WHITE PAPER

“Sharing 7,000 Years of Egyptian Culture with the American Research Center in Egypt’s Open Access Conservation Archives”

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Created By:
Andreas Kostopoulos, Tessa Litecky, Natalya Stanke
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Glossary

**ARCE Homepage:** ARCE’s main website.
**ARCE Conservation Archives website:** The website developed with funding from this NEH Foundations award. There are five collections published with a total of 7,583 records.
**Website tutorials:** Watch project team members showcase the website’s content and provide insights to optimize user experiences.
**Conservation Archives Policies:** These are the policies, developed by the team, which pertain to “Access and Use,” “Privacy,” and “Take-Down.”
**About Us & Collections:** Read ARCE’s general information, updates, and background information about published collections here.
**ARCE’s Google Arts and Culture project page:** This is ARCE’s project page on the Google Arts & Culture platform. Currently, visitors can find 36 online exhibits inspired by ARCE’s Conservation Archives.
**International Digital Ephemera Project (IDEP):** UCLA Library has launched an innovative and forward-looking initiative to capture ephemeral content with global partners. Through this project, UCLA Library endeavors to build international and global collections of knowledge and to preserve historical and cultural records. At present, on this website, UCLA presents collections with content from Armenia, Cuba, Egypt, Iran, Iraq, Israel, and South Africa.
**International Digital Ephemera Project, ARCE’s project page:** This is ARCE’s dedicated project page under IDEP. Currently, there are five collections published with 7,583 digital records.
**International Digital Ephemera Project Toolkit:** The IDEP Toolkit outlines general guidelines for undertaking digitization projects for IDEP partner organizations. The ARCE project team consulted this Toolkit while developing ARCE’s digital publication workflow.
**NEH website:** This is the website for the National Endowment for the Humanities, which sponsored our project.
**United States Aid for International Development (USAID):** The United States Agency for International Development exclusively funded the contents of the ARCE Conservation Archives, totaling 78 conservation projects (or collections).
**United States Department of Education (DoE):** ARCE received a DoE award (P274A200019) in October 2021 to further digitize, describe, and publish online collections from the ARCE Conservation Archives. This is the website of the funding agency.
1. Project Summary

The American Research Center in Egypt (ARCE) is a scholarly institution based in Cairo dedicated to supporting the conservation of Egyptian antiquities, promoting research in all periods of Egyptian history, and strengthening Egyptian-American ties. ARCE possesses a unique archive documenting conservation work conducted at some of the most recognizable historic sites in the world, such as the Valley of the Kings and Karnak Temple, as well as sites from equally important but less-represented eras of Egyptian history. The ARCE Conservation Archives consists of 78 collections on heritage management and conservation work conducted within Egypt from 1994 to 2018 funded solely by the United States Agency for International Development (USAID).

Such projects include Pharaonic, Greco-Roman, Coptic, Islamic, and Jewish sites, which span across Egypt both geographically and historically. The full scope of the collections that comprise the archives represents a vast period from 5,000 BCE to the mid-19th century, encompassing nearly 7,000 years.

Located in our Cairo Center, the ARCE Conservation Archives provides primary source materials including hundreds of thousands of physical and born-digital items: photographs, various formats of photographic slides, technical reports, architectural drawings, maps, epigraphic sketches, and other graphic materials.

Notably, the Conservation Archives includes images from before, during, and after conservation projects, maintaining records of the architectural features of the sites while also documenting various conservation processes. With funding from NEH Humanities Collections and Reference Resources Foundations Grant, the project team digitized, described, and published three conservation collections (Aslam Al Silahdar Mosque Conservation, Red Monastery Architectural Conservation, and Shunet El Zebib Documentation and Conservation)¹ from the ARCE Conservation Archives as part of a pilot project to establish an Archives website and make ARCE’s invaluable archival records free and openly accessible online.

This pilot project was achieved through a partnership with the UCLA Library, combining the resources of both institutions to ensure the project’s sustainability and even broader dissemination of ARCE’s Conservation Archives content. The secondary and equally important aspect of our project was creating the necessary foundational archival policies, documentation, and metadata standards to appropriately arrange and describe the physical and born-digital materials in the Conservation Archives under rigorous archival standards, in consultation with our partners in the UCLA Library and an interdisciplinary Advisory Panel. Most importantly, this project has laid the groundwork for future initiatives to eventually publish the entire ARCE Conservation Archives.

¹ A description of each project can be located under Section 2.4
2. Project Origins and Goals

2.1. Goals

Goal 1: Complete a basic assessment of ARCE’s Conservation Archives (collection-level descriptions)^2.

Goal 2: Create critical documentation for establishing archival best practices and a digitization workflow.

Goal 3: Arrange, describe, and publish three conservation collections from the ARCE Conservation Archives to pilot the developed publication process.

Goal 4: Select and customize a digital platform to manage and publish the ARCE Conservation Archives collections.

Goal 5: Create and implement a dissemination strategy for the ARCE Conservation Archives website.

Goal 6: Establish a comprehensive, sustainable storage and preservation system for ARCE’s digital assets.

2.2. Motivations and Needs

2.2.1. Accessibility Issues

The motivation to launch a pilot project for publishing our archival collections online was twofold: increasing accessibility and improving preservation. Until the launch of the Conservation Archives website, our materials could only be utilized by visiting the office in Cairo or contacting the Archives department directly. This situation was prohibitive not only because many students and scholars who study Egyptian history do not have the resources to visit Egypt, but also because most people were not aware of what records constitute ARCE’s collections.

2.2.2. Political Instability and Environmental Factors

The materials put forward for digitization and publication under this grant were often the only documentation of the Egyptian cultural heritage sites, most of which are either deteriorating with age or threatened by other environmental factors or political instability. The preservation and documentation of these sites at a particular point in time are of crucial importance. While the hard copy materials in the archives are currently safe, political change and environmental devastation can come quickly. Therefore, digitization and publication of these records ensure their dissemination and preservation for generations to come.

2.2.3. Resources

Prior to this grant, ARCE lacked the human and financial resources required to develop the documentation and workflow for undertaking a digitization and publication project. This Foundations grant allowed us to initiate a pilot project and lay the groundwork for digitizing, describing, and publishing ARCE’s Conservation Archives. A major component of this

^2 A sample of the three collection descriptions can be found in Appendix E.
groundwork was creating foundation archival policies and a Processing Manual that was tested and refined through the publication of the pilot projects.

2.3. Supporting Work Prior to the Grant Project

2014 ARCE recognized the need to digitize our archival materials following the turmoil of the Arab Spring in 2011. These events highlighted the vulnerability and endangered nature of the ARCE Conservation Archives as a collection located in Cairo, Egypt. Through initial fundraising efforts to establish ARCE’s digitization capability, ARCE staff met with personnel of the Egyptology Department faculty at UCLA, who then introduced ARCE’s Project Archives Specialist to the UCLA Library department. That was the first contact and exchange of information regarding the importance and vulnerability of the ARCE archives.

2015 The UCLA Library contacted ARCE and invited the Project Archives Specialist to a conference at UCLA. This conference was supported by the Arcadia fund and focused on helping institutions digitizing and publishing endangered records through the International Digital Ephemera Project (IDEP). ARCE and UCLA agreed to a limited digital publication partnership and signed a Memorandum of Understanding (MoU) committing shared values and infrastructure for ARCE’s digitization efforts.

2016 With the support of the UCLA Library staff, ARCE published one collection from the Conservation Archives to the IDEP website. For this collection, the “Luxor Roman Wall Paintings,” ARCE digitized the collection material and UCLA created the metadata description for all records. After receiving positive feedback, UCLA aided ARCE in publishing a second collection to the IDEP website, the “Conservation of the Tomb of Anen.”

2018 ARCE staff members, based in the US office and with consultation from the Project Archives Specialist based in the Egypt office, drafted a proposal for an NEH Foundations award, PW264060-19, with the title: “Sharing 7,000 Years of Egyptian Culture with the American Research Center in Egypt’s Open Access Conservation Archive.”

2019 ARCE won the NEH Foundations award and began preliminary work on the project.

2.4. Selection Criteria for the Three Pilot Collections
This Foundations grant provided ARCE the opportunity to digitize and describe three pilot collections within the Conservation Archives, each representing a unique conservation project. ARCE identified two main criteria for selecting the pilot collections to publish as part of this project. The primary criterion was diversity. ARCE identified projects from different historical periods documenting different types of monuments, different segments of cultural heritage management, and different geographical locations. This ensured audience exposure to a diverse array of records and information.

The secondary criterion was digitization level. ARCE selected projects that combined both born-digital material and non-digitized hard copies, ensuring that project staff could create workflows for different record formats. ARCE selected the following three conservation collections to be digitized and published online as part of this NEH Foundations award:

- **Shunet el-Zebib Documentation and Conservation (1996—2006 & 2010—2014):** The funerary monument of King Khasekhemwy at Abydos, built during the Old Kingdom c. 2750 BCE, is among the oldest surviving mudbrick structures in the world and the best example of Egypt’s earliest tradition of royal mortuary building. ARCE handled crucial documentation and stabilization work to rescue this endangered site.

- **Red Monastery Architectural Conservation (2015—2018):** Situated on the edge of the desert, the Red Monastery is a remarkable remnant of Egypt’s Byzantine past. ARCE has worked for 15 years to preserve elaborate murals and make functional improvements to the church. This particular collection focuses on architectural conservation and site presentation.

- **Aslam al-Silahdar Conservation and Documentation (2005—2009):** Constructed in 1344 by a Mamluk prince and featuring jewel-toned inlaid marble and glittering glass mosaics, the mosque is located in a sprawling Cairo neighborhood that contains monuments, homes, and landmarks dating as far back as the 10th century. ARCE and skilled laborers from the surrounding neighborhood worked on structural and aesthetic conservation at the mosque.

### 2.5. Intended Audience

#### 2.5.1. Scholars and Researchers
In the past, the Conservation Archives were primarily accessed by researchers and academics interested in Egyptian history. In particular, these users were university students, from bachelor to Ph.D., or academics with an interest in Egyptian history who utilized archival records and images for research projects and academic publications. The ARCE Conservation Archives’ valuable resources are theoretically available to anyone, but in practice, were usually only provided to archaeologists, conservators, art historians, and anthropologists residing in or passing through Cairo. For those who cannot make the journey to Cairo, the digitization of these materials is of critical importance.

Egyptian cultural heritage sites and the material found in the ARCE Conservation Archives website can be studied across several disciplines and among many fields of study in the humanities including anthropology, archaeology, architecture, art history, digital humanities, history, Egyptology, Coptic studies, Islamic studies, linguistics, sociology, and religious studies. Moreover, access to the ARCE Conservation Archives website creates new avenues of
research and study, contributing to interdisciplinary themes related to Egypt and the aforementioned fields of study, including, for example:

- The evolution of Mamluk-era pottery styles;
- The contribution of Egyptian craftsmen in heritage restoration;
- Reuse of Pharaonic monuments in the Roman period.

2.5.2. Students
The Conservation Archives also has the potential for use by educators at any level in lesson plans and curriculum development, both at the university level and in K-12 classrooms. The website provides free, open-access, and downloadable materials. In designing the website, the project team sought to make the collections easily browsable and included features such as collection descriptions and comprehensive metadata to make the materials accessible to non-experts who want to do in-depth research. Students and faculty professors from a variety of fields such as archaeology, Egyptology, art history, engineering, and communications will benefit from these records.

2.5.3. General Public
The far-reaching significance of the ARCE Conservation Archives website records extends well beyond the community of scholars specialized in the study of Egypt to encompass topics relevant and accessible to the general public. The information contributes to conversations related to general interest themes in history, religion, and art, including: Mosaics of the Egyptian Graeco-Roman period; Egypt’s Christian monastic art; the architecture and function of mosques; and Ancient Egyptian beliefs of the afterlife. Much of ARCE’s outreach efforts were aimed at the general public to increase awareness of the Conservation Archives in general. Information and features on the website, such as the four published tutorial videos, help give context to the project and the collections themselves to broaden their appeal to a general audience and make the website easy to use and explore.

3. Participants

3.1. ARCE (Cairo, Egypt and United States)

Key Personnel
- Dr. Yasmin El Shazly, Project Director
- Andreas Kostopoulos, Project Manager
- Talya Stanke, Metadata Specialist
- Tessa Litecky, Digitization and Data Specialist

Supporting Personnel
- Dania Younis, Communications Manager
- Jeanned’Arc Sanbar, Communications Associate
- Mirriam Ibrahim, Communications Associate
- Yasser Tharwat, Finance Manager
- Zakaria Yacoub, Information Technology Manager

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3 A detailed list with participant roles and responsibilities can be found in Appendix D.
3.2. University of California – Los Angeles Library (Los Angeles, California)
- Dawn Childress, Librarian for Digital Collections and Scholarship
- Genaro Sanchez, Digital Assets Coordinator

3.3. Notch8 (San Diego, California)
- Rob Kaufman, Notch8 Founding Partner and Senior Lead Developer
- Lea Ann Bradford, Senior Developer
- Kait Sewell, Developer
- Diem Tran, Software Validation and Test Engineer
- Crystal Richardson, Project Manager
- Kevin Kochanski, Client Liaison

3.4. Advisory Panel (Egypt, United States)
- David Anderson – Associate Professor of Archaeology, University of Wisconsin-La Crosse
- Salima Ikram – Distinguished University Professor of Egyptology, Department of Sociology, Egyptology and Anthropology, The American University in Cairo
- Janice Kamrin – Associate Curator, The Metropolitan Museum of Art
- Nick Picardo – Digital Humanities Consultant, Harvard University
- Jodi Reeves Eyre – Digital Curation Consultant, Eyre & Israel, LLC
- Peter Der Manuelian - Barbara Bell Professor of Egyptology, Harvard University; Director, Harvard Museum of the Ancient Near East

4. Project Activities and Outcomes

4.1. Logistical Considerations and Parameters of the Project

4.1.1. Assigning New Personnel
Several logistical constraints affected the planning and implementation of the project. There was a personnel change from the team that designed and wrote the initial grant and the team that implemented the project. The Director of Communications, Outreach Manager, and Chief Financial Officer, all based in ARCE’s office in Alexandria, Virginia, had a pivotal role in drafting and implementing the Foundations proposal. However, by the time ARCE won the award, these members left ARCE. Due to the departure of these individuals, actions were taken to recruit new staff and redistribute grant responsibilities. In the original proposal, the project management was designed to take place in the U.S. office. However, it quickly became evident that the most cost-effective approach to fulfill grant objectives was to transfer project management to ARCE’s Cairo Center, as that is where the majority of project activities would occur.

The position of project director was reassigned to Dr. Yasmin El Shazly, ARCE’s Deputy Director of Research and Programs based in the Cairo Center. The Project Archives Specialist in the Cairo Center, Mr. Andreas Kostopoulos, took on the role of project manager. He redesigned the budget in order to effectively implement the goals and objectives of the program with a
Cairo-based team. As a result of this, two new part-time positions were created, a digitization and data specialist and a metadata specialist. Ms. Tessa Litecky and Ms. Natalya Stanke, respectively, were hired in these newly created positions to focus specifically on digitization, metadata creation, and project documentation. They were both locally sourced after the job positions became available on ARCE’s website and other recruitment agencies. The ARCE Information Technology manager, Mr. Zakaria Yakoub, and the Communications Manager, Ms. Dania Younis, supported the project but were not included in the revised budget due to lack of funding.

4.1.2. Redrafting the Budget

In early Summer 2019, after ARCE won this award, the Foundations grant budget underwent significant revisions. The former budget situated ARCE in an unsustainable position requiring recurring high cost-sharing. Adopting a more sustainable approach, the project manager worked with the project team to reorganize and redraft the budget according to the changed personnel and cost-sharing conditions. After the personnel budget was successfully reduced, the focus shifted to reducing the budget line for the publishing software to a more realistic solution.

Redrafting the budget and reorganizing the project’s activities proved challenging for the team involved in the project’s implementation, as they were not involved with the original planning for the grant. However, the details and objectives of the project were sufficiently outlined in the grant application, allowing the new project team to understand the goals and intentions of the grant writers.

As part of the grant’s activities, ARCE would acquire a content management system (CMS) for digitized assets to be hosted and then published online. The proprietary CMS proposed by the original grant team proved far too costly for the operations. The expense of acquiring the CMS, plus consultation fees to implement this system and annual maintenance, created obstacles for the successful implementation of the project and the financial viability and sustainability of the program due to its dependence on high cost-sharing over time. The overall cost of implementing this project approach greatly exceeded the NEH award budget ceiling and ARCE could not cost-share as the newly hired Chief Financial Officer had a different approach. Therefore, the project team removed the originally proposed CMS from the budget and switched to prioritizing more affordable, mostly open-source-based CMS options. During Summer 2019, the grant team conducted extensive research into various hosting and publishing tool options⁴. The project team consulted the grant’s Advisory Panel and eventually agreed to expand ARCE’s partnership with UCLA Library as part of a distributed infrastructure approach. By the end of Summer 2019, the team budget issues were resolved, new personnel was hired, and a publishing solution was drafted and ready to move on to the implementation phase.

4.2. Activities and Outcomes

⁴ A matrix with all publication tool options is available in Appendix B.
During the NEH Foundations award, ARCE explored the diverse facets of the digital publication process. This grant provided ARCE the opportunity to thoroughly assess our collections, expand our partnership with UCLA, draft foundational archival policies and workflows, and develop and disseminate the ARCE Conservation Archives website.

To ultimately produce an online digital collections website for ARCE’s Conservation Archives, the project team initially identified an ideal flow of activities. First, ARCE would need to write foundational documentation for clearly defining the workflow and guiding the digital publication process. Next, ARCE would need to explore CMS options for hosting and preserving our digital assets. Following that, the team would organize and arrange the appropriate material for publication, digitize and describe all records, and publish them on an online platform.

While ideal, in theory, this activities flow was not a realistic depiction of the intricacies and complexities that arose while embarking on ARCE’s first digitization and publication effort of this scale. In reality, while ARCE followed researched archival guidelines, the actual processes for drafting foundational documentation, digitizing and describing data, and building ARCE’s internal archival capacity created a fluid and ever-growing learning base, influencing all aspects of the project and creating a non-linear approach to implementing project activities.\(^5\)

### 4.2.1. Institutional Organization & Policies

In Spring 2020, the project team gathered expert input from Advisory Panel members, a digital curation consultant, and several archivists located in Egypt on establishing a digitization workflow and creating documentation for archival best practices. Following these meetings and internal research, the project team wrote foundational archival policies for the ARCE Archives, including collection descriptions, a Collections Management Policy, an Access and Use Policy, a Privacy Policy, and a Digital Preservation Best Practices.

In an assessment of the Conservation Archives conducted in Spring 2019, the project team wrote 78 collection-level descriptions to identify the assets within each collection\(^6\). This was the first in-depth assessment of specific materials within each individual collection, allowing us to clearly articulate collection contents. These assessments are now available to any user by request and serve to facilitate researcher access and use by providing a concise summary of collection materials. They also facilitate ARCE’s long-term digital publication efforts by providing us with a clear understanding of the resources required to prepare each collection.

During the first grant year, the team drafted a Collections Management Policy, Access and Use Policy, and Privacy Policy. The Collections Management Policy outlines the scope, mission, physical storage conditions, and acquisition/deaccessioning guidelines for the ARCE Archives (which includes the Conservation Archives). The Access and Use Policy outlines ARCE’s open-access approach to publishing the Conservation Archives as well as regulations for user engagement in-person and online. The Privacy Policy addresses ARCE’s approach to selecting material for publication as well as provides a “take-down”\(^7\) mechanism for alleged violations within ARCE’s published content. During the second grant year, the team finalized the Digital

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5 To see a timeline of the grant’s activities, please consult Appendix A.
6 Collection level description for the three pilot projects are available in Appendix E.
7 See the glossary for hyperlinks on ARCE’s Conservation Archives website policies.
Preservation Best Practices outlining the technical infrastructure for sustainably preserving and maintaining our digital assets in the long term.

Throughout the entire grant period, the project team developed a Processing Manual containing 1) the foundational policies relevant for best archival practices, and 2) detailed instructions on the resources and processes within ARCE’s digital publication workflow. The Manual showcases digitization and file preparation, the file naming convention for digital assets, and ARCE’s Metadata Schema for describing records. It also articulates the roles and responsibilities of ARCE and UCLA as partners in the publication process. The drafting of the Processing Manual concluded in Spring 2021. This Manual is a working document by nature and the ARCE Archives department intends to update and expand upon it over time to reflect the most accurate internal archival practices and processes, as well as to clarify improvements necessary to better serve researchers.

4.2.2. Creative Commons

An important guiding value for the project team throughout the project was ARCE’s confirmed commitment, as stated in the grant proposal, to open-access material. Previously, ARCE employed an “information use form” system where users submitted individual forms for every item they wished to reproduce for non-commercial purposes. Although all material within the ARCE Conservation Archives was freely available for educational and other non-commercial purposes, the information use forms created a burdensome obstacle to engaging with ARCE’s material. Therefore, the team endeavored to find a simpler solution to ensure that ARCE’s copyright over its archival material remained intact while simultaneously allowing wider, more easily accessible engagement for users. This was formalized through the implementation of a Creative Commons license as part of ARCE’s Access and Use Policy to ensure that archival materials published online remained openly accessible and free to use while protecting ARCE’s copyright over the work. The Advisory Panel and the ARCE management approved a specific license, Creative_Commons_Attribution-NonCommercial-ShareAlike_4.0_International License (CC BY-NC-SA)\(^8\) which allows others to freely copy, distribute, and make non-commercial use of the particular work but must acknowledge the source. All collections within ARCE’s Conservation Archives are now subject to the CC BY NC SA license, thereby improving access to our material through transparent terms for user engagement with our content.

4.2.3. Partnership with UCLA Library

An important development during the NEH project was the expansion of the ARCE-UCLA partnership which began in 2015 as an initial effort to describe, digitize, and publish two archival collections from the Conservation Archives after ARCE recognized the tentative and fragile situation of our Archives (see also Section 2.3 - Supporting Work Prior to the Grant Project). After ARCE won the NEH Foundations award in Spring 2019, the ARCE’s Project Archives Specialist contacted the UCLA Library for advice on establishing a metadata schema and workflow. Eventually, once the originally proposed proprietary content management system proved untenable, ARCE and UCLA agreed that for the purposes of this grant and into the future, expanding our partnership was the most beneficial and sustainable approach to digitizing and publishing the Conservation Archives. During the Fall of 2019, and following ARCE’s management and Advisory Panel approval, ARCE and UCLA drafted a project charter to

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\(^8\) A matrix with different CC license options is available for review in Appendix F.
inaugurate the agreed-upon work for the Foundations award, as well as to clearly define roles and responsibilities for each side of the partnership for this grant. The partnership with UCLA and publishing modifications was communicated to NEH for approval.

The experience of UCLA Library has been invaluable for implementing the goals of this Foundations grant, particularly regarding ARCE’s digital collections management and data preservation solutions. As part of the partnership, the UCLA Library agreed to allow ARCE to use their digital asset repository, Islandora, as well as ingest all assets into their extensive preservation infrastructure to ensure long-term preservation. In addition to this, UCLA’s Librarian, for Digital Collections and Scholarships Ms. Dawn Childress, provided experienced insight and continuous consultation to the ARCE project team through all steps of the digital publication process, including connecting ARCE with our Archives website developer, Notch8.

Throughout the grant, our partnership ensured the sustainability of the project as UCLA did not charge ARCE for hosting storage space based on our shared value of promoting resources for the public within our Memorandum of Understanding.

4.2.4. Choosing Our Content Management and Publication Platform

Due to the reorganization of the original grant scope and change of personnel, ARCE’s project team needed to implement a new cost-effective approach that would ensure program sustainability and success. The team explored both proprietary and open-source software options while prioritizing 1) capacity for long-term digital storage and preservation of ARCE’s digitized records, and 2) ability to broadly disseminate our digitized records to scholars, researchers, students, and the general public.

Additionally, the project team researched software solutions that would result in a free, open-access online platform with a high-quality user experience for research communities and the larger public. We prioritized including a robust and customizable search engine, compatible design features similar to ARCE’s main homepage (to enable web traffic in both directions), and a user-friendly interface responsive to desktops, phones, and tablets. The project team assessed a variety of content management and publishing tool options, including:

1) Proprietary Software

Proprietary software would be beneficial for its quick deployment and modern interface. In addition, it usually provides training as well as ongoing support and troubleshooting. The biggest drawback of proprietary software was the high purchase cost. Not only is the initial licensing expensive, there are also additional annual fees for software updates and support. Furthermore, with proprietary software, once an agreement is established, ARCE is limited to working only with the company that owns the software. In the possible scenario that ARCE would want to move to another software, the migration of data may prove difficult and time-consuming.

2) Open-Source Software

An alternative to proprietary software was open-source software, which means the source code can be modified, adapted, and updated by users. The greatest advantage of open-source software is that it is free to download and use, reducing the cost of

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9 The project charter between ARCE and UCLA is available for viewers in Appendix C.
10 Decision matrix is available for reference in Appendix B.
purchase. However, ARCE would still need to hire a company to configure and customize the software to the project needs and build the frontend. With this option, we could avoid a significant annual financial commitment and ensure the sustainability of the digitization and publication efforts.

However, in the scenario the project team adopted an open-source software, the storage and long-term preservation of the digital assets would solely remain ARCE’s responsibility. This would require ARCE to acquire the personnel resources to maintain our CMS, ensure the preservation of our assets, and ingest all future records into the platform past the grant’s funding period.

3) **Open Context**

Another option was to publish the pilot collections on Open Context, a non-profit platform maintained by the Alexandria Archive Institute focused on publishing archaeological data for the preservation of cultural heritage. Open Context publishes data with their own open-source software on their interface while linking records within their collection to other research collections on the web. With this option, Open Context would preserve and maintain ARCE’s records to ensure the data remains accessible over time. However, publishing with Open Context also posed significant drawbacks for ARCE. A priority of the project team was the design and development of a frontend interface resembling ARCE’s homepage. Open Context’s frontend is not customizable, therefore it would not be possible to incorporate ARCE branding or desired website features in the publication of our records, greatly limiting our records’ functionality and browsing capacity.

4) **UCLA Library Partnership**

Finally, ARCE had the option to expand a pre-existing partnership with UCLA Library. Previously, ARCE and UCLA Library worked together to digitize, describe, and publish two collections from the Conservation Archives (Conservation of Tomb of Anen and Luxor Roman Wall Paintings) on the IDEP platform. Under the suggested expansion of the partnership, the project team would digitize, describe, and deliver ARCE’s records to UCLA’s open-source-based CMS, Islandora. ARCE’s digital records would then be hosted and preserved by the UCLA system. UCLA would publish ARCE’s collections on the IDEP site, as well as work with ARCE’s web developer to harvest ARCE’s assets and metadata via the Open Archives Initiative Protocol Metadata Harvesting (OAI-PMH) for publication on an interface unique to ARCE. To create and design the frontend of the ARCE online platform, the project team would contract web developer Notch8 due to their familiarity with UCLA’s backend systems (having previously worked with UCLA on similar publication projects).

After presenting all the available options to the Advisory Panel and ARCE management, it became clear that the expanded partnership with UCLA was the most cost-effective and desirable approach. Hosting the Conservation Archives’ digital assets with a larger partner organization with the infrastructure and capability to maintain and preserve assets while creating an independent online platform using open-source software (customized by developer Notch8) would provide the most useful and sustainable publishing solution for disseminating our collections.
4.2.5. Digitization, Description, and Publication of Archival Material

Through expanding our partnership with UCLA and digitizing, describing, and publishing three pilot collections, ARCE developed a digital publication workflow:

★ **Assessment of the Pilot Collections:** From the ARCE Conservation Archives assessment conducted in Spring 2019, the project team identified 10,634 records for publication within the three pilot collections. These records included born-digital images, 35mm photographic slides, and written documentation in form of bound reports.

★ **Scanning Our Archival Material:** Following the assessment and organization of records within the pilot collections, the digitization and data specialist scanned non-digitized documents and 35mm slides. The digitization was performed in-house using a flatbed scanner for documents and an Epson V850 Pro for the slides. As needed, the digitization and data specialist coordinated the outsourcing of larger materials to The American University in Cairo’s Digitization Lab.

★ **File Renaming:** The project team, in consultation with UCLA Digital Library, defined an ARCE Conservation Archives file naming convention. The digitization and data specialist and two ARCE interns renamed all digitized files for the pilot collections according to the developed convention.

★ **Editing Process:** All records were assessed by project team members following editorial criteria from the developed Privacy and Access and Use policies (e.g. omitting confidential financial or employee information). Additionally, our two interns assisted in assessing records for quality consistency. Images with burn spots, dust accumulation, or excessive blurriness were either edited on Photoshop or removed from publication. The editing process revealed many duplicated images which also reduced the total amount of records for publication. As a result of the editing process, the final amount of publishable records was reduced to 6,710.

★ **Description of Records:** The metadata specialist developed ARCE’s Metadata Schema in collaboration with UCLA Digital Librarian, Dawn Childress, and created metadata for all digitized material within the pilot collections. The metadata specialist continuously consulted with UCLA Digital Library staff for identifying preferred authority sources and creating new fields as necessary to accurately describe records (such as adding fields for incorporating ARCE’s Creative Commons license).

★ **Ingestion of Records:** The project team shared ARCE’s digital records with completed metadata with the UCLA Digital Library through shipping external hard drives. Once collection records were received, UCLA’s Digital Assets Coordinator performed file integrity checks and transferred the records to UCLA Digital Library’s networked storage environment. The Coordinator then ingested the digital records and their metadata into UCLA’s CMS, Islandora.

★ **IDEP Publication:** UCLA Digital Library staff published ARCE’s pilot collections to the IDEP website and deposited ARCE’s digital records into UCLA’s digital preservation service, Merritt, for long-term storage and safekeeping.

★ **Website Configuration:** The project team collaborated with the Notch8 team to communicate website design, incorporate interface features, and organize the online presentation of metadata fields.

★ **Exposing Our Records:** UCLA Digital Library staff exposed ARCE’s collection records and metadata via OAI-PMH to ARCE’s website developer Notch8.

★ **Publication of the Pilot Collections:** Notch8 harvested ARCE’s records from UCLA and published our collections to the developed ARCE Conservation Archives website.
This workflow was achieved through consultation and collaboration with UCLA Digital Librarian, Dawn Childress, and the IDEP Toolkit\textsuperscript{11} (outlining guidelines for undertaking digitization projects).

### 4.2.6. Metadata Schema

ARCE’s partnership with UCLA influenced the development of our metadata schema. UCLA’s IDEP program uses the Metadata Object Description Schema (MODS) for its collections as it is compatible with their CMS. The project team, therefore, drafted ARCE’s schema based on MODS as 1) this allowed for easy ingestion of ARCE’s digital assets into UCLA’s digital repository and 2) MODS is a highly flexible, well-suited schema for the cultural heritage nature of our collections.

Basing our schema off of MODS allows for interoperability, or the ability for ARCE to easily transfer our digital assets across a variety of software platforms. This is essential for ensuring ARCE can host assets within a variety of repositories for the long term, including UCLA’s CMS Islandora. It also allows for a diversity of metadata fields within a variety of topics (e.g. subject place and time, rights information, genre) which provides flexibility in describing ARCE’s richly diverse data.

The metadata specialist, in collaboration with UCLA Digital Librarian Dawn Childress, drafted ARCE’s Metadata Schema designed for maintaining industry best practices. As a modified version of MODS (Metadata Object Description Schema), ARCE’s metadata fields reflect our commitment to rich, useful data description. The schema is tailored toward the conservation work present within Conservation Archives collections. For example, there is extensive use of

\textsuperscript{11} For further information on IDEP Toolkit please see under hyperlink Glossary.
the “note” element within MODS to incorporate detailed information, such as the “Statement of Responsibility” field, which concisely explains a conservation project’s history, or the “Creative Commons” field, which clearly defines how users can engage with our material.

Throughout the process of metadata creation for the three pilot collections, ARCE maintained its commitment to following international standards. This is reflected in both the schema framework (MODS) and the consistent use of internationally recognized controlled vocabularies. The controlled vocabularies included sources such as the Library of Congress Subject Headings and Name Authorities, the Virtual International Authority File, the Getty Art & Architecture Thesaurus, the Thesauri and Ontology for Ancient Egyptian Resources, and PeriodO. These controlled vocabularies ensured standardized and consistent descriptive data. Through this Foundations work, ARCE finalized a schema for all metadata description of the ARCE Conservation Archives.

Our schema fields include:
4.2.7. Dissemination

With inter-institutional activities, ARCE disseminated its collections through a variety of mediums. ARCE primarily disseminated its collections as available records on our Conservation Archives website and UCLA’s IDEP website. Dissemination activities were carried out through several different channels and platforms.

ARCE Social Media:

The project team’s main dissemination strategy for the website was to use ARCE’s social media accounts to introduce the website to the public and announce updates regarding new collections and website features. The ARCE communications team consists of a Communications Manager, a Communications Associate, and a Digital Content Producer who are responsible for ARCE’s social media accounts. ARCE has 28,714 Facebook followers, 3,463 Instagram followers, 1,097 LinkedIn followers, and 3,959 Twitter followers.

The Communications team, under the auspices of Communications Manager, Ms. Dania Younis, worked closely with the project team to create a visually attractive poster12 for the website shared online in December 2020 to introduce the launch of the website. Continuing the online dissemination strategy, the communications team also drafted posts using content from the website to publicly announce each new collection.13 The posts were posted biweekly and introduced a new collection every two weeks in order to keep the audience engaged with the website.

12 https://www.facebook.com/arcenational/photos/a.16267177707832/3970582402953893/?type=3&theater
13 Example of Facebook post: https://www.facebook.com/arcenational/photos/pcb.3909384729073661/3909365899075544/?type=3&theater
Moreover, the project team created and published four tutorial videos\textsuperscript{14} for users through social media showcasing ARCE’s Conservation Archives website features, such as navigating the website, metadata search fields, browsing through collections, and downloading content. The project team worked with the communications department to draft posts and publish them on Facebook, Instagram, and LinkedIn.

Lastly, the project team utilized ARCE’s social media accounts, particularly Twitter, to disseminate information about the ARCE Conservation Archives website during International Archives week, from June 6 to 11, 2021.

**Presentation Lecture:**

ARCE’s Project Archives Specialist, Mr. Kostopoulos, delivered a presentation on the digitization and publication of the Conservation Archives during ARCE’s virtual annual meeting, held from April 22 to 25, 2021. The presentation, titled “Out of the Box and Onto the Web – ARCE’s Conservation Archives Goes Online,” provided an overview of the past five years’ digital efforts and challenges, as well as data about each of the projects available on the Conservation Archives website. ARCE’s virtual Annual Meeting was attended by 700 participants from 14 different countries.

**Department of Education Info Session:**

In October 2020, ARCE received support from the Department of Education to digitize and publish another 11 collections over four years. The second component of this award is to collaborate with U.S. faculty members at community colleges and minority-serving institutions to utilize the published collections in their coursework. Students in a diverse range of disciplines will use digitized content from the ARCE Conservation Archives to design online exhibitions on Egyptian history and culture for the Google Arts & Culture platform. This project will not only increase the breadth and diversity of the online Conservation Archives but will also facilitate the use of ARCE’s archival materials in college classrooms. In June 2021, ARCE’s Project Archives Specialist, Mr. Kostopoulos, delivered a presentation to U.S. faculty partners introducing them to the Conservation Archives website and its features. The faculty will then pass on this information to their students who will use the Conservation Archives website in the course of their projects over the next semester. The students will use the Conservation Archives website, and the 7,583 digital records available, to create digital exhibitions. This project and Mr. Kostopoulos’ presentations will greatly increase awareness of the Conservation Archives website and materials among faculty and students at U.S. community colleges and minority-serving institutions.

**Scribe Magazine Features:**

The project team contributed to an article for ARCE’s biannual publication, Scribe magazine, in the Fall 2020 issue (no. 7). The article detailed the launching of the ARCE Conservation Archives website and updates on NEH Foundations work, including information on the newly-published collections as well as features of the website. The forthcoming Spring 2021

\textsuperscript{14} The tutorial videos are available on the ARCE Conservation Archives website and hyperlinked in the Glossary.
issue (no. 8) will feature an interview with the project team, an in-depth history of the project and its partners, and further dissemination of project deliverables. Scribe is issued twice a year and mailed to 1,156 United States recipients, 235 recipients around the rest of the world, and 32 scholarly institutions in the United States and the United Kingdom.

**Newsletter to ARCE Members / ARCE Chapters:**
The project team, in consultation with the ARCE communications team, drafted a newsletter that was shared with ARCE members and chapters, introducing the launching of the ARCE Conservation Archives website and its contents. The newsletter was released following the launch of the website in December 2020. ARCE currently has 1,500 members and 14 chapters located in the United States (Washington D.C, Philadelphia, Boston, New York, Atlanta, Memphis, Chicago, Seattle, Portland, Kansas City, Berkeley, Santa Ana, Tuscon, and Dallas).

### 4.3. Grant Products

The Foundations Grant project produced the following products:

- The ARCE Conservation Archives website, launched on December 20, 2020.
- Five collections from the Conservation Archives arranged, digitized, described, and published online with a total of 7,583 digital records;
  - Two additional collections (*Conservation of the Tomb of Anen and Luxor Roman Wall Paintings*) with a total of 873 digital records. These collections were previously published with support from UCLA on the IDEP website. ARCE, in agreement with UCLA, decided to expose these two collections on the ARCE Conservation Archives website to provide more content to users and expand the number of published collections from the original scope.
- Formalization of ARCE’s open-access content through the adoption of a Creative Commons license.

### 4.4. Professional Outcomes

The NEH Foundations grant project offered several professional development and learning opportunities for members of the ARCE project team. As part of this grant, ARCE hired two positions directly related to executing the digital publication process (a digitization and data specialist and a metadata specialist). From this, the project team trained and acquired technical knowledge related to topics such as file naming conventions, metadata standards, and controlled vocabularies under the UCLA Digital Library and the Advisory Panel's guidance. With the gained knowledge and skills, the Archives department constructed and tested the internal processes for effectively digitizing and publishing collections from the Conservation Archives.
Another important professional development opportunity arose when the management of the program shifted to the Cairo Center. The Project Archives Specialist’s role was upgraded and involved in activities that were not initially assigned to him. In his upgraded position as project manager, Mr. Kostopoulos had the opportunity to acquire further knowledge on implementing federal grants and work collaboratively with subject field experts from the Advisory Panel and UCLA Library.

This Foundations grant has also assisted the archives in building capacity and human capital to scale up to larger digitization and publication efforts. The team members, in collaboration with UCLA, designed and drafted a proposal requesting further support from NEH under the Implementation phase. If awarded the NEH Implementation grant, ARCE will have the internal capacity and experience to establish an in-house digitization lab and, with the UCLA partnership and publishing platform established, further publish and preserve a far greater number of collections.

Finally, the NEH Foundations project allowed ARCE to enable and involve several individuals from different job positions and perspectives by participating in the project and bringing in their unique skill sets. Under section 3 (Participants) the viewers can see the full list of people who were involved in the project.

5. Project Evaluation and Impact

The success of this project was dependent on the project team meeting the primary goals: generating foundational documents and establishing a workflow; digitizing, describing, publishing three pilot collections to create and test established procedures; creating an open-access website to share the digitized collections with the public; engaging in dissemination and outreach activities to publicize the website; and enabling ARCE to seek additional funding to continue publishing the Conservation Archives. While the methodology of these activities evolved in the course of the project, ARCE successfully met each of these goals.

5.1. Foundational Documents

It was important for the project team to create or formalize internal archival policies to lay the groundwork for publishing the entire Conservation Archives. The goal of creating foundational documents was always part of the work plan, however, it grew in importance during the course of the project, resulting in documents and policies of more significant depth and variety than originally imagined.

There were several documents formalized to ensure the success of ARCE’s digital publication, including a Conservation Archives File Naming Convention, Metadata Schema, Privacy Policy, and Access and Use Policy. The team also created a Collections Management Policy and Digital Preservation Best Practices. Some of these documents existed informally or were not initially part of the work plan, however, the project team decided they were necessary to ensure project activities complied with international standards.
The implementation of a Creative Commons license is an important part of the Access and Use Policy as it reiterates ARCE’s commitment to free and open access to our archival material. It impacts academics and educators who can freely and easily download and share records while abiding by user terms. ARCE hopes it can serve as a model for other cultural heritage organizations that wish to publish their archives.

5.2. Digitizing, Describing, and Publishing Three Pilot Collections

The project team was successful in digitizing, describing, and publishing the three pilot collections on our web platform, in addition to two extra collections that were previously published as part of UCLA's IDEP project. The end result was five published Conservation Archives collections, exceeding our expectations for the project.

Publishing five collections on our Conservation Archives website was possible through our partnership developed with UCLA. Our collaboration also significantly affected the workflow of the digitization, description, and publication process. With our partnership, ARCE became responsible for assessing, processing, and preparing the digital assets and corresponding metadata. UCLA was then responsible for the additional tasks required for asset publication and preservation, namely data ingestion and exposing records to our software developer Notch8. This resulted in a more sustainable approach to publishing our collections through distributed infrastructure and a realistic work plan for the project team.

5.2.1. Publishing Platform

After significant research into the best publishing tool for our project needs, ARCE launched the Conservation Archives website in December 2020. After continued discussion with our UCLA partners and the web developers who designed the site, the final platform included most of the features originally planned and the site functioned without any significant technical issues after the launch.

Ultimately, one of the most important outcomes of this Foundations award was the creation and launch of the Conservation Archives website with strong search filtering, detailed metadata description, and easy accessibility of records. The resulting website serves as a tool for researchers intending to conduct specific subject-area research as well as an informational resource for the general public to browse.

Features included on the ARCE Conservation Archives website:

- Modern design integrated with arce.org styles and branding to ensure traffic both ways,
- Thumbnails for each record,
- Responsiveness on phones and tablets,
- Searchable PDFs,
- A robust search engine with a sidebar of various search fields,
- Supportive of tiff/pdf files,
- Image viewer with deep zoom,
- IIIF support,
5.3. Dissemination Strategy

The Foundations grant provided ARCE the ability to clarify target audiences for Conservation Archives material as well as target platforms for diversifying our mediums of engagement. The dissemination strategy for this project was focused on familiarizing the public with the contents of ARCE’s Conservation Archives, making them aware of our plan to digitize and publish the material, as well as publicizing the launch of the website. Dissemination efforts were particularly important, since, even though many academics focused on Egyptian history and culture are

15 Google Analytics statistics are available in Appendix G.
familiar with ARCE, knowledge of the Conservation Archives and its contents is limited among scholars in other disciplines and the general public.

In coordination with the ARCE Communications Department, dissemination of the NEH Foundations project deliverables and our open-access platform was achieved through a variety of communications outlets including, but not limited to:

- A virtual presentation at the ARCE Annual Meeting in April 2021,
- Four how-to tutorials targeted at facilitating user engagement published on our website and social media,
- Outreach through ARCE's established communication platforms such as Scribe (a printed and digital magazine issued bi-annually) and ARCE's social media (Facebook, Instagram, LinkedIn, Twitter),
- Presentations and outreach activities made possible through other federally-funded projects (Department of Education P274A200019 award) and partnerships (Google Arts and Culture platform),
- A digital marketing plan, drafted and executed by the ARCE Communications team, to reach out to and inform ARCE members, U.S chapters affiliated with ARCE, and past ARCE collaborators.

Over the course of the project, it became clear that most of the dissemination activities needed to take place after the launch of the website in December 2020, since the launch of the Conservation Archives website was a core objective of this project and the most public-facing component. Upon the successful launch of the website, the project team and Communications Department worked collaboratively to inform the general public, ARCE followers, and researchers about the new website and the published collections.

With the advent of ARCE’s partnership with UCLA, the dissemination strategy has expanded to combine the communication efforts of both organizations and maximize the visibility of the project, both within the U.S. and internationally. Because UCLA has agreed to host and store ARCE’s digitized archival records, the Conservation Archives collections are available on both the ARCE website as well as UCLA’s IDEP site, which provides exposure through an established, internationally-known platform. This strategy amplifies the accessibility of the collections through making them more discoverable by students and academics in the UC system, across the United States, and abroad. This partnership also provides an opportunity for outreach activities aimed at the UCLA community of academics and students to further engage with U.S.-based researchers and the general public.

5.4. Lessons Learned and Challenges

1. **Draft proposal budgets carefully and realistically:** The first challenge we faced was adjusting the award’s budget and project personnel. Reducing costs on our publishing tool option and personnel was required to ensure long-term sustainability and remove an undue cost-sharing responsibility. Originally, the project’s management was based in ARCE’s U.S. headquarters and relied on contracting technical consultants. Once we redrafted our budget, we focused on shifting project management to Cairo and hiring locally sourced staff to build internal capacity.
2. **Bring an interdisciplinary team to the table:** It is beneficial to involve individuals from a variety of disciplines either as key personnel or supporting members because an interdisciplinary team brings diverse perspectives that can holistically approach a humanities digitization project. This said, we recommend keeping a realistic number of Advisory Panel members to any proposal, as logistically it can be difficult to arrange meetings with a large number of participants (especially when factoring in cross-continental time differences).

3. **Know your records and how to preserve them.** Be realistic from the start of a new digitization project and ensure you have comprehensive knowledge of your institution’s records/materials. For example, in ARCE’s case as a small institution with limited digital asset formats (mostly PDF and TIFF), we cannot rely on consistent cost-sharing for annually recurring maintenance costs for a proprietary CMS nor can we budget a full-time staff member for the long-term ingestion and preservation processes for an open-source CMS. Knowing your records and resources well helps any institution make the right choice when choosing a CMS.

4. **Consider non-traditional solutions:** While not originally proposed within the scope of this project, adopting a shared infrastructure approach with the UCLA-ARCE partnership has enormously benefited both institutions. ARCE, as a small institution, has access to the expansive resources of a large institution like UCLA, namely their robust storage and preservation system as well as the knowledge and experience of collaborators at the UCLA Digital Library. In turn, UCLA has the opportunity to help disseminate rare or endangered materials and expand its online collections. Publishing the ARCE collections with a digital repository like the International Digital Ephemera Project made our collections more discoverable for audiences that would be difficult to reach independently. For cultural heritage collections, partnerships with institutions such as the Digital Public Library of America, the Digital Library of the Middle East, Europeana, and Open Context could provide increased exposure and mutually beneficial dissemination of records.

5. **Build an Editorial Schema.** One unanticipated necessity for publishing digital materials was the editorial review process. The digital publication workflow demonstrated that a portion of an individual collection’s material was determined to be unpublishable, most often due to poor image quality or restrictions following ARCE’s Privacy Policy. Working on and further developing an editorial schema is something that would benefit all project managers who plan to undertake a publication project. This requires knowing your archival materials well and remaining realistic on the amount of final published records (as this can change drastically after the editing process).

6. **Know your plan for accessing your records.** ARCE’s partnership with UCLA resulted in distributed infrastructure, meaning ARCE does not have access to UCLA’s repository system backend. This is advantageous in that ARCE cannot financially commit to the resources required for maintaining a backend, but it also limits us as ARCE’s digital assets for publication are tied to UCLA timelines and management.

7. **Partnerships can create logistical boundaries:** With the existing partnership between ARCE and Notch8, ARCE staff do not have access to the Conservation Archives website’s backend. This means that the ARCE team cannot perform alterations such as editing text or changing hero images independent from Notch8’s involvement. This can create considerable time delays and cost increases for improving the Conservation Archives interface.
8. **Track your audience:** For ARCE, Google Analytics has provided a detailed mechanism for collecting usage statistics. This way, we can gather data frequently to understand user engagement trends and patterns, which in turn informs our dissemination decisions and outreach strategies.

9. **Social media is important:** Through tracking engagement on the Conservation Archives website, it became apparent that the strongest and most effective form of disseminating the website was achieved through online announcements via ARCE’s social media accounts (namely Instagram, Twitter, and Facebook).

10. **Pandemics happen:** The advent of the COVID-19 global pandemic posed a significant challenge to the project. However, employing robust online communication platforms helped project staff to stay updated and in touch with the program objectives. Working remotely demanded flexibility among all partners and utilizing a variety of communication channels including email, Microsoft Teams, Slack, and Google Drive.

11. **International collaboration requires scheduling flexibility:** Another major challenge for the project was working with a partner located on another continent, and in particular, delivering our digital assets to UCLA. Sending large amounts of data through cloud services proved difficult as it requires a consistently strong internet connection (which is a separate challenge within Egypt). We found it was far easier to deliver digital assets and metadata by mailing external hard drives. Additionally, coordinating meetings and communication with UCLA and Notch8 (both located in California) required planning effort and scheduling flexibility.

12. **Timelines can (and do) shift:** Originally, ARCE assumed that our Processing Manual would be completed prior to the start of the publication processing to guide digitization, description, and publication workflows. However, since this project piloted the publication process, the Manual continued to be refined throughout the grant period as we addressed issues and explored the most efficient way of working. This proved to be a positive change, as the processes detailed within the Manual led to the successful publication of three pilot collections and will act as a comprehensive guide for future work.

6. **Project Continuation and Long-Term Impact**

6.1. **Continuation of the Project**

ARCE is determined to continue work on this project to maintain and further expand the partnership with UCLA and our collaborators, extend dissemination efforts of ARCE’s research, as well as maximize the Conservation Archives website discoverability and outreach. UCLA is a research support member for ARCE and in the past five years we have built a strong relationship through our online publication efforts. ARCE and UCLA are in mutual understanding that will move forward for all upcoming digitization and publication efforts in regards to a Department of Education (DoE) award and a potential NEH Implementation award. A memorandum of understanding is in effect (until 2023) with shared intentions for renewal, to cover future work. UCLA is responsible for the preservation and dissemination of ARCE’s digital assets through UCLA IDEP and is committed to the continuation of outreach activities through their channels.
ARCE in the duration of the NEH Foundations award contracted the services of Notch8, a web developer based in San Diego. The successful launch of the website, the frontend usability, and the established workflow of this award have convinced ARCE that extending the contracting services with Notch8 to cover work assigned for the DoE award is the most sustainable and cost-effective approach. ARCE has weekly meetings with the Notch8 team where we explore the best solutions moving forward, including the possible incorporation of an ARCE staff member receiving backend access to the website interface. Backend access would provide ARCE the ability to edit text and design features independently, and reduce further long-term maintenance costs.

During this grant period, ARCE in partnership with UCLA Library developed a metadata schema (based on MODS) for describing records within the Conservation Archives. Moving forward, ARCE will explore avenues for enhancing the established metadata schema. Through the assessment of our archival collections in Fall 2019, the project team identified multiple FileMaker databases. These databases contain detailed technical and subject information regarding various conservation and archaeological projects. Although our current schema is robust and inclusive, further metadata field development would enhance browsing and accessibility for the complexity of information within the databases. This means that in future work, these databases could be incorporated and published through the website.

Last but not least, the participation and guidance of the Advisory Panel throughout the two-year duration of the NEH award were extremely beneficial for the program. The team worked closely with subject experts with extensive experience in their fields. It became apparent that the continuation of their advisory role in future publication projects is essential and mutually beneficial. As of now, ARCE has secured the participation of all members of the Advisory Panel for upcoming projects.

ARCE is also dedicated to the continued dissemination of the ARCE Conservation Archives spearheaded by the Communications team through ARCE’s digital platforms. Additionally, the Project Archives Specialist will continue monitoring the Google Analytics account set for the website and report on user engagement and website metrics. Data collected will inform website interface features and design decisions. An example of a feature that the team is considering employing is the incorporation of 3D scans of sites and monuments. ARCE has a Matterport camera and several sites have been 3D documented. Adding these 3D models as a website feature will allow users to further discover ARCE’s work.

### 6.2. Future Activities and Long-Term Impact

Throughout this grant, the project team built internal capacity through the implementation of digitization best practices and workflows, the acquisition of digital preservation resources through a shared infrastructure approach with our partner UCLA, and the development of a website to publish ARCE’s archival collections. This in-house capacity provides a strong foundation for ARCE to pursue large-scale digitization efforts to publish the entirety of the Conservation Archives in the future. Now that the digitization and publication workflow has been established, ARCE is seeking additional funding, including the NEH Implementation award, to purchase equipment and initiate training to build an in-house digitization lab. Further funding will also allow ARCE to develop broader internal capacity, both in terms of human resources, as well as physical resources, like hardware. ARCE will also pursue funding opportunities from other
federal and non-federal agencies as appropriate to scale up the digital publication of the Conservation Archives and increase the amount and variety of collections published on our website.

An assessment of the ARCE Conservation Archives performed in 2019 indicated that in total 78 conservation projects are available for digitization and online publication. With the NEH Foundations award and in partnership with UCLA, ARCE succeeded in publishing and making five collections available. With support from a Department of Education award, we anticipate 11 more collections in the coming four years to be fully digitized, described, and published on the ARCE Conservation Archives website. Our proposal for additional funding from the NEH Humanities Collections and Reference Resources PW-20210715 submitted in July 2021 identifies another 26 conservation collections for digitization and online publication. That means that more than 50% of ARCE’s Conservation Archives could be fully digitized and published by 2025.

In addition to publishing more collections under the DoE award, which began in Fall 2020, the project enables students from community colleges and minority-serving institutions from a variety of fields to create digital exhibitions with ARCE Conservation Archives content as a primary source. Students during the first year of the project will have access to the initial five collections under the NEH Foundations grant, while additional collections will be added each year. With this, university students will be exposed to a greater number of collections from the ARCE Conservation Archives as they create digital exhibitions. In addition, their digital exhibits, published on Google Arts & Culture, will further disseminate ARCE’s archival holdings and provide context for the general public. This project will run until 2024.

Moving forward beyond the Foundations grant period, ARCE intends to deepen its partnership with Google Arts & Culture to provide virtual educational stories, exhibits, and lesson plans geared towards K-12 students, university students, and the general public. To encourage engagement, the majority of records used within the Google Arts & Culture platform will be discoverable on the Conservation Archives website. Furthermore, each individual record (primarily photographs) can be searched for and viewed on Google Arts & Culture, accompanied by detailed biographical metadata information. The project teams hope that presenting ARCE’s archival material on a popular, easily accessible platform will help the general public experience and learn from the holdings of the Conservation Archives.

6.3. Conclusion

This White Paper documents the cumulative efforts of the past two years in implementing an NEH Foundations award. This Paper outlines the project’s goals, activities, outcomes, and impact, as well as the lessons learned. Aligning with the purpose of this Foundations award, ARCE and the project team will continue to revise and improve our practices beyond the grant period to reflect our growth as a cultural heritage archive.

As we believe in growth through learning, we encourage readers to reach out to us with any questions or suggestions for benefiting ARCE and the digital humanities community.

Feel free to email the team here: archives@arce.org.
Appendices:

A. NEH Project Timeline

<table>
<thead>
<tr>
<th>NEH FOUNDATIONS AWARD TIMELINE</th>
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<tbody>
<tr>
<td>ARCE receives NEH Foundations award</td>
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<td>ARCE writes collection-level descriptions for each collection within the Conservation Archives</td>
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<td>ARCE explores publishing options for the Conservation Archives, including open-source and proprietary content management systems</td>
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<td>Recognizing the benefits of a distributed infrastructure model, ARCE expands partnership with UCLA’s International Digital Ephemera Project (IDEP) to host and publish the three pilot collections from the Conservation Archives</td>
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<td>ARCE forms partnership with software developer NOTCH8 to create an ARCE digital collections frontend to publish the Conservation Archives</td>
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<tr>
<td>ARCE develops our File Naming Convention and Metadata Schema for the Conservation Archives</td>
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<td>ARCE adopts a Creative Commons license formalizing open access to our archival material</td>
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<td>ARCE drafts foundational archival policies and documentation including a privacy policy, an access and use policy, and a collections management policy</td>
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<td>ARCE digitizes and describes the three pilot collections</td>
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<td>ARCE continues digitizing and describing the three pilot collections</td>
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<td>UCLA finishes ingesting the three pilot collections and publishes them online to the IDEP website</td>
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<td>UCLA ingests two of ARCE’s pilot collections</td>
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<td>ARCE’s Conservation Archives website launches online (December 2020)</td>
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<td>ARCE continues drafting foundational documentation, including preservation best practices and a Processing Manual outlining the digitization and publication workflow</td>
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<tr>
<td>ARCE finishes drafting foundational documentation for the archives including preservation best practices and a Processing Manual outlining the digitization and publication workflow</td>
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<tr>
<td>ARCE collects user engagement data with Google Analytics</td>
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<td>NEH Foundations award concludes</td>
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<td>Post grant period, ARCE will seek diversified funding sources to continue the publication of the Conservation Archives</td>
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<th>SPRING</th>
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## B. Matrix for Publishing Options

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<tr>
<th>Publishing tool</th>
<th>Cost for acquiring services or software</th>
<th>Recurring costs</th>
<th>Advantages</th>
<th>Disadvantages</th>
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<td><strong>Proprietary Software</strong></td>
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<tr>
<td><strong>Axiell</strong></td>
<td>X</td>
<td>1. Cost for support and maintenance 2. Cost for hosting the software on ARCE server</td>
<td>1. Web-based CMS with archiving module, in addition to an online publishing tool 2. Includes set-up, security configuration, 3-days onsite training, annual support, and maintenance 3. Reliability 4. Option to access collections from tablet, phone, or desktop</td>
<td>1. High cost / not sustainable option 2. Designed for large institutions with complex data like museums and libraries 3. Migrating to other software is difficult</td>
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<td>Software</td>
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<tr>
<td><strong>ContentDM</strong></td>
<td>X</td>
<td>High Annual fee depending on amount of data</td>
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|                       |   | 1. No licensing fees  
|                       |   | 2. End-user experience is designed for phones, tablets, and workstations  
|                       |   | 3. Secures and monitors digital originals in a cloud-based preservation archive  
|                       |   | 4. Increased accessibility through Web Content Accessibility Guidelines (WCAG) compliance efforts  
|                       |   | 5. Customizable without special programming skills  
|                       |   | 6. Embedding videos and maps  
|                       |   | 7. Handles documents, images, video, and audio  
|                       |   | 1. Significant annual commitment, sustainability long term  
|                       |   | 2. No option to host on ARCE server  
|                       |   | 3. Limitations to migrate to other software  
|                       |   | 4. Built for larger organizations  |
| **Open Source Software** | | |
| **Omeka** customized by Archimedes Digital | X | 1. Limited cost: hosting the front end software on ARCE server  
|                       |   | 2. Recurring cost for digital assets hosting  
|                       |   | 1. User friendly Interface  
|                       |   | 2. Fully integrated with arce.org style and branding  
|                       |   | 3. Possibility to include 3D scanning of sites  
|                       |   | 4. Experienced staff with digital humanities  
|                       |   | 1. U.S based, time difference  
|                       |   | 2. Heavy workload of projects / dedication effort  
|                       |   | 3. Higher cost of developing than other web developers |
| **DSpace** customised by AlZad | X | Technical support / maintenance & software server annually | 1. Company has offices in Cairo / Option for face to face meetings  
2. Easily configurable web-based interface  
3. Affordable package | 1. Basic layout, limited display options  
2. Requires heavy customization |
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<tr>
<td>Publishing via partnering with an organization</td>
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| **UCLA Library** and front end by Notch8 using open source software (UCLA partners in previous digital projects) | 1. No funds required for NEH Foundations phase  
2. Only cost for building the front end | Limited cost: hosting the front end software on ARCE server | 1. Guaranteed storage and long-term preservation of ARCE digital assets in UCLA CMS  
2. Assistance with reporting and future grant proposals  
3. Opportunity to further expand partnership with an ARCE RSM  
4. Allows for smaller ARCE project team  
5. Broader dissemination or ARCE’s digital records through IDEP  
6. Sustainability of the project  
7. Training provided to ARCE project team at no cost  
8. Front end configuration by a web developer of our choosing | 1. Budgeting cost of storage only after the completion of the NEH Foundations award  
2. Shared CMS with other IDEP collections  
3. Difficulty for ARCE to access digital assets within the Islandora CMS |
| Open Context | X | No Annual fee / no recurring cost | 1. Editors clean and organize data at no cost for ARCE project team  
2. Ensures ongoing preservation and accessibility of ARCE digital assets  
3. Broader dissemination through their established network  
4. Editing team are all subject field experts, ensuring our records are curated properly | 1. Project pages on ARCE website, but individual records linked to Open Context - Confusion over two different platforms  
2. Open Context interface difficult to navigate for average user  
3. Losing corporate branding identity  
4. No front access and configuration according to ARCE needs |
C. UCLA Project Charter

Project name: Sharing 7,000 Years of Egyptian Culture with the American Research Center in Egypt’s Open Access Conservation Archive
Partner institution: American Research Center in Egypt (ARCE)

Descriptions of Challenge or Opportunity
ARCE has received an NEH Foundation Grant for Humanities Collections and Reference Resources (HCRR) PW264060-19 to develop a prototype discovery layer for their digitized archival collections of conservation documentation, including the preparation and publication of three selected collections:

1. Conservation Project of the Aslam al Silahdar Mosque
2. Documentation and Conservation of the Shunet al Zebib Monument in Abydos
3. Red Monastery Architectural Conservation Project

Since UCLA is currently collaborating with ARCE to publish other archival collections as part of the IDEP initiative (Luxor Roman Wall Paintings and the Tomb of Anen), UCLA and ARCE have agreed to extend the current partnership to publish the three additional collections. In this phase, UCLA will continue to support the preservation and hosting of ARCE resources (assets and metadata). In addition, UCLA will also make the resources available via OAI to support ARCE’s work to develop a front end that will harvest the resources for publication/discovery through ARCE’s new website. ARCE will work with Notch8 to design and develop their front end and to harvest their assets.

Collection Description
The three selected collections, located within ARCE’s Conversation Archives, are the Conservation of the Aslam al Silahdar Mosque in Historic Cairo, the Conservation and Documentation of Shunet el Zebib in Abydos, and the Architectural Conservation of the Red Monastery in Sohag.

Scope
ARCE will digitize and create metadata for three archival collections during the first half of 2020 and send the resulting data to the UCLA. UCLA will provide access to the delivered assets and metadata through IDEP/Islandora, exposing the data for harvesting via OAI MPH. UCLA will also provide long-term preservation of the data. UCLA will work with ARCE to define the metadata needs and template and consult on the project as needed to ensure a successful outcome. UCLA will contribute to the Phase 2 NEH Implementation Grant which ARCE team will draft and will be due in July 2021.

Out of Scope - Potential Future Projects
ARCE will also be building a discovery layer into which they will harvest the assets and metadata, but this work will be completed by ARCE and software developer Notch8.
ARCE and UCLA will jointly apply for an NEH Implementation Grant in 2021 to process and publish additional 26 ARCE conservation projects.

**Staff Resources**

**UCLA:**
- Dawn Childress, Project Manager at UCLA

**ARCE:**
- Yasmin El Shazly, Project Director
- Andreas Kostopoulos, Project Archives Specialist
- Tessa Litecky, Digitization and Data Specialist
- Talya Stanke, Metadata Specialist

**Schedule Considerations/Constraints**
- We aim to have first project ingested into Islandora by March 2020
  - All three pilot projects ingested by July 2020
- Published prototype archives site online by July 2020
- Web developer to determine when to launch the website.
- Implementation grant application opens May 15, 2021 and is due July 15, 2021

**Rights**

ARCE retains copyright/ownership of all assets. UCLA can reuse assets and their metadata as appropriate for promotion of UCLA collections and initiatives.

**Responsibilities**

**ARCE will be responsible for:**
1. Data preparation and delivery to UCLA
   a. Create and deliver metadata and assets in a format compatible with UCLA systems, file naming conventions, workflows, and metadata schemas
   b. Quality assurance/control (reviewing published assets online) and communicating issues to UCLA
2. Working with UCLA to resolve such issues where they are related to the assets and metadata or exposing the assets and metadata.

**UCLA will be responsible for:**
1. Advising ARCE on metadata schema and naming conventions
2. Ingesting data for the three collections into Islandora or other appropriate system
3. Long-term preservation of assets. In the event of a migration, UCLA will migrate digital assets to any future repository system.
4. Exposing metadata via OAI (or Solr)
5. Consulting on NEH Foundation Grant award reporting
6. Consulting on implementation grant writing process for the Implementation grant application (to be submitted by July 2021)
D. Personnel Roles and Responsibilities

Project Personnel

- **Dr. Yasmin El Shazly, Deputy Director of Research and Programs**
  Ph.D., Egyptology (Johns Hopkins University), Dr. El Shazly served as Project Director. She supervised all aspects of the project, including decisions on scientific data organization, overall project design, and implementation. She worked in conjunction with the project manager and Advisory Panel to set objectives and reported progress to ARCE management.

- **Andreas Kostopoulos – Project Manager**
  Mr. Kostopoulos was responsible for the management of day-to-day activities related to the project implementation and served as the lead point of contact with the UCLA Digital Library team and Notch8 website developers. He ensured all staff were unified in their knowledge of project goals and monitored progress which he reported to the ARCE management. He also worked closely with the Advisory Board chair Nicholas Picardo to establish work flows and presented achievements to ARCE management and Advisory Board. Mr. Kostopoulos as a full time ARCE employee will continue to work on collecting data from Google Analytics account set for the ARCE Conservation Archives website and make sure information is accurate and communicated to ARCE management. Also, he will address any upcoming problems regarding online access and will be in communication with web developers for maintenance and trouble-shooting.

- **Talya Stanke – Metadata Specialist**
  Working from the ARCE Cairo office (until the work-at-home policy was implemented due to COVID-19), the metadata specialist facilitated operations related to metadata preparation, entry, and ingestion into UCLA’s Digital Library system. She worked with the rest of the team to draft important policies such as the Access and Use Policy and Privacy Policy, the Processing Manual, and ARCE’s metadata schema as well as presented and subsequently implemented the Creative Commons license to apply to ARCE’s archival material.

- **Tessa Litecky – Digitization and Data Specialist**
  Working from the ARCE Cairo office (until the work-at-home policy was implemented due to COVID-19), the digitization and data specialist processed and completed digitization and data preparation for the three pilot projects to be ingested into the UCLA Digital Library system. She worked collaboratively with the rest of the team to draft documents such as the Collections Management Policy, the digitization workflow and the white paper.

- **Yasser Tharwat**
  Mr. Tharwat’s main role was to overlook the NEH spending budget and report any problems to the project manager and ARCE’s chief financial officer. He was also responsible for drafting the financial report and processing the payments related to program activities.

Supporting Personnel

- **Dania Younis – Communications Manager**
- **Jeanned’Arc Sanbar – Communications Associate, United States**
- **Mirriam Ibrahim-Communications Associate, Egypt**
The project team, especially after the official launch of the website, collaborated with the ARCE communications team, in particular Communications Manager Ms. Younis, to design a dissemination strategy and promote the ARCE Conservation Archives website. Results of the collaboration with the communications department are stated under the “Accomplishments” section. The communication team has also acted as liaison with Teal, the website developers for the main ARCE site (arce.org), to ensure that the ARCE Conservation Archives website and the main site are linked, and to aid developer Notch8 with maintaining branding consistency and clarity.

- Zakaria Yacoub, Information Technology Manager
  On several occasions, the project held meetings with ARCE's I.T manager, Mr. Yacoub, to resolve technical issues and ensure best practices for hosting and maintenance issues. He assisted greatly with setting up accounts, activating software and hardware, and ensuring high quality technical assistance.

- Nada Zakaria, Intern
- Nancy Abdel Aziz, Intern

**University of California – Los Angeles Library (Los Angeles, California)**

- Dawn Childress - Librarian for Digital Collections and Scholarship
  MLS Rare Book and Manuscripts (Indiana University-Bloomington), Librarian for Digital Collections & Scholarship. Ms. Childress served as Project Lead for UCLA activities and oversaw the work of the UCLA staff. She also served as the primary point of contact between UCLA and ARCE and coordinated with ARCE staff on project workflows and best practices. Ms. Childress led orientation sessions for ARCE staff on the set-up and use of imaging equipment, imaging workflows, and post-processing.

- Genaro Sanchez, Digital Assets Coordinator.
  Mr. Sanchez coordinated and performed ingestion of all records and their metadata into UCLA's digital collections system and validated the integrity of files and data received from ARCE. Mr. Sanchez also performed quality control of published materials in conjunction with the ARCE project team.

**Notch 8 (San Diego, California)**

Notch8 was founded by Rob Kaufman in 2007. Since then, they have grown to a team of sixteen developers and have worked on projects around the globe. Founded and based in San Diego, California, the team currently includes full-time staff based in three time zones and two countries (United States and Canada). Notch8 works predominantly in Ruby on Rails and Javascript frameworks and React Native mobile applications, but they have expertise in several other languages and a deep bench of theming and design work on web applications. Since 2016, they have been active with digital library solutions, primarily through their involvement with the Samvera Community. Notch8 staff members serve as product owner for the Hyku Samvera solution, sit on Samvera Steering, serve as chair of the Hyku Interest Group, in addition to sitting on multiple other committees and working groups within the community. They are Samvera Partners and both in and out of the Samvera framework, they have contributed to more than 25 projects in the digital repository space.
Key project contributors at Notch8 include:

- Rob Kaufman, Notch8 Founding Partner and Senior Lead Developer
- Lea Ann Bradford, Senior Developer
- Kait Sewell, Developer
- Diem Tran, Software Validation and Test Engineer
- Crystal Richardson, Project Manager
- Kevin Kochanski, Client Liaison

Advisory Panel (Egypt, United States)
The Advisory Panel provided ARCE with expert insight throughout the project. It was composed of leaders in various fields related to Egyptology, archaeology, conservation and cultural heritage management, digital humanities, curation, and other relevant areas. The Advisory Panel collaborated with the project team to determine and formalize the ARCE digitization and publication workflow which dictated best practices and guidelines for digitization and online publication. The project manager presented all the different publication platforms and they ratified the expansion of the partnership with UCLA Library. The Advisory Panel also consulted on dissemination strategies, ensuring that the ARCE Conservation Archives records are made available to as many individuals in as many locations as possible. A list of the Advisory Panel members and their affiliations is as follows:

- David Anderson – Associate Professor of Archaeology, University of Wisconsin-La Crosse
- Salima Ikram – Distinguished University Professor of Egyptology, Department of Sociology, Egyptology and Anthropology, The American University in Cairo
- Janice Kamrin – Associate Curator, The Metropolitan Museum of Art
- Nick Picardo – Digital Humanities Consultant, Harvard University
- Jodi Reeves Eyre – Digital Curation Consultant, Eyre & Israel, LLC
- Peter Der Manuelian - Barbara Bell Professor of Egyptology, Harvard University; Director, Harvard Museum of the Ancient Near East
E. Collection-Level Descriptions for the Three Pilot Collections

HISTORIC CAIRO: ASLAM AL-SILAHDAR
USAID GRANT NUMBER: 263-A-00-04-00018-00 (EAC)
Cristophe Bouleau & Aga Khan Trust for Culture: Project Directors
Matjaž Kačični: Photographer

BACKGROUND INFORMATION:
Historic Era: Islamic Period (Mamluk) Project location: Cairo Governorate

The mosque of Aslam al-Silahdar was built in 1344 by a Mamluk prince and features jewel-toned inlaid marble and glittering glass mosaics. ARCE and skilled laborers from the surrounding neighborhood worked on the structural and aesthetic conservation of the mosque. Between June 2006 and April 2009, ARCE and the Aga Khan Trust for Culture carried out comprehensive conservation of the monument, under the auspices of the Egyptian Supreme Council of Antiquities.

SCOPE & CONTENT:
Duration of the Project: June 2005 – March 2009

These numbers are estimates and will vary depending on editorial processing and digitization decisions:

Content: 13 PDF, 12 AutoCAD drawings, 1560 digital images
• 11 quarterly progress reports covering June 2006 – March 2009
• 1 Final Report, Conservation Project of Aslam al-Silahdar Mosque, June 2006 – April 2009
• 1 Structure Report, Aslam al Silahdar Mosque Restoration Project, October 2006
• 12 architectural drawings of the Aslam al-Silahdar conservation project, February 2007
• 1560 digital photographs documenting the conservation work at Aslam al-Silahdar with accompanying record sheets

RED MONASTERY: ARCHITECTURAL CONSERVATION
USAID GRANT NUMBERS: AID-263-A-00-04-00018-00 (EAC) and AID-263-A-15-00007 (CHTE)
Michael Jones, Nicholas Warner: Project Director
Matjaz Kacicnik: Project Photographer

BACKGROUND INFORMATION:
Historic era: Byzantine
Project Location: Sohag Governorate

Architectural conservation and site presentation work was carried out at the Red Monastery Church from October 2013 to June 2018. The work was executed by Nicholas Warner with his team of local, skilled craftsmen. Among the tasks completed were: installation of new limestone paving and a new electrical network with LED lighting throughout the church; installation of new...
wooden doors and cupboards; replacement of sections of timber damaged by termites; roofing work; re-erection of fallen columns in the nave; installation of displays of archaeological finds; installation of a new altar in the sanctuary; and repair and conservation of the interior and exterior of the tower adjacent to the church.

SCOPE AND CONTENT:
Duration of Project: January 2015 – June 2018

*These numbers are estimates and will vary depending on editorial processing and digitization decisions:*
Content: 13 PDF, 1 Word Document, 5103 TIFF, 3 AutoCAD
- 1 Specialist Report, 2011
- 3 Technical Reports covering August to November 2015
- 1 Specialist Report covering work done from October 2013 – June 2014
- 1 Technical Report covering work activities from September – November 2015
- 1 Specialist Report, May 2016
- 1 report submitted in 2016 reporting the floor removal
- 2 Technical Reports covering work done in the tower and church during Spring 2016
- 1 Technical Report submitted covering work done in the tower during Fall 2016
- 1 Technical Report covering work done in the tower during Spring 2017
- 1 Technical Report covering the emergency termite control work done in July 2018
- 1 draft proposal, November 2016
- 5103 TIFF images with record sheets
- 3 AutoCAD drawings of the Red Monastery Nave, Tower Roof and Tower

SHUNET AL ZEBIB (FUNERARY ENCLOSURE OF KHASEKHEMWY)
USAID GRANT NUMBER 263-G-00-93-00089-00 and 263-A-00-04-00018-00
David O'Connor, Project Director Matthew D. Adams, Project Co-Director

BACKGROUND INFORMATION:
Historic Era: Pharaonic Period (Old Kingdom) Project location: Sohag Governorate

The funerary monument of King Khasekhemwy in Abydos, known as the Shunet el-Zebib, is among the oldest surviving mud brick structures in the world and the best example of Egypt’s earliest tradition of royal mortuary building. Funding from the EAP grant between 1999 and 2006 resulted in documentation and conservation of approximately 50% of the 200-meter perimeter using newly made mud bricks of the same size and materials as the original to re-establish structural integrity. Follow-up funding provided under a subsequent USAID grant in 2010 enabled team members to continue with stabilization and conservation of the enclosure, parts of which still risked collapse. The precarious situation at the Shunet el-Zebib was evidenced by its inclusion in the World Monuments Fund’s 2008 Watch List of the World’s 100 Most Endangered Sites.

SCOPE AND CONTENT:
These numbers are estimates and will vary depending on editorial processing and digitization decisions:

Content: 14 reports, 4 PDF, 3,931 JPG, 13 CDs

- 1 Final Report covering 1999 – 2006
- 3 Technical Reports covering 2010 – 2012
- 9 Progress Reports covering May 2000 – April 2007 non-digitized
- 1 Architectural Documentation Report Vol. 1 non-digitized
- 1 Final Structural Report Vol. 2 non-digitized
- 1 mud brick conservation, Field Report Vol. 3 non-digitized
- 1 Conservation Specifications Report non-digitized
- 1 volume of Abydos Seminar I: Site History & Conservation non-digitized
- 3,931 JPG images with record sheets
- 1 photogrammetric recording report with 13 CDs digitized
F. Matrix for Creative Commons License

Implementing a Creative Commons (CC) license for the American Research Center in Egypt’s (ARCE) Archives:

Types of licenses:

With any Creative Commons license applied, users will be required to provide due credit for all material.

The six available, internationally recognized (version 4.0) Creative Commons licenses:

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| Researchers can non-commercially use and adapt content (adapted versions must be shared under the same license). No commercial use of the licensed material is permitted, either of the original or of any modified form. | Open access to materials  
| Commercial use of content is not allowed  
| Adaptations allowed and licensed under CC BY NC SA: this permits the creation of educational resources such as non-commercial translations of content or Google Arts & Culture Exhibits | Researchers/users do not need to inform ARCE that they are going to use or adapt our content (they will still be required to provide credit) | Yes, most educational resources use this license as it allows for publicly beneficial, accessible, non-commercial content |
| **CC BY-NC-ND**  
| (Attribution-NonCommercial-ShareAlike-No Derivatives):  
| Neither adaptations nor commercial uses are permitted for usage of content | Open access to materials  
| Commercial use of content is not allowed  
| Adaptations of content forbidden | Researchers/users do not need to inform ARCE that they are going to use or adapt our content (they will still be required to provide credit) | Yes, this license would work for ARCE content, but it restricts user ability to utilize our content in that no adaptations can be produced, therefore it does not permit the creation of educational resources |
G. Google Analytics

Acquisition overview

Users: 1.3K
New users: 1.3K

New users by User medium:
- (none): 637
- organic: 345
- referral: 344

Sessions by Session medium:
- (none): 1,330
- referral: 716
- organic: 460

Sessions by Session campaign:
- No data available

Lifetime value:

© 2021 Google | Analytics home | Terms of Service | Privacy Policy | Send feedback
Demographics overview

Users by Country

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Users by City

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Users by Gender

No data available

Users by Interests

No data available

Users by Age

No data available

View countries ➔

View cities ➔

View genders ➔

View interests ➔

View age ranges ➔