CULTURAL HERITAGE PRESERVATION WORK IN AFGHANISTAN AND CENTRAL ASIA

GIL J. STEIN

In 2017–18 we completed the sixth full year of cultural heritage preservation projects in Afghanistan and carried out our first year of a new heritage initiative in the post-Soviet republics of Central Asia. The three cultural heritage grants in Afghanistan are funded by the U.S. Department of State and the U.S. Embassy in Kabul. The Central Asian heritage project is based in Uzbekistan and supported by the U.S. Embassy-Tashkent.

AFGHANISTAN

We have been carrying out our cultural heritage projects in Afghanistan in partnership with the National Museum of Afghanistan (NMA) with its director, Fahim Rahimi, and the Afghan Institute of Archaeology (AIA) with its director, Noor Agha Noori. These efforts are funded by three grants: Core Operations, the Mobile Museum Outreach Project (MMP), and the Afghan Heritage Mapping Project (AHMP).

These partnership projects have several key goals: a) develop a bilingual objects management database for the NMA, b) conduct a full inventory of the NMA’s holdings, c) train NMA conservators and curators, restoring sculptures from the early Buddhist monastic complex of Hadda, d) museum outreach programming (the “Mobile Museum” grant), e) partner with the AIA to develop a GIS database of archaeological and other heritage sites in Afghanistan based on satellite imagery, and f) train the staff of the AIA in the use of geospatial databases for archaeological research and cultural heritage preservation.

At the National Museum, the inventory of all objects in the museum and other storage areas is now essentially complete. However, we are continuing with the Hadda sculptural restoration project, with our Mobile Museum Outreach Project (MMP), and in training and capacity building for the museum staff in object conservation, database management, and best practices for object curation.

In addition to our work with the National Museum, the OI is also conducting the Afghan Heritage Mapping Project (AHMP) in partnership with the Afghan Institute of Archaeology, to train the staff and concurrently develop a geospatial database whose ultimate goal is to use remote sensing data to document all the main archaeological sites in Afghanistan.

The OI component of these partnerships consists of two parts. The “Chicago team” included Gil Stein (principal investigator) and Brendan Bulger (grant planning, administration, and budgeting), and OI Conservator Alison Whyte. Our “Kabul team” comprised Field Director Alejandro Gallego Lopez, Head Conservator Fabio Colombo, and Assistant Conservator Elisa Pannunzio (fig. 1).

Figure 1. OI Afghan project staff in Kabul.
Local logistical support for our project is provided by ACHCO (a Kabul-based non-governmental organization specializing in cultural heritage projects in Afghanistan); our close partners have been ACHCO founder Jolyon Leslie and Ahmad Bilal. At the U.S. Department of State, our key partners have been Dr. Laura Tedesco, the Cultural Heritage program manager at the Office of Press and Public Diplomacy, responsible for Afghanistan and Pakistan, while the State Department’s financial management of the grant is overseen by Grachelle Javellana. At the U.S. Embassy-Kabul, we especially thank Cultural Affairs Specialist Muzhgan Azizy.

The Core Operations grant supports the “OI House” field headquarters in Kabul and shared infrastructural needs for all our work in Afghanistan at the NMA, the AIA, and our Mobile Museum Outreach Project. In January 2019, project Principal Investigator Gil Stein signed the renewal of the Memorandum of Understanding (MoU) between the OI and the Ministry of Information and Culture that allows for our work in Afghanistan (fig. 2). The MoU specifies that the OI and the National Museum are working together on the main activities encompassed in the Core Operations Grant, such as the Hadda Sculptural Restoration Project, the Loss Assessment Project, capacity building through training of NMA conservators and curators, and documentation of the ceramology storeroom.

Security is a central concern for our projects in Afghanistan and is a major element of infrastructure. In early 2018, the OI Kabul field director coordinated the installation of several key security upgrades to the OI’s Kabul House: bars on all second-floor windows, a metal sniper screen at
the back of the compound, and a line of 2 m high sand-filled steel mesh Hesko barriers along the inside of the outer compound wall along the street.

At the NMA, one of our major foci of activities is the Hadda Sculptural Restoration Project. The 1,500-year-old sculptures from Hadda in the NMA’s holdings are one of the most important collections of Early Buddhist (Gandharan) art in the world. These priceless sculptures were systematically smashed by the Taliban in the months leading up to their destruction of the giant standing Buddhas at Bamiyan. At great personal risk, the NMA staff secretly collected and stored more than 7,600 fragments of these sculptures. Our head conservator in Kabul, Fabio Colombo, and Assistant Conservator Elisa Pannunzio are now well into the process of cleaning, stabilizing, and reassembling the Hadda sculptures (fig. 3). We have now rejoined approximately 900 sculptural fragments and are making significant progress toward actually reassembling the smashed sculptures (fig. 4).

The Hadda project is also investigating the potential for 3-D scanning of the sculptural fragments with two goals in mind. At the most basic level we plan to use our Spyder 3-D scanner to scan all of the 7,600+ fragments simply as a means of documentation to complement the standard digital photography. In addition, we are exploring the possibility of using advanced 3-D modeling software to “digitally
reassemble” the fragments. To assess the feasibility of this second goal, Professor Giuseppe Salemi—an expert in laser scanning from the Department of Cultural Heritage, Archaeology, and History of Art at the University of Padua—carried out a one-week initial consultancy visit to the National Museum of Afghanistan in Kabul in January 2019. Professor Salemi examined the Hadda fragments themselves, evaluated and calibrated our 3-D scanner, and tested a range of visualization formats for the 3-D scans of the fragments (fig. 5). He concluded that some level of 3-D digital reassembly might be possible, especially with improved equipment, specific modeling software, and the integration of digital methods with human pattern recognition. Specifically, if the conservators could presort the fragments by size, color, texture, and surface characteristics into small groups of fragments presumed to be related, then the 3-D modeling could locate fresh breaks whose shapes formed “mirror images” on pairs of fragments that could then be digitally rejoined.

Capacity building for NMA conservators is also a key component of the project. From June 29 to July 4, 2019, OI–Kabul Head Conservator Fabio Colombo and Assistant Conservator Elisa Pannunzio conducted a second conservation training workshop for the NMA conservation staff, along with students from the University of Kabul, the Ministry of Information and Culture (MoIC) Department of Monuments, and conservators from the Afghan Institute of Archaeology (fig. 6). Fabio and Elisa gave a practical demonstration of their work in the laboratory and a PowerPoint presentation recounting the evolution of the Hadda project. This latest in a series of workshops is laying the groundwork to allow for the participation and training of Afghan conservators from outside the National Museum as well.

For true long-term sustainability of the OI–NMA inventory database, we need a pool of NMA staff who can develop, modify, and troubleshoot the FileMaker Pro database when needed. By learning the underlying structure of the database, they will be capable of resolving problems in the future and will be able to design new report templates and modify the system structure to accommodate changing information environments such as a new museum location or inclusion of regional museum database information. Over the last three years we have started to train NMA staff in database management. Twenty curators and other NMA staff members are now completely proficient in the use of the database to document and inventory the objects in the museum’s collections. The National Museum hired a new database manager (Nurullah Hadaf), who came with a BA in computer science. OI Field Director–Kabul Alejandro Gallego-Lopez began daily training sessions for Nurullah in the use of the NMA–OI inventory database.

In addition to our work on conserving collections and capacity building, we have also focused on educational outreach through our Mobile Museum Outreach Project (MMP). Kabul Field Director Alejandro Gallego Lopez has worked closely with Project Manager Jalil Yousoufi and program instructors Sajjad Ali and Zakiya Rahimi to develop and implement this project. The Mobile Museum Outreach Project partnership is a collaboration with the National Museum of Afghanistan (NMA) to develop and implement a national-scale educational outreach program that raises awareness and improves audience perceptions of Afghanistan’s cultural heritage. The programs are presented to high school students (grades 10–12) through in-class presentations in boys’ and girls’ high schools and orphanages in six cities across Afghanistan: Kabul, Herat, Mazar-i Sharif, Bamiyan, Kandahar, and
and Jalalabad. Presentations and materials made available at the U.S. Embassy sponsored Lincoln Learning Centers around the country and at orphanages in Kabul, Mazar-i Sharif, and Herat.

The Mobile Museum uses innovative digital technology, object-based learning, and traditional educational tools in multiple pathways of engagement with students. Class presentations by trained staff include video, 3-D printed replicas of museum objects (fig. 7), posters and banners for permanent display (fig. 8), and notebooks with information about the NMA for students to take home. The range of class presentations is being augmented by posting the program materials on the NMA website, at Lincoln Learning Centers, and by providing each school with banners and posters highlighting the civilizational history of Afghanistan and the objects in the National Museum. On-site evaluation questionnaires are used to assess and improve program effectiveness (fig. 9).

As of July 2019, we have presented the program in class or through live webcasts to 5,462 students in 64 boys’ and girls’ high schools and in orphanages both in the capital, Kabul, and the provincial cities of Mazar-I Sharif and Herat.

Our third grant in Afghanistan is the Afghan Heritage Mapping Partnership (AHMP). This project collaborates with the Afghan Institute of Archaeology (AIA) in a two-pronged mission: a) the use of satellite imagery, historical maps, and other geospatial technologies to build a comprehensive GIS database of identified archaeological sites and monuments across Afghanistan, and b) capacity building through the construction of training modules and management tools (including a spatial data archive), and the training of local Afghan heritage professionals in the use of these tools. These foci are split between the CAMEL (Center for Ancient Middle Eastern Landscapes) lab at the University of Chicago and a developing GIS (Graphic Information Systems) laboratory at the AIA in Kabul. The main goals of the AHMP are:

1. Use of satellite imagery to develop a spatial inventory of known and newly discovered archaeological sites, especially in areas of deep historical significance and under acute threat from looting and armed conflict (fig. 10).
2. Development of innovative techniques for tracking the condition of archaeological sites and analyzing spatiotemporal patterns in looting.
3. Creation of an interactive toolkit of management tools and training modules to enable heritage professionals to be involved in planning and development projects in Afghanistan.

4. Training Afghan heritage specialists—especially from the Afghan Institute of Archaeology—in the use of AHMP-provided geospatial database of archaeological sites, along with tools and techniques for heritage management and civic planning.

The AHMP staff continued their work of identifying new sites from satellite imagery, checking and correcting coordinates from earlier ground survey work in Afghanistan, and the checking and verification of potential archaeological and heritage sites flagged by the NGA (National Geospatial-Intelligence Agency). As part of this process, the Chicago staff began the process of checking and integrating the list of roughly 1,200 potential sites identified and described by the Afghan Institute of Archaeology into our existing geospatial database. This list—provided to us in February 2019 by the AIA’s Director Noor Agha Noori—contains site data from twenty-three of the thirty-four provinces of Afghanistan. Over the past three years, the AHMP has used satellite data to survey 72,852 sq. km of Afghanistan, identifying 10,071 archaeological and heritage sites, plus approximately 1,000 additional qarez/qanat underground irrigation canal systems, for a total of 11,071 sites identified to date (fig. 11).
In early 2018, at the request of the Washington Department of State and the U.S. Embassy-Kabul, the staff of the Afghan Heritage Mapping Project (AHMP) in Chicago—notably acting CAMEL Lab Director Anthony Lauricella and AHMP Project Manager Eric Hubbard—worked in collaboration with OI Field Director Alejandro Gallego Lopez to develop a list of 401 significant cultural heritage sites in Afghanistan. They utilized information from the *Archaeological Gazetteer of Afghanistan* and the Ministry of Information and Culture’s Department of Monuments’ “Plaque List”—a list of significant historical monuments—to serve as the basis for the “No Strike List” for allied operations as part of Operation Resolute Support. For each site, the standard ArcGIS longitude and latitude coordinates were determined or checked and corrected from earlier, less accurate records. These standard coordinates were then converted into the decimal coordinate system used by NATO forces. Remote sensing images were located for each site and incorporated into the Resolute Support record template, including the site name, brief site description, and province in which the site is located. The list of 401 sites was provided to CENTCOM (U.S. Central Command) for incorporation into the final “No Strike” list for Afghanistan. This is a major step in preserving archaeological and other heritage sites in the country by avoiding accidental damage in the course of conflict.
Capacity building and training are also integral parts of the AHMP. Most notably the AHMP hosted an intensive, two-week workshop in February 2019 at the University of Chicago, utilizing the CAMEL lab facilities in the Oriental Institute. Five staff members of the AIA, including its director, Noor Agha Noori, were in attendance (fig. 12). The training introduced the AHMP database and our methodologies for remote research, and also functioned as an initial planning session for how best to grow and utilize the data collaboratively. The project continues to provide instructional material to the AIA staff in charge of their database and is developing further coursework to be carried out in Kabul.

CENTRAL ASIA

One of the most impactful, efficient, and cost-effective ways to preserve cultural heritage in Central Asia is by training local conservators in internationally accepted methods for the preservation of artifacts already located in the national museum systems of these countries. Although the national museums of the Central Asian republics have artifact conservation laboratories and staff conservators, the laboratories are rudimentary, and the staff often are in need of rigorous training in the methods and techniques needed to preserve the archaeological, historical, and artistic objects in their collections.

To address this challenge, in 2018 the OI extended the scope of its cultural heritage work into Central Asia with the inauguration of the “C5 Cultural Training Partnership for Artifact Conservation” (C5 CTPAC). This is a three-year program of capacity building and advanced training for artifact conservators at the national museums of the five Central Asian republics (“C5”): Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan. In September 2018 the Oriental Institute organized the first in a series of three annual intensive two-week training workshops for sixteen conservators from the National Museums of the C5 republics and from other museums in Uzbekistan. The development of this plan is based on local determinations of need by the Ministries of Culture, the National Academies of Sciences, and the national museums of these countries. The workshops are taught by conservation experts from leading international centers. The topics covered in each workshop are tailored to provide training in internationally recognized standards and practices of treatment for the main classes of artifact types and constituent materials that form the majority of the holdings in the national museums of the C5 countries. This is the first systematic program to bring together heritage preservation specialists from the national museums of the C5 countries for training.
In 2018 we were able to get the participation of conservators from the national museums of Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan for the first workshop (fig. 13). Of the five Central Asian republics, only Turkmenistan did not send any participants. The workshops took place in Tashkent at the State Museum for the History of Uzbekistan. We are grateful to our partners, Ms. Jannat Ismailova, director of the museum, and Deputy Director Otabek Aripjanov. The training program curriculum was developed by Workshop Coordinator Fabio Colombo (who also serves as the head conservator for our cultural heritage work in Afghanistan). The twelve-day class sessions combined theoretical background with an overarching focus on hands-on practical experience learning how to assess, document, clean, and restore actual archaeological objects. The class projects focused on the conservation of unbaked clay sculptures and on mural paintings from the first to fifth centuries CE. All the assigned reading materials were translated into Russian as the only lingua franca shared by the conservators of the four participating countries (fig. 15). We also had a translator who worked with Fabio to provide in-class English–Russian simultaneous translation. We were delighted to read the positive evaluations of the workshop by the participants, who also provided useful suggestions for the topics they hope to see covered in the upcoming 2019 and 2020 workshops two and three.

Figure 15. Bilingual Russian–English cover page for the assigned C5 CTPAC workshop readings. The Scythian gold ornament was selected as a unifying logo because Scythian material culture is found in all five of the Central Asian republics.
CONCLUSIONS

The OI’s cultural heritage programs address two kinds of challenges: post-conflict restoration in Afghanistan, and in Central Asia, proactive programs to strengthen heritage and build the capacity of local specialists to ensure the preservation of heritage in countries where the greatest risks stem from population growth, urban expansion, and economic intensification. We are committed to doing whatever we can to address the world heritage crisis through collaborative projects with our local partners in countries at risk.