NILE'S EARTH



INTERNATIONAL CONFERENCE

STUDY AND CONSERVATION OF EARTHEN ARCHAEOLOGICAL SITES IN ANCIENT EGYPT AND SUDAN

ORGANISED BY GRENOBLE SCHOOL OF ARCHITECTURE



4-5-6 JULY 2023

INSTITUT D'URBANISME ET DE GÉOGRAPHIE ALPINE (IUGA)

14 et 14 bis Av. Marie Reynoard, 38100 Grenoble



The ANR Nile's Earth project (2021-2024)

The ANR Nile's Earth project is led by the École Nationale Supérieure d'Architecture de Grenoble (ENSAG) with the collaboration of UMR 5189 Histoire et Sources des Mondes Antiques, UMR 8167 Orient & Méditerranée, CRAterre, the Institut Français d'Archéologie Orientale in Cairo (Ifao), the Centre Franco-Égyptien d'Étude des Temples de Karnak (CFEETK) and the Section française de la direction des Antiquités du Soudan (SFDAS).

Since the birth of Egyptology in the nineteenth century and then Sudanology, the interest of researchers has focused mostly on stone architecture. The earthen architecture that is however much older and also systematically associated with it has been rather poorly studied and even less preserved nor enhanced, though with few monumental exceptions. But in recent years, it has become clear that there is a need to better take into account these vestiges of earthen architectures for ensuring a full understanding and proper restitution to both research and the general public. Some first attempts have been conducted by teams of archaeologists, but with results that are not always satisfactory.

The Nile's Earth project proposes to gather complementary competencies to fill the gaps with further investigations towards a better knowledge of these remains, their states and conditions of conservation, and then the definition of more adapted and durable methods and techniques for conservation and site presentation.

Nile's Earth International Conference



Word of welcome

Earthen heritage of the ancient Nile Valley is increasingly threatened by current climatic and ecological changes (e.g., heavy rains, dam construction, and cultivation of previously semi-desert or desert areas, soil salinization). It is therefore now recognized that specific solutions are needed to effectively preserve Egyptian and Sudanese archaeological sites.

In this context, the ANR Nile's Earth project aims at contributing to this quest by exploring the potential of multidisciplinary approaches for a better identification and knowledge of these earthen archaeological earthen remains, the assessment of their state of conservation, and the definition of adapted and sustainable conservation methods and techniques. The assumption is that, to be relevant, conservation protocols must rely on in-depth knowledge of ancient building techniques and materials, as well as the original building culture.

The Nile's Earth International Conference 2023, one of the main activities of this project, aims at stimulating an international debate towards better characterizing the earthen architecture of the ancient Nile Valley. It also aims at better identifying needs and exploring relevant methodologies and solutions to meet the growing demand for conservation and valorization of Egyptian and Sudanese archaeological sites, in line with international recommendations.

This conference takes place two hundred years after the deciphering of the ancient hieroglyphs by Champollion (who studied at our university). In addition, the creation of CRAterre was strongly inspired by the world-renowned Egyptian architect Hassan Fathy. It is therefore with great pleasure that our team will welcome you to Grenoble to share your experiences, your results, but also your pending questions on the three main themes of the conference, which will form the basis of discussions for a better knowledge, recognition and valorization of this exceptional heritage.

Thanks to the hard work of the organizing committee and the scientific committee, as well as the staff of ENSAG and IUGA, we were able to ensure conditions conducive to the success of this event. The same applies to our colleagues at the IFAO in Cairo, where participation is also possible thanks to the broadcasting system set up. It is regrettable that it was not possible to do the same for SFDAS in Khartoum, but we hope that the situation will soon improve and we will ensure that professionals in Sudan can benefit from this conference and its outcomes.

Welcome to Grenoble! Welcome to Nile's Earth 2023, which will hopefully be the first of many.



Thierry Joffroy
Architect-Research Director (HDR)
Deputy Director of the AE&CC research unit
Director of the CRAterre team
ENSAG / Univ.Grenoble-Alpes

and the Organising Committee

TUESDAY, JULY 4

Morning

8:30 - 9:00 DOOR OPENING

Welcoming of participants



9:00-10:30 PROJECT PRESENTATION AND OPENING SPEECHES

Welcome word and Nile's Earth project presentation by Thierry JOFFROY, Architect, Director of research, ANR Nile's Earth Project coordinator.

Opening speeches

10:30 - COFFEE BREAK

THEME 1

ARCHAEOLOGY, ARCHITECTURE AND BUILDING CULTURES

Moderator Bérengère REDON

11:00 - 11:10 OPENING OF SESSION



"Archaeology in Egypt: Finding mud bricks" by Patricia and Jeffrey Spencer - Running time: 4:58 min.

11:10 - 11:30 **JAROMIR KREJCI**

Mud-brick structures in the Old Kingdom royal necropolis at Abusir Centre - tradition, strategies, usage.

11:30 - 11:50 PETER LACOVARA

The Origin and Early Development of Casemate Architecture in Egypt.

11:50 - 12:10 **AHMED ALTAHER**

Mudbrick Architecture from the Avenue of sphinx. An overview on the buildings' techniques from trench 4 at sector 5.



12:10 - 12:30 DEBATE

12:30 - LUNCH

Programme



Afternoon

Moderator Julie ANDERSON

14:00 - 14:10 OPENING OF SESSION



"Mud Architecture in Sudan" by Intisar Soghayroun el-Zein and Julie Anderson Running time: 5 to 7 minutes

14:10 - 14:30 **MATTHIEU VANPEENE**

Another Brick in the Wall; First Architectural Results of the Study on Dendara's Walls.

14:30 - 14:50 **SYLVAIN DHENNIN**

The architecture of the Animal Catacombs in Dendara.

14:50 - 15:10 MOHGA ABD EL-KAWY

The Architectural Design of Newly Discovered Pottery and Lime Kilns at Tabbet Metawah Site West Alexandria.



15:10 - 15:30 DEBATE

15:30 - BREAK

Moderator Julie ANDERSON

16:00 - 16:20 NATHALIE KAYSER-LIENHARD

Nile mud-brick architecture as seen in the calotypes of Félix Teynard.

16:20 - 16:40 TOMOMI FUSHIYA, MOHAMED HASSAN SIEDAHMED

Testimonies of cooperative care: Socioeconomic system of the maintenance of the oldest mosque in Sudan.



16:40 - 17:00 DEBATE

SPECIAL SESSION - TRIBUTE TO HASSAN FATHY

Moderator Thierry JOFFROY

17:00 - 17:20 ZINEB BENNOUNA



The earthen Architecture of Hassan Fathy or how Architecture can contribute to the preservation of the Nile's Heritage.

17:20 - 17:30 "Hassan Fathy: Pioneer of sustainable architecture and social development" - by Dr. Fekri Hassan . Running time: 9:44 min

17: 30 - 17:45 **FEKRI HASSAN**

Revitalization of Hassan Fathy's New Gourna.

17:45 - END OF DAY

WEDNESDAY, JULY 5

Morning

THEME 1

ARCHAEOLOGY, ARCHITECTURE AND BUILDING CULTURES

Moderator Ahmed ALTAHER

9:00 - 9:10 OPENING OF SESSION

9:10 - 9:30 YUJIA FAN



Dialogue between two Sites: The Experience of Protecting the Earthen Great Wall in China

9:30 - 9:50 HAROUNE BEN CHARIF, AZEDDINE BELAKEHAL

Documenting earthen construction processes and techniques, a case study on Ksar Timimoun, Algeria.

9:50 - 10:10 JENNIFFER QUIROZ BRAVO

Last Testimonies of Earthen Architecture in Original Communities of Tarapacá.



10:10 - 10:30 DEBATE

10:30 - COFFEE BREAK

THEME 2

RAW AND BUILDING MATERIALS

Moderator Nadia LICITRA

11:00 - 11:10 OPENING OF SESSION

11:10 - 11:30 **CORTEN PÉREZ-HOUIS**

From the silt to the shale clay, from the valley to the desert : the material transformations of the red brick in Egypt and Sudan.

11:30 - 11:50 <u>CLÉMENT VENTON</u>, MAËL CREPY, <u>BÉRANGÈRE REDON</u>

First insights on the earthen architecture of the site of Plinthine (« the city made in mud ») (Egypt, region of Alexandria)

11:50 - 12:10 MOHAMMED NASRELDEIN

Archaeobotanical Evidence from Brick Structures at the Third Cataract Region, Northern Sudan: first results and perspectives.



12:10 - 12:30 DEBATE

12:30 - LUNCH

Programme



Afternoon

Moderator Bakonirina RAKOTOMAMONJY

14:00 - 14:20 PELIN FIKRIYE KURTUL-VACEK

An index of ancient earthen materials from Anatolia to the Nile Valley.

14:20 - 14:40 <u>EWA SOBCZYNSKA, KACPER WASILEWSKI,</u> WOJCIECH TERLIKOWSKI, MARTYNA GREGORIOU-SZCZEPANIAK Structural assessment of mosque building in old Dongola.



14:40 - 15:00 DEBATE

15:00 - BREAK - WALK TO GRENOBLE SCHOOL OF ARCHITECTURE

15:30 - 16:30 THEMATIC GROUP WORKSHOPS AT ENSAG

ELÉMENTERRE PEDAGOGICAL KIT GROUP 1 FIELD TESTS FOR
CONSERVATION WORK
GROUP 2

16:30 - BREAK

17:00 - 18:00 THEMATIC GROUP WORKSHOPS AT ENSAG

FIELD TESTS FOR CONSERVATION WORK GROUP 1 ELÉMENTERRE PEDAGOGICAL KIT GROUP 2

18:00 - END OF DAY



THURSDAY, JULY 6

Morning

THEME 3

CONSERVATION, VALORISATION AND MANAGEMENT

Moderator David GANDREAU 9:00 - 9:10 OPENING OF SESSION

9:10 - 9:30 ANTHONY CROSBY, AYMAN DAMARANY

From Excavation to Conservation

9:30 - 9:50 ABDELRAHMAN MEDHAT, SHAIMAA ELSHISHTAWY, MOHAMMED ABDELROHMAN, ISHANLOSEN ODIAUA

The influence of climate Changes on the selected Egyptian Archaeological sites of western Desert.

9:50 - 10:10 THIERRY JOFFROY, XAVIER HENAFF

Conservation of the earthen architectural assets at Pepi I necropolis archaeological site: how to adapt to climate change?



10:10 - 10:30 DEBATE

10:30 - COFFEE BREAK

Moderator David GANDREAU 11:00 - 11:20 <u>LOLA JOYANES-DIAZ LOLA, CARMEN Mª MUÑOZ</u> <u>GONZALEZ</u>, JONATHAN RUÍZ JARAMILLO, JUAN LUIS MARTÍNEZ DE DIOS, ALEJANDRO J. JIMENEZ SERRANO

Mitigation and adaptation of climate change in the conservation and preservation of architecture and funeral landscape in Qubbet el Hawa"

11:20 - 11:40 SAYED MOSSADEQ KHALILI

Kabul Citadel and Shir-Darwaza Historic Wall: An Architectural and Historic Study.

11:40 - 12:00 MAGDALENA SKARZYNSKA, KRZYSZTOF CHMIELEWSKI

Baraka: Revitalization of Sudan's oldest preserved mosque at Old Dongola. Conservation of wall paintings. Project assumptions and preliminary test results.



12:00 - 12:30 DEBATE

12:30 - LUNCH

Programme



Afternoon

Moderator Tony CROSBY

14:00 - 14:20 KAREL INNEMEE, DOBROCHNA ZIELIŃSKA, YASK **KULSHRESHTHA, HENK JONKERS**

A bio-based liquid impregnation system. First results of consolidation of adobe bricks from the church at Miseeda.

14:20 - 14:40 MADDALENA ACHENZA, AMMAR AL TAEE

Construction details against moisture in ancient Babylon and its surroundings.

14:40 - 15:00 **DAVID GANDREAU**

Preventive conservation works at Saï Island, feedback 15 years after.



15:00 - 15:30 DEBATE

15:30 - BREAK / PRESENTATION BY MUTAZ EL-EMAM

Traditional Nubian House Decoration

Moderator Tony CROSBY

16:00 - 16:20 AHMED ADAM



Maintenance and restoration of mud and mud-brick buildings: Khandag Town as a case study.

16:20 - 16:40 SHAIMAA ELSHISHTAWY, ABDELRAHMAN MEDHAT

Community engagement potential for sustainable earthen architecture conservation in the Western Desert in Egypt with addressing the influence of climate change on it.



16:40 - 17:00 DEBATE



17:00 - 17:40 CONCLUSIONS & CLOSURE

17:40 - END OF DAY



Scientific Committee

- ABDEL MONEIM GHANNAM Manal, Director of ACCRA/MoTA
- ABDELSAWI FEDLELMULA Abdelhai, Director of excavations, NCAM, National Corporation for Antiquities and Museums
- ACHENZA Maddalena, Professor, Cagliari University
- ANDERSON Julie, Curator for Sudan and Nubia, British Museum
- BLOND Ninon, Lecturer, École Normale Supérieure de Lyon
- BONNET Charles, Member of the Académie / Académie des Inscriptions et Belles-Lettres
- BOURGES Ann, Research engineer, C2RMF
- CREPY Maël, Scientific member of Ifao , Institut français d'archéologie orientale (Ifao)
- CROSBY Tony, Architect, American mission of North Abydos
- EZZAT Islam Mohamed, Assistant lecturer,
 Department of Museums and Sites Management,
 Faculty of Archaeology, Ainshams University.
- HASSAN Fekri, Professor, Director of the Cultural Heritage Management Program, Université Française d'Égypte
- GANDREAU David, Expert in earthen architecture conservation, CRAterre/AE&CC/ENSAC/UGA
- JOFFROY Thierry, Director of CRAterre research unit, CRAterre/AE&CC/ENSAG/UGA
- LICITRA Nadia, Post-doc, CRAterre/AE&CC/ENSAG/UGA
- MARCHI Séverine, Engineer in archaeology, CNRS, UMR 8167-Orient&Méditerranée
- QUILES Anita, Responsible for the Ifao archaeometry department, Institut français d'archéologie orientale (Ifao)
- REDON Bérangère, Research fellow, CNRS, UMR 5189-HiSoMA
- ROSSI Corinna, Associate Professor of Egyptology, Politecnico di Milano
- SOGHAYROUN ELZEIN Intisar, Professor, University of Khartoum
- SPENCER Jeffrey, Former Deputy Keeper of Egypt and Sudan, British Museum
- TAHER MOHAMED Ahmed Mahmoud, Codirector , Centre Franco-Égyptien d'Étude des Temples de Karnak - CFEETK, UAR 3172 du CNRS - MoTA

Organisation Committee

The Nile's earth international conference is organized by the École Nationale Supérieure d'Architecture de Grenoble (ENSAG-UGA) in collaboration with the UMR 5189 Histoire et Sources des Mondes Antiques (CNRS), UMR 8167 Orient & Méditerranée (CNRS), the International Centre for Earthen Construction (CRAterre), the French Institute of Oriental Archaeology in Cairo (Ifao), the Centre Franco-Égyptien d'Étude des Temples de Karnak (CFEETK, CNRS/MoTA), and the Section française de la direction des antiquités du Soudan (SFDAS).

MEMBERS OF THE ORGANISING COMMITTEE

- Thierry JOFFROY | CRAterre/AE&CC/ENSAG/UGA
- Audrey CARBONNELLE | CRAterre/AE&CC/ENSAG/UGA
- Alix HUBERT | CRAterre/AE&CC/ENSAG/UGA
- Nadia LICITRA | CRAterre/AE&CC/ENSAG/UGA
- Anita QUILES | Institut français d'archéologie orientale



Institut d'Urbanisme et de Géographie Alpine (IUGA)

Conference Venue

Address: 14 & 14 bis Av. Marie Reynoard, 38100 Grenoble



Stop Tram A



Restaurant or take-out



ENSAG

Grenoble School of Architecture

Conference Group Workshops Address: 60 Av. de Constantine, 38100 Grenoble



Grand Place - Shopping Center

































