



## EGYPT AS CULTURAL CROSSROAD: HISTORICAL AND ARCHAEOLOGICAL STUDIES BETWEEN TRADITION AND INNOVATIVE TECHNOLOGIES

Giuseppina Capriotti Vittozzi  
National Research Council of Italy  
Institute for Ancient Mediterranean Studies

The Institute for the Study on the Italic and Ancient Mediterranean Civilisation (ISCIMA) of the National Research Council of Italy (CNR) has been recently unified with the Institute for Aegean and Near Eastern Studies (ICEVO), leading to the birth of the new Institute for Ancient Mediterranean Studies (ISMA: <http://www.isma.cnr.it/>).

In this framework, the Egyptological line of research led by G. Capriotti Vittozzi can develop with a new interdisciplinary outlook.

### PROJECTS

#### EGYPTIAN CURSES: ENVIRONMENTAL DISASTERS BETWEEN EGYPT AND PALESTINE

A team led by G. Capriotti Vittozzi is working on this Egyptological project funded by the Italian Ministry of Universities and Research (MIUR), in the framework of “The seven plagues”. This is considered a relevant project of national interest (PRIN 2009, led by Lorenzo Nigro, Sapienza University of Rome).

Knowing the dynamics of environmental disasters is very important to prevent them. As a result, the scholars who study current earthquakes or climatic change are very interested in ancient phenomena. Ancient Egypt gives us an extraordinary opportunity for comparison because of the extended documentation available.

The CNR multidisciplinary team sorted and catalogued the Egyptian sources and archaeological records regarding cataclysmic events, famines and epidemics in ancient Egypt. Matching different data and different areas of study aims to identify historical events and create an interactive databank. The multidisciplinary team works with an integrated perspective, and also analyzes the data collected in a Geographical Information System, with the help of advanced technologies such as photogrammetry and satellite remote sensing.

#### Meetings

- Italian-Egyptian Workshop, Aswan 16-18 November 2013 *Archaeology and Environment: Understanding the past to design the future. A multidisciplinary approach.* <http://aswan2013.isma.cnr.it/index.php?en/1/home>
- Conference, Rome 6 December 2013 *Environmental disasters from ancient Egyptian sources. A multidisciplinary approach.*

#### Forthcoming

- Proceedings of the International Conference *Reading catastrophes.:Methodological Approaches and Historical Interpretation. Earthquakes, Famines, Epidemics, Floods between Egypt and Palestine – 3rd - 1st millennium BC* (Rome, 3 December 2012) <http://www.lasapienzatojericho.it/Prin%202009/conferencc/readingcatastrophec.php>

#### EGYPT IN THE ROMAN WORLD

The project aims to gather data on the presence of Egyptian culture in Rome and, above all, to discern the *Roman interpretatio*.

#### Publications

- G. Capriotti Vittozzi, *La terra del Nilo sulle sponde del Tevere*. Foreword of M.J. Versluys, Roma 2013 (Collana di Studi di Egittologia e Civiltà Copta 1).
- G. Capriotti Vittozzi, *Lampade e visioni. Forme oracolari di origine egizia*, in P. Buzi (ed.), *Oracoli, visioni, profezie. L’Egitto da Alessandro il grande all’Alto Medioevo*, (SMSR 79, 1/2013), pp. 47-59.

## Giuseppina Capriotti Vittozzi | Egypt as Cultural Crossroad

- G. Capriotti Vittozzi, *Caligola e l'Egitto: culti di origine egizia e immagine della regalità*, in G. Ghini – F. Coarelli (eds), *Caligola, la trasgressione al potere*, Roma 2013, pp. 57-64.
- G. Capriotti Vittozzi, *Horo, Osiri, Antinoo e le lampade magiche: elementi di magia egizia nel mondo romano*, in M. Piranomonte – F.M. Simón (eds), *I contesti magici. Contextos mágicos*, Atti del *Convegno Internazionale a Roma dal 4 al 6 novembre 2009*, Roma 2012, pp. 283-287.
- G. Capriotti Vittozzi, *Amenemhat III a Roma*, in "Etudes et travaux" 25, 2012, pp. 51-63.

### FOREIGN CULTURES IN EGYPT

Because of the interdisciplinary work in the ISMA, the presence of Phoenicians in Egypt is one of the current research topics which is very important for Phoenician studies.

#### *Forthcoming*

- G. Capriotti Vittozzi, *Il sarcofago fenicio di Tell el-Maskbuta*, in "Rivista di Studi Fenici" 40.

### TECHNOLOGIES IN SUPPORT OF RESEARCH

Technological projects aspire to provide advanced tools for research and scientific documentation.

#### REMOTE SENSING EXPLORATION OF EGYPTIAN DESERT AREAS AS A FIELD OF CULTURAL CONTACTS

Satellite Remote Sensing in support of Egyptological Research (SatER) team: Maurizio Fea, Stefano Gusmano, Chris Stewart, in collaboration with Mario Aversa and Roberto Salzano.

A team of satellite remote sensing specialists is using an integrated approach for testing different kinds of data and the

effectiveness of remote sensing to gather information on ancient human tracks and the evolution of territory.

Space technologies, such as telecommunication, accurate localisation and navigation, and remote sensing, are very useful to archaeological investigations, in particular in desert regions. Specifically, Earth observation data acquired from aircraft and satellites in various spectral bands do help investigations about archaeological sites regarding their protection and valorisation, by monitoring their status and changes and detecting potential natural and anthropogenic risks. Moreover, by using space data acquired by microwave sensors it is possible to search for old ruins, past river beds and historical human paths that are nowadays hidden by desert sand.

One of the most important focuses for the team work is the eastern delta and Sinai, where caravan routes and waterways have crossed each other for millennia.

#### SURFACE ELABORATION TECHNOLOGY FOR HIEROGLYPHIC INSCRIPTIONS (SETHI)

In collaboration with Andrea Angelini (CNR – ITABC)

The aim of this project is to experiment and test digital photogrammetry in the epigraphic field in order to improve the method of studying epigraphs through a specific protocol of measurement and acquiring digital data. The generation of 3D epigraphs would assure an accurate base model for metric analysis of the object in a virtual space. The final model would show qualitative items together with quantitative data in an accurate way. From a high resolution 3D model it is possible to obtain all measurements of length, width and depth of the engraving and to get information about the geometry, morphology and the global visualization of the object. Photogrammetric systems would allow us to produce a virtual document which would be available to scholars and useful in the preservation and the enhancement of cultural heritage.