White Paper Report

Report ID: 98516
Application Number: HD5082109
Project Director: Nada Shabout (Nada.Shabout@unt.edu)
Institution: Alexandria Archive Institute
Reporting Period: 9/1/2009-11/30/2010
Report Due: 2/28/2011
Date Submitted: 3/2/2011
The Modern Art Iraq Archive (MAIA):
Web tools for Documenting, Sharing and Enriching Iraqi Artistic Expressions

White paper to the NEH Office of Digital Humanities
Digital Humanities Start-Up Grant, Level II
Grant #: HD-50821-09
9/1/2009 – 11/30/2010
February 28, 2011

Nada Shabout1
University of North Texas
nada.shabout@unt.edu

Saleem Al-Bahloly2
UC Berkeley
saleemha@berkeley.edu

Sarah Whitcher Kansa3
Alexandria Archive Institute
skansa@alexandriaarchive.org

Eric C. Kansa4
Alexandria Archive Institute
kansaeric@gmail.com

Abstract

MAIA (the Modern Art Iraq Archive; http://artiraq.org/maia) is a participatory content-management system to share, trace and enable community enrichment of the modern art heritage of Iraq. MAIA’s focus is thousands of works of art, many of them now lost, from the Iraqi Museum of Modern Art in Baghdad. MAIA is unique in that it not only documents the lost artworks, but also provides tools for community enhancement of those works, allowing contribution of stories, knowledge and documentation to the system, as well as syndication of the content elsewhere on the Web.

MAIA, which was built with open source collection management software from Omeka, features a comprehensive virtual archive of the works from the Museum’s various galleries, including a database of images and information about the objects in English and Arabic. These significant national treasures are displayed in an open format that invites participation from users worldwide, including the Iraqi national and expatriate communities, and users are encouraged to help identify and understand individual pieces. MAIA provides a valuable research tool for scholars, students, law enforcement officials, and the general public, and most importantly Iraqis, as the works of art form an important expression of the Iraqi national experience.

---

1 Project Director
2 Collections Researcher
3 Project Manager
4 Technology Consultant

This work is licensed under the Creative Commons Attribution 3.0 Unported License.
To view a copy of this license, visit http://creativecommons.org/licenses/by/3.0/
1. INTRODUCTION

The Modern Art Iraq Archive (MAIA), located at http://artiraq.org/maia/, is the result of a long-term effort to document and preserve the modern artistic works from the Iraqi Museum of Modern Art in Baghdad, most of whose holdings were lost and damaged in the fires and looting during the aftermath of the 2003 US invasion of Iraq.

Efforts to document the lost art began in 2003 with Phase 1 of the project, when Project Director Nada Shabout undertook intensive research and interviews with artists, museum personnel, and art gallery owners. 5 Phase 2 of the project began in September 2009, with the development of MAIA, a comprehensive virtual archive of the information Shabout collected about the works in Museum’s various galleries.

MAIA displays these significant national treasures in an open forum that invites worldwide use. Arabic translation helps bring these collections to the Iraqi national and expatriate communities. User contribution tools encourage users to help identify and understand individual pieces.

This project helps fill an important documentation void; a void that has, thus far, hampered efforts to recover Iraq’s modern heritage. The lack of archives and other documentation for the Iraqi Museum of Modern Art has made it difficult for authorities, including Interpol, to track the stolen works. Unless concise and full information and images are provided, Interpol cannot add the items to its database of stolen works of art published on their website. As a result, many valuable visual records will disappear into the art market. Thus, this public inventory of modern Iraqi art, developed and curated by experts, has more than academic significance. MAIA will act as a reminder of the cultural value of this art and this will hopefully hasten the return of lost works. Furthermore, public inventory and documentation of these words can create obstacles to smuggling or selling them on the art market.

5 The first phase of collecting data was supported by two fellowships from The American Academic Research Institute in Iraq (TAARII).

This report details activities and accomplishments over the course of the project, from September 2009 to November 2010.

2. PROJECT GOALS & ACTIVITIES

2.1 Goals

The MAIA collection aims to document the full museum collection of 8,000 modern Iraqi paintings, sculptures, drawings and photography, dating from late 19th century until April 2003, 5000 of which remain lost. Currently, MAIA holds over 700 works by more than 100 artists. Each item includes an image and a description of the work and any information about its whereabouts, in English and Arabic. In addition to the works of art, MAIA has a collection of exhibit catalogs, brochures, newspaper announcements, and other textual materials pertaining to the modern art of Iraq. Following the decimation of the National Library in Baghdad during the American invasion of 2003, and the general wasting of Iraq that followed, these textual materials are exceedingly rare. Including this documentary archive in MAIA helps to preserve and share the discursive and historiographic context of MAIA’s collection of art.

The project goal, which we have achieved, was to create a bilingual, authoritative online resource that is easy to use but that contains a breadth and depth of content to provide a sound foundation for the addition of other works and documentation. This content is documented according to widely-used standards (i.e. Dublin Core metadata) and also makes machine-readable data available so that it can be easily discovered and integrated with content and applications elsewhere on the Web. The collection offers users a variety of ways to explore the content, from basic and advanced searches, to guided exploration (by artists, textual resources, and medium type), to simply viewing all items in the archive.

2.2 Implementation

MAIA employs extant tools provided by Omeka (http://omeka.org), a project of the Center for History and New Media at George Mason University. Omeka is a free, open source web-publishing platform for the display of scholarly collections. Given the budgetary constraints of our project, Omeka was a sensible solution to achieve
the functionality we needed without the high development costs. Omeka offers a suite of templates, a gallery of examples, and guidance to help users design a site that meets their content-management and sharing needs. Omeka also offer a selection of add-ons to help users further customize their site. Since one of our priorities was encouraging community participation, Omeka’s “Web 2.0”-style add-ons, such as the contribute form and image annotation tool, were appealing.

The other system that we chose to use elements from to build the MAIA system on is Open Context. Open Context ([http://opencontext.org](http://opencontext.org)) is a web-based, open access data publication system that supports enhanced sharing of museum collections and field research data by enabling researchers and cultural heritage collections managers to publish their primary field data, notes and media (images, maps, drawings, videos) on the Web. It is free and uses open source software built on common open source technologies (Apache-Solr, MySQL, PHP, and Dojo Ajax) widely accessible and supported by a vast, global developer community. We are experimenting with integrating Open Context’s faceted navigation feature into the MAIA Omeka site. The faceted browse tool provides a much more informed overview of a collection, showing fields associated with content even for custom metadata, allowing exploration beyond simple searches.

We have successfully integrated Open Context faceted navigation in another Omeka site, BoneCommons6, thus achieving our original proposal’s stated software development goals. However, in the end we chose not to deploy faceted search in MAIA because most of the works in MAIA lacked the kind of documentation needed to create metadata suitable for faceted navigation. Although faceted search is not required at this stage, we see it as a useful feature for future development. As MAIA’s collections continue to grow following the period of this NEH start-up grant, we may choose to integrate faceted search powered by Open Context.

Thus, this NEH start-up grant provided a foundation for future growth. For MAIA, we successfully deployed and customized Omeka so that the MAIA collection is well-poised to grow and expand. Omeka offers a user-friendly platform for building, customizing and organizing the MAIA collection, as well as allowing options for contributions and comments from the community. We also have readily at hand search functionality powered by Open Context’s faceted search tool, which has already been demonstrated successfully in another Omeka-based site. As the MAIA collection continues to expand and as metadata documentation continues to improve, we are poised to enable this faceted navigation tool, as needed.

### 2.3 Activities

NEH funds supported Phase 2 of the project, creating an open, online system for organizing and sharing the works of art and information about them collected by Project Director Nada Shabout during Phase 1. Phase 2 activities included:

- Build a content management system based on Omeka that offers clear documentation of the works and has the required attributes to most effectively facilitate community contribution to the content.
- Upload and organize all content collected and digitized during Phase 1. This includes digital images and scanned printed materials.
- Customize the MAIA interface with Arabic language capability.
- Globally disseminate the collected information to encourage addition of public knowledge of the lost works.
- Update system based on user feedback.
- Present MAIA to the digital humanities community via conference presentations and publications.

### 2.4 Changes to the Project

The following beneficial changes to the project plan occurred early on in the project and were reported in the interim report (March 31, 2010):

1. **Project Name Change:** To reflect the fact that project content will be archived with the California Digital Library, we changed the project name to include the word “archive” the previous name had been the Open Modern Art Collection of Iraq). The project is now called the Modern Art Iraq Archive (MAIA).

2. **Additional content:** In addition to the c. 600 assets originally included in this project, we

---

6 See example: [http://www.alexandriaarchive.org/bonecommons/datasets](http://www.alexandriaarchive.org/bonecommons/datasets)
have added numerous collections of related works, such as newspaper articles and sketchbooks) related to the artists. This is the work of Saleem al-Bahloly, a graduate student at UC Berkeley who became involved with the project in mid-2009 before we received funding for Phase 2. We also have six CD containing videos of the galleries and works of art in place at the Museum of Modern Art before it was destroyed. Prof. Shabout is obtaining permission to make these videos available in the system. Though low-resolution, these videos will prove invaluable in determining the original location and layout of the works before the museum’s destruction.

3. ACCOMPLISHMENTS

3.1 Overview

While the MAIA system can stand alone as an archive documenting the modern art of Iraq, it has a potential for impact beyond the site itself. We have designed the system to contain features for research and educational use, including multiple languages, licenses, and citation. But we have also added tools for users to contribute to the archive, to further document and enrich the content.

In order to reach as many viewers and contributors as possible, the MAIA system has a simple, intuitive interface, centered on the works of art and the artists. All static content in the system is translated into Arabic. Annotation and contribution features are also available in multiple languages. MAIA generates unique URLs and citations for every item and expresses bibliographic metadata in a format that Zotero (http://zotero.org), a free and open source bibliographic management tool, can recognize.

To date, over 700 items (including their descriptions and metadata) have been uploaded to the system. These items are of extreme value to the cultural heritage of Iraq and for the first time will be accessible to the public. Arabic translations have been added to the content (artist, title, source, and description). We have installed all of the necessary plug-ins for individual contributions (uploads of photos, videos, stories), tagging, and comments. We have tested the plug-ins for various types of user contributions in order to determine the appearance and work flow. In some cases, the plug-ins had to be modified in order to improve the work flow. For instance, we added an email alert to the site administrator every time a new item is added using the “Contribute” function.

3.2 Copyright

The MAIA project’s student technology developer, Mohit Gupta, worked closely with Omeka over the course of the project to develop new features that will benefit other Omeka projects. Gupta has already developed a Creative Commons license chooser, which allows individual Creative Commons licenses to be selected per item (rather than a blanket Creative Commons license for the whole project, as was previously the case). This is relevant to the MAIA project because many of the artistic works in the MAIA collection will require the Attribution, Noncommercial, Share-alike license, while others will only require Attribution. The new Creative Commons Chooser add-on allows flexibility in the way that each item can be shared and reused.7

3.3 Shared Resources

Two of the partners on this project, the Alexandria Archive Institute and UC Berkeley School of Information, are also taking part in an NEH/IMLS-funded study of user experience around archaeological data sharing. In order to explore the diverse needs of the producers and users of digital research content, they are working with individuals from different areas of archaeology and cultural heritage management. Three of the participants on that study have decided to use the same joint Omeka / Open Context tools that MAIA is using to create a system to share subject-specific content. The experiences of these three projects continue to inform the MAIA project (and vice versa).

3.4 Archival Services

Since this project’s inception, we have secured digital archiving services from the California Digital Library (CDL). This is made possible through an agreement between CDL and Eric Kansa (School of Information, UC Berkeley), technology consultant on this project, to archive all Open Context content. Because MAIA content will be indexed by Open

Context (via the faceted browse tool), MAIA can be archived in the CDL. The CDL is currently developing and testing a suite of “micro-services” for archiving, and Open Context is involved as a beta-tester. Through Open Context MAIA project content will then enter into the CDL’s preservation system where it will see active curation overseen by leaders in digital archiving.

3.5 Community Input Tools
A key component of this project is community input. Contribution tools provided by Omeka allow anyone to enrich MAIA content and help build a memory of the lost works of art. Related to this is image annotation, another plugin offered by Omeka. MAIA users might know a person depicted in a portrait, or the location of a landscape. The image annotation tool allows them to highlight a certain part of the image and write a comment related to it. These tools add more metadata to the works, helping to document and possibly save them. Though we are experimenting with these Web 2.0 tools, we do not anticipate mass uptake of annotations or tagging. However, we are hoping they will be useful to the scholarly community, where there is an interested researcher community that might come together to work on a specific research outcome. We want the option to be available and the public to know they are welcome to comment or add knowledge around these works.

3.6 Future Developments: Faceted Browsing and Feeding Content
Open-ended exploration can be very frustrating for users when an archive is large or unfamiliar. It is often hard to understand what the archive contains. In this context key word searches can be frustrating “type and hope” experiences of trying to find search terms that work within a collection. Interfaces that enhance user experience and facilitate navigation are an important component to success. A faceted navigation tool developed by Open Context offers an intuitive way to navigate large collections organized by complex metadata systems through a simple tree structure that allows for informed discovery. As users explore the system, they see information about the nature and size of the collection they are exploring, thus making “point and click” faceted navigation far more effective at information retrieval than “type and hope” key-word searches.

As discussed, we decided not to integrate faceted search into the current MAIA system, even though we have successfully deployed faceted search on another Omeka site, BoneCommons. Faceted search requires rich and highly structured metadata to work well, and thus far, many of the art items in MAIA lack such elaborate documentation. However, as MAIA continues to grow beyond the term of this current startup grant, we expect its collections and documentation to expand to a sufficient complexity to merit the use of faceted navigation.

When this feature is added, Open Context will “crawl” feeds from MAIA to obtain structured XML or JSON data from the Omeka site. Then Open Context will index these metadata descriptions. MAIA will use of Open Context’s powerful API and Web services8 to obtain facet counts from Open Context to enable faceted search across Dublin Core metadata and Omeka-specific metadata, including collections and user generated tags. By using Web services, we can power faceted search on Omeka sites without requiring developers of these Omeka sites to deploy complex and difficult to configure applications like Apache Solr. In this way, Open Context can act as a common search engine, where its API can power faceted search across multiple Omeka sites. This approach keeps with Omeka’s objectives of offering a simple and easy to deploy collections management system. One of the reasons for Omeka’s success is that it is so easy to set up, even in shared hosting environments common in humanities computing. To keep requirements on Omeka to a minimum, we are doing the computationally-demanding faceted search with Open Context, and bringing this capability to Omeka sites using simple Web services and APIs. Eventually, this integration could become a faceted browse “add on” for Omeka.

4. AUDIENCE, UPTAKE, AND CHALLENGES

4.1 Audience
MAIA will not only help raise awareness of this vital part of Iraqi cultural heritage, but it will also provide an opportunity for scholars, students, and the public to document and enrich the works of art. MAIA is not intended to be a place for passive

---

8 See documentation at: http://opencontext.org/about/services
exploration, but rather a site that encourages commentary that will help further document and, ideally, trace the works. To be clear, however, we anticipate that this will see more use for research and educational purposes, and awareness-building among professionals interested in monitoring Iraqi cultural heritage. The success of the system will not rely on input from outsiders. Rather, the system will stand on its own, but will welcome input from users.

4.2 Evaluation, Uptake and Use

We can judge from the level of interest expressed by the Iraqi artists’ community, graduate students around the world working on Iraqi art, the Iraqi Embassy, and the Iraqi Cultural Center in Washington D.C., among others, that the site will be an important research element and source of primary information on Iraq’s modern art. Publicity about the MAIA system will occur via news articles, listserv announcements, and publications (see “Grant Products,” below), many venues already familiar with Project Director Nada Shabout’s work. This publicity will raise awareness of the new accessibility of the works of art and the tools available for their enrichment.

All content in the MAIA system is openly available on the Web. Exposure of the content to search engines facilitates its discovery by users worldwide. In addition, Omeka provides RSS feeds enabling syndication of content. RSS feeds are a simple and widely used form of Web services. These expose some “machine readable” data that other software can use to aggregate or render in alternative interfaces and visualizations. In other words, feeds can be useful to promote mashups, especially because feeds are already so widely supported by commercial aggregation services and open source software libraries.

Though we have not tracked use of MAIA specifically (since it only just became public at the time of this writing), we have learned about how Omeka draws users to its content based on our work with BoneCommons, another instance of Omeka serving the zooarchaeology community. A study of three months of searches leading to BoneCommons content indicated that half the searches were seeking people and products (in the case of BoneCommons, these “products” were pdfs of publications). The other half of searches over the 3-month period were for a variety of terms that did not fall in obvious categories. Because Omeka exposes content to web searches, these thousands of “unclassifiable” terms led serendipitously to BoneCommons. We expect the same kind of discovery with MAIA, where many users will know about the site and will seek works by specific artists, and many others will simply type a term into a search engine and be directed to relevant information in MAIA.

4.3 Challenges

4.3.1 Working with extant tools

“Out of the box” tools such as those provided by Omeka promise to transform collections development in the humanities. However, such tools seldom meet the full suite of needs for the producers and the users of content-sharing sites. While the “plain vanilla” Omeka offers an excellent start, additional customization and programming help is usually needed to adapt a system to the specific requirements of a given collection. In other words, while Omeka offers an excellent starting point that meets 90% of the needs in developing a new online collection, users may still need software development expertise to customize Omeka to meet needs specific to a given collection.

The tools offered by Omeka met the vast majority of our goals for the MAIA system:

- Administrative interface is easy to use for non-specialists
- Intuitive interface offers a variety of ways to explore the content
- Bilingual
- Breadth and depth of content
- Offers simple tools for user contributions
- Employs widely-used standards (Dublin Core metadata)
- Makes machine-readable data available so that it can be easily discovered and integrated with content and applications elsewhere on the Web

We encountered stumbling blocks in a few areas:

1. Though the Contribution form was easy to install, it required some modification to meet the needs of the MAIA project. Our developer added the following: (1) an email alert to the
moderator when a contribution is made; (2) a reCAPTCHA box to authenticate contributors and avoid spam.

2. The list of items and list of collections is not user-friendly. The content needs to be ordered into Exhibits, Simple Pages, or Collections that draw out groupings. This takes some expertise and redesign that requires both a time commitment and knowledge of interface design.

3. Exhibits are not easy to build and, depending on the theme, can require some additional coding.

4. The Contribution form does not allow upload of more than one image, frustrating contributors who want to share multiple images of an item.

| Table 1: Omeka plug-ins used for MAIA |
|---------------------------|---------------------------------|--------------------------|
| **Plug-In Name**          | **Function**                     | **Comments**             |
| COinS                    | Adds COinS metadata to various item pages, making them Zotero readable. | Functions well, though additional coding was required to add multiple authors (see BoneCommons) |
| Contribution             | Allows collecting items from visitors | Easy to install, but required revised coding to make appropriate to MAIA needs (see Point 1, above) |
| Creative Commons Chooser | Adds a Creative Commons License to the admin interface and extends Omeka items to be associated with individual CC licenses. | This plug-in was created for Omeka by our project’s developer, Mohit Gupta (with the Alexandria Archive Institute, African Commons, and the UC Berkeley School of Information, Information and Service Design Program) |
| Dropbox                  | Allows Omeka users to ‘batch upload’ a large quantity of files at one time, creating unique items in the archive for each file. | Extremely useful for dealing with batch uploads as well as large files that cannot be uploaded through the administrative view |
| Image Annotation         | Allows users to annotate images. | Functions well |
| Simple Pages             | Allows administrators to create simple web pages for their public site. | Feature is very easy to use, particularly if the creator has some knowledge of html |

5. Arabic text is not yet searchable and not machine-readable. It is still difficult to make Omeka truly internationalized so that full text and advance search functions work well with Arabic language documentation and metadata.

The first three points we were able to ameliorate with additional coding. Points 4 and 5 are the top two features that we have indicated to Omeka that we would like to see developed.

4.3.2 Identifying developers

An area where we found an unexpected challenge was in working with student programmers, who struggled to find time to dedicate to carrying out the technology developments. Eric Kansa, this project’s technology consultant, had to undertake more of the technology development than we anticipated. The eComma project and the Open Context project have faced similar challenges. On a shoestring budget, in particular, it becomes very difficult to get the work done. Omeka is trailblazing by creating a system that is relatively easy to use by someone with little coding experience, but in order to meet all the needs of a project, it still requires someone with programming expertise. This usually means that non-technology-savvy project managers must look outside their discipline to find skilled programmers. There is a clear need for more training of humanists in computing and computer scientists in humanities.

5. CONTINUATION OF THE PROJECT

- **Additional content:** The current MAIA system provides the essential framework for building a large collection of related materials. In addition to newly digitized materials and comments/stories being added by the global user community, we also have immediate plans to add images and metadata from other extant digital collections, such as al-Hidatha, which contains works from the Modernism and Iraq exhibit at Columbia University.9
- **Broadcasting:** Periodic updates about the MAIA project will be broadcast via email lists, blogs, http://www.nhm.gov/ODH/Default.aspx?tabid=111&id=42

---

9 http://www.learn.columbia.edu/modernism_iraq/
10 The al-Hidatha digital collection was based on the exhibition of Modernism and Iraq at the Wallach Gallery at Columbia. Inclusion of the materials in MAIA will give the collection a permanent home within a growing body of primary sources.
and Twitter to encourage the global community to comment on current items and add new items.

- **Links from external sites:** We will encourage universities, government sites, and related projects to link to MAIA in order to raise MAIA’s search engine page rank to increase exposure on search engines.

- **Design for discovery:** RSS/Atom feeds and exposure to search engines will make the content easier to find serendipitously (i.e. users will not need to know about the site, but will discover it through web searches).

- **Archiving and Stewardship:** The Alexandria Archive Institute currently houses the MAIA system and will continue to oversee the addition of new content. After indexing with Open Context, the material will be accessioned and archived with the California Digital Library.

6. LONG-TERM IMPACTS

- **Education:** A robust, open access source of primary information, the MAIA system will encourage and facilitate studies about Iraqi art and culture globally.

- **Authorities tracking lost art:** MAIA content can also be used by organizations seeking raise awareness of missing art. The open, machine-readable content can be easily fed to other sites and incorporated into digital documentation about Iraq’s missing works of art and antiquities.

- **A Living Resource:** MAIA is not static. It a continually changing resource with input from the global community. Thus, we see the developments during the grant period reported here as a sound foundation upon which will be added many more works of art and further documentation that can only be possible with exposure to a global audience.

7. GRANT PRODUCTS

7.1 Website

The outcome of this grant is the Modern Art Iraq Archive, a free and open source archive of over 700 items related to the modern art of Iraq: http://artiraq.org/maia/. The current MAIA system serves as a well-structured starting point for continuing documentation and investigation of Iraqi artistic works and related content. MAIA is the only site that documents these looted works. A simple interface that allows users to explore by medium (such as “oil on canvas”) will be of use not only to researchers, but also to customs agents and law enforcement officials seeking information on potentially stolen works.

7.2 Conference Presentations

The MAIA system was presented at the Digital Humanities 2010 conference in London, England. The project was one of only 34% of submitted papers selected via an intensive peer-review process for presentation at the conference. The abstract is available in the DH2010 online catalog: http://dh2010.cch.kcl.ac.uk/academic-programme/abstracts/papers/pdf/ab-754.pdf

7.3 Publications and Announcements

- Project participants are currently working on a paper to submit for publication in the International Journal of Contemporary Iraqi Studies or the Review of Middle Eastern Studies.

- The project has also been announced in various venues, such as blogs, Twitter, and web pages, and email lists. Venues include: the Middle Easter Studies Association (MESA) website, the Association for Modern and Contemporary Art from the Arab World, Iran and Turkey (AMCA) website; the AMCA listserv; The College Art Association (CAA) Newsletter; the Contemporary Arab and Muslim Cultural Studies Institute (CAMCSI) website at the University of North Texas (UNT); and Middle East studies and Art History departments at a variety of universities.

- MAIA will also receive exposure through the press. Project Director Nada Shabout has discussed her work on tracing Iraqi art in a series of interviews with print and online news sources over the past eight years. An interview “walk through” of MAIA by Shabout will be aired by Al-Jazeera English in March 2011.

8. CONCLUSIONS

We hope the MAIA collection will provide a valuable research tool for scholars, students, authorities, the general public, and Iraqis as part of their modern heritage. Given the current events in Iraq, there is an increased interest in contemporary
Iraqi culture and its visual expression, yet Western journalists are having difficulties in finding sources of reliable, factual information. Beyond raising awareness of contemporary Iraqi culture and the impacts of war, this site can also create obstacles to illegal sales of these stolen works on the black market.

With continued funding, our longer-term vision for MAIA is that it will become a virtual museum, where visitors will navigate through a map-based interface, exploring galleries and viewing individual works of art, ideally in the place they stood before the museum was damaged and many of the works lost. In this way, the public will have a visual understanding of the number of works still missing or for which no documentation exists. The emotional impact of seeing blank sections of gallery walls is far greater than reading a number or percentage, and will give the public a more profound understanding of the loss of these works of modern Iraqi heritage.

APPENDIX

A. RELEVANT LITERATURE


B. SCREEN SHOTS OF MAIA

Figure 1: Home page of the MAIA site

![Home page of the MAIA site](image1)

Figure 2: A basic search for “mosque” returns four items

![Basic search results](image2)

Figure 3: View of an item, showing fields translated into Arabic and image annotation options

![Item view](image3)
Figure 4: A search by medium lists 331 works of art using “oil on canvas”

C. PUBLIC RESPONSE

Conferences and Workshops

- World Universities Congress; Çanakkale, Turkey; October 20-24, 2010.
- Researcher-Managed Collections Working Group (workshop); Berkeley, CA; February 26-27, 2010. (Hosted by the Alexandria Archive Institute and UC Berkeley School of Information)
  http://ux.opencontext.org/blog/2010/02/researcher-managed-collections-working-group/

Media Coverage and Announcements

- Announcement of Project Funding: Association for Modern and Contemporary Art of the Arab World, Iran and Turkey.
- News: December 8, 2009, University of North Texas: “NEH grant to fund Shabout’s archive project of Iraqi art”
- News: Al-Jazeera English, March 2011

D. PROJECT PARTICIPANTS

Nada Shabout (Project Director) is an Associate Professor of Art History and the Director of the Contemporary Arab and Muslim Studies Institute (CAMCSI) at the University of North Texas. She is the author of Modern Arab Art: Formation of Arab Aesthetics, University of Florida Press, 2007; and co-editor of New Vision: Arab Art in the 21st Century, Thames & Hudson, 2009. She has curated several exhibitions of Arab and Iraqi art and written extensively on the subject. Since 2003, she has been working on the recovery, documentation and digitization of modern Iraqi heritage, particularly the collection previously held at the Iraqi Museum of Modern Art.

Saleem Al-Bahlooly (Researcher), a graduate student in the Anthropology Department at UC Berkeley, has been the lead compiler of digitized text.

Tiffany Floyd (Researcher), a graduate student at the University of North Texas in the Art History MA program, assisted with data entry and description writing for MAIA items.

Ahmed Khalil (Project Translator) is an architect. He has been the lead translator and editor for MAIA.

Sarah Whitcher Kansa (Project Manager) directs the Alexandria Archive Institute (AAI), a non-profit organization whose mission is to help enable projects such as MAIA by providing fund raising, access to developers, digital archiving infrastructure, and guidance on good practices to help extend the reach, reuse, and longevity of digital heritage content.

Francis Debaluwe (Dissemination Coordinator) leads publicity and community-building efforts through blogging, and monitors public use of the MAIA site.

Mohit Gupta (Omeka Developer) was a graduate student at the School of Information at UC Berkeley when he participated on this project.

Eric Kansa (Technology Consultant) is the lead developer for Open Context and provides technical guidance and advice for this project.