

quaderni di assorestauro



ANNO 03 NR 03
OCTOBER 2014

**NAPLES
POMPEI
BARI
NARDO'
LECCE**

INTERNATIONAL WORKSHOP

ASSORESTAURO TRAINING AND COMMERCIAL VISIT
TO ITALY FOR FOREIGN ARCHITECTS AND
RESTORERS. EXPORT SUD PROGRAMME

**CONSERVATION, MANAGEMENT
AND VALORIZATION
OF CULTURAL HERITAGE**



Project financed by the Italian Institute for Foreign Commerce & Assorestauro



ICE - Agenzia per la promozione all'estero e
l'internazionalizzazione delle imprese italiane

assorestauro®

With the patronage of



Partnership project





Quaderni di Assorestauro



Year 03 Number 03
October 2014

edited by
Andrea Grilletto

Graphic Project



Viviana Maria Lucia Volpini
www.custom-art.it

© copyright 2014
Assorestauro Servizi Srl

legenda index

sponsor presentation	■
preface	■
artwork restoration	■
management of CH & valorization	■
rehabilitation	■
architectural restoration	■
International Projects	■
projects & services	■

— sponsor presentation

■ presentation of “ICE”	4
■ presentation of “Assorestauro”	5
■ presentation of “Ance Puglia”	6

— Naples 13 october

■ The case study of the restoration of the Real Albergo dei Poveri in Naples - Francesca Brancaccio	8
■ Restoration and Consolidation of Villa Montesano in San Paolo Belsito (Naples), reused as a country house - Francesca Brancaccio	14

— Pompei 14 october

■ Major Project Pompei - MPP - Antonia Pasqua Recchia	20
---	----

— Bari 15 october

■ Calo' Carducci Palace - Impresa Garibaldi	24
---	----

— Nardo' 15 october

■ Energy saving for historical heritage: the domotised lighting system of the Cathedral of Nardò (Lecce) Stefano Pallara - Cristina Caiulo	28
--	----

— Lecce 16 october

■ Integrated valorisation of the Urban Defensive Walls: Restoration and Reuse North-West Section - 1st operational phase: Ex Carlo Pranzo Area - Francesca Brancaccio	34
■ Med-Art 2 Project	42
■ Lecce 2019	44
■ Lecce Conference: Conservation, Management and Valorization of Cultural Heritage	46



sponsor presentation



ITALIAN TRADE AGENCY

ICE - Agenzia per la promozione all'estero e l'internazionalizzazione delle imprese italiane

The ICE-Italian Trade Promotion Agency is the government organisation which promotes the internationalisation of the Italian companies, in line with the strategies of the Ministry for Economic Development. ICE provides information, support and advice to Italian and foreign companies.

In addition to its Rome headquarters, ICE operates worldwide from a large network of Trade Promotion Offices linked to Italian embassies and consulates and working closely with local authorities and businesses.

ICE provides a wide range of services overseas helping Italian and foreign businesses to connect with each other:

- identification of possible business partners
- bilateral trade meetings with Italian companies
- trade delegation visits to Italy
- official participation in local fairs and exhibitions
- forums and seminars with Italian experts



ASSORESTAURO
via F. Londonio 15
20154 Milano
Tel./Fax +39 02 34930653

www.assorestauro.org

Presidente:
Alessandro Zanini

Direttore Tecnico:
Andrea Griletto
andreagriletto@assorestauro.org

Segreteria:
Ada Baborski
segreteria@assorestauro.org

assorestauro®

associazione italiana per il restauro architettonico, artistico, urbano
italian association for architecture, art and urban restoration

Assorestauro is the first association established in Italy for materials, equipment and technology producers and service providers for the restoration and heritage conservation sector. Among the associations involved in this sector, which includes various institutional bodies that represent designers or restorers, **ASSORESTAURO** is the first to finally give voice to the industry and the sector of specialised services, promoting their interests in promotional, legal and cultural areas. **ASSORESTAURO** seeks to represent the sector, both nationally and internationally. In regard to the Italian market, an increased sensitivity towards our architectural heritage, together with the diffusion of new technologies, point to a growth in the sector in recent years, both from the cultural point of view (debates, magazines, conventions, exhibitions) and from that of technology (innovative materials, machines and equipment, software, plant design etc.). This provides the industry with a great opportunity for increasing and strengthening the occasions for dialogue, which are often lacking, with professionals, on the one hand, and with institutions (Government departments, Universities) on the other. As far as foreign markets are concerned, there is a clear perception of the need to capitalise on the great prestige that Italy enjoys abroad in matters of cultural heritage and on the remarkable investment in cultural technology that Italian companies have made in recent years, in order to translate specialist skills and know how into business opportunities abroad.

ASSORESTAURO therefore has the scope of coordinating, protecting and promoting the interests of its associated companies, and fostering their progress and development, endorsing their products and services and representing them in their relations with the institutions and organisations working in the field of research and training, regulations and promotion. It also acknowledges the support and patronage of the main restoration Italian Trade Show and Events, recognising, together with its associated companies, the value of a trade fair appointment that has become an international point of reference.

The company carries out the following specific activities:

- it promotes studies and research and collects news, items and statistical data useful for sector information, and carries out studies, monitoring and analysis of the situations and developments in the markets;
- it participates in the elaboration and publishing of international regulations for the qualification of associated companies, assisting them and protecting them in the certification of the quality and security systems of their products and services;
- it directly and indirectly organises training or updating courses, research and conferences for the development and dissemination of technologies and the use of their products;
- it promotes and holds conventions, synergies and agreements among associations throughout the world.



Giacomo Amendolara
 Director

ANCE PUGLIA
 via Nicola Tridente, 22 - 70125 Bari
 Tel. e Fax 080/5648816
 ancepuglia@ancepuglia.it

ANCE Bari
 via Amendola 172-5 Executive Center
 70126 Bari
 Tel. 080/5467703 - Fax 080/5467788
 picchiarelli@confindustria.bari.it

ANCE Brindisi
 Corso Garibaldi, 53 - 72100 Brindisi
 Tel. 0831/473111 - Fax 0831/568467
 valentina.corrado@confindustria.brindisi.it

ANCE Foggia
 via Valentini Vista Franco 1 - 71100 Foggia
 Tel. 0881/562232 - Fax 0881/723091
 saverio.paladino@assindustria.fg.it

ANCE Lecce
 via Fornari 12 - 73100 Lecce
 Tel. 0832/316061/2/3/4 - Fax 0832/397402
 ance@confindustrialecce.it

ANCE Taranto
 via Dario Lupo 65 - 74100 Taranto
 Tel. 099/7345307 - Fax 099/377902
 edili@assindustria.ta.it

■ What is ANCE PUGLIA? Italian Construction Contractor's Association

ANCE PUGLIA is the regional organization that safeguard especially the professional interests of private construction contractors, active in public works, residential and industrial building.

Many functions and different institutional tasks concern this association, the most representative are:

- a) Examine, coordinate and offer assistance in the problems of private constructor;
- b) Ensure relationship with Local administrative authorities in solving problems of constructors, planning investments, defining interventions and managing the territory;
- c) Promote a lot of searches or studies about constructor's interests;
- d) All other important functions are collected in the local statute.

Not only at local level the interests of this category are protected, because ANCE PUGLIA adheres to national ANCE that has more representative power with its 20 regional Associations, 102 Provincial Associations and 20,000 construction companies of any specialization and dimension.

The fundamental objective of ANCE Puglia Organisation is the protection of property developers, entrepreneur of building operations and other private or public analogous, professional interests at regional level.

The representation of ANCE Puglia, in the framework of ANCE (National Association of Property Developers) at national level, is performed based on functions established in the Statute.

Particularly, the ANCE Puglia, manages and coordinate category problems at the regional level, undertaking the necessary, indispensable, decisions in regards, and intervene to the Authorities, the entities and Administrations for their solution.

Also, it promotes and effectuate studies, researches and initiatives of category area of interest, in this regard it performs all the due actions for the final achievement of social aims.



ANCE | PUGLIA



Francesca Brancaccio
 B5



info@b5srl.eu
 www.b5srl.eu



info@boviar.com
 www.boviar.com

SPC s.r.l.

mail@spc-engineering.it
 www.spc-engineering.it

Kimia

info@kimia.it
 www.kimia.it

AMBIENTE E TERRITORIO
 ing. Antonio Pompa
 Valentino Giuseppe
 SO.RES.

The case study of the restoration of the Real Albergo dei Poveri in Naples

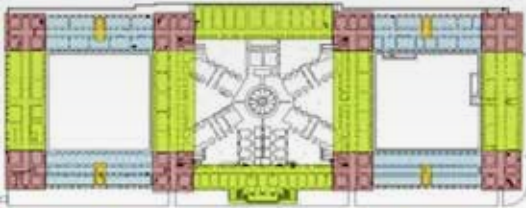
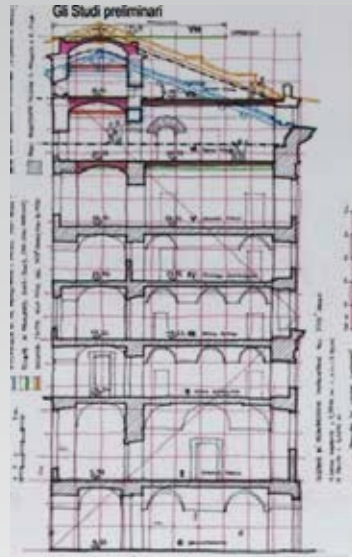
The case study of the restoration of the Real Albergo dei Poveri in Naples – an XVIII century site of worldwide interest - shows the philosophy and the methodologies used in a sustainable restoration. Also in relation to its exceptionally huge dimensions (360 m of façade, 110.000 sq. m. of rooms, 25.000 sq. m. of courtyards) this could lead to one of the most relevant experience of restoring an urban site.

The “Real Albergo dei Poveri” is an important historical monument that naturally draws the attention of the public and the media. The front building has a dominant structure in the urban landscape as it can be seen from a far distance. After the earthquake in 1980, that led to the breakdown of part of the building and to very serious damages to its structures, it was almost completely evacuated for security reasons. In the same year the Municipality of Naples became the owner of the building.

The ambitious and unfinished, abandoned but still majestic and magnificent project of an European archistar in XVIII century, Ferdinando Fuga, is nowadays object of restoration.

The state of incompleteness, the split and inhomogeneous use of the last years in the life of this urban scale heritage building, the abandonment as result of structure collapses in the past, has delivered today an empty immense box in the city, characterized by both poor structural and locative conditions







On 2002 an International team of architects and engineers, RTP Croci Repellin, specialized in the restoration of ancient monuments, after an European tender, was charged by the Comune di Napoli to design the project of restoration and to follow the works. The Municipality settled a timetable, linked to its financial possibilities, organized by different vertical lots of work.

Respecting the legislation for Heritage buildings, all efforts have been made in order to propose an Eco-building that is responsive to external climate. The energy efficient concept have become part of an integrated design process, all performing and successful results had to match with Italian heritage building regulation and observations. The SARA label and the technical support were very important in the designing procedures, because they helped in convincing the decision makers on the importance of joining the respect of history and tradition with new sustainable technologies. Conservation and protection of cultural heritage could be defined between the articulation of a physical framework (respect of the materials, technological integration) and the complexity of intangible aspects.

The dialectic about cultural heritage and its restoration moves around integrated conservation strategies, scheduled maintenance and compatible management.

A sustainable restoration is among the objectives of conservation, through the implementation of “good choices” and the identification of “best practices”, in order to establish a new dialogue between a heritage building and its context (both urban and social), linking historical materials with new products and technologies. The project is based on the idea of combining the respect

for history and philology of the layers, with the choice of new and old materials and technics, their implementation, together with critical operations of removals or replacements.

The main goals of the concept and the innovation in planning and architecture were to show how reach sustainability also in the restoration of an ancient building, adopting natural and local components and material and integrating renewable energy system.

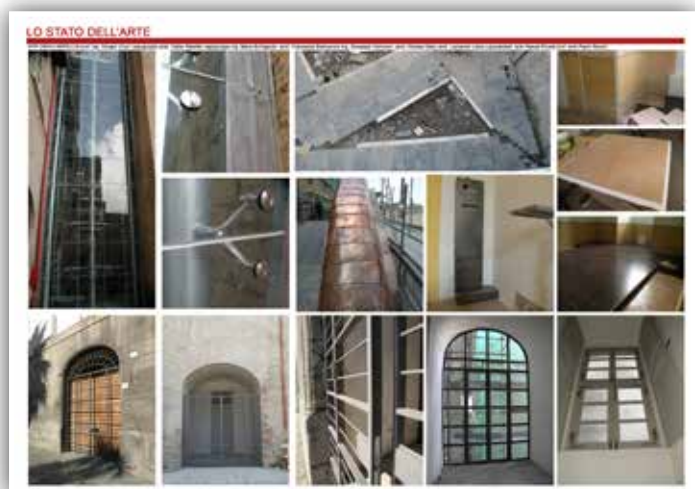
The use of traditional, local construction materials (i.e. bricks, tufo, wood, lime) have been favored to get benefit of both, the historical aspects in architecture and the thermal advantages of materials.

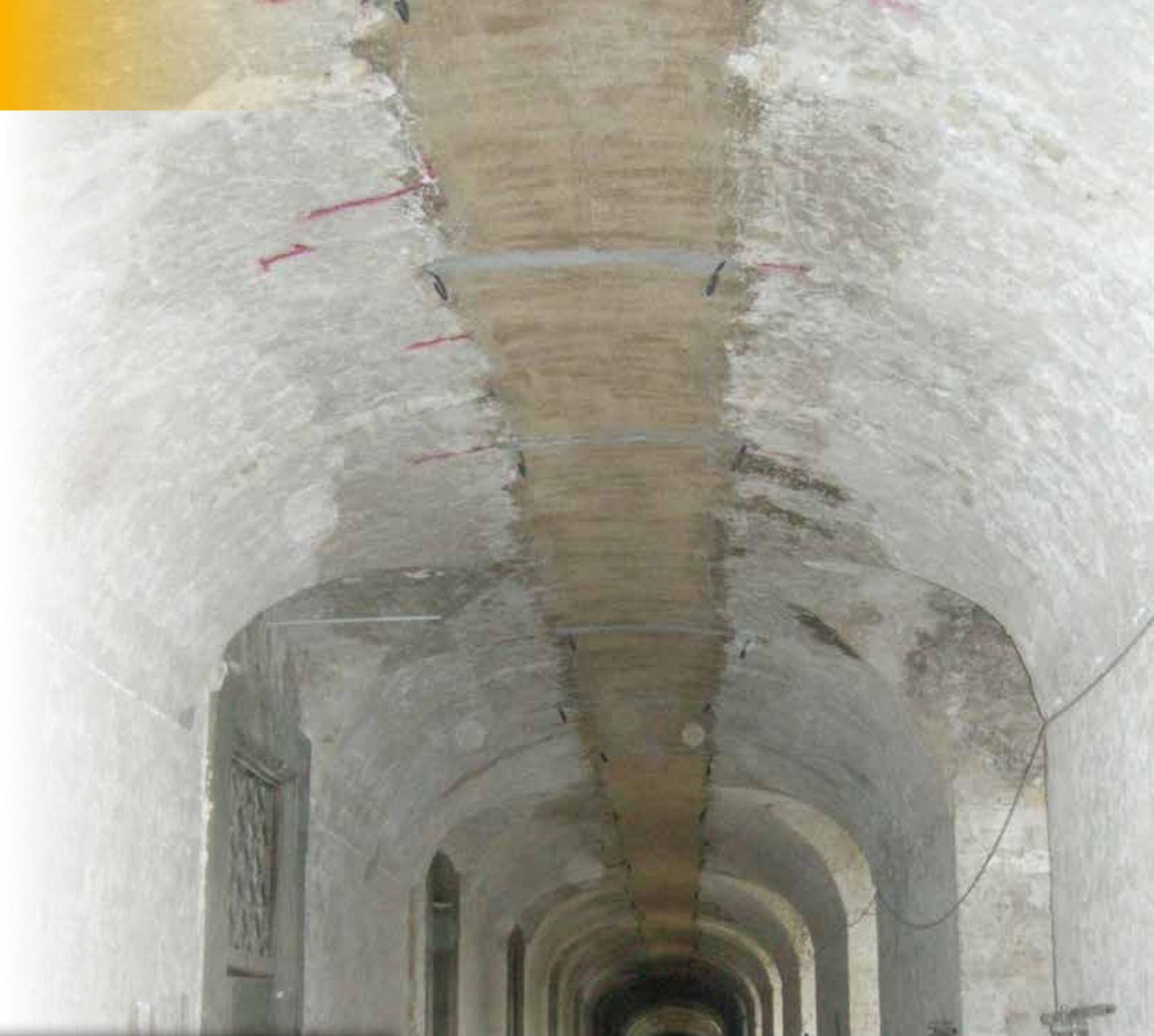
The passive design strategy of the building aims to use natural and local construction and material and takes advantages of topographical, climatic and urban framework conditions. This has been achieved by using an environmental management, energy efficient design, large storage tank for rain water and a maximum of natural lighting in order to reduce the energy demand for lighting, heating and cooling. Free-cooling by natural night ventilation and cross ventilation in the roof area minimize overheating in summer, just like the shading devices in the glass roof by integrated PV modules. The glass roof with PV integration has several functions: solar protection, natural lighting, natural ventilation in upper floor, replacement of shading devices and restoration of roof. The public access eco-building was already selected in 2002 as an emblematic case study within the European project S.A.R.A., in relation to the optimization of choices of compatible reuse and identification of standard and parameters of energy saving. The Report of the UNESCO - ICOMOS Mission to the historic center of Naples (12/ 2008) pointed out: "The project team aimed at applying an integrated design for an eco-building - innovation in planning and architecture to reach sustainability, at adopting natural and local components and materials, as well as integrating renewable energy systems in the restoration of the ancient building." This result has been fulfilled in the lower floors(0 -III), where works are almost completed. The 3 upper floors has been designed to benefit from the maximum of natural lighting, in order to reduce the energy demand for lighting, with a control of the overheating in summer. Only a prototype of the PV roof has been realised till now. Some technical hitches were found in the design process and in matching all measurements required, because of the lack of a reutilisation program, which started later, but which got advantages also from results. This project is an extraordinary world evidence of the possibility and the advantages of joining restoration to sustainability. The objective of replicability is immediately assured by the interventions already designed on the whole building. A new season of interest is raising: the restoration project introduces eco-friendly solutions, concerning careful choices of materials and technologies, and devices like the recovery of rainwater, the integration of photovoltaic modules in glass roofs, the adoption of green roofs, use of underfloor heating. The consolidation of walls and vaults, with modern techniques and experimental materials, follows the architectural reconfiguration, according to the principles of critical restoration. Flexibility, potential reversibility, sustainability inform all the choices and solutions.



Today, after 15 years spent in keen knowledge, detailed projects and ongoing worksites, it is possible to offer a new feeling of belonging and awareness to a place that has been for a long time a site of social and human separation. The building is next to the airport and to the principal railway station (high speed trains): a bus service can link the site in 5 minutes. The Real Albergo dei Poveri, with its strategic location and its dimensions, can eventually start to be integrated into the city and into an urban touristic circuit, using already existing institutional framework, and by adopting new rules for new opportunities. New chances might be unlocked within it: the opportunity of living with the differences, as *civitas*, the opportunity of being the place where everybody – a tourist and a resident, a stranger and a local, - could experience the condition of feeling a citizen. Urban tourism in such a site can include leisure tourism linked to the particular features of urban areas, business tourism linked to the economic, social and cultural vitality of the city, conference tourism linked to the available facilities. The strategic choice will be to develop a tourist product based on historic heritage together with gastronomy, art, culture and popular traditions, events and attractions, providing a wide range of tourist attractions. The lack of a cohesive urban Integrated Development Plan is the cause of a gradual deterioration of the urban tourist destination's environment. Quality management initiatives will take account of the host communities concerned, social aspects, environment, culture and heritage, the market, the travel sector in its broadest context. The satisfaction of the tourist is a function of several interdependent components, which underscores the need for strategic and integrated planning of tourist destinations, together with the selective use of specific tools and techniques to address integrated quality management (including quality control) of the destination.

The management of such a building requires monitoring and follow-up tools and the assistance of the public authorities in coordinating activities, integrating them into other urban functions.



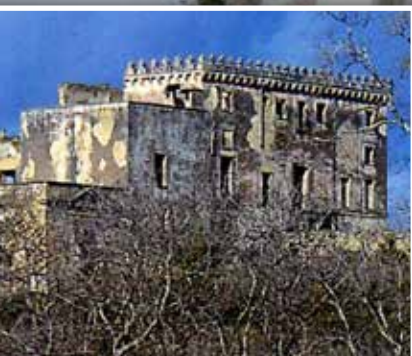


E LA METODOLOGIA DI INDAGINE

ALBAMENTE CONSAPEVOLE, FRA 'PURA CONSERVAZIONE'

FORMAZIONE

The collage consists of several small photographs arranged in a grid. The top row shows a close-up of a wall with a white surface, a white door, and a white conical object. The middle row shows a close-up of a wall with a white surface, a white door, and a white conical object. The bottom row shows a close-up of a wall with a white surface, a white door, and a white conical object.



Francesca Brancaccio
B5

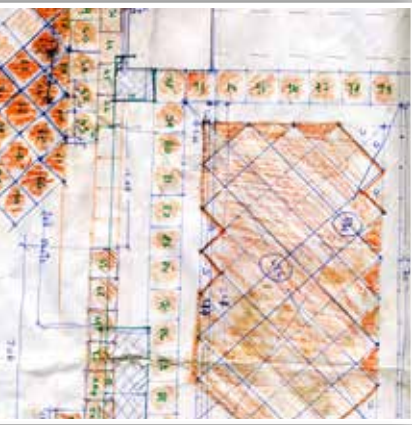


info@b5srl.eu
www.b5srl.eu

A D Restore
CRC Centro Restauro
Recupero Campano

Restoration and Consolidation of Villa Montesano in San Paolo Belsito (Naples), reused as a country house

Villa Montesano is on the top of a small hill (80 meters above sea level), outside the town of San Paolo Belsito, near Nola, not far from the city of Naples. Born as an agricultural site, the villa and its surroundings were later transformed in one of the most prestigious residences in the area. Probably constructed on an earlier rural settlement, the original plan of the Villa, together with its rural volumes and the annexed chapel, shows a precision of design, a clarity of details and a rigor in the implementation of materials. Historians consider that its first architect was Cosimo Fanzago (1593 -1678), a very famous baroque artist, working during the seventeenth century in the Campania region, who designed the first nucleus of the building. The main plan has a regular geometric shape, a square, faced by a semicircular exedra. A second phase of transformations is linked to the construction of an annexed chapel, probably in XVIII century. This chapel is divided into two spaces by a polycentric arch, framing the altar, surmounted by a fake half-dome in "tiles" of bricks. In the third phase of its changes, the building might have been transformed in a "castle", with its upper battlements. A liberty façade was probably added at the beginning of the XX century on the "back" side of the building, opened towards the garden and the panorama. An awful fire, during the Second World War, destroyed all the documents of the State Archives of Naples, brought there in order to be protected. Even after more extensive maintenance interventions, the seismic events of 1980 have further compromise the conservation status of the building, followed by a general condition of abandonment and neglect. Few years ago the family Antignani decided to buy the ruins and to restore the building in order to have a country house. They financed the project and the worksite, directed by the Italian company B5 srl under the supervision of the architect Francesca Brancaccio, according to the principles and theories of Italian Restoration. The contractor, AD restore, is the society of Daniele Antignani, engineer; the management of the activity is coordinated by the society Villa Montesano. The restoration activities described are meant as the result of an intervention "that has the aim of conserving and transmitting to the future works of historical, artistic and environmental interest, facilitating the reading of them while not erasing the traces of the passage of time this is based on a respect for ancient material land the authentic documentation that such works constitute and, moreover, is to be seen as a critical act of interpretation that is not verbal but expressed concretely in the work carried out. Or, more precisely, it is a critical hypothesis and a proposition that is always modifiable, without it ever altering irreversibly the original".



DESCRIPTION OF THE PHASES OF DESIGN

According to the Italian legislation, a first feasibility study designed the framework to meet the needs of the customer with the costs, and to find out all the specific services to be provided. A preliminary project defined, then, the qualitative and functional characteristics of the work. All already available old maps and plans were controlled and updated, through a detailed manual and instrumental survey. All the geotechnical investigations were carried out at this stage of the project. All the most significant characteristics of the building were found out and stressed, according to the need of matching the historical patterns together with functional and operational plans submitted to the client. All the needs of management and maintenance, the time schedule of implementation phases, the legislation constraints, the necessary permissions, were planned and organized, by giving all the administrative steps to follow, with detailed indication of the times. An estimation of costs was prepared according to the special performance of the work, providing with an indication of the functional needs and requirements and the specifications of the intervention, in accordance with the needs of the client and the financial constraints, with specification of works that could be done by a general contractor and very specialized works. Coherent, coordinated and planned activities of the studies, prevention, maintenance and restoration gave the possibility of identifying all the interventions, designed to control the condition of the asset, maintain the integrity, efficiency and function of its identity, respect all the ancient materials for their protection and transmission to the future.

Main goal of the final project was to develop the design with choices defined in the preliminary draft, as well as to arrive at a reliable estimation of the costs. The final draft prepared defined all the criteria used for the choice. A detailed mapping of the diseases was carried out simultaneously with the operations of survey. The tools used for the knowledge and the interpretation of the history and of the state of conservation were weakly destructive stratigraphies and chemical and physical analysis of mortars and masonry. All the information were useful for the design choices through a keen historical-critical awareness. Two restorers from Istituto Superiore Centrale per il Restauro of Rome gave their consultancy for all the preliminary activities of understanding and analyzing materials and decays, under the supervision of the architect specialized in restoration. The analysis of the wooden floors, almost totally destroyed, was carried out by detecting all the traces still visible on the walls of chestnut beams, it was possible to identify the distance between the beams; traces of wooden floors were also found in the rooms of the exedra. The chapel was covered with a floor of brick-concrete, set on a shelf whose size and geometry suggested a cover with wooden trusses. The walls had different nature or belonged to different periods: they were identified, measured and finally dated, by using all the information available from literary to dimensional sources.

The project had different approvals, getting all the necessary permissions: it contains warnings on the characteristics of the materials, the methods of intervention and consolidation, the

integration of the evaluation in the area, with preliminary reports on the calculation of structures. All the drawings - in detailed scales - showed the respect of all the historical-critical or structural matters, detailing the main characteristics of the works, equipment and systems.

The re-use of the building was an indispensable starting point for correct actions in restoration. The destination of the villa is a place of hospitality in a rural context: a country house, with rooms, lounges and restaurants, intended for receptivity, but also a spa, a place for conferences and events, a garden with a pool in the countryside. Further studies allowed to analyze and verify in the executive project all the designed solutions, leading to formulate and propose all technical and detailed executive choices that, in compliance with the historical data, with in-situ evaluations, and findings, with respect of the iconographic, historical-critical reconstruction, are all compatible with the 'existing. The project gives specific solutions that are potentially reversible, clearly distinguishable, aiming to combine the priority needs of the respect of the architectural compatibility with the possible reuse, minimizing, if necessary, the visual impact.

THE WORKSITE

The collapsing of structures prevented the access to some areas: a first phase of works for provisional security measures gave the opportunity of better understanding and investigating the building, its structures, and its history. The consolidation forecasted the structural security in order to avoid further damages by supporting some parts of the building. It also aimed to improve the existing situation and to build some of the collapsed structures. The restoration of the building, located in a seismic zone, includes the intervention of structural improvement. The walls and the vaults were consolidated with traditional methods by stitching and unstitching and with punctual injections of grout mortar. The philological reconstruction of collapsed parts of masonry was carried out with original materials. Original wooden floors were restored, and, when missing, new wooden floors were realized. The opening and closing of some doorways were connected to the reconfiguration of the compartments and to some structural or philological reasons. Old platbands were replaced, where necessary, with new elements in chestnut wood, with thickness and depth similar to the original ones.

The existing floors in terracotta were completely recovered and sometimes integrated only where necessary, with new elements. The floors tiles still on site were measured, photographed, catalogued. During a first stage, a detailed in-situ measurement of the geometry, of the implementation and of the size of the tiles was carried out; in a second phase, however, the parts were removed, cleaned, numbered, and putting them apart in order to reuse them.





In particular, even in relation to the need to give specific samples of the solutions not otherwise perceptible through the project documentation, the restoration was organized according to following steps. The restoration of the church forecasted the complete conservation of all the existing ancient plasters, through the integration, the preservation of existing moldings, and the restoration of the altar with its supplements, the recovery of the existing pavement.

The restoration and / or reintegration of decorative elements inside the structure matches with the finishing of all interior plaster walls, of original vaults, of horizontal elements of chestnut wood, of new horizontal elements, of the stairs, recovery of masonry.

The final choice of colors for the exterior façades was in white and gray, meaning to emphasize the reading of all the architectural lines which today determine the character of the complex: The question of the choice was really difficult to solve, because the building had many transformations in the centuries, that were linked to different changes in the colors of façades. The first documented phase, the baroque one, had many decorations and a typical use of yellow and light red. In the neoclassical period, the building was white and gray, becoming in the XIX Pompeian red and dark gray. In each period – as already said – some parts were added, and then it was impossible to find a potentially unitary and complete image of the building by choosing some colors. This is why the choice of a neuter solution - even if all the phases were well documented - aimed to show the articulated game between parts and volumes of the complex with color tones. The use of lime paint with pigments and the final adoption of a protection made by silicates, diluted in a very low percentage, helps to preserve the transparency of the glazing. The restoration of existing chimneys was forecasted, together with the choice of repositioning new chimneys following the same traces of the lost old ones. A heating / cooling system was placed under the floors; all the wirings has been conveyed in a technical duct along the perimeter of the rooms. All the samples of final windows and doors, interior and exterior, aimed at the reconstruction of the existing model, for those to be replaced because it unrecoverable or no longer existing, with only slight modifications that could improve their technological performance. When the model was no more philologically detectable, new windows or doors, always in wood, are designed, following a modern design that shows simplified lines by interpreting old modules of eighteenth century elements.



When the lacunae in the “architectural text” proved to be extensive and numerous, it was necessary to adapt the solution to the needs of reuse: this gave the possibility of considering the restoration as a critical and creative action. The new solutions, always reversible, identifiable and closely related to the outcomes of the analyses and expert surveys, gave new architectural images and functionality. For this reason, together with the strict severity in keeping all structures and all the historical existing traces of quality actions, the project also planned to introduce new vertical connections, a modern design of the outdoor spaces, together with the protection and the recovery of all the essences already existing. The old stone basin was kept, restored and protected and a new pool, with its modern and simple lines, surrounds it. The project also includes the introduction of vertical links, in order to improve the connection of the rooms. A new glass elevator system, based on a steel frame, was placed in little courtyard among the volumes, with a limited impact on existing building. The new deck on the top level took place of an old unknown one that might have been changed over the centuries and that eventually collapsed after the earthquake of 1980: a simple slab in concrete, clearly distinguishable, hosting three holes, used as receptors and distributors of natural and artificial light, which simultaneously organize the distribution of the rooms on level III, the lighting in the top of the terrace and the dining room to level II.

BIBLIOGRAPHY

- Bonelli, R., *Scritti sul restauro e sulla critica architettonica* (Scuola di Specializzazione per lo studio ed il restauro dei monumenti, Università degli Studi di Roma “La Sapienza”, Strumenti 14, Bonsignori, Roma, 1995).
- Brandi C., *Teoria del restauro*, Einaudi, Torino (1977) [first edition: 1963, Roma]
- Carbonara, G., 1997. *Avvicinamento al restauro. Teoria, storia, monumenti*. Liguori, Napoli.
- Cordaro M., *Restauro e tutela. Scritti scelti (1969–1999)* (Annali dell’Associazione Ranuccio Bianchi Bandinelli Graffiti Editore, Roma (2000)
- De Angelis d’Ossat, G., *Sul restauro dei monumenti architettonici* (edited by Spiridione Alessandro Curuni, Scuola di Specializzazione per lo studio ed il restauro dei monumenti, Università degli Studi di Roma “La Sapienza”, Strumenti 13, Bonsignori, Roma), 1995.
- Esposito D., *Carte, documenti e leggi in Giovanni Carbonara (Ed.), Trattato di restauro architettonico, vol. 4 Utet, Torino (1996), pp. 405–621*
- Léon, P., *La vie des monuments français. Destruction, restauration*. Picard, Paris 1951.
- Mancini R., *Carte, raccomandazioni e documenti internazionali: un quadro di aggiornamento*, in Giovanni Carbonara (Ed.), *Trattato di restauro architettonico. Primo Aggiornamento. Grandi temi di restauro*, Utet, Torino (2007), pp. 607–638.
- R. Pane, Mauro Civita (Ed.), *Attualità e dialettica del restauro* (Anthology of Texts, Solfanelli, Chieti (1987)
- Philippot, P., *Saggi sul restauro e dintorni. Antologia* (edited by Paolo Fancelli, Scuola di Specializzazione per lo studio ed il restauro dei monumenti, Università degli Studi di Roma “La Sapienza”, Strumenti 17, Bonsignori, Roma), 1998.

Project and Direction of Works: B5 S.r.l.

Consultant: Carlo Serino, Antonio Iaccarino Idelson - restauratori ICR (Equilibrarte S.r.l.).

Description: Feasibility study, Preliminary project, Final project and Executive design; Direction of works of the restoration and consolidation of Villa Montesano in San Paolo Belsito (NA) reused as a country house

Place: San Paolo Belsito, Nola - Naples (Italy)

Author: B5 s.r.l.: arch. Francesca Brancaccio, restoration and architectural project, direction of works coordination of security; ing. Ugo Brancaccio, structural project

Amount: € 2.276.102,17

Buyer: Villa Montesano S.r.l. - via Roma n°133, Pomigliano d’Arco

General Contractor: AD Restore S.r.l.



Antonia Pasqua Recchia
 General Director
 MiBAC – Ministry of Cultural Heritage
 and Activities

[Extract from: 2546-4 Pompei brochure
 versione 2 04/01/13 16.57 Pagina 5]

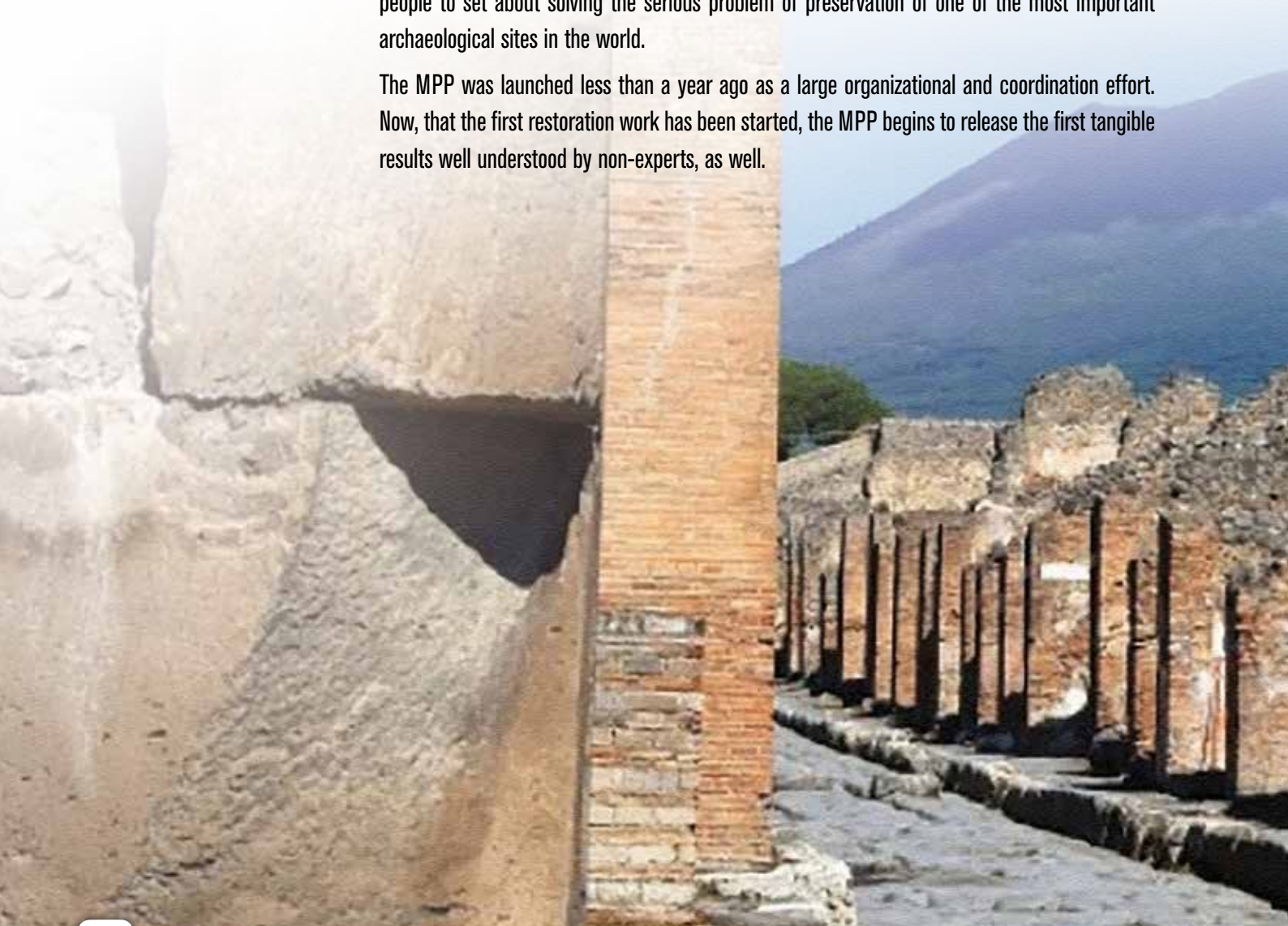
■ Major Project Pompei - MPP

...Pompeii, an archaeological site of more than 66 hectares... since then the remains of the buildings, dating from the 1st century, ...have been left exposed to the elements for more than 250 years...

[L. Ornaghi]

The “Major Project Pompei – MPP”, is a great collective commitment of different institutions and people to set about solving the serious problem of preservation of one of the most important archaeological sites in the world.

The MPP was launched less than a year ago as a large organizational and coordination effort. Now, that the first restoration work has been started, the MPP begins to release the first tangible results well understood by non-experts, as well.



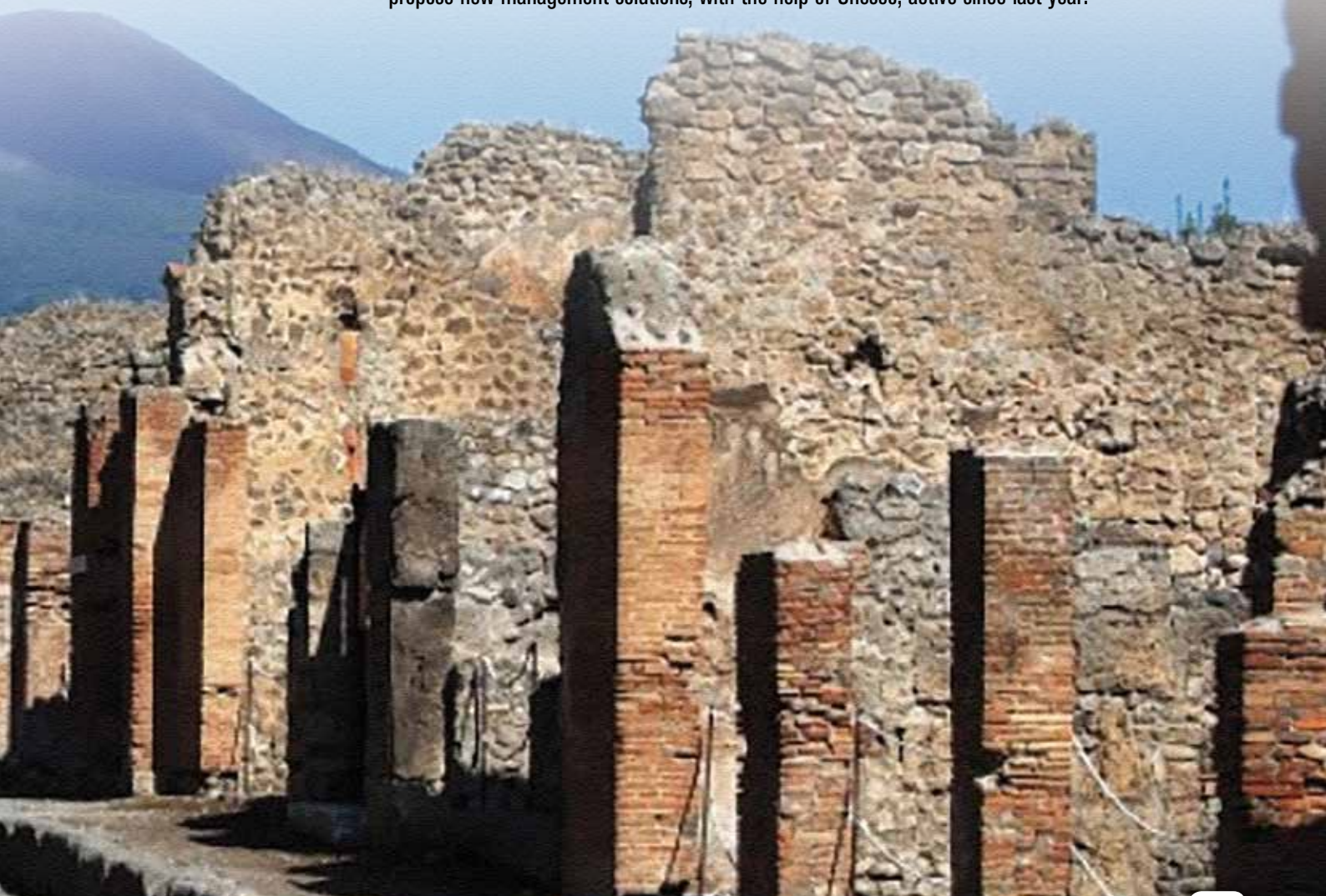
The actions to be taken are complex. These require the utmost care and the wider responsibility by all people involved.

Indeed, it is the most relevant investment which has ever been dedicated to an archaeological site, since its discovery and excavation.

The most serious problems are the geological and hydrogeological instability; the structural failure; the collapse of pieces of walls, the deterioration of the plaster, whether or not decorated and the decay of the upper part of the walls. All of these problems are faced with specific projects which involve the structural consolidation, the restoration of both the architectural elements and frescoes, as well as safety. These various projects, as soon as they will be completed, will guarantee security levels compatible with a long-term preservation of all parts of the archaeological site.

The tasks described above, require the largest economic resources of the MPP, but they are not the entire project. There are many other aspects, including the solution of problems of documentation, survey and diagnosis, of security, of promotion, communication and the enhancement of managerial skills of the “Archaeological Superintendency of Naples and Pompeii”.

The MPP is also an excellent opportunity for scientists and researchers from around the world, they will have a chance to deepen their knowledge of the site, to enrich the scientific debate, propose new management solutions, with the help of Unesco, active since last year.



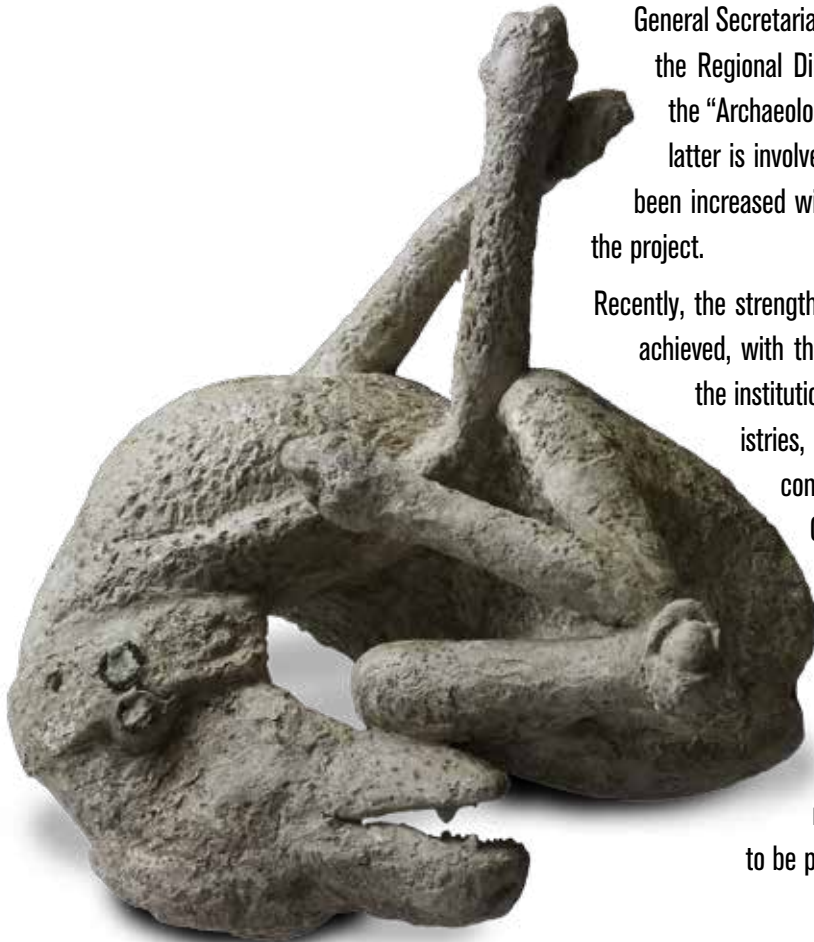
All this was made possible thanks to the cooperation between several ministries (for Culture and Cultural Activities, for Territorial Cohesion, for Economic Development, for Interior Affairs, for Education and Research).

Particularly the Ministry for Culture and Cultural Activities is involved at many levels and with different departments:

General Secretariat, General Directorate of Antiquities, more recently the Regional Directorate of Culture of Campania and, obviously, the “Archaeological Superintendency of Naples and Pompeii”. The latter is involved in an exceptional effort, although the staff has been increased with technicians hired last year, fully committed to the project.

Recently, the strengthening of the governance of the project has been achieved, with the development of a Steering Committee, with all the institutions involved, including representatives of five ministries, the European Commission and Invitalia, a public company supporting the planning and project. The Chairman of the Steering Committee is also ultimately responsible for different actions and enables the project to be more successful.

The MPP is an extraordinary example of planning, organizational and executive skills by a good public administration, during its implementation it will prove more and more, an example to be presented at both National and European levels.



COORDINATION GROUP

Steering committee

MiBAC – Ministry of Cultural Heritage and Activities

Antonia Pasqua Recchia, General Secretary

Luigi Malnati, Director General of Antiquities

MISE – Ministry of Economic Development

Aldo Mancurti, Department for Development and Cohesion Policies

Giampiero Marchesi, Department for Development and Cohesion Policies

Working Group for Legality and Safety

Fernando Guida Coordinator, Prefecture of Naples

Paolo Caputo, Ministry for Territorial Cohesion

Fabio Carapezza Guttuso, Ministry of Cultural Heritage and Activities

Jacopo Greco, Ministry of Education, University and Research

Tiziana Morgante, Authority for the Supervision of Public Contracts for works, services and supplies

Mariolina Goglia, Prefecture of Naples

General Secretariat

Antonia Pasqua Recchia, Coordinator General Secretary

Dora Di Francesco, Technical Secretary

Directorate General of Antiquities

Luigi Malnati, Director General

Maria Grazia Fichera, Technical Secretary

Archaeological Superintendency of Naples and Pompeii

Teresa Elena Cinquantaquattro, Superintendent

Grete Stefani, Directorate of Excavation at Pompeii

Valerio Papaccio, Pompei Technical Office Pompeii

Bruno Sammarco, Plan Office

Annamaria Sodo, Data Processing

Center of Boscoreale

Technical Support

Giovanni Portaluri, Paolo Di Nola, Invitalia – The national Agency for inward investment promotion and enterprise development





■ Calò Carducci Palace, Bari

The Calò Carducci Palace overlooks the Square of the Jesuits or Jesus, in the old city, to the right of the baroque church of Jesus, of which it constitutes a lateral wing and links with the individual space of the square, Zeuli Street, the Little Gate of St. Gaetano and St. Onofrio's Arch. There is no precise information about the construction of the palace. Marcello Petrigiani and Franco Porsia¹ write in this matter:

"Sappiamo già che quasi non vi è edificio nella Bari del Seicento che non abbia piani rialzati e "membri di sopra"; numerose sono le case accatastate come palizzate; un po' meno sono i veri e propri palazzi patrizi ed un buon numero di essi è localizzabile sulla rua francigena (o nelle immediate vicinanze) che, da quando la grande chiesa del Gesù ne occupa la parte di svincolo e di raccordo con la piazza, svilendo la monumentalità di edifici dai prospetti oggi altrimenti incomprensibili, sembra ridursi a semplice percorso tra la piazza e le corti della basilica nicolaiana. Probabilmente era esistito un tempo in cui i ricchi emigrati toscani e lombardi avevano dato un volto monumentale alla città. I palazzi Calò Carducci e Zizzi, la superstita balconata in strada del Gesù e forse la grande casa del vescovo di Polignano, Casamassima, dotata di due giardini, sembrano aver perso l'originale funzione di parata con l'intrusione della chiesa del Gesù che fu consacrata nel 1595."

("We already known that there is almost no building in Sixth Century Bari that does not have raised floors and "upper parts": there are numerous houses stacked up like palisades; more rare are the genuine and proper patrician palaces and a good number of these are located on the francigena street (or in the immediate vicinity) that, since the Great Church of Jesus occupies part of the highway and links with the square, debasing the monumentality of the buildings from the facades that are otherwise incomprehensible today, appears to be reduced to a simple route between the square and the courtyards of the Nicholean basilica. Probably there was once a time when the rich Tuscan and Lombard immigrants would have given the city a monumental face. The Calò Carducci and Zizzi





palaces, the surviving balconies in the Street of Jesus and perhaps the large house of the Bishop of Polignano, Casamassima, endowed with two gardens, seem to have lost the original function of a parade with the intrusion of the Church of Jesus that was consecrated in 1595”.)

Other historians have dated the realization of the palace to the beginning of the seventh century, when a branch of the Calò family joined the Carduccis. The Calòs are of Greek origin, from the Kingdom of Naples and they moved to Bari in the XIII century and acquired the noble title in 1282. Their official residence was in the palace located in the Maurelli square, in fact the gate bears a frieze with an inscription about Tullio and Jacob of this dynasty, the Carduccis, from Florence, where they had ascended to the highest ranks of the Florentine Republic, moved to Bari in 1474 and established their residence in the palace that gave its name to the eponymous courtyard. They died out in the first half of 1700 with Cecilia, the daughter of Hannibal, who carried on the patrician family of the Baris, who added her own surname to that of the Calòs, when in 1716 she married Saverio Calò, Ignazio's son.

The coat of arms of the new Calò Carducci dynasty, on the stairway inside the loggia door on the first floor, depicts, in a blue field (the celestial virtues), a tree with green foliage and roots (the family, united like the branches on the trunk whose exposed roots testify as to the antiquity of the origins), supported by a rampant gold lion (the symbol of strength, courage and magnanimity) and transversed horizontally by a gold band (the belt on which the warrior hung the sword to indicate the belonging to the equestrian order of cavaliers).

The façade of the palace is expressed in two parts: a compact body – with two windows on the first of the two levels and a single central one on the last one, all of them without cornices – joins an articulated front comprising a high base overlooked by symmetrically articulated studios and an entrance gate surmounted by a triangular pediment that intrudes into one of the five recesses of the loggia on the first floor, framed by pilasters, on the latter, corresponding to the second floor, taking the form of a ledge with an upper balustrade, on whose restraining pillars were decorative busts, that have not been discovered until the present day.



If we exclude the loggia of the Seats of the Nobles, the presence of an open façade and strong chiaroscuros like those of the Calò Carducci palace becomes a unique element for the seventh century architecture of Old Bari, characterized by full and compact wall masses, and for the Square of Jesus, comprising high buildings and dominated by the ample façade of the church. The interior of the building shows masonry of varying thickness and an irregular succession of spaces, probably due to successive realizations or additions of spaces resulting from the demands of the different owners.

On the first floor there is evident distinction of the main façade overlooking the square, comprising four large spaces of which three are joined to the small loggia, that is covered with veiled vaults, pertaining to the part that overlooks internal paths, composed of smaller spaces, with a part iron part clay attic, created, or reconstructed, in more recent times and modest barrel vault spaces. The spaces adjacent to the loggia show a wooden attic with polychrome decorations (Armenian?), today in extremely poor states of preservation, due to the abandonment of the building, the neglect over time that led to the collapse of the covers on the upper floor and serious static problems in the whole building. The entrance hall on the first floor, facing the access stairway, proof of the original representative function, is not joined to the loggia and today appears to be broken up into two spaces.

A beautiful access stairway leading to the mezzanine floor is placed at the rear of the hall. Notwithstanding the serious state of preservation and the successive alterations, the palace has kept its beauty over time.

“Della zona basamentale del palazzo in piazza del Gesù, allo scopo di aprirvi una serie di botteghe, fu purtroppo fatto così grave scempio che un restauro di ripristino è impensabile se non soccorre un qualche indizio estrinseco come un disegno o una stampa. Anche la posizione della scala di accesso al primo piano, tagliata com'è a trincea a danno del bel loggiato coperto da una successione di volte a vela, sembra il frutto di un altro inconsulto intervento. [...]

Le manomissioni cui la fabbrica fu sottoposta nel tempo non ne hanno offuscata la nobiltà che deriva all'edificio dai cinque fornicelli di facciata, dal motivo del portale timpanato inserito in quello centrale e -, al livello del secondo piano, che dovette essere necessariamente essere quello residenziale - dall'ampio loggiato con sui pilastri di contenimento della ringhiera i busti decorativi, che ricordano, come collocazione almeno, quelli del coronamento del Sedile.”

(“Such a mess was made of the base zone of the palace in the Square of Jesus, in order to open out over a series of studios, so that restoration and renovation is inconceivable without resorting to some extraneous clue such as a design or print. Also the position of the stairway leading to the first floor, cut horizontally and the damage of the beautiful loggia covered with a succession of veil vaults, seems to be the result of another rash intervention [...]. The alterations that the factory was entrusted with at the time have not obscured the nobility deriving from the building by the five façade recesses, by the motif of the pedimented gate inserted in the central one and - on the level of the second floor, that should necessarily have been the residential one - the ample loggia with its restraining pillars of the railing, the decorative busts, that recall, at least as a historical setting those of the coronation of the Sedile.”)²

The alterations of the internal spaces remain even more evident and one thinks that, when in 1888 the convent of Saint Teresa of the Gate or Saint Teresa of the Women in Peter the Hermit's

BIBLIOGRAPHY

Apollonj Ghetti B.M. Old Bari, Contribution to its Awareness and Rehabilitation, Arti

Grafiche Favia, Bari 1972, p 106 & Table XXI (photo)

A.A. V.V. The Land of Bari and Capitanata, in Atlas of the Baroque in Italy, Edizione De Luca, Roma 1996, p. 510.

Candida Gonzaga B. Noble Families of the Southern Provinces of Italy (rist. anast. 1875-82),

Arnaldo Forni Editore, Bologna 1995, III volume, p. 38.

Melchiorre Vito, Bari, Mario Adda Editore, Bari 1987 p. 66, 67 & 158

Petrignani M. & Porsia F. The City in the Story of Italy Bari, Edizioni Laterza, Bari 1988, p. 60, 70 e 83.

Sada L. Notes of Expenses for Taking the Veil and Marriage of Bari Patrician Tanzi (749-1806) in

Apulia Historical Archives 1987 no. XL, p. 262+

Street, on the corner of Saint Peter's Square, the palace accommodated some nuns:

"Il 1888 è la fine: le poche monache rimaste si trasferiscono nel ritiro delle Stimmatine di Modugno. Un anno dopo acquistano per 12.000 mila lire, dalla benefattrice Maria Calò, vedova Carducci, un appartamento nel palazzo di piazza del Gesù in Bari: è il primo nuovo conventino, adattato all'uso da un altro benefattore, l'ing. Nicola Capriati. Ben presto la cerchia si allargò e nel 1891, il numero delle monache salì a dieci; queste per aver suscitato simpatia e fiducia in tutta la contrada, vennero chiamate "le Giuseppine".

("1888 is the end: the few remaining nuns moved to the retreat of the stigmatas of Modugno. One year later they acquired for 12,000 thousand lire, from the benefactress Maria Calò, Carducci's widow, an apartment in the palace of the Square of Jesus in Bari, this is the first new convent, adapted for the use of another benefactor, Engineer Nicola Capriati. Pretty soon the circle expanded and in 1891, the number of the nuns had risen to ten; these after having inspired sympathy and loyalty in the entire region, were called "the Josephines".)³

Vito Melchiorre also quotes the same information:

"Il 4 marzo 1889, le due religiose (le suore Angelica Teresa Lamberti e Maria Maddalena Gabrieli) presero in fitto una porzione del Palazzo Calò Carducci, in strada dei Gesuiti, e vi si trasferirono, ottenendo dall'autorità religiosa il riconoscimento come nuova comunità carmelitana. Nel volgere di alcuni anni, il numero crescente delle vocazioni indusse le due fondatrici ad acquistare un pezzo di suolo in via De Rossi [...]".

"On 4 March 1889, the two nuns (Sister Angelica Teresa Lamberti and Maria Maddalena Gabrieli) rented a portion of the Calò Carducci Palace in the Street of the Jesuits, and moved there, obtaining from the religious authorities recognition as a new Carmelite community. Over the course of several years, the growing number of vocations caused the two founders to acquire a plot of land in the De Rossi Street [...]."⁴

NOTES TO THE TEXT

¹ Petrignani M. and Porsia F. The City in the Story of Italy Bari, Edizioni Laterza, Bari 1988, p. 60

² Apollonj Ghetti B.M. Old Bari Contribution to its Awareness and Rehabilitation, Arti Grafiche Favia, Bari 1972, p. 106

³ Sada L. Notes of Expenses for Taking the Veil and Marriage of Bari Patrician Tanzi (749-1806) in Apulia Historical Archives 1987 no. XL, p. 262

⁴ Melchiorre Vito, Bari, Mario Adda Editore, Bari 1987 p. 66





Stefano Pallara
 Cristina Caiulo



info@studioaerrekappa.com
 www.studioaerrekappa.com



**LEONARDO
 SOLUTIONS**

info@leonardosolutions.it
 www.leonardosolutions.it

■ Energy saving for historical heritage: the domotised lighting system of the Cathedral of Nardò (Lecce)

ENERGY SAVING FOR HISTORICAL HERITAGE

■ INTRODUCTION

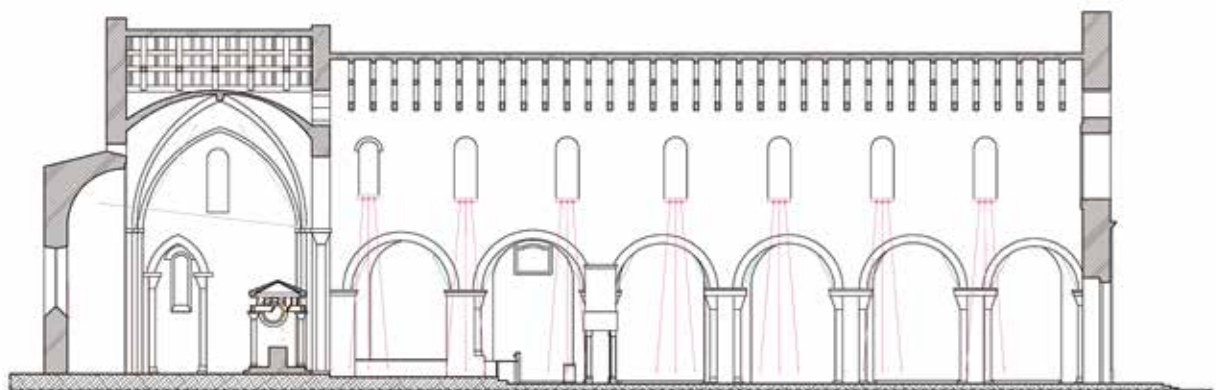
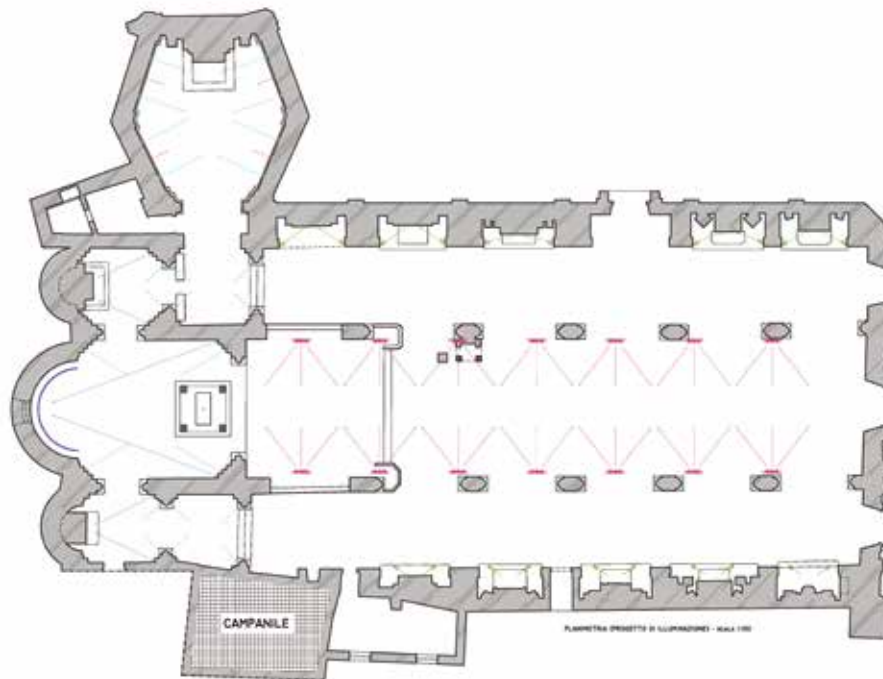
Our goal was to use domotics to transform the Cathedral of Nardò into a “smart building”, a first step towards the creation of a “smart city”. In brief, a domotic system is a system for the control and management of electrical or electrifiable apparatuses and devices, allowing, among other things, to optimise consumptions.

■ HISTORY

The original system of the Cathedral of Maria SS.ma Assunta of Nardò probably dates back to the VII-XI centuries. The first significant restoration intervention was carried out by the Benedictine monks after the 1245 earthquake. The oak crucifix dates back to more or less the same period: among the oldest wooden crucifixes in Southern Italy, it is commonly referred to as the “Black Christ”. Further restoration was carried out after the 1350 and 1456 earthquakes, followed by other interventions completed at the hands of various bishops, such as the Neapolitan bishop An-







tonio Sanfelice (1708-1736), supported by his brother Ferdinando, a famous architect. In 1892, bishop Giuseppe Riccardi decided to start to demolish the Cathedral, but as soon as the first wall surfaces came down, the original medieval structure was unveiled: the baroque stuccos which had been disguising the ancient cathedral to follow the trends of the past were therefore removed and bishop Riccardi appointed the famous painter Cesare Maccari from Siena to fresco the chancel, the apse and the ogival vault in the presbytery.

■ THE DESIGN OF THE NEW LIGHTING SYSTEM OF THE CATHEDRAL

The design of the new lighting system of the Cathedral mainly focuses on energy saving systems and the compliance of the chosen illuminating devices with the real needs of the building,



through a careful selection of the best solutions, in terms of luminous efficacy, Colour Rendering Index, life, luminous flux and colour temperature, to be positioned and angled according to the specific needs of each single room for the best luminous effect. The chosen illuminating devices are characterised by extreme flexibility, allowing to modify the luminous fluxes through a continuous regulation of the load; moreover, using both halogen and LED lamps (Light Emitting Diode) with dual KNX and DALI control systems (Digital Addressable Lighting Interface), the best illuminating effect is guaranteed, even for any future requirement. Particularly, all illuminating devices are custom and ad-hoc devices specifically conceived for the Cathedral and equipped, following our indications, with specific DALI feeders and therefore all adjustable and adaptable to each “functional scenario”. Having chosen the BUS system allows to save material, optimise the path of the conduit pipes and carry out quick and simple modifications at any time, simply excluding or adding illuminating sources in a “scenario” or creating brand new “scenarios” by means of elementary programming operations from the console, without needing a technician, exclusively required if the control unit is to be managed or if an update of the configuration is asked by the Customer. With specific reference to the Cathedral of Nardò, the (still on-going) qualification process is based on the analysis of a system aimed at providing the building with a new, modern lighting system as well as at optimising consumptions for a remarkable energy saving. For such reasons a domotic system was chosen, already experimented in 1998 in the Sanctuary of San Giuseppe da Copertino, one of the first protected sacred historical buildings in Italy to use domotics.



REFERENCES

De Lorenzis D., Gaballo M., Giuri P. (a cura di), 2014, *Arte e devozione nella Cattedrale di Nardò*, «Quaderni degli Archivi Diocesani di Nardò e Gallipoli», Nuova Serie, Supplemento VII, Mario Congedo Editore, Galatina (LE).

Santantonio G., 2013, *Ecclesia Mater. La fabbrica della Cattedrale di Nardò attraverso gli atti delle visite pastorali*, «Quaderni degli Archivi Diocesani di Nardò e Gallipoli», Nuova Serie, 6, Mario Congedo Editore, Galatina (LE).

Caiulo C., Pallara S., 2013, *Risparmio energetico negli immobili storici vincolati: l'impianto di illuminazione a gestione domotica della Cattedrale di Nardò (Lecce)*, in «Il delfino e la mezzaluna», Studi della Fondazione Terra d'Otranto, anno II, n. 1, Tipografia Biesse, Nardò (LE).

Bellini A., 2013, *Giacomo Boni e il Restauro Architettonico. Un caso esemplare: la Cattedrale di Nardò*, GBE/Ginevra Bentivoglio Editoria, Roma.

Gaballo M., Bove Balestra S. (a cura di), 2005, *Il Cristo nero della Cattedrale di Nardò*, «Quaderni degli Archivi Diocesani di Nardò e Gallipoli», Nuova Serie, Supplemento II, Congedo Editore Galatina (LE).

Cappello A., Lacerenza B. (a cura di), 2001, *La Cattedrale di Nardò e l'Arte Sacra di Cesare Maccari*, «Quaderni degli Archivi Diocesani di Nardò e Gallipoli», Nuova Serie, 4, Congedo Editore Galatina (LE).

Mazzarella E. (a cura di Gaballo M.), 1999, *Nardò Sacra*, «Quaderni degli Archivi Diocesani di Nardò e Gallipoli», Nuova Serie, 3, Congedo Editore Galatina (LE).

Vetere B. (a cura di), 1986, *Città e Monastero. I segni urbani di Nardò (secc. XI-XV)*, Congedo Editore Galatina (LE).





Francesca Brancaccio
 B5



info@b5srl.eu
 www.b5srl.eu

CAPRIELLO VINCENZO SRL



info@pimarlimestone.com
 www.pimarlimestone.com

Integrated valorisation of the Urban Defensive Walls: Restoration and Reuse - North-West Section - 1st operational phase: Ex Carlo Pranzo Area

DESCRIPTION

THE PROJECT – made by the Ufficio Centro Storico of the Municipality of Lecce (arch. Patrizia Erroi, arch. Andrea Ingresso) - involves a broad area in the city, connected with the urban wall system. The sites in the worksite are the walls themselves, a modern building nearby, the secret garden of Giaconia Palace, the parking area in Carlo Pranzo square. Works are nowadays going on with the contractor Capriello Vincenzo srl, based on the project and on its technical and methodological improvements made by the Italian society B5 srl (Francesca Brancaccio and Ugo Brancaccio, specialized in restoration of ancient monuments and sites), under the consultancy of Professor Giovanni Carbonara and Professor Mauro Matteini. The company PIMAR is providing the worksite with Lecce stones.

The wall circuit has influenced the urban fabric of the city since the IV-III sec. BC. From the second half of the IV century B.C., the town was enclosed in a massive defensive structure: according to the technique used in the Region of Salento, foundations were made of irregular blocks, while the elevation consisted of parallelepiped blocks of Lecce stone, arranged on several rows, without mortar or binders and finished by stonemasons. An addition of the XVI century defines the northern edge, a double rampart with a typical forceps form, as aggressive outpost of the entire system of fortification. Inside the artefact, the transformations are due to the interconnection with the adjacent former convent of the Franciscans; outside the bastion retains its original volumetric configuration and constitutes element of grandeur and magnificence of the original fortified area. The defensive work “double rampart forceps” consists of two pentagonal bastions, organized on three levels (basement, first and roofing) connected by a runner originally covered. Nowadays we still have only the current level in the basement.

The state of preservation of the building wall as a whole has been somewhat compromised, with many causes of degradation: lack of maintenance, that has caused the growth of weeds and



deep roots. The horizontal structures of the walls present on the decking flooring in limestone: some parts are totally disconnected and covered by lush vegetation that has led to massive disruptions of the sidewalls with leak from the original structure. The masonry is heavily degraded both in reference to the action of moisture and weathering (the samples of stone and mortar shows the presence of soluble salts, analyzed with the system of the “ion-exchange chromatography”).

The project

The Walls are protected by Legislative Decree 22 January 2004, n ° 42 “Code of Cultural Heritage and Landscape.”

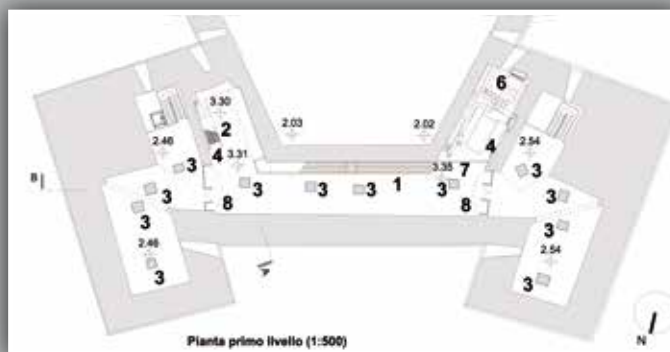
The modern building, built around 1900, consists of two blocks, on one floor and on a total area of about 654 sq.m. The part of the building interested by this project is the one facing via Leonardo Leo, that will be used as space linked to the touristic circuit of the fortified walls. A large open space takes place between the rear elevation of the sixteenth century Giaconia Palace and the walls fortified perimeter, which forms the western border. The area retains much of the original features The upper terrace behind the walls has numerous palm trees, orchard, etc. The garden is in a state of neglect and it needs renovation of the whole system. The project involves also a big urban area of about 25.000 sq. m. of extension, currently used as a public car park. All the site place can become the filter area between historic and modern city, between historical memory and contemporary. The “system of Mura urbiche” means, in particular, the set of remaining evidence of the old system of urban fortification. The project is conceived in a broader perspective, as the restoration of the Walls aims not only



to preserve the physical and architectural components, but wants to interrelate all the elements in a hypothesis of general enjoyment of the area, the monument becoming a visual landmark in a broader environmental context. The conservation and the restoration of the wall structure is extended to the entire height of the wall. The intervention, according to consolidated methodologies and recognized international techniques in restoration of stones starts with exploratory drilling for the verification of design characteristics in the founding of the walls and data on the context. These surveys will be carried out in order to integrate the archaeological excavations. The action involves the individual segments and / or portions of the wall surface in severe degradation conditions. Weeds and roots will be carefully removed by manual operations. A general review of the covers of the terminal crown of large masonry consisting of slabs limestone cm thick. 8-10 will be done, by repositioning the slabs and integrate missing elements. The surface will be treated with chemical products for sanitizing and pre-consolidate in order to reduce the degradation and better conserve the masonry subject to microbiological attack, by impregnation with biocides for the elimination of biological microorganisms (molds, lichens, mosses, etc.). The parts extremely degraded will receive the impregnation with products for preconsolidation applied by brush in several coats, taking care to thoroughly impregnate the surface. Punctual operations of consolidation will be made with mortars additive. A general cleaning of the surfaces will be carried out with manual techniques with the attention not to alter the underlying natural patina, including the elimination of extraneous matter of any kind (in brackets iron, nails, etc). For surfaces attacked by "alveolizzazione", the project aims to preserve in situ, limiting the intervention to grouting the alveoli deeper with mortar, having characteristics of adherence, consisting of hydraulic lime in low salt content, stone dust and sand from the river. Portions of the wall surface characterized by the presence of joints between segments depleted with the loss of binding function identified in the analysis of the mortar, will be cleaned and consolidated.

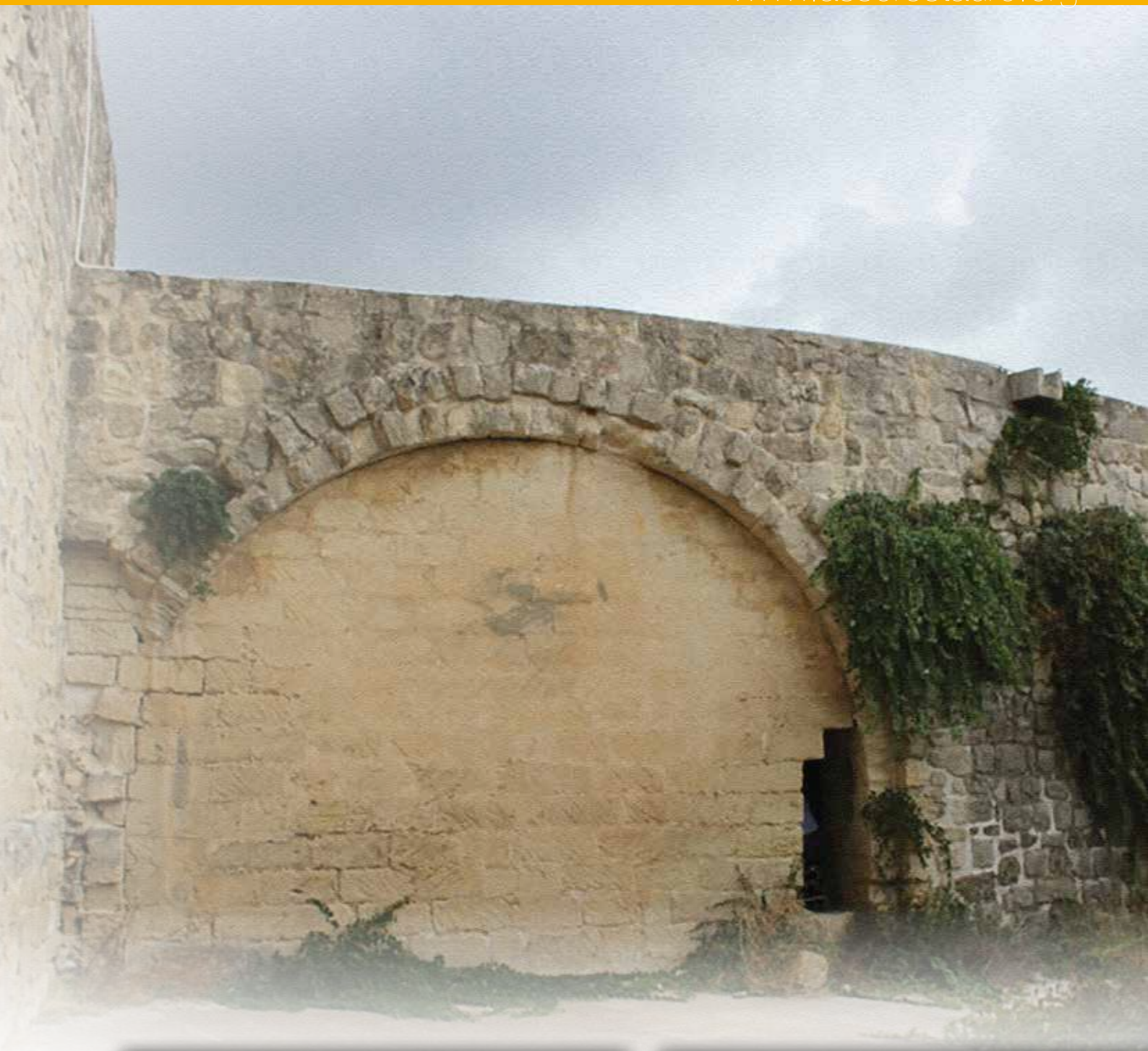


Missing segments will be replaced by masonry with the method of “scuci-cuci”. A final treatment will balance the colors of the wall portions replaced with a protective water-repellent product with high penetration. The project involves emptying the moat on the front of the double bastion St. Francis and the first section of the former 40 meters along Place Carlo Pranzo under the constant control of archaeologists. The excavations will proceed according to the instructions given by the Archaeological Superintendence. The project of reuse, with the creation of a guided tour of high-value cultural tourism, forecasts a whole action concerning the redevelopment of the urban area at the northern entrance of the city. The attractor must relate to the environmental context, the fruition the fortified walls of the city transform a viable portion of the upper walkway for a length of about ml. 530. The beginning of the path is located in the modern building, which will be transformed in a tourist outpost for the reception of visitors (toilets, bookshop and other complementary functions infopoint. The aerial walkway at ml. + 5.70 will be reachable by



a panoramic elevator located in the large well of light inside the building and a bridge built with steel and corten. The project involves also the restoration of the walkway summit of the walls that will be available for its entire length, for both the front overlooking Via Leonardo Leo and on the facing area of the former Carlo Pranzo Place with direct access to environments which form the two bastions to the garden of the historic building Giaconia. The restoration will consist of the general revision of the pavement, with disassembly and relocation of limestone slabs already required for grubbing in depth of the roots of weeds, after the reconfiguration of the slopes for the conveyance of rainwater. The existing path of the width of ml.0.80, realized in superelevation on the inner side of the plane of walkway, obsolete and no longer accessible, will be removed, together with the guard posts on the walkway, framed structure in reinforced concrete and walkways of service. The “sentry” in nineteenth-century masonry old post will be preserved. A steel staircase will allow access to the floor of the terrace of the bastion west (about +9.00 m). Some additional work will be required for the reconstitution of the route of the Gardens of Palazzo Giaconia, through a general revision of the pavement, restoration of the two ladders placed in the thickness of the wall, the recovery of the existing columns and the integration of missing columns. The Bastions will become a meeting place, visited and reused through events like sensorial installations, video, art expressions, sounds, contemporary creativity. Waste material that are today in the basement, will be removed. A general cleaning of the walls will be made, together with the restoration of the openings of the skylights, a steel bridge for the viability of the floor, some systems of electrical, phone, air recirculation system, fire-fighting.

Improving solutions: The project received few improving solutions adapted to operate a better redevelopment of the outdoor areas, by offering new traces, retraining and further improving the outdoor areas in relation to the pedestrian and vehicular practicability, by confirming the completion of the walkway, the scale and the panoramic, such as system access to the walkway on the walls. The location of stairs and a lift was improved, in order to make them more functional, and to allow the vertical connecting means to be immediately usable, with less impact on the



environment inside and outside. This new functional relationship improves the environmental requalification of the entire area currently in a state of total degradation. The proposed improvements will not interfere with the static wall structure of the walls, finding the supports directly on the ground. Many details were improved, in relation to the needs of use, proposing a lower physical impact. The construction of a footbridge in the same material is characterized by a greater attention to the relationship with the environment. The walkway was redesigned with a particular attention to solving the approach from Leonardo Leo, the impact of the walkway, the instant communication of its presence at the entrance to the system walls, and, somehow, to the historic center of the city. A big attention was given to carriageability of the street for the access of emergency cars. The proposed improvements in this area aimed essentially at ensuring accessibility to the public easier to the portion of the ramparts (in particular for the disabled), to ensure greater accessibility of the exposed surface and reduce the visual impact and noise of the system conditioning. Within the more general path of fruition, the portion covered by this project involves the movement on the walls and inside of the ramparts from the new entry point that is located in the building on Via Leonardo Leo manufacturing. The problems relating to safety conditions in the batch to limit separation of the lot subject to intervention and the area of Piazzale Carlo Pranzo, were solved by considering modeling to natural slope of the land, by affixing open mesh biodegradable nets in strands of coconut fiber, that will provide with a right microclimate for the greening of the slope. All the pedestrian connections will be assured through naturalistic engineering works in reinforced earth. The same system was used for the stairs, which will allow the connection of the share of Piazzale Carlo Pranzo with the level of the bed of rock. Special attention was given to inserting at the foot of the slope, a system of pipe draining and regimentation of rainwater. The improvements also provide general illumination of the site through an integrated system with projectors for outdoor LED warm white and flood optics, that allows a large degree of openness and accents. The amount of natural light able to penetrate inside of the ramparts is increased by about 400%. The creation of a ladder in Cor-ten allows smoother transition under the arch of the roof vault of the basement (> 2.40 m), and the full enjoyment of the bottom wall corresponding the ground floor. This solution allows the descent to the basement of the ramparts, leaving enough space for the passage of people between the scale and time. The implementation of a panoramic lift will permit to enjoy the sight of the back wall of the rampart in all its breadth and grandeur (6m wide by 12m tall). A floating floor will cover part of the basement rock, utilizing paving slabs with a support structure on adjustable galvanized steel supports. The sides are treated with a metal grid, in order to compensate the angles of the walls, and host the change of the air conditioning air in accordance with the provisions of the project.



info@pimarlimestone.com
www.pimarlimestone.com

■ Limestone supply for the restoration of the “Mura Urbiche”

The story of 150 years concentrated in a single company, this is PIMAR for its customers, its industry and for his territory. Here in Puglia, in Salento, we have the pleasure to be spectators of a unique and rare artistic heritage, hard to find elsewhere. Day after day, walking through the baroque streets of Lecce our eyes wander new curve, new game of shadows and light fruit of an artisan secular ability. PIMAR became the protagonist in the last years of many restoration work, a great responsibility to brings to light what the time has hidden and “protected”. The stone is the base and the tool to work with, but what is obvious is that the restoration of the artistic and architectural demands a high level of professionalism that only the results, and their durability over the years, can guarantee. PIMAR claim is, “work for ideas that create History”, but from time to time, and with great pleasure, we have the opportunity to work for the History and with it. The restoration of the “Mura Urbiche” of Lecce is not a project among many, it is a decisive step in the PIMAR professional life: this is a challenge for all our skills and our abilities to return to the original beauty, to the TRUE splendor, of an iconic building of our territory. In a nutshell it is a source of great pride for PIMAR, for its staff and for all contractors involved in this project.



A cooperation between Turkey and Italy



Regione Emilia-Romagna

international projects

MED-ART.2

transnational cooperation for culture preservation



COMING
SOON

assorestauro®

associazione italiana per il restauro architettonico, artistico, urbano
italian association for architecture, art and urban restoration



**REINVENTARE
 EUTOPIA**

*Città candidata
 Capitale europea della cultura*

Building relationships and being aware of our bordering culture: it is in this spirit that the territory of Lecce and Brindisi brings forward its candidacy, relying on its millennial history as a bridge across the Mediterranean. This rich cultural melting pot, the result of exchanges, meetings and dialogue with the Balkans, the East and South of the world, cast Lecce2019 towards the dream of a new Europe nurtured by relations, plurality, new horizons and prospects.

Starting from scratch to reshape our future: this is the challenge that gives life to REINVENTING EUTOPIA for Lecce2019. More than just a word play, it is a call for change that combines thought with concrete action, aimed to render the provinces of Lecce and Brindisi flagships of good practices and democracy.

For the purposes of Lecce2019, “reinventing” does not mean resting on the laurels of our architectural and artistic heritage, but it includes a variety of steps, i.e. acknowledging our value, championing potentials, creating networks, jumping over the barrier of isolation in order to spark off a virtuous circle of knowledge, opportunities and innovative patterns of growth.



From the Heel of the Boot gazing at the stars in Europe: through the dimension of utopia it is possible to overturn our perspectives, modify the magnetic north and south, capitalize on the regional peculiarities and cultural differences, which constitute the real wealth of a united Europe. People can teach and learn from daily encounters and dialogues that may help us to put in place this laboratory of experiences, which starts from a “we”-based approach and redraws a new concept of community and Occident reaching out to the South.

www.lecce2019.it



CONFERENCE

October 16th 2014
Palazzo Turrisi Palumbo
Via Marco Basseo 1, Lecce

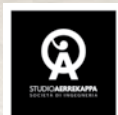
Assorestauro training and commercial visit to Italy
for foreign architects and restorers. Expo sud plan

Conservation, Management and Valorization of Cultural Heritage

SPONSOR



SPC s.r.l.



WITH THE PATRONAGE OF



PARTNERSHIP PROJECT



16

OCTOBER

P R O G R A M M E

	Chairman: Stefano Pallara Assorestauro's Regional Delegate for Puglia and Basilicata
15.00 - 15,30	Welcome speech: Paolo Perrone Mayor of Lecce Loredana Capone Councillor for Productive Activities Puglia Nicola Delle Donne President of Ance Puglia Vito Margiotta Confindustria Lecce ITC-ICE - Agenzia per la Promozione all'estero e l'Internazionalizzazione delle Imprese Italiane Promotional Activities for the Sector
15.30 - 15,50 Michela Catalano Superintendence for the Architectural and Landscape Heritage of Lecce, Brindisi e Taranto	The Restoration Worksite: treasure chest of knowledge for the programmed conservation
15.50 - 16,10 Mariaenrica Frigione University of Salento	How innovative nano-materials can preserve the beauty of Lecce stone
16.10 - 17,30 Alessandro Bozzetti SPC	Real Albergo dei Poveri, Naples
Diego Aisa KIMIA	Lime based products for restoration of CH
Francesca Brancaccio B5	Restoration and reuse experiences on heritage buildings and sites
Giuseppe Latte Bovio Boviar	Methods and instruments for non-destructive tests
Beppe Fragasso Impresa Garibaldi	Calo' Carducci Palace in Bari
Stefano Pallara Studio Aerrekappa	Cathedral of Maria SS.ma Assunta, Nardò
Davide Mauri Domodry	Dehumidification systems
Giorgia Marrocco Pimar	Urbane Difensive Walls - Lecce
17.30 - 19,30	Coffee break, Matching and free b2b meetings

QA

quaderni di assorestauro



YEAR03NR03