

## DIYALA PROJECT

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While the present report on the Diyala Project will be one of the shortest that I have ever written, it contains the one line that I had hoped to write for years: the Diyala database went live in March!

<http://dialaproject.uchicago.edu>

There has been no fanfare. To anyone who has ever worked on a database project this may not be surprising. Sending a book manuscript off to the publishers is a rite of passage — it's out of one's hands, and there is an element of finality to it. With a database, work is never really finished. This is both a good and a bad thing. It is great to be able to fix mistakes, and to add new results, but this asset can also become a burden. The fact that a database is dynamic raises expectations, and we will have to live up to those.

It's been a long road since 1992, when McGuire Gibson first initiated the Diyala Project. I have, in previous reports, described the evolution of what originally was conceived as a book manuscript to a Web-based database. What seemed to be nothing more than a switch in media for data delivery ultimately impacted the nature and purpose of the project. Originally, we had planned a publication of the "miscellaneous finds" from the Diyala expedition, already in itself a formidable task. The size and comprehensiveness of these excavations, undertaken between 1930 and 1938 at the sites of Tell Agrab, Tell Asmar, Ishchali, and Khafaje, had provided the chronological backbone for much of Mesopotamia's early archaeological history. Between 1938 and 1988 nine volumes — five on architecture and four on key artifacts (sculpture, seals, pottery) — were published. Some 15,000 artifacts, however, remained unpublished. Once we had collected object descriptions from field registers and object cards and started to enter them into a database it became apparent that a separation of "published" versus "unpublished" artifacts would be unsystematic and counterproductive. Over the years the "Diyala Miscellaneous Objects Database Project," supported by a National Endowment for the Humanities (NEH) grant between 1995 and 1999, morphed into the Diyala Project, becoming a repository for all data pertaining to Diyala artifacts.

The scope of the project was once more widened in 2004. The limitations of transferring records systematically from an excavator's notebook into a database field had become all too apparent. Object descriptions could be verified and, if the object was available for examination, could even be improved upon. Such an option, however, did not exist for archaeological contexts. Here the very meticulousness of excavators would become a curse: Thorkild Jacobsen, the expedition's field epigrapher who also spent much time in the field as an excavator, took great pain in describing a tablet's findspot in relation to certain features: e.g., "Locus X ... found 2 meter SSE of the drain opening, 10 cm above pavement." That is a fairly detailed description that can be mapped out with some dedication, but how can it be entered into a database in a meaningful way? Other excavators, such as the German archaeologist Conrad Preusser (who worked on the Temple Oval at Khafaje in 1930/31), offered very detailed sketches in the object registers, detailing not only the context in which an artifact

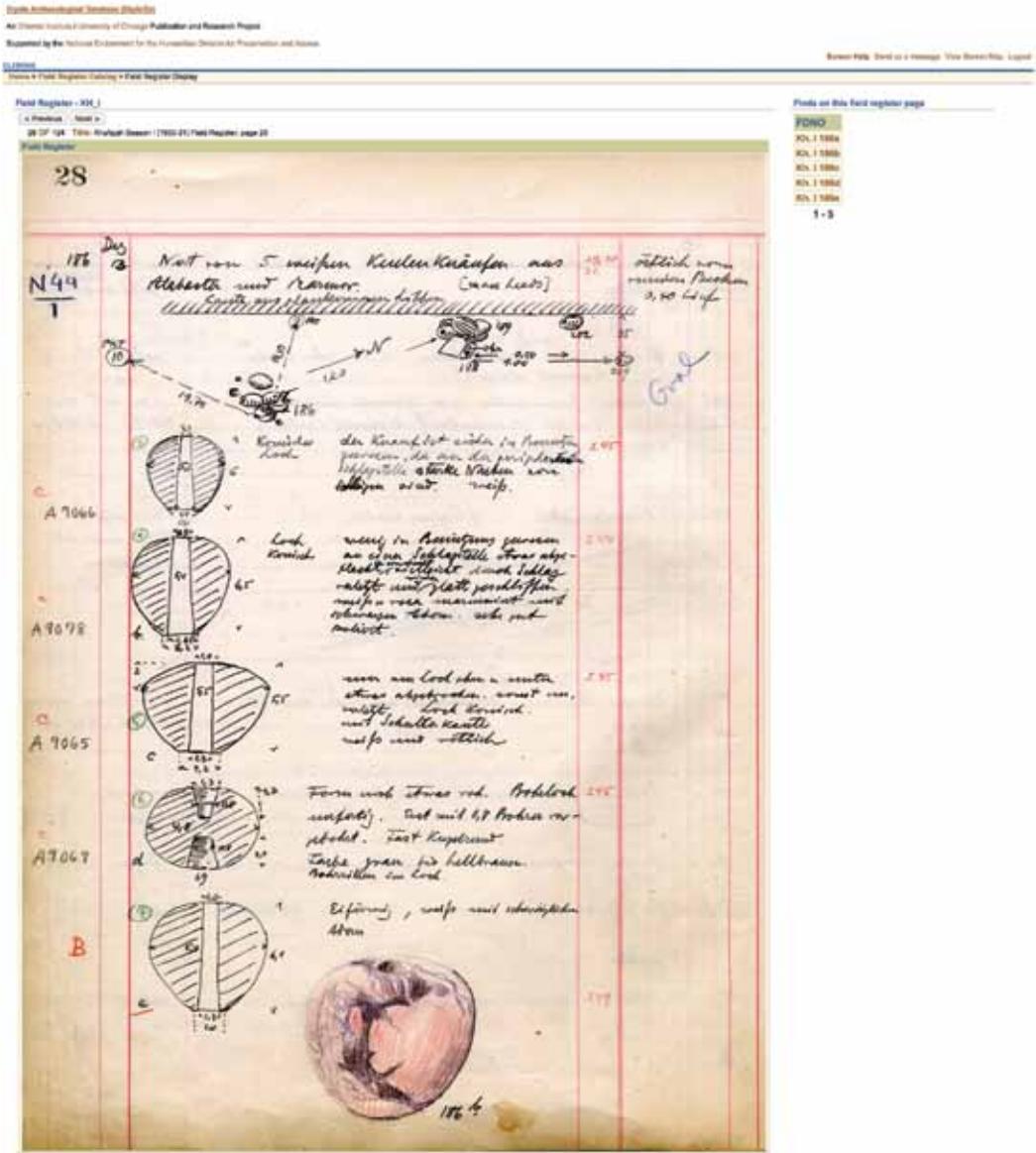


Figure 1. Document page showing entries from the 1930/31 Khafaje field register (kept by Conrad Preusser, in German). The menu in the top right corner provides links to the database entries for these artifacts

was found but also its relationship to other artifacts (fig. 1). Once more, such information is very useful, but it cannot be verbalized. What good, then, is a database if it does not save the user from accessing the original paper record?

The answer, of course, was found in a large-scale digitization of all field records from the expedition. This effort, which was supported by two NEH grants (2004–2006; 2007–2009), allowed us to build the links between a narrative or a depiction on paper and a searchable, systematic data entry. In the past I have described the challenges that we faced in accomplishing this task: thousands of locus and object cards, notebooks, and field negatives were scanned. Items that were too large or too brittle to be scanned were photographed with a digital SLR.

Maps and plans had to be processed through the sheet scanner owned by the CAMEL lab. We encountered problems with data storage, switched from external hard drives to DVDs and finally back to hard drives as their prices came own and their storage capacity increased. I remain deeply grateful to the heroes of these days — Karen Terras, Robert Wagner, and Betsy Kremers — who devoted so much of their time to the successful completion of this task.

In the meantime George Sundell, aided by me and by Mike Fisher, our student assistant who increasingly became the jack-of-all-trades for the Diyala Project, continued to build the database. My departure from Chicago in December 2008 created numerous challenges in this respect. I readily admit that, facing new tasks at the University of Toronto and the Royal Ontario Museum, the Diyala Project did not always receive the attention that it deserved. Luckily, George and Mike stepped up to the plate and have very much worked on their own for the past three years.

Our date to switch the database live roughly coincided with Mike Fisher's departure from the project to join the Oriental Institute's Afghanistan project in May 2012 (see separate report), but Mike remains a correspondent and contributor inasmuch as his busy schedule allows for that. In June we also saw the departure of Angela Altenhofen, who had been drawing many of the sealings from Tell Asmar since 2008. I remain deeply grateful to both of them for their dedicated work and wish them the best for their future careers.

Back to the present: what can the database actually do at this point? Once a user enters the site (fig. 2), its home screen (fig. 3) will provide him with a number of choices: an object or groups of objects can be looked up by searching its find number entries, site subdivisions (site, area, level, locus), materials, or by keywords. Individual record screens (fig. 4) provide the core data for each object — its provenience, material(s), dimensions, description, archaeological periodization, photographs, drawings, and links to field records (object catalogs, notebooks). For information on specific archaeological site subdivisions — an area, level, or locus — a separate menu is provided on the home screen. While much of the archival material

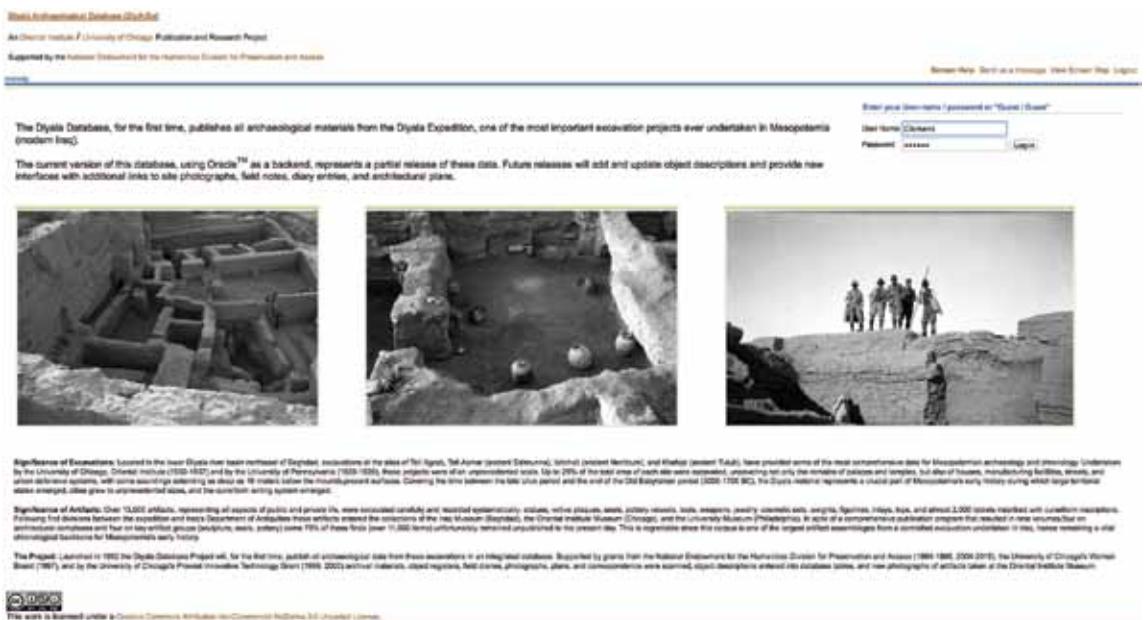


Figure 2. Diyala database entry screen

DIYALA PROJECT

**Diyala Archaeological Database (DiyArDa)**

An Oriental Institute / University of Chicago Publication and Research Project

Supported by the National Endowment for the Humanities Division for Preservation and Access

[Screen Help](#) [Send us a message](#) [View Screen Map](#) [Logout](#)

CLEMENS  
Home

**Search/Browse Object Database by**

- Find Number Elements (sils, season, infix code)
- Archaeological Find Set (Graves, Hoards etc.)
- Site Subdivisions
- Materials
- Keywords
- Selectable Data Filters

**Archaeological Site Subdivisions**

- View Locus Information
- View Area/Level Information
- View Period Information

**Background Information**

- Frequently Asked Questions (FAQs)
- Diyala Project Proposals and Reports

**Other**

- Content Administration Portal

**Documents**

- Field Registers
- Field Diaries and Day Books
- Object Card Catalog
- Locus Card Catalog
- Object Typologies

**Photographs**

- Digital Image Catalog
- Photograph Negative Catalog

**Plans**

- Published Plans and Maps Catalog
- Field Plans and Maps Catalog

**Publications**

- Diyala-Related Oriental Institute Primary Publications Catalog
- Diyala-Related Oriental Institute Other Publications Catalog
- Diyala-Related Non-Oriental Institute Publications Catalog

**Announcements**

1. 14Mar2012: A new release of the Diyala Application has been installed. For details of the changes, refer to the release information under Background Information/FAQs.
2. The Diyala Application will be unavailable Sundays from 7AM to 11AM (Central US Time) (GMT-6) so that maintenance may be performed.



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Figure 3. Diyala database home screen, providing search and browse options to a user

The screenshot displays a detailed record for an object. At the top, it includes navigation links like 'Home', 'Screen Help', 'Send us a message', 'View Screen Map', and 'Logout'. The main content is organized into several panels:

- Registration Information:** Shows 'AA 02202', '10-Jun-1994', and '03/12/12'.
- Descriptive Keywords:** Lists 'Stone 1', 'Stone 2', 'Stone 3', 'Type', 'Subtype', 'Design Type', 'Material', 'Period', 'Style', and 'Infix'.
- Physical Description:** Includes 'Category', 'Material' (Stone), 'Height' (10.8 cm), 'Thickness' (3.0 cm), and 'Width' (8.3 cm).
- Archaeological Period Information:** Lists 'PERIOD', 'ASSOC/AUTH', and 'ROMANCE' with various sub-categories like 'Early Dynastic' and 'Diyala Project'.
- Object Provenience Information:** Shows 'Site', 'Area', 'Level', 'Locus', and 'Locus Group'.
- Provenience Source Information:** Lists 'Field No.', 'Field Record', and 'Published Record'.
- Thumbnail / View Images:** Displays a 3D model of a stone object.
- Relationships:** Shows 'Predecessor Register' and 'Field Register'.
- Citation Information:** Lists 'Citation List' and various 'DOI' (Digital Object Identifier) numbers.

Figure 4. Example of an individual record screen in the database

is already interlinked with the object database and site subdivisions on a page-by-page level, the user can also browse through complete documents, such as field diaries, field registers, and notebooks.

There is no point in denying the fact that much work remains to be done. We continue to improve the database interface, and actively are soliciting feedback not only on the database content, but also on its layout (in order to facilitate this, every screen has a “send us a message” option in the top right edge). It is one thing for us to use this database, but what about outside users? One item that is high on my personal wishlist is a map interface with embedded hyperlinks: clicking on a locus number will provide lists of artifacts found in it, photographs taken in the field, and show all written records for this context. In addition to that, many of the field diaries remain to be indexed for keywords, and objects need to be categorized further or have their descriptions cleaned up.

With Mike Fisher’s departure and me being in Toronto, organizing future steps has been a bit of a challenge. Being offsite, at a different university, however, provides new options. Among my colleagues and students here in Toronto I have found great interest in the Diyala materials, and two of my PhD students already have signed up as volunteers. I have just been informed by the University of Toronto that funding has been approved for a work study student to work on the Diyala materials. While the Diyala Project will always have its home at the Oriental Institute, our efforts to study it can be globalized. In this respect I have received much encouragement here in Toronto: both the Department of Near and Middle Eastern Civilizations and the Royal Ontario Museum have pledged logistical support in these endeavors.

I would like to thank the Oriental Institute for their continued support of this project, notably for having funded Mike Fisher’s and Angela Altenhofen’s salaries over the past two years. My most sincere thanks, however, have to go to George Sundell for his dedication, patience, and for his willingness to hold the fortress and take on tasks that go way beyond the scope of a database architect.

An online database of all the Diyala materials may not have been Henri Frankfort’s vision some seventy-five years ago when he completed his fieldwork in the Diyala region. Being a visionary that did not shy away from trying out new approaches it remains our hope that he would approve of our work.

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