INTEGRATED DATABASE PROJECT

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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.
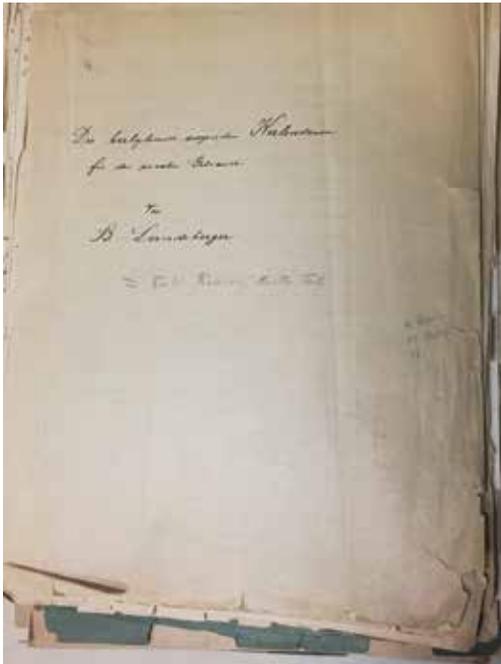

Figure 1. Title page of Benno Landsberger's handwritten thesis in the Archives

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). 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

Click the image to view full size

Classification/Broad: Sculpture

Classification/Specific: Statue, Human

Material/Broad: Stone or Rock

Material/Specific: Quartzite

Measurements: 5257 H mm, 5447 kg

Description: Tutankhamen, 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

Slide 1 of 52

D. 19245

View Photo Archive record.

— View References

1. Teeter, Emily. *Ancient Egypt: Treasures from the Collection of the Oriental Institute.* Oriental Institute Museum Publications 23. Chicago: Oriental Institute of the University of Chicago, 2003.
   See: pp. 52-54. View Entry

2. Teeter, Emily. "Update on the Egyptian Gallery." *The Oriental Institute News and Notes* 159 (1998): 17-21.
   See: pp. 17-18. View Entry

3. Wilson, Karen L. *The Oriental Institute Museum: Highlights from the Collection.* Chicago: Oriental Institute of the University of Chicago, 1989.
   See: p. 8. View Entry

4. Murnane, William J. *Colossal Statue of Tutankhamun from West Thebes.* Oriental Institute Museum Featured Object 5. Chicago: Oriental Institute Museum Education Office, 1986.
   See: pp. 1-4. View Entry

5. *The Oriental Institute of the University of Chicago: Handbook and Museum Guide.* 1941. Chicago: University of Chicago Press, 1941.
   See: p. 18. View Entry

6. Holscher, Uvo. *The Temples of the Eighteenth Dynasty.* Oriental Institute Publications 41. Chicago: Oriental Institute of the University of Chicago, 1939.
   See: p. 104, fig. 87, pls. 45A-B, 46B, 47A-B. View Entry

Figure 3. Museum collection record for OIM E14088 showing attached bibliography

Return to Search Results

Type:	Journal Volume Article
Authors:	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 Stacks
Call Number:	J/SAK/38
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	View Entry
2.		FRAGMENT, USED AS MAGIC BRICK Registration Number: E 6330 B	View Entry
3.		Rectangular, heiratic inscription on two sides. Used as magic brick Registration Number: E 6330 A	View Entry
4.		Base only, rectangular, feet of statuette left. Used as magic brick Registration Number: E 6785	View Entry
5.		Rectangular, broken. Used as magic brick Registration Number: E 6798	View Entry
6.		Rectangular, name of Pa-Her[ib]-Mer. Used as magic brick Registration Number: E 6780	View Entry
7.		Base only, rectangular, center hollowed out, with inscription around. Used as magic brick Registration Number: E 6786	View Entry
8.		Rectangular, hieratic text in ink associated with "northern brick inscription.", for Wasir Nes-Ka-Shuti Registration Number: E 6776	View Entry
9.		Rectangular, hieratic text ink associated with "southern brick inscription.", for Wasir, Nes-Ka-Shuti, hole through center Registration Number: E 6777	View Entry
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	View Entry

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 Stacks
Call Number:	S/SAOC54
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

— View Reviews of this Publication

1. Kákosy, 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

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

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