffery, Woods Hole, Massachusetts  
 Chris Jensen, Downers Grove, Illinois  
 Ms. Barbara Jillson, Chicago, Illinois  
 Ms. Mary Ellen Johnson, Geneva, Illinois  
 Ms. Pamela Johnson, Windermere, Florida  
 Ms. Samantha W. Johnson, Colorado Springs, Colorado
- Mr. Charles E. Jones and Alexandra A. O'Brien, PhD, State College, Pennsylvania  
 Richard E. and Marie T. Jones, Wilmette, Illinois
- Mrs. Allison F. Kant and Mr. Pooneet G. Kant, New York, New York  
 Ms. Toyoko Kawase, Osaka, Japan  
 Mr. Alan Kawaters, Olympia Fields, Illinois
- Mr. John A. Kelly, Jr. and Mrs. Joyce J. Kelly, Naples, Florida  
 Ms. Linda E. Ginzler and Dr. Boaz Keysar, Chicago, Illinois  
 Ms. Sheena Kim and Mr. John Leyland, Oak Park, Illinois  
 Mr. and Mrs. Jerome C. Kindred, Arlington, Virginia  
 Mr. and Mrs. William J. Knight, South Bend, Indiana  
 Irmgard K. Koehler, MD, Chicago, Illinois  
 Mrs. Annie A. Kohl, Media, Pennsylvania
- Dr. Shelley Korshak and Mr. Laurence A. Sode, Chicago, Illinois  
 Mr. Dave Krass and Ms. Susan McDonald, Chicago, Illinois
- Mr. Donald W. Krejci and Mrs. Jane F. Krejci, Monte Sereno, California  
 Ms. Carole Krucoff and Mr. Larry S. Krucoff, Chicago, Illinois  
 Ms. Lottie J. Krzywda, Chicago, Illinois
- Mr. and Mrs. James Kulikauskas, Arlington Heights, Illinois
- Mr. Michael Gerard Kulma and Ms. Luella Theresa P. Adan, Chicago, Illinois  
 Katrinka T. Lally, Chicago, Illinois
- Mr. and Mrs. Charles Larmore, Providence, Rhode Island  
 Ms. Laura L. Larner-Farnum, Yorba Linda, California
- Mrs. Barbara M. Lary and Mr. Victor Lary, Springfield, Illinois  
 Mr. Stephen S. Lash, New York, New York  
 Mr. David M. Laucks, Red Lion, Pennsylvania  
 Mr. Gregory Lawton, Chalfont, Pennsylvania  
 Mr. Richard Lee, Holland, Pennsylvania  
 Mr. Ted Lekan, Chicago, Illinois  
 Nancy Lennon and John F. McNellis, Chicago, Illinois
- Dr. and Mrs. Leonard Henry Lesko, Seekonk, Massachusetts  
 Ms. Jane H. Leuthold and Dr. Raymond Leuthold, Chicago, Illinois



**\$100-\$249 (cont.)**

- Jill and John Levi, Chicago, Illinois  
 Mr. and Mrs. Josef B. Levi, Chicago, Illinois  
 Mr. Jeff Levine and Mrs. Rebecca Levine, Riverside, Illinois  
 Mr. Saul Levmore and Ms. Julie A. Roin, Chicago, Illinois  
 Thaddeus Walczak and Mrs. Carole J. Lewis, Jensen Beach, Florida  
 Professor Avra Liakos and Mr. J. Dimitri Liakos, Sycamore, Illinois  
 Ms. Kathleen Lis, Howell, Michigan  
 Ms. Janet Lissak and Mr. Laurence Lissak, Lombard, Illinois  
 Mr. John W. Locke and Ms. Judith R. Locke, Chicago, Illinois  
 Mrs. Helen Lowell, Cheadle Hulme, United Kingdom  
 Mr. Philip R. Luhmann and Mrs. Dianne C. Luhmann, Chicago, Illinois  
 Mr. Joseph J. Luria, Miami Beach, Florida  
 Mr. and Mrs. Hugh C. MacFarlane, Jr., Tampa, Florida  
 Palka Malgorzata, Chicago, Illinois  
 Mr. Ninos Marcus, Elk Grove Village, Illinois  
 Anonymous, Venice, California  
 Dr. Glennda S. Marsh-Letts, Springwood, Australia  
 Mr. Arthur M. Martin, Chicago, Illinois  
 Ms. Jeanne M. Martineau, Chicago, Illinois  
 Mr. Ronald A. Martinetti and Mrs. Ky Martinetti, Sierra Madre, California  
 Ms. Masako I. Matsumoto, Napa, California  
 Ms. Eva C. May, New Rochelle, New York  
 Ms. Gail P. McClain, Chicago, Illinois  
 Mr. Douglas McDonough and Ms. Barbara L. McDonough, Homewood, Illinois  
 Ms. Katherine L. McFarlin, Chicago, Illinois  
 Mr. Craig McKeown and Mrs. Cynthia McKeown, Middletown, New Jersey  
 Ms. Simone McNeil, Chicago, Illinois  
 Mr. Richard H. Meadow, Canton, Massachusetts  
 Mr. Dimitri Meeks, St. Clement de Riviere, France  
 Ms. Mary P. Mehl, St. Joseph, Missouri  
 Mr. R. Darrell Bock and Ms. Renee Marie Menegaz-Bock, Chicago, Illinois  
 Dr. Carol Meyer and Mr. Robert K. Smither, Hinsdale, Illinois  
 Ms. Florence Kate Millar and Ms. Emma Shelton, Bethesda, Maryland  
 Dr. Jenny T. Hackforth-Jones and Mr. Gene A. Miller, Madison, Wisconsin  
 Dr. William K. Miller, Duluth, Minnesota  
 Mr. Robert Ralph Moeller and Ms. Lois Patricia Moeller, Evanston, Illinois  
 Mr. and Mrs. D. Read Moffett, Chatham, Massachusetts  
 Mr. Kenneth Moore, Chicago, Illinois  
 Mr. Martin Moran, Chicago, Illinois  
 Ms. Suzanne Morgan, Chicago, Illinois  
 Mrs. Alicia Morse and Mr. Robert Morse, Annapolis, Maryland  
 Mr. Charles H. Mottier, Chicago, Illinois  
 Mr. and Mrs. Anthony John Mourek, Riverside, Illinois  
 Miss Effat Abd El Aziz Moussa, Naperville, Illinois  
 Mr. Henry Moy, Idabel, Oklahoma  
 Mr. Arthur H. Muir, Jr., Thousand Oaks, California  
 Mr. Jay F. Mulberry and Mrs. Alice J. Mulberry, Chicago, Illinois  
 Ms. Holly J. Mulvey, Evanston, Illinois  
 Mr. Douglas G. Murray and Mrs. Isobel M. Murray, Santa Barbara, California

**\$100-\$249 (cont.)**

- Mr. Michael J. Murrin, Chicago, Illinois
- Mr. David E. Muschler and Ms. Ann L. Becker, Chicago, Illinois
- Mr. and Mrs. Stanley F. Myers, Hanover, New Hampshire
- Mr. Charles R. Nelson, Seattle, Washington
- Dr. and Mrs. Richard W. Newcomb, Chicago, Illinois
- Mr. Christopher Newman and Ms. Marjorie K. Newman, Hoffman Estates, Illinois
- Mr. Stavros Nicolopoulos, Madrid, Spain
- Mr. and Mrs. John P. Nielsen, Lombard, Illinois
- Mr. Dale George Niewoehner, Rugby, North Dakota
- Dr. Edward Brovarski and Mrs. Del Nord, Brookline, Massachusetts
- Ms. Karen Nordheim\*, Chicago, Illinois
- Mr. Walter E. North and Mrs. Judy Ryon, Orleans, Massachusetts
- Mr. James H. Nye and Mrs. Jean M. Nye, Chicago, Illinois
- Mr. Dennis O'Connor, Chicago, Illinois
- Mr. Michael J. O'Keefe and Mrs. Virginia S. O'Keefe, Des Moines, Iowa
- Mr. Thomas J. O'Keefe, Chicago, Illinois
- Dorinda J. Oliver, New York, New York
- Mr. Gary M. Ossewaarde, Chicago, Illinois
- Ms. Leslie Osterberg, Oak Park, Illinois
- Ms. Carol E. Owen and Mr. Clinton W. Owen, Chula Vista, California
- Mrs. Sarah R. Packard, Westmont, Illinois
- Ms. Martha Padilla, Sunland, California
- Mr. Thomas Panoplos, Chicago, Illinois
- Ms. Beatrice A. Parker, Providence, Rhode Island
- Mr. Valentin Parks, Jr. and Ms. Michele Flynn, Gansevoort, New York
- Ms. Joan Hunt Parks, Chicago, Illinois
- Mrs. Nancy P. Patterson and Mr. Thomas G. Patterson, Chicago, Illinois
- Mrs. Lisa Pattis and Mr. Mark R. Pattis, Highland Park, Illinois
- Mr. Fred Pawlak and Ms. Marianne Pawlak, Orland Park, Illinois
- Mr. Donald Payne and Ms. Nancy Payne, Barrington, Illinois
- Ms. Betty L. Perkins, Los Alamos, New Mexico
- Mr. and Mrs. Norman Perman, Chicago, Illinois
- Mr. Thomas E. Petroskey and Mrs. Melanie McCarty, Hammond, Indiana
- Mr. Todd Eugene Petzel, New York, New York
- Ms. Emily Sue Pinnell Reichardt, River Forest, Illinois
- Mr. Jeffrey C. Pommerville and Mrs. Yvonne L. Pommerville, Scottsdale, Arizona
- Mr. Marcus Pond and Mrs. Sharon Pond, Harrellsville, North Carolina
- Mr. Cameron Poulter, Chicago, Illinois
- Mr. Richard H. Prins and Mrs. Marion L. Prins, Chicago, Illinois
- Mr. and Mrs. Joseph A. Putz, Palos Heights, Illinois
- Mr. Robert Andersen and Ms. Elaine Quinn, Chicago, Illinois
- Mr. Richard J. Raskin and Ms. Susan Bazargan, Chicago, Illinois
- Mr. and Mrs. James M. Ratcliffe, Chicago, Illinois
- Ms. Xue Y. Fung and Mr. David E. Reese, Chicago, Illinois
- Mrs. Laurie N. Reinstein, Highland Park, Illinois
- Dr. Kenneth Irving Resnick and Raiselle C. Resnick, DDS, Chicago, Illinois
- Mr. David R. Reynolds and Mrs. Pamela C. Reynolds, Oak Park, Illinois
- Mr. Dean F. Richardson, Pittsburgh, Pennsylvania
- Anonymous, Bloomsburg, Pennsylvania

**\$100-\$249 (cont.)**

- Mr. William M. Backs and Dr. Janet Rizner, Evanston, Illinois  
 Ronald A. Ferguson, MD and Ms. Agnes A. Roach, CFP, Gurnee, Illinois  
 Mrs. William J. Roberts, Lake Forest, Illinois  
 Mr. Robert J. Robertson, Forest Hills, New York  
 Karen Robinson, Saint Paul, Minnesota  
 Ms. Linda R. Rogers, Chicago, Illinois  
 Mr. Neil Rolde, York, Maine  
 Amy Rosenberg, Ann Arbor, Michigan  
 Miss Katherine J. Rosich, Washington, D.C.  
 Sabine Rossow, Therwil, Switzerland  
 Mr. Chase Sachs, Deerfield, Illinois  
 Mr. Mazin Fuad Safar and Mrs. Michal Safar, Chicago, Illinois  
 Ms. Hilda Schlatter and Mr. Paul Sakol, Oak Park, Illinois  
 Mr. Elias Wesley Sandel and Ms. Lucie Sandel, Homewood, Illinois  
 Mr. and Mrs. John Sanders, Chicago, Illinois  
 Mr. Paul Benjamin Schechter and Ms. Naomi Reshotko, Denver, Colorado  
 Ms. Margaret Schmid, Chicago, Illinois  
 Mr. Richard Schmitt and Mrs. Corinne Schmitt, Glen Ellyn, Illinois  
 Mr. Jon F. Schmoll and Mrs. Sandra W. Schmoll, Chesterton, Indiana  
 Mr. Jonathan Green and Ms. Joy Schochet, Chicago, Illinois  
 Dr. Hans Schreiber and Ms. Karin Schreiber, Chicago, Illinois  
 M. Roy Schwarz, MD and Mrs. T.C. Schwarz, Winchester, Virginia  
 Mr. and Mrs. Stephen T. Scott, Chicago, Illinois  
 Mr. John Kingsley Shannon and Ms. Jan Serr, Milwaukee, Wisconsin  
 Dr. Michael Sha, Carmel, Indiana  
 Ms. Roberta L. Shaw, Toronto, Canada  
 Mr. Robert M. Shelbourne and Mrs. Tatiana A. Shelbourne, Washington, D.C.  
 Ms. Mary Ellen Sheridan, Levering, Michigan  
 Ms. Lois B. Siegel, Chicago, Illinois  
 Mr. Peter Silvers and Ms. Charlotte Silvers, Lake Mills, Wisconsin  
 Mr. David Slobodkin and Mrs. Orly Slobodkin, Forest Park, Illinois  
 Dr. Henry D. Slosser, Pasadena, California  
 Mr. and Mrs. Kenneth Small, Chicago, Illinois  
 Ms. Mary W. Small, Kensington, California  
 Amelia Smithers, Gentilino, Switzerland  
 Mr. Michael J. Sobczyk, Des Plaines, Illinois  
 Ms. Margaret Phillips Sobhani, Kenosha, Wisconsin  
 Mr. Daniel J. Sobol and Dr. Amy Wagner, Mokena, Illinois  
 Mr. Jerry I. Solomon, Longboat Key, Florida  
 Miss Nancy A. Spencer, Chicago, Illinois  
 Mr. Stephen C. Sperry, Maple Grove, Minnesota  
 Mr. David A. Spetrino, Wilmington, North Carolina  
 Mrs. Phyllis Mazer Sternau, New York, New York  
 Mr. Kent D. Sternitzke, Bowling Green, Ohio  
 Mr. Stephen M. Stigler and Mrs. Virginia Stigler, Chicago, Illinois  
 Dr. Theresa He and Dr. Jonathan Blake Strauss, Chicago, Illinois  
 Mrs. Laura F. Sudler and Mr. Louis C. Sudler, Jr., Chicago, Illinois  
 Dr. Eric William Terman and Ms. Mari Philipsborn, Chicago, Illinois  
 Mr. and Mrs. Randolph Frank Thomas, Chicago, Illinois

**\$100-\$249 (cont.)**

- Mr. William S. Tinsley, Powell, Ohio  
 Mrs. Ann C. Tomlinson and Mr. Richard Tomlinson, Chicago, Illinois  
 Ms. Kay Torshen, Chicago, Illinois  
 Ms. Jean M. Treese, Chicago, Illinois  
 Ms. Kathleen Treptow, Homewood, Illinois  
 Mr. Sugihiko Uchida, Niigata, Japan  
 Mr. Mark van Gorder, Chicago, Illinois  
 Mr. Andrew Vesselinovitch, Chicago, Illinois  
 Mr. Stephen L. Vileo, Westland, Michigan  
 Mr. John Vinci, Chicago, Illinois  
 Anonymous, Issaquah, Washington  
 Mrs. Mary Eleanor Wall, Elmhurst, Illinois  
 Mr. and Mrs. William R. Wallin, Wilmette, Illinois  
 Mrs. Barbara Walsh and Mr. Michael Walsh, Downers Grove, Illinois  
 Mr. David S. Crossett and Ms. Mary J. Walsh, Oak Park, Illinois  
 Dr. Marc K. Walton, Ashton, Maryland  
 Ms. Annie Y. Wang, Chicago, Illinois  
 Mrs. Debra Ann Webber and Ms. Joel Andrew Webber, Lincolnshire, Illinois  
 Mr. Johannes Weertman and Ms. Julia R. Weertman, Evanston, Illinois  
 Ms. Eileen Wehrheim and Mr. Tom Wehrheim, Oak Park, Illinois  
 Richard G. Weinberg and Diane Weinberg, Chicago, Illinois  
 Mr. Robert Weinberg, Chicago, Illinois  
 Dr. George Honig and Mrs. Olga Myriam Weiss, Chicago, Illinois  
 Mr. Teed J. Welch, Waccabuc, New York  
 Mr. and Mrs. J. Marshall Wellborn, New York, New York  
 Mr. and Mrs. Edward F. Wente, Chicago, Illinois  
 Mr. Frederick L. Whittinghill and Ms. Joanmarie Hofmann, Wesley Chapel, Florida  
 Mr. and Mrs. Ronald S. Wideman, Chicago, Illinois  
 Mrs. Grace W. Wolf, Chicago, Illinois  
 Ms. Ann S. Wolff, Winnetka, Illinois  
 Dr. David Woolman and Mrs. Ina Woolman, Providence, Rhode Island  
 Ms. Rachel I. Xidis, Dekalb, Illinois  
 Judge and Mrs. Mark Yerman, Citrus Springs, Florida  
 Mr. Robert R. Yohanan and Ms. Joan E. Yohanan, Kenilworth, Illinois  
 Ms. Carole Y. Yoshida, Orland Park, Illinois  
 Mrs. Agnes Zellner, Chicago, Illinois  
 Mr. J. Raymond Zimmer, Charleston, South Carolina  
 Ms. Carol Zuiches and Mr. James Zuiches, Portland, Oregon

† *Recently deceased*

**Bequests**

We would like to recognize the following individual who generously made provisions for the Oriental Institute in their estate plans. We honor their memories.

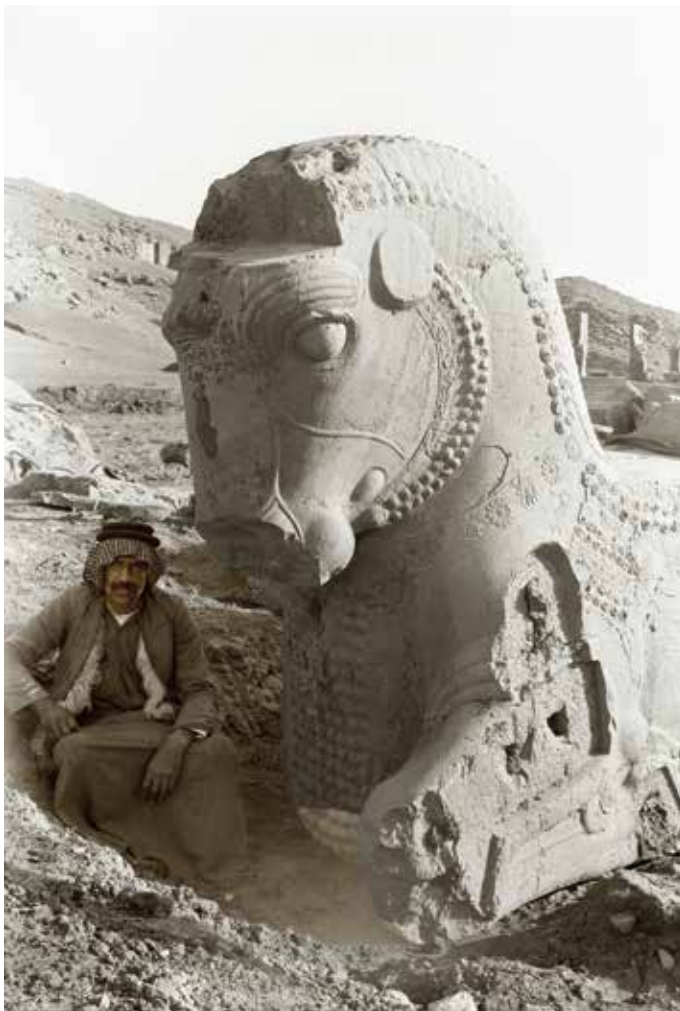
The Estate of Chester D. Tripp, Chicago, Illinois





## FACULTY AND STAFF





*Above and overleaf: Worker alongside a double-bull column capital from the Unfinished Gate at Persepolis. Herzfeld Expedition, 1933 (D. 13305)*

# FACULTY AND STAFF OF THE ORIENTAL INSTITUTE

July 1, 2015–June 30, 2016

Area Code 773

## EMERITUS FACULTY

Lanny Bell, Associate Professor Emeritus of Egyptology

Robert D. Biggs, Professor Emeritus of Assyriology  
r-biggs@uchicago.edu, 702-9540

John A. Brinkman, Charles H. Swift Distinguished Service Professor Emeritus of Mesopotamian  
History  
j-brinkman@uchicago.edu, 702-9545

Miguel Civil, Professor Emeritus of Sumerology  
m-civil@uchicago.edu, 702-9542

Peter F. Dorman, Professor Emeritus of Egyptology  
p-dorman@uchicago.edu

Walter T. Farber, Professor Emeritus of Assyriology  
w-farber@uchicago.edu, 702-9546

Norman Golb, Ludwig Rosenberger Professor Emeritus of Jewish History and Civilization  
n-golb@uchicago.edu, 702-9526

Gene B. Gragg, Professor Emeritus of Near Eastern Languages  
g-gragg@uchicago.edu, 702-9511

Matthew W. Stolper, John A. Wilson Professor Emeritus of Assyriology, Director, Persepolis  
Fortification Archive Project  
m-stolper@uchicago.edu, 702-9553

Edward F. Wente, Professor Emeritus of Egyptology  
e-wente@uchicago.edu, 702-9539

K. Aslihan Yener, Associate Professor Emeritus of Archaeology

## FACULTY

Fred M. Donner, Professor of Near Eastern History  
f-donner@uchicago.edu, 702-9544

McGuire Gibson, Professor of Mesopotamian Archaeology  
m-gibson@uchicago.edu, 702-9525

FACULTY AND STAFF

- Petra Goedegebuure, Associate Professor of Hittitology; Senior Editor, Chicago Hittite Dictionary Project  
pgoedegebuure@uchicago.edu, 702-9550
- Rebecca Hasselbach-Andee, Associate Professor of Comparative Semitics  
hasselb@uchicago.edu, 834-3290
- Janet H. Johnson, Morton D. Hull Distinguished Service Professor of Egyptology; Editor, Chicago Demotic Dictionary Project  
j-johnson@uchicago.edu, 702-9530
- Walter E. Kaegi, Professor of Byzantine-Islamic Studies  
kwal@uchicago.edu, 702-8346, 702-8397
- Nadine Moeller, Associate Professor of Egyptian Archaeology  
nmoeller@uchicago.edu, 834-9761
- Brian P. Muhs, Associate Professor of Egyptology  
bpmuhs@uchicago.edu, 702-9533
- James F. Osborne, Assistant Professor of Near Eastern Archaeology (from July 1, 2015)  
jamesosborne@uchicago.edu, 702-0568
- Dennis G. Pardee, Henry Crown Professor of Hebrew Studies  
d-pardee@uchicago.edu, 702-9541
- Susanne Paulus, Assistant Professor of Assyriology (from July 1, 2015)  
paulus@uchicago.edu, 702-2778
- Richard Payne, Neubauer Family Assistant Professor  
repayne@uchicago.edu, 834-9897
- Hervé Reculeau, Assistant Professor of Assyriology (from July 1, 2015)  
hreculeau@uchicago.edu, 702-4592
- Robert K. Ritner, Professor of Egyptology  
r-ritner@uchicago.edu, 702-9547
- Martha T. Roth, Chauncey S. Boucher Distinguished Service Professor of Assyriology  
mroth@uchicago.edu, 834-2448
- David Schloen, Associate Professor of Syro-Palestinian Archaeology  
d-schloen@uchicago.edu, 702-1382
- Gil J. Stein, Professor of Near Eastern Archaeology; Director, Oriental Institute  
gstein@uchicago.edu, 702-4098
- Theo P. J. van den Hout, Arthur and Joann Rasmussen Professor of Western Civilization, Hittite and Anatolian Languages; Executive Editor, Chicago Hittite Dictionary Project  
tvdhout@uchicago.edu, 834-4688, 702-9527
- John Z. Wee, Assistant Professor of Assyriology (from July 1, 2015)  
johnwee@uchicago.edu, 702-0131
- Christopher Woods, Associate Professor of Sumerology; Editor, *Journal of Near Eastern Studies*  
woods@uchicago.edu, 834-8560

## RESEARCH ASSOCIATES

- Abbas Alizadeh, Senior Research Associate, Iranian Prehistoric Project  
a-alizadeh@uchicago.edu, 702-9531
- Annalisa Azzoni, Research Associate, Persepolis Fortification Archive Project  
annalisa.azzoni@vanderbilt.edu
- Richard H. Beal, Senior Research Associate, Associate Editor, Chicago Hittite Dictionary Project  
r-beal@uchicago.edu, 702-9527
- Scott Branting, Research Associate, Kerkenes Dağ Project  
branting@uchicago.edu
- Elsbeth R. M. Dusinberre, Persepolis Fortification Archive Project
- Jean Evans, Research Associate, Nippur Project  
jmevans@uchicago.edu
- Gertrud Farber, Research Associate, Sumerian Lexicon Project  
g-farber@uchicago.edu, 702-9548
- Mark Garrison, Research Associate, Persepolis Fortification Archive Project  
mgarriso@trinity.edu
- François Gaudard, Research Associate; Associate Editor, Chicago Demotic Dictionary Project;  
Co-editor, Mummy Label Database Project  
fgaudard@uchicago.edu, 702-9528
- Jack Green, Research Associate, Chief Curator, Museum (until 6/30/2016)
- Emily Hammer, Research Associate (Assistant Professor), Director, Center for Ancient Middle  
Eastern Landscapes (CAMEL)  
ehammer@uchicago.edu, 834-1152
- Lisa Heidorn, Research Associate, Oriental Institute Nubian Expedition  
lheidorn@uchicago.edu
- Wouter Henkelman, Research Associate, Persepolis Fortification Archive Project  
wouterhenkelman@gmail.com
- Austin “Chad” Hill, Research Associate, Galilee Prehistory Project  
austinchill@uchicago.edu
- Carrie Hritz, Research Associate, Zeidan Project, Girsu Project
- W. Raymond Johnson, Research Associate (Associate Professor); Field Director, Epigraphic  
Survey  
wr-johnson@uchicago.edu, 834-4355
- Charles E. Jones, Research Associate, Persepolis Fortification Archive Project  
cejo@uchicago.edu
- Morag M. Kersel, Research Associate, Galilee Prehistory Project  
mokersel@uchicago.edu, 702-0086



FACULTY AND STAFF

Mark Lehner, Research Associate, Giza Plateau Mapping Project  
MarkLehner@aol.com

Massimo Maiocchi, Writing in Early Mesopotamia and Neubauer Collegium Signs of Writing,  
(from 2/18/2016)  
maiocchi@uchicago.edu, 702-2589

Lec Maj, Research Associate, Persepolis Fortification Archive Project  
lec@uchicago.edu

Gregory Marouard, Research Associate in Egyptian Archaeology, Tell Edfu Project, and Dendara  
Project  
marouardg@uchicago.edu, 834-4270

Gregory McMahon, Research Associate, Çadır Höyük Project

J. Brett McClain, Research Associate; Senior Epigrapher, Epigraphic Survey  
jbmccclai@uchicago.edu, 702-9524

Carol Meyer, Research Associate, Bir Umm Fawakhir Project  
c-meyer@uchicago.edu

Kiersten Neumann, Research Associate (from 2/1/2016); Curator, Museum (from 1/15/2016)  
neumann@uchicago.edu, 834-8590

Artur Obłuski, Research Associate, Qasr el-Wizz Publication Project  
aobluski@uchicago.edu

Rana Özbal, Research Associate, Tell Kurdu Project

Hratch Papazian, Research Associate  
hratch@uchicago.edu

Marina Pucci, Research Associate, Chatal Höyük Publication Project

Clemens D. Reichel, Senior Research Associate, Diyala Project, Hamoukar  
cdreiche@uchicago.edu, (416) 586-7938

Fiona Rose-Greenland, Research Associate, MANTIS Project (from 1/15/2016)  
fargreenland@uchicago.edu, 795-2375

Yorke Rowan, Senior Research Associate  
ymrowan@uchicago.edu, 702-0086

John Sanders, Senior Research Associate, Nippur Project  
jc-sanders@uchicago.edu

Foy Scalf, Research Associate; OIDO; IDB; Head, Research Archives  
scalffd@uchicago.edu, 702-9537

Oğuz Soysal, Senior Research Associate, Associate Editor, Chicago Hittite Dictionary Project  
o-soysal@uchicago.edu, 702-3644

Geoffrey D. Summers, Research Associate, Kerkenes Project  
summers@metu.edu.tr

Emily Teeter, Research Associate; Special Exhibits Coordinator, Museum  
eteeter@uchicago.edu, 702-1062

Joanna Then-Obłuska, Research Associate, Oriental Institute Nubian Expedition  
jthenobluska@uchicago.edu

Raymond Tindel, Research Associate  
r-tindel@uchicago.edu

Tasha Vorderstrasse, Research Associate, Islamic Archaeology Publication Project  
tkvorder@uchicago.edu

Lynn Welton, Research Project Professional, CRANE Project  
lwelton@uchicago.edu, 702-7497

Donald Whitcomb, Research Associate (Associate Professor), Islamic and Medieval Archaeology  
d-whitcomb@uchicago.edu, 702-9530

Magnus Widell, Research Associate  
widell@uchicago.edu

Bruce B. Williams, Research Associate, Oriental Institute Nubian Expedition  
bbwillia@uchicago.edu

Karen L. Wilson, Research Associate  
k-wilson@uchicago.edu

Richard Zettler, Research Associate  
rzettler@sas.upenn.edu

## STAFF

Mohamed Abo El Makarem, Conservator, Epigraphic Survey  
702-9524

Keli Alberts, Artist, Epigraphic Survey  
kelialberts@hotmail.com

Susan Allison, Assistant Registrar, Museum  
srallison@uchicago.edu, 702-3513

Nahed Samir Andraus, Conservator, Epigraphic Survey

Alain Arnaudies, Digital Archives Database, Epigraphic Survey  
arnaudies@laposte.net

Emmanuelle Arnaudies, Digital Archives Database, Epigraphic Survey  
taaptah@gmail.com

Knut Boehmer, Head, Computer Laboratory (from 10/1/2015)  
kboehmer@uchicago.edu, 702-0989

Denise Browning, Manager, Suq  
d-browning1@uchicago.edu, 702-9509

Rebecca Cain, Assistant Editor, Publications Office  
rebeccacain@uchicago.edu, 702-5967

Dennis Campbell, Research Project Professional, Persepolis Fortification Archive Project

FACULTY AND STAFF

- D'Ann Condes, Financial Manager  
dcondes@uchicago.edu, 834-9886
- Jennifer Castellanos, Assistant Manager, Suq  
jcastellanos1@uchicago.edu, 702-9509
- Laura D'Alessandro, Head, Conservation Laboratory, Museum  
lada@uchicago.edu, 702-9519
- Margaret De Jong, Senior Artist, Epigraphic Survey  
mdejong98ch@hotmail.com, 702-9524
- Christina Di Cerbo, Epigrapher/Artist, Epigraphic Survey  
tinadicerbo@hotmail.com, 702-9524
- Adam Finefrock, Visitor Services and Security Manager  
ajfinefrock@uchicago.edu, 702-5112
- Michael T. Fisher, GIS and Database Development Specialist  
mtf@uchicago.edu
- Nate Francia, Financial Management Assistant  
nmfrancia@uchicago.edu, 834-0451
- Alejandro Gallego López, Field Director, NMA Project, Afghanistan  
agallegolopez@uchicago.edu
- Susan Geshwender, Volunteer Manager, Public Education  
geshwender@uchicago.edu, 702-1845
- Christian Greco, Epigrapher, Epigraphic Survey  
christian.greco@museoegizio.it
- Moriah Grooms-Garcia, Youth and Family Program Manager, Public Education (until 3/18/2016)
- Samir Guindy, Administrator, Epigraphic Survey  
samsgu1952@hotmail.com
- Lotfi Hassan, Senior Conservator, Epigraphic Survey  
hslotfi@gmail.com, 702-9524
- Catherine Heim, Research Specialist, NMA Project, Kabul
- James B. Heidel, Architect/Artist, Epigraphic Survey  
heidel@uchicago.edu, 702-9524
- Anait Helmholz, Head Librarian, Epigraphic Survey  
anaith@succeed.net
- Frank Helmholz, Stonemason, Epigraphic Survey  
frankhelmholz8@gmail.com, 702-9524
- Richard Jasnow, Epigrapher Consultant, Epigraphic Survey  
rjasnow@jhu.edu, 702-9524
- Hiroko Kariya, Conservator, Epigraphic Survey  
hkariya@aol.com, 702-9524

Catherine Kenyon, Head, Public Education and Outreach (until 8/5/2016)

Jen Kimpton, Epigrapher, Epigraphic Survey  
jkimpton@uchicago.edu, 702-9524

Yarko Kobylecky, Photographer, Epigraphic Survey  
museumphoto@hotmail.com, 702-9524

John A. Larson, Museum Archivist, Museum  
ja-larson@uchicago.edu, 702-9924

Susan Lezon, Photo Archivist and Photographer, Epigraphic Survey  
suelezon@gmail.com, 702-9524

Erik Lindahl, Gallery Preparator, Museum  
lindahl@uchicago.edu, 702-9516

Jill Carlotta Maher, Assistant to the Director, Epigraphic Survey  
jillcarlottamaher@yahoo.com, 702-9524

Samwell Maher, Assistant Administrator, Epigraphic Survey  
samwell.maher@hotmail.com, 702-9524

Leila Makdisi, Youth and Family Program Manager, Public Education (from 5/16/2016)  
lnmakdisi@uchicago.edu, 702-0788

Helen McDonald, Registrar, Museum  
helenmcd@uchicago.edu, 702-9518

Brittany F. Mullins, Associate Director of Development  
bfmullins@uchicago.edu, 702-5062

Jennie Myers, Membership Program Manager (from 6/1/2016)  
jmyers1@uchicago.edu, 834-8950

Carol Ng-He, School & Community Program Manager, Public Education  
cnghe@uchicago.edu, 702-1158

Susan Osgood, Senior Artist, Epigraphic Survey  
sittsu@sover.net, 702-9524

Mariana Perlinac, Assistant to the Director  
oi-administration@uchicago.edu, 834-8098

Conor Power, Structural Engineer, Epigraphic Survey  
conorpower@msn.com, 702-9524

Miller Prosser, Research Database Specialist, OCHRE Data Service  
m-prosser@uchicago.edu, 702-1352

Seth Richardson, Managing Editor, *Journal of Near Eastern Studies*  
seth1@uchicago.edu, 702-9552

Stephanie Rost, Postdoctoral Fellow  
702-7497

FACULTY AND STAFF

Essam El Sayed, Finance Manager, Epigraphic Survey  
essam\_nadosb@yahoo.com, 702-9524

Sandra Schloen, Manager, OCHRE Data Service  
sschloen@uchicago.edu, 702-1352

Julia Schmied, Blockyard and Archives Assistant/Epigrapher, Epigraphic Survey  
julia.schmied@gmail.com, 702-9524

Leslie Schramer, Editor, Publications Office  
leslie@uchicago.edu, 702-5967

Elinor Smith, Photo Archives Registrar, Epigraphic Survey  
elliesmith34@gmail.com, 702-9524

Tracy Tajbl, Director of Development (until 2/15/2016)

Joshua Tulisak, Graphic Design and Preparation Assistant (from 12/1/2015)  
tulisak@uchicago.edu, 702-9516

Thomas G. Urban, Managing Editor, Publications Office  
turban@uchicago.edu, 702-5967

Krisztián Vértés, Artist, Epigraphic Survey  
krisztian.vertes@gmail.com, 702-9524

Amy Weber, Membership Program Manager (until 3/18/2016)

Alison Whyte, Associate Conservator, Museum  
aawhyte@uchicago.edu, 702-5181

Ilona Zsolnay, Postdoctoral Scholar  
izsolnay@uchicago.edu , 702-7497

---





# INFORMATION

The Oriental Institute  
1155 East 58th Street  
Chicago, Illinois 60637 USA

## Museum Gallery Hours:

Tuesday and Thursday to Saturday 10:00 AM–5:00 PM  
Wednesday 10:00 AM–8:00 PM  
Sunday 10:00 AM–5:00 PM

## Telephone Numbers (Area Code 773) and Electronic Addresses

Administrative Office, oi-administration@uchicago.edu, 702-9514  
Archaeology Laboratory, 702-1407  
Assyrian Dictionary Project, 702-9551  
Computer Laboratory, 702-0989  
Conservation Laboratory, 702-9519  
Department of Near Eastern Languages and Civilizations, 702-9512  
Demotic Dictionary Project, 702-9528  
Development Office, 834-9775, oi-development@uchicago.edu  
Director's Office, 834-8098  
Epigraphic Survey, 702-9524  
Facsimile, 702-9853  
Hittite Dictionary Project, 702-9543  
Journal of Near Eastern Studies, 702-9592  
Membership Office, oi-membership@uchicago.edu, 702-9513  
Museum Archives, 702-9520  
Museum Information, 702-9520  
Museum Office, oi-museum@uchicago.edu, 702-9520  
Museum Registration, 702-9518  
Public Education, oi-education@uchicago.edu, 702-9507  
Publications Editorial Office, oi-publications@uchicago.edu, 702-5967  
Research Archives, 702-9537  
Security, 702-9522  
Suq Gift and Book Shop, 702-9510  
Suq Office, 702-9509  
Volunteer Guides, 702-1845

---

World-Wide Web Address

<http://oi.uchicago.edu>

---

