

The work site school of the Italian Egyptian Centre for Restoration and Archaeology

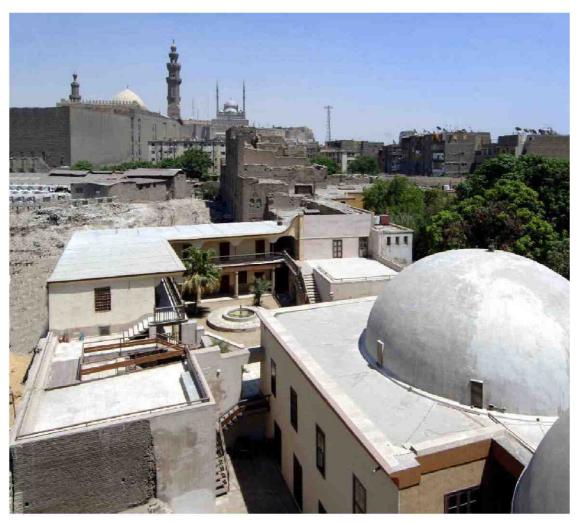


Fig 01 – The Italian-Egyptian Centre for Restoration and Archaeology (CIERA) in Cairo

The Italian-Egyptian Centre for Restoration and Archaeology (CIERA) operates in a large monumental complex at the foot of the Citadel of Cairo, in the district of Hilmiyah, near the mosque of Sultan Hassan (Fig 01).

The area, of approximately 10,000 square meters, of which more than 2,500 are covered with debris, offers architectural, historical and artistic remains and testimonies covering the period from the VII to the XIX century (Fig 02).

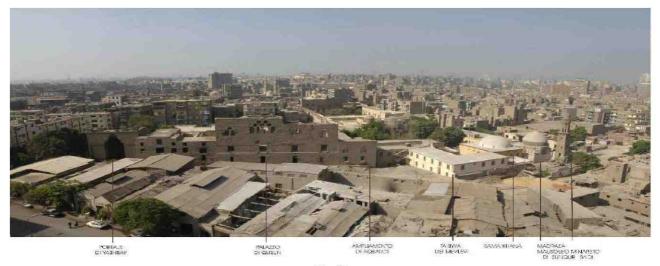


Fig 02

The following are the most remarkable buildings:

- The Palace of Qusun-Yashbak-Aqbardi: built with subsequent additions between the 14th and 16th centuries.
- The Madrasa of Sunqur Sa'di (14th century) and the underlying archaeological area, with remains of settlements from different epochs, starting from the 7th century A.D.
- The Mausoleum of Hasan Sadaqa (sec. XIV) adjoining the madrasa with its minaret.
- The "tekeyya," which is the Convent of the Mevlevi Dervishes. Its construction began in the 16th century, in the area between the remains of the madrasa of Sunqur Sa'di and the Yashbak Palace, adapting to the new function that could be utilized from the old monuments.
- The Sama'Khana: a theater built by Mevlevi Dervishes (starting from 18th century) in which to perform the circular dance, typical of their mystical confraternity.

Since the very beginning, all the activities had an educational purpose ($Fig\ \theta 3$). This is, indeed, a "work-site school," where the practical activity of restoration cannot be separated from the scientific and technological research, or from training (both theoretical and practical).

The teachers supervise the intervention working directly with trainees (coordinators, restorers, technicians and artisans) in the accomplishment of the project.

Students, for their part, learn by practicing until the intervention is completed and by the repetition of similar interventions later, the teaching of restoration, in fact, cannot be exclusively theoretical.

All the projects and work concerning archaeology, architecture, structures and the fine arts were accomplished only in the laboratories and with the equipment of the Centre, by our staff and trainees. The documentation of the accomplished activity was, for each participant, certification of the acquisition of a professional qualification.

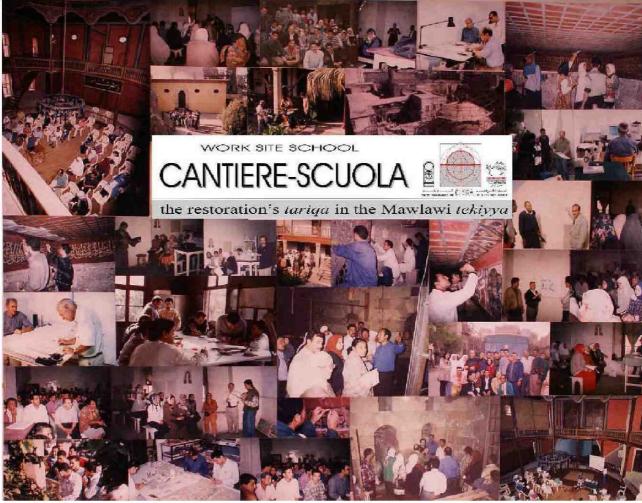


Fig 03

The Italian-Egyptian Centre for Restoration and Archaeology was officially inaugurated on the 28th of July 1988, on the occasion of the opening to the public of the restored Mevlevi Sama'khana (*Fig 04*), a *building for worship with a theatre plan*, after a long period of training and restoration, in cooperation with the Supreme Council of Antiquities (S.C.A.), Cairo University, and other Egyptian Universities.

Buildings involved in the restoration activities

- In **1988** the Centre completed the recovery of the **Sama'khana** (Fig 05), the most significant building in the world of this architectural typology.
- In **2002**, the **Madrasa of Sunqur Sa'di** was restored (Fig 06): its plan is a very unusual example of Mamluk Bahri architecture. The restoration included archaeological excavations under the Sama'khana (Fig 07), which was built using some structures belonging to the madrasa itself.

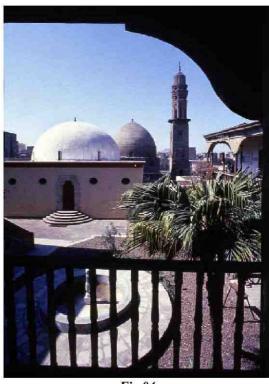


Fig 04





Fig 05



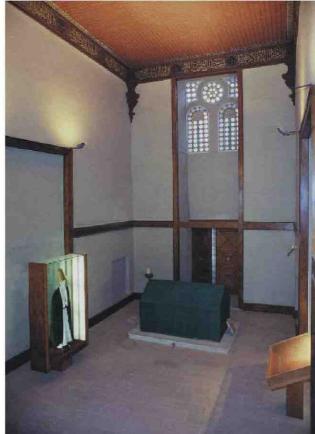
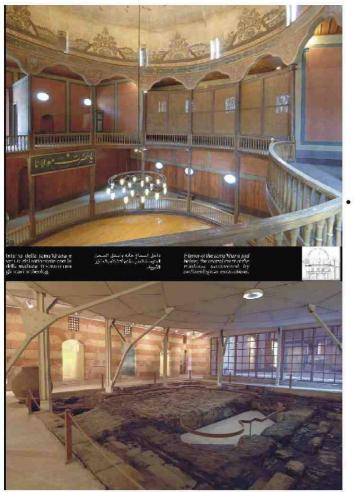
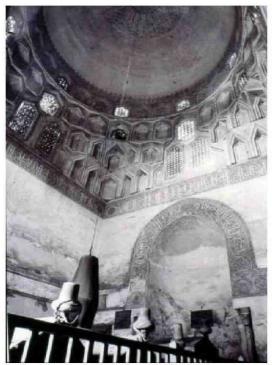


Fig 06



In 2009 the Mausoleum of Sunqur Sa'di (known as the mausoleum of Hasan Sadaqa) was recovered, his marble cenotaph is now visible to the public ($Fig \ 08$).

Fig 07





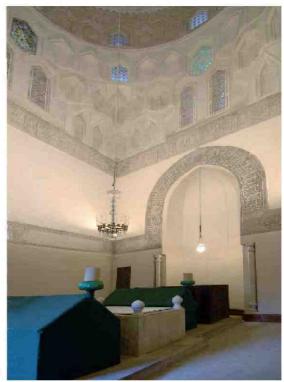


Fig. 08



Convent Restoration ("E" area)

after



Fig 09

At the same time, through the activities of the work-site school, the CIERA has contributed to the institutionalization of restoration courses at universities in Cairo, Helwan, Qena, Luxor, Tanta (*Fig 10*), Kafr Sheikh, Alexandria.

 The cells of the Mevlevi convent facing the sama'khana (Fig 09) and in the entrance of the convent on Shari Es-Suyufiya were restored.



Fig 10

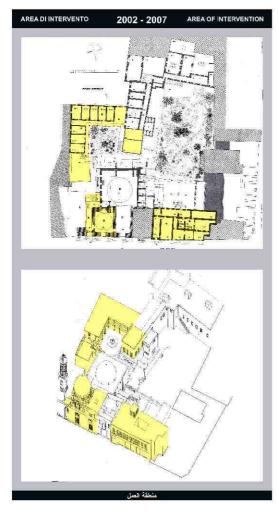


Fig 11

Organization of the work site school

Particularly during the period of 2002–2009, two programs interacted in the organization and development of the activities of the work-site school:

- (Fig 11) the restoration project of the Mausoleum of Sunqur Sa'di and the Mevlevi convent (project carried out with the contribution of the Italian law n. 212/92) in the period from October 2003 to March 2006, and
- (Fig 12) the Professional Training for Restoration and Archaeology Program (promoted by the Directorate General of Co-operation for Development, Ministry of Foreign Affairs) in the period from May 2002 to December 2009.

SCA has The contributed significantly implementation of the programs with the provision of personnel to be trained and some local materials procurement. A particular and continuous contribution was given by Italian MAE, archaeological sector.















Il cantiere scuola

Fig 12

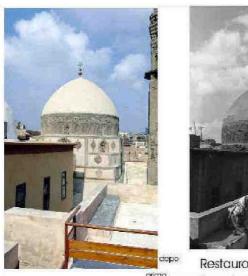












Fig 13

The two programs (Fig 13) were carried out, when possible, parallel to each other, and this contributed to providing all the activities with the organization and characteristics of a worksite school.

The volunteering of the members of the Italian NGO, CFPR, was crucial for the organization and implementation of the programs and the results achieved.

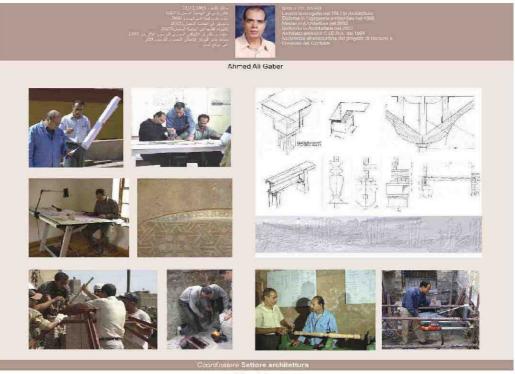


Fig 14



Training was divided into three categories of professional specializations:

- Coordinating professional figures (architect, engineer, restorer, coordinator) (Figg 14, 15 and 16);



Fig 16



- Specialized professional figures (stuccoes, stone materials, paintings, archaeological materials, yard assistance, technicians for special interventions) (Fig 17);
- Support artisans (carpenter, joiner, mason, smith, plasterer, painter, stonecutter, tiler) (Fig 18).

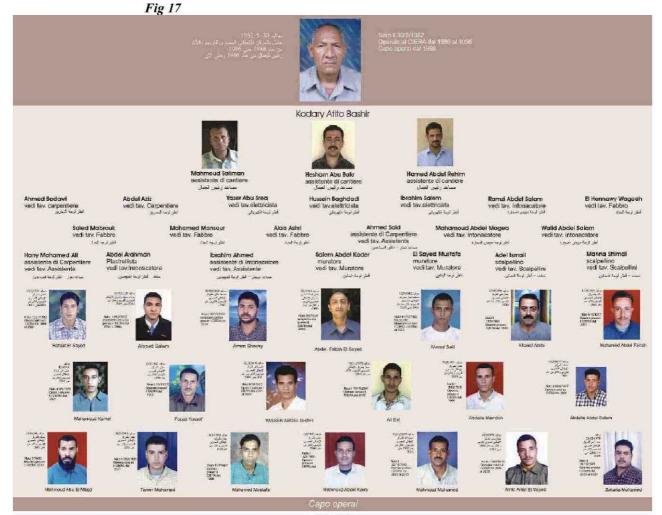
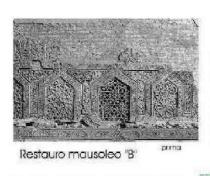


Fig 18





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Professional specializations involved different operational fields.

<u>Stuccoes</u>: (Fig 19) interiors and exterior of the Mausoleum of Hasan Sadaqa (cleaning, consolidation, integration of missing parts, cast-molding-reproduction);

<u>Stone</u>: (Fig 20) façade of the Mausoleum and of the *iwan* of the madrasa of Sunqur Sa'di (preliminary phases, operational tests and cleaning);









Fig 20

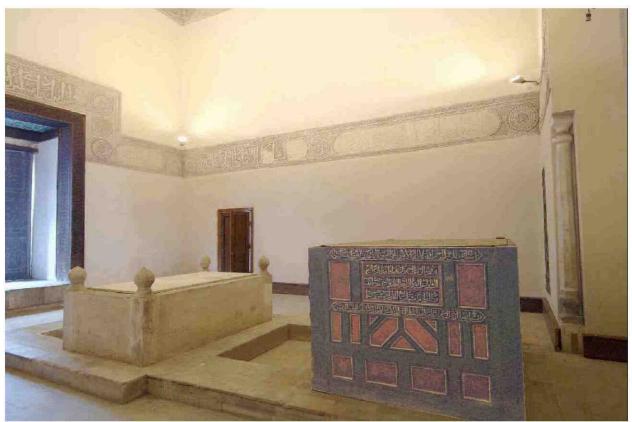


Fig 21

<u>Paintings</u>: the wooden sarcophagus of Hasan Sadaqa (Fig 21), the inscriptions in the iwan and decorations of the Sama'khana;

<u>Archaeology</u>: Mausoleum and madrasa of Sunqur Sa'di (Fig 22) and the Mevlevi convent (excavations in the mausoleum and researches in the convent, restoration of the archaeological material;

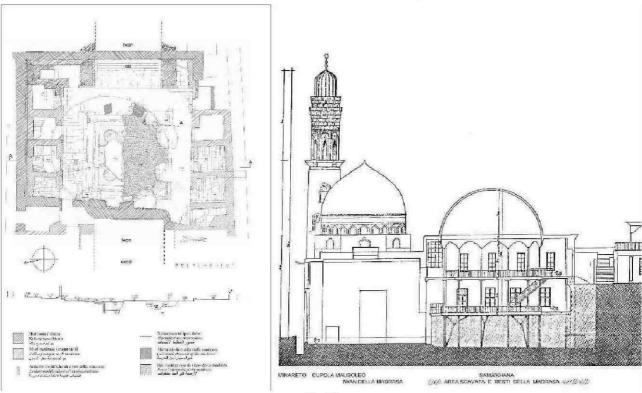


Fig 22

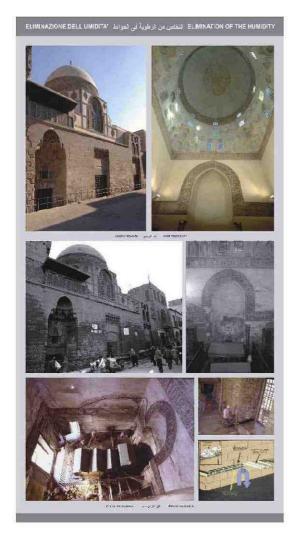


Fig 23

These restoration interventions were carried out in accordance with the following concepts:

• **Visibility** of the intervention (pictures of the iwan) (Fig 24)

<u>Architecture</u>: (Fig 23) Convent and Mausoleum (elimination of moisture in the walls, consolidations, restoration of wooden structures, floors, roofing, balconies).







Fig 24

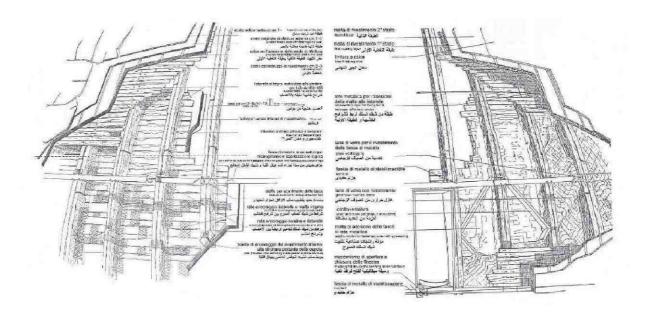
NUOVE TECNOLOGIE E MATERIALI DI SUPPORTO ALLE TECNICHE ANTICHE







New technologies and materials as integration of ancient techniques



ANALISI STRUTTURALE DEGLI INTERVENTI DI RESTAURO NELLA CUPOLA IN LEGNO DELLA SAMA'KHANA Structural analysis of the restoration interventions in the wooden dome of the Sama'Khana

Fig 25

- Compatibility of the materials used with the original ones (section of the Sama'khana dome) (Fig 25);
- Reversibility of both materials and intervention, where possible (opening of the Sama'khana windows) (Fig 26).

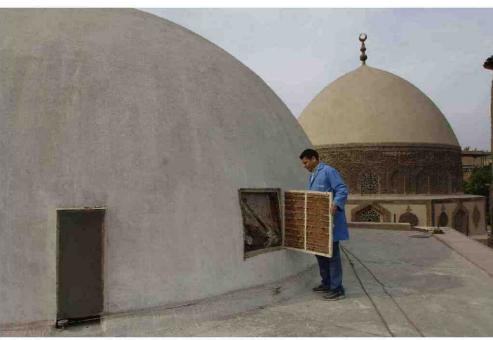
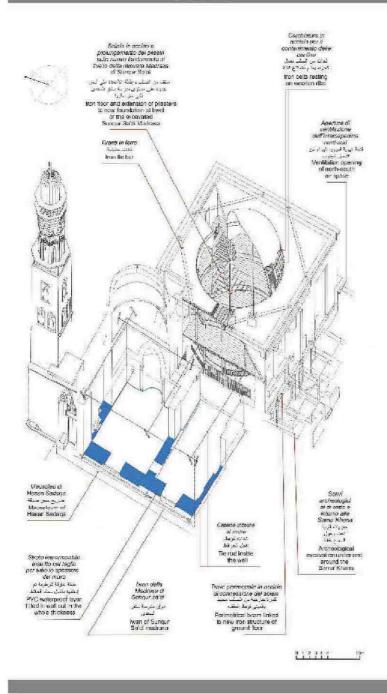


Fig 26



Special attention was paid to the preservation of the shape and the technique of the monument, using (Fig 27):

- Minimal intervention to preserve the shape
- Supporting structures, in case of structural interventions, to preserve original techniques and technologies (chains, braces and tie rods in the mausoleum and Sama'khana)
- Detailed documentation, before, during and after the intervention, especially in the case of changes. Where possible, documentation was produced in situ (windows in the Sama'khana façade; stuccoes in the mausoleum) (Fig 28).

Fig 27

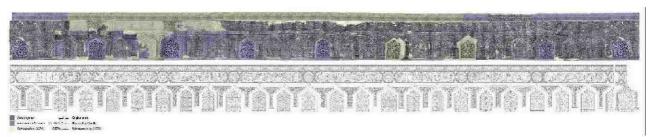


Fig 28





The **theoretical lessons** were divided into three levels. **Basic lessons**, addressed to artisans. **Specific lessons**, concerning the different field of restoration, addressed to the coordinators and the staff of the Supreme Council of Antiquities (*Fig 29*).

Thematic lessons and workshops on research themes, accomplished restoration interventions and related cultural and historical aspects; these lessons, addressed to professionals and to a wider public were carried out by experts of CFPR or other institutions (*Fig 30*).

The total number of people who took part in the training program is 529, distributed as follows:

- SCA staff in the period from 2002 to 2009: 3 professionals (coordinators); 87 artisans-workmen; 39 restorers;
- for short training programs: 88 university students; 71 artisans-workmen;
- thematic refresher lessons: 241 professionals in the field of restoration.

Italian teachers and experts

Most of Italian teachers come from the State's Institute of Art, but also from the Central Institute for Restoration, the National Council for Research and also from Rome University "La Sapienza," Naples University "L'Orientale", Polytechnic of Bari and Venice University, IUAV.

In view of the continuity, the CIERA has requested the Ministry of Social Solidarity its registration as NGO in Egypt and finally obtained it in October 1st, 2013.

The current organization will enable a more fruitful cultural and technical exchange between Italy and Egypt, with youth employment, social development and awareness of cultural heritage.



Fig 30