







Project Anga Final Report

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INTRODUCTION

Project Anqa is a collaborative project between multidisciplinary actors involved in cultural heritage, innovative technology and education. The project partners created 3D recordings of at risk heritage sites located in Damascus, Syria, archived them and created a web platform where the site imagery and data are accessible to the public.

Project Anqa seeks to preserve endangered heritage sites through digitalising heritage sites, building capacity in local teams and making innovative technology accessible, as well as by promoting the transfer of knowledge through an Open Access web platform and the creation of a permanent online architectural archive.

1-Project Anga Partners

The project, which started in 2016, involved multiple partners: ICOMOS, CyArk, Carleton Immersive Media Studio (CIMS) of Carleton University, the Directorate General of Antiquities and Museums (DGAM) of Syria, and the Institute for the Preservation of Cultural Heritage (IPCH) of Yale University. The project was made possible with the generous support of the Arcadia Fund.



The homepage of the Project Anga website

ICOMOS initiated original talks and guidance, and then ensured the scientific coordination of the project. CyArk helped to build capacity in the region, by training the DGAM team and by providing state-of-the-art technology to enable them to produce heritage records of seven at-risk heritage sites in Damascus, Syria utilising 3D scanning, photogrammetry and panoramic photography. Yale University's IPCH created the beta version of the website, and the Carleton Immersive Media Studio team delivered the final web platform and storytelling experience.

2- Web platform and innovative technology use

CyArk trained 10 Syrian high-level engineers and architects from the DGAM to capture 3D data of seven built heritage sites located in Damascus and to collect contextual data about the cultural heritage sites. Yale University's IPCH and the Carleton Immersive Media Studio worked on creating an online experience to showcase this work.

The website (http://cims.carleton.ca/anqa) is designed to feature three themes: 3D viewing, conservation and storytelling. The sites were captured as spherical panoramic images to create virtual tours that immerse the visitors in these cultural heritage sites. Then, a short historical description of the site along with pictures is provided as well as documentation data that can be downloaded for free. The information is available in open access, thus the website is targeted towards scholars and professionals as well as the public.



A short description of the site "Madrasa al-Jaqmaqiya" with pictures

3-Selected sites

The website features seven heritage sites chosen to highlight the architectural variety in the city and the diverse role of the sites. The chosen sites were religious, educational, related to health-care, some also housed rulers.

The seven historical sites are:

- Al-'Azm Palace was built between 1749 and 1751 by the governor of Damascus As'ad Pasha al-'Azm. It has received an Agha Khan Award for Architecture for its restoration and maintenance. Currently, the palace houses the Museum of Arts and Popular Traditions.
- Ananias Chapel is an underground chapel that demonstrates the presence of Christianity in Damascus and is linked to the apostle St Paul. It was and still is an important pilgrimage site for Christians.
- **Bimaristan Nur al-Din** was created in 1154 by Nur al-Din Mahmud ibn Zengi, the ruler of Syria, as a hospital and medical school. The building is now the Museum of Medicine and Science in the Arab World.
- Hamman Nur al-Din is a public bath built between 1154 and 1174 by Nur al-Din Mahmud ibn Zengi, which still functions as a bathhouse. It was created to provide funds for the waqf (a charitable endowment to support the Nur al-Din Madrasa).
- Khan As'ad Pasha is a caravanseral built in 1752 by As'ad Pasha al-'Azm and was called "the great masterpiece of Ottoman Damascus". The DGAM began restoring it in 1980 and it now functions as a centre for cultural activities.
- Madrasa al-Jaqmaqiya was built between 1418 and 1420 for the Mamluk governor of Damascus Jaqmaq al-Arghunshawi. Madrasas were buildings with multiple functions which included an Islamic religious school. The Madrasa al-Jaqmaqiya now houses the Museum of Arabic Calligraphy.
- **Tekkiye Süleymaniye** is an Ottoman mosque complex that includes public facilities such as a soup kitchen and lodgings for travellers. It was designed by the famous architect Sinan for the Sultan Süleyman the Magnificent between 1553 and 1554. This site was restored by the DGAM in the 1960s.



A virtual tour of Al-'Azm palace, with a map on the left of the screen to allow the viewer to change its location, along with objects that highlight the specificities of the site and provide further information.

4-Achievements

One of the most positive aspects of the project is the dedication of its partners to capacity building. CyArk provided the DGAM team with the necessary tools and training to empower local talented architects and engineers to capture 3D data with different techniques such as laser scanning, aerial drones and photogrammetry as well as the ways to process the resulting data. CyArk provided three workshops in collaboration with the Emergency Safeguarding of the Syrian Cultural Heritage project at the UNESCO Beirut office. The workshops also included practical sessions in which the participants actively documented the Temple of Eshmoun archaeological site in Saida and the Sursock museum in Beirut.

Dr Samir Abdulac, Chair of ICOMOS Working Group on the Safeguarding of Cultural Heritage in Syria and Iraq, as well as



The DGAM and CyArk teams during a practical session of one of the Beirut workshops

Dr Saima Akhtar and Professor Stefan Simon from Yale University's IPCH provided assistance to the team. ICOMOS provided archival data of the heritage sites. The proficiency and excellent abilities of the DGAM team were also a factor of the project's success.

An important objective of Project Anqa was to develop the project in other countries, such as Iraq. The recognition and exposure it has received could allow the project to expand. In fact, Professor Simon presented the project in front of a Congressional Hearing in Washington, D.C. in 2016. Project Anqa was also introduced to former French president François Hollande by Dr Abdulac as part of a briefing. Dr Abdulac also presented the project at various events, including the International Conference on the Protection of Cultural Heritage in Conflict Areas held in Abu Dhabi, the International Conference on Documenting our Heritage at Risk, and during international meetings around the world. Three international publications have followed and others are in a printing stage. The global exposure of the project may pave the way for possible future support.

Lastly, another relevant achievement of Project Anqa is the consolidation of an online portal. For its launch, ICOMOS shared the website's address on its own website and social networks, encouraging followers to visit Project Anqa's website. The information reached more than 10 000 people on Twitter and 15 000 on Facebook. The website is successful in attracting visitors, with 762 unique visitors during the month of March 2019, and between 40 and 80 unique visitors per day during the same month. The vast majority of visitors come from North America.

This website will gain even more exposure as a member of the Carleton team who worked on Project Anqa will present the website at the 27th CIPA (International Committee of Architectural Photogrammetry) Conference, which will take place on 1-5 September 2019 in Ávila, Spain. Mario Santana, Professor at Carleton University and ICOMOS Vice-President, presented the project as part of the Getty Conservation Institute Scholar Lecture Series, reaching out to different heritage conservation audiences. The outcome of Project Anga will also be featured in an article in the upcoming 2018 ICOMOS Annual Report.

5-Challenges

One of the greatest challenges Project Anqa's partners successfully overcame was the inaccessibility of the project's data that hindered its transmission from the host country through the internet. The shortages of electricity and internet connection as well as the heavy size of the files compromised any transfer via electronic correspondence. Thus, hard drives and memory cards had to be exchanged physically, which was more difficult to organise and required more time.

Project Anqa also had to face another great challenge that slowed the pace of the project. Due to the reinforcement of sanctions imposed by the US government on Syria, one of Project Anqa's partners, Yale University's IPCH, unfortunately had to withdraw from the project. The Carleton Immersive Media Studio of Carleton University stepped in to continue the work begun on the website, enabling the partners to fulfil the project goal of rendering the data and site imagery accessible to the public.

Another difficulty was to ensure the DGAM team could work in a secure environment while being in a high conflict zone, and that the team continued the work once the training was over and the CyArk team had left.

The ICOMOS Working Group is still closely in touch with the DGAM team, which has just finalised the field survey of the damage assessment for the UNESCO project "Recovery of the ancient city of Bosra" using the skills learned in Project Anqa capacity-building workshops. Other international interventions from French, Japanese and perhaps soon Russian teams are exposing our trainees to different equipment, software, methods and objectives. A centralised coherent inventory would be useful for future work in Syria, although additional storage capacity is currently unavailable. This is one of the challenges of a one-time project.

Surprisingly, Project Anga has been easier to develop so far in Syria than in neighbouring Iraq.

CONCLUSION:

Although Project Anqa's partners faced challenges to overcome, the project still successfully reached its goal of creating an online web platform with 3D scans and comprehensive data in open access on built heritage at risk in Syria. Teams from different countries effectively worked together, and the training allowed to build capacity in the region. With the exposure the project has received, it will hopefully serve as an example to inspire future similar projects that seek to preserve endangered cultural heritage.