quaderni di assorestauro

QA

ANNO01NR01
MAGGIO 2012

ACTA OF THE INTERNATIONAL WORKSHOP

ROME NAPLES CAPRI

TRAINING COURSE IN ITALY AND B2B MEETINGS AT THE NAPLES CONFERENCE

27 MAY – 01 JUNE

Project financed by the Italian Institute for Foreign Commerce

ITALIA
Italian Trade Promotion Agency

Quaderni di Assorestauro

QA

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edited by
Andrea Grilletto

Graphic Project
Viviana Volpini
www.custom-art.it

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ITALIA
Italian Trade Promotion Agency

Project financed by
the Italian Institute for Foreign Commerce

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sponsor presentation

_ Presentation of “Foreign Trade/Italian Trade Commission (ICE)”

ITALIA

Italian Trade Promotion Agency

The **Italian Institute for Foreign Trade/Italian Trade Commission (ICE - Istituto Nazionale per il Commercio Estero)** is the Italian public agency entrusted with promoting trade, business opportunities and in-dustrial cooperation between foreign and Italian companies, thereby encouraging their internationalization.

With headquarters in Rome, ICE can count on a few regional offices in Italy and a network of more than a hundred offices all over the world (**Italian Trade Commission** offices abroad).

ICE’s activities are financed by public and, to a lesser extend, private funds:

- through the Ministry of Foreign Trade, who establishes directives and keeps a supervisory role;
- through Italian companies that use its services for information, assistance and promotion.

Getting to know the Italian market through the ITC Information Service (for foreign companies)

ICE’s offices abroad can provide information and assistance to foreign companies wishing to develop business with Italian counterparts or to select forms of entry in the Italian market. In particular, ICE provides: an Italian economic outlook (an overview of the fundamentals of the Italian economy), the most up-to-date information on Italian laws and regulations on trade policies and, in cooperation with AGI (Italian Press Agency), a selection of the most relevant daily news about Italy. On the other hand, ICE gathers offers and requests coming from foreign companies interested in developing business with Italian partners, a database that can be accessed by Italian companies.

Getting to know foreign markets through ITALTRADE information service (for Italian companies)

Information

The objectives that a company can pursue using ICE's services range from competitor analysis to the assessment of the acceptability of a product up to the comprehensive evaluation of the operational and legal context likely to be encountered. ICE's services can therefore be tailored to specific needs, ranging from market entry strategies to the conclusion of sales contracts, joint ventures, licensing or forms of promotion, such as company and product pres-entations, organisation of symposium and press conferences.

Promotion

Through participation to international exhibitions, trade missions, conventions, advertising campaigns and other promotional activities, ICE aims at intensifying business opportunities and supporting the establishment of Italian companies in new markets, creates awarness and reinforces the image of *Made in Italy*.

The website Promoting Italy - www.italtrade.com - can be regarded as an international promotional tool for Made in Italy brand, addressed at overseas companies interested in business relationships with Italy.

Multilateral cooperation

ICE facilitates Italian companiesin accessing financing by international organisations and stimulates jointventure opportunities and industrial/technological partnerships with foreign companies. The participation of Italian companies in projects in developing countries is promoted through direct contacts with major inter-national institutions (World Bank, European Bank for Reconstruction and Development, European Union) and through promotion of alliances with companies from beneficiary countries for combined participation to tenders.

Training

In the international sector, the development of human resources is essential in any long-term strategy.

ICE organises training courses for young Italian and foreign graduates interested in a career in organisations or companies with a strong focus on international markets. Particular attention is paid to the training of managers and officials from developing countries and from countries engaged in the internationalisation of their own entrepreneurial system. This activity is undertaken with organisations such as UNC-TAD, WTO, European Union and with Italian and foreign universities and business schools.

_ Presentation of "Assorestauro Servizi"

assorestauroservizi

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 patronage of DNA.Italia 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.

Andrea Griletto
Technical Director of
Assorestauro

_ ...to gather the *conservazione* in only one point... Assorestauro

Seven years after its foundation, Assorestauro is increasingly assuming a key role both in Italy and abroad to gather the skills and professionalism related to the world of Conservazione, Restoration and Reuse.

We can say that Assorestauro is now the only point of reference both nationally and internationally for those who want to look out to the world of Italian conservation, intended as widely as possible, as a synthesis of various disciplines that converge in it, the specialized skills, the technologies and the growing entrepreneurship. A fund that, when analyzed as a whole, represents a strong market and has important implications in the tourism sector, industry and the bio/construction. At a time of severe crisis in general, expecially branches like Cultural Heritage, consolidating virtuous alliances, and perhaps in some way, spontaneous, with neighboring areas, have been shown to maintain A certain solidity and drag the overall economy by strengthening the identity and sense of belonging of each company involved. However, this is probably a feeling that is felt strongly at the local level, where there have been so far the activities of the world of finance and administration (think for example to banking foundations) to support the sector. While the government appears to gradually reduce or cancel the call for funding in the area, attention is increasingly directed to the world of private finance, which seems to give more confidence to the sector. In this sense, of course, is moving Assorestauro, in order to give to the associated companies new references and employment opportunities. If on the one hand, private parties, that have so far financed the fund, have been extremely careful in directing their efforts toward new and important issues, multisectoral (maintenance, organic, energy saving, ...), has not been started yet that the synergy ports, and requires the lender to verify the requirements of the performers (survey, design, materials, performance) in order to ensure and improve the process.

The central philosophy of Assorestauro, beyond the disquisitions over the method among restoration and conservation, is related to gather a compound so important in terms of economic and moral value by creating a table for discussion and planning activities and working methods. This intent is certainly not easy to realize and, for the first time, business community figure out as the proponent subject, putting ahead its speculative mission the growth, at the technical level, of a sector that increasingly takes the form of economic leader of our country development, finding finally its rightful place in the tourism sector also. We are obviously all aware of how this epochal crisis, surely new to those of our generation, has undermined the solidity even of companies and enterprises with a strong cultural background, but most of all how it challenged the confidence of the final user in a system that appeared to collapse like a house of cards. This the general feeling..., but what are these mentioned areas nearby? ...surely the whole tourism section which has increased its cultural component, founding within the idea of restoration a clear way to highlight and enhance its infrastructure (engineers will forgive for the improper use of the term); ... the development and growth of the materials of the green-building/energy sector, which largely borrows from the past to shun the chemical and plastic excesses of the second half of last century; ... the laser technology sector, which in recent years is more and more in use over CH due to the progressive development and optimization of techniques and costs; ...land management, that endorses the more delicate techniques of the past and approaches to sustainability of an agricultural society to maximize its efficiency and minimize the environmental impact (project of recovery of the agricultural identity of our area through the reuse and development of the wide wealth of farms, villages and rural buildings,... yet, the policy for the historic villages, the Eco-museums, the development of integrated management models... and I think that the food for thought could go over and over...

All these are the themes that build the frame of the experiences, places and professionalism that we will meet in our common journey of an entire week. A path that blends, according to the founding principles of conservation, training with the comparison and dialogue between cultures in the clear knowledge that every object, situation, has its own identity engraved in the history and projected into becoming; and solutions/developments to be designed, represent an unique and unrepeatable situation to be addressed to with consciousness and awareness. In the end, I would like to present some of the principal activities, in progress, of Assorestauro. Some of these activities will be discussed during

the course with some friend invited from the target countries: Morocco, Russia and Turkey. The discussion is obviously widely open to all the group to find new ideas, perspectives and synergies, starting with new dialogues on a common vocabulary, that of Conservation, or better Conservazione.

THE ICE WORKSHOP DOUBLED IN 2011 (Ferrara, March 2011– Turin, November 2011)

In 2011 for the first time the annual ICE Workshop, which is addressed to foreign experts in the restoration field and has been managed by Assorestauro in the last five years, was held twice. The first meeting in March was organised in conjunction with the restoration fair "Salone del Restauro" in Ferrara and registered the participation of attendees from Algeria, Saudi Arabia, Croatia, Egypt, Israel, Morocco, Mexico, Peru and Russia. The course involved the following towns: Bari, Matera, L'Aquila, Ferrara and Bologna with visits to the building sites proposed by the firms belonging to the Association. The second meeting was held in November in conjunction with "Salone DNA.Italia" in Turin. For the first time it did not take place in connection with the Ferrara event, as expressly suggested by Assorestauro; the experience is going to be repeated with the May 2012 edition, which is combined with the event "DNA in Tour" in Naples. The course involved the following towns: Roma, Perugia, Spoleto, Verona and Turin with visits to the building site of the steps of the Verona Arena and of the restoration and diagnostics labs in Venaria Reale.

EXPLORATORY MISSION IN ERBIL – BAGHDAD (August 2011)

In August 2011 Assorestauro was invited by the Municipality of Baghdad to make an on-the-spot investigation aimed at the restoration of the Liberty Monument. The monument, built as the eastern entrance (gate) of the city, celebrates the birth of the Iraqi Republic after British colonial domination. Its bronze sculptures were made by the renowned Iraqi sculptor Jawad Salim (1919-1961) and finished by his wife after his early death, while the facing was built using Italian travertine. It is highly significant from a formal point of view that a monument celebrating the birth of the Republic and built using Italian materials is going to be restored in collaboration with Italy, in a period in which the country is struggling to rebuild its identity. Arrangements are currently being defined. They should be ratified with the invitation that has already been extended by Assorestauro to the person in charge of signing the business agreements to participate in the next ICE Workshop. The mission to Baghdad was also the opportunity to present the Italian restoration field at a convention organised by the training service of the Lombardy Region and Promos in Erbil, which led to a partnership agreement between the local University and the Politecnico di Milano, represented in this occasion by the team of Prof. Boriani, President of Assorestauro's Technical- Scientific Committee.

HIGH TRAINING COURSE – THE LOMBARDY REGION - BRESCIA (January – May 2012)

Assorestauro, by virtue of its partnership with the training centre "CFP Zanardelli" in Brescia, organised a 300 hour programme called: "Impiantistica per i Beni Culturali: coniugazioni possibili" (Thecnical Systems for Cultural Heritage: possible conjugations). The course, implemented by CFP Zanardelli and financed within the training project "Lombardia Eccellente", is free of charge and open to 30 students. It foresees a first introductory part on the construction techniques used for historic buildings and the study of materials, and a second part dedicated to historic systems, both air-conditioning and lighting. The course is about to end and the firms belonging to the Association are holding a series of seminars, which are free of charge and open to the public, to deepen the subjects dealt with. The event was organised under the patronage of the Municipality of Brescia and the Association of Architects and Engineers of the province of Brescia, and implemented in collaboration with the Superintendency for Architectural Heritage and Landscape for the provinces of Brescia, Cremona and Mantua.

WEBSITE AND MEMBERS' RECORDS UPDATE

The new website has already been presented. It is becoming a real platform for promoting dialogue and communication among the members. From this point of view we are working to create more effective newsletters and forums for discussions concerning the different projects in existence. To strengthen dialogue between the Association and its members and among the members themselves, we are carrying out a complete review of the members' records to clearly define the points of reference for technical, administrative and marketing issues in the firms belonging to the association, so that a more direct and effective communication is favoured and a more immediate relationship is established.

RESEARCH PROJECTS SUPPORTED BY PUBLIC FUNDING:

European Project EVoCH (November 2010 – April 2012)

The EVoCH project ended on 11th January with the Seminar held at the Committee of Regions in Brussels (10-11 April 2012). For two years Assorestauro was engaged in the initiative as the Italian partner. It was a demanding task, for which we would like to thank, first of all, Andrea Rattazzi. It was also an extremely important and positive experience for the association because it gave Assorestauro the opportunity to present itself at a European level as the reference point in Italy for the firms in the Restoration and Preservation sector. A series of seminars was held within the project. Each partner organised a seminar in his own country. The first one was held in Valladolid in Spain (November 2010), the following one in Koblenza (May 2011), then Rome (June 2011), Helsinki (August 2011), Vienna (February 2012). The series of events ended with the round table in Brussels last April. The aims of the EVoCH project were fully achieved and will be further pursued with the realization of a network and an observatory for the study of the financial aspects of management, intervention and fruition of cultural heritage. This commitment is crucial, also in the near future. The objective is to sensitize and encourage the European Commission to give more importance to our sector and to include it in future intervention and spending programs. The role of the relationship between the public and the private sectors with relation to cultural heritage is becoming more and more significant. Therefore it should be stimulated, planned and managed at a European level. Thanks to its participation in EVoCH, Assorestauro puts itself forward as the Italian reference partner for future European platforms.

ANIMUS project:

The research project, funded by the EC and by the Lombardy region, is currently in progress. Thanks to the member Bossong spa, represented by the Vice President Michele Taddei, Assorestauro, with its service company, is one of the partners of the initiative. Its task is to disseminate the project, benefitting from a share of the funding.

MED-ART project– Emilia Romagna region

The MED-ART project is now in its start-up phase. Co- funded by the Emilia Romagna region, it foresees missions aiming at strengthening the relationship among Assorestauro and TBMM (the Department of National Palaces in Turkey), with the restoration of the Clock Tower of the Dolmabahçe Palace in Istanbul, and the Directorate of Istanbul Foundations (the Body in charge of all the sacred buildings), with the publication of the brochure on the lighting of the Fountain of Ahmet III. More in general, the project foresees missions to promote the sector through thematic seminars and workshops in order to facilitate penetration of Turkey, a country in ferment also and especially in the cultural field, by the Italian firms of the sector. Moreover, the project includes scouting missions in Morocco. Also in the case of this country the aim is to favour business connections by strengthening the friendly relationships which have been already established throughout the years during the annual ICE Workshops.

MAE Project– Regions - China

The project, which is now being formalized, is funded by MAE and co-funded by the Regions. It foresees training and exchange missions among Italian and Chinese technicians. Within the initiative Assorestauro will be the subject implementing the activity on behalf of the Lombardy Region. Although it is still in a preliminary phase, the project should be structured in three parts:

- Presentation in Italy of the Regions and the subjects implementing the project
- Seminars and work experience in Italy for Chinese technicians
- Seminars and workshops in China for Italian firms.

10.00 - 12.00 am

_ Presentation of "Scuola di Specializzazione"

Graduate Program in Architectural Heritage and Landscape for the study of Monuments and Historic Preservation.

The School aims at giving a specific education within the critical, historical, artistic, technical and professional realm of historical preservation and at providing the best knowledge of the conservation principles, methodology and techniques concerning archeological, architectural and landscape heritage.

The School provides a two year compulsory attendance, while a third year may be dedicated to a 'hands on' internship.

The School selects graduate students in Architecture, Civil Engineering, Art History, Archeology and Cultural Heritage and any foreign student with equivalent degree, through a written test.

There are thirty positions available each year.

The School is structured around the following activities:

1. Education regarding issues related to history of art, architecture and landscape.
2. Training within the application of historical research and of methodologies for the critical evaluation of cultural heritage.
3. Teaching of specific knowledge regarding building materials and their decay.
4. Acquisition of skills in the solving of conservation problems through adequate technical systems.
5. Training as architect and conservator.

Mandatory courses include: "History of Building Techniques"; "Conservation of Building Materials and Applied Chemistry"; "Structural Problems in Historical Buildings"; "Legislation regarding Cultural Heritage"; "Landscape Preservation"; "Architectural Restoration"; "Urban Restoration"; "Structural Consolidation of Historical Buildings"; "Economic Aspects related to Conservation Planning"; "Technical Equipment in Historical Buildings"; "Methodology Archaeological Inspections" (2nd year).

Students may also choose among the following elective courses: "History of European Preservation"; "Architectural Survey"; "History of Architecture and methods of analysis".
Further activities, such as field work, on site visits and stages of archaeological excavations will be organized during the year.
Informations will be released by:
Foreign Students Office, Palazzo dei Servizi Generali, piazzale Aldo Moro, 5 - 00185 Roma
tel. 0039.06.49912745 or
Training Office, via A. Gramsci, 53 - 00197 Roma, tel. 0039 06 3213305 - fax 0039 06 3212908
restauro@uniroma1.it restauroscuolaspecializzazione@gmail.com
http://w3.uniroma1.it/speciarestauro/

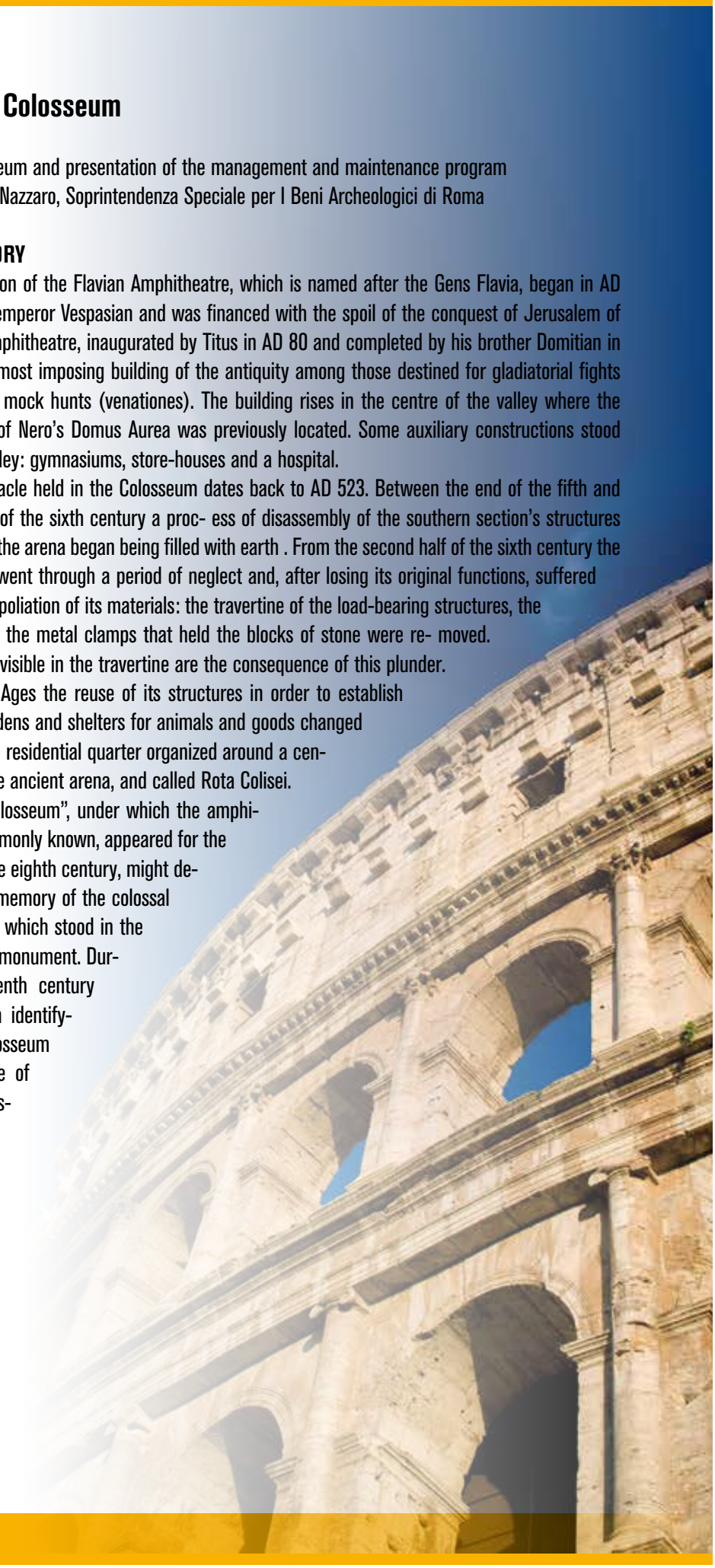
2.30 - 4.30 pm

_ Visit to Colosseum

Visit to Colosseum and presentation of the management and maintenance program
Arch. Barbara Nazzaro, Soprintendenza Speciale per I Beni Archeologici di Roma

THE HISTORY

The construction of the Flavian Amphitheatre, which is named after the Gens Flavia, began in AD 72 under the emperor Vespasian and was financed with the spoil of the conquest of Jerusalem of AD 70. The amphitheatre, inaugurated by Titus in AD 80 and completed by his brother Domitian in AD 82, is the most imposing building of the antiquity among those destined for gladiatorial fights (munera) and mock hunts (venationes). The building rises in the centre of the valley where the artificial lake of Nero's Domus Aurea was previously located. Some auxiliary constructions stood around the valley: gymnasiums, store-houses and a hospital.
The last spectacle held in the Colosseum dates back to AD 523. Between the end of the fifth and the beginning of the sixth century a proc- ess of disassembly of the southern section's structures started, while the arena began being filled with earth . From the second half of the sixth century the amphitheatre went through a period of neglect and, after losing its original functions, suffered a systematic spoliation of its materials: the travertine of the load-bearing structures, the marble facing, the metal clamps that held the blocks of stone were re- moved.
The holes still visible in the travertine are the consequence of this plunder.
In the Middle Ages the reuse of its structures in order to establish dwellings, gardens and shelters for animals and goods changed the area into a residential quarter organized around a central square, the ancient arena, and called Rota Colisei.
The name "Colosseum", under which the amphitheatre is commonly known, appeared for the first time in the eighth century, might derive from the memory of the colossal statue of Nero which stood in the vicinity of the monument. During the sixteenth century the tradi- tion identifying the Colosseum with the place of the first Christians' martyrdom became



established, though never proved. The sacred nature of the building was sanctioned in occasion of the Jubilee in 1750, when Pope Benedict XIV had a cross raised in the middle of the arena and 14 chapels built for the Via Crucis.
After a earthquake in 1803 the first reinforcement works were accomplished carrying out two brick abutments, one on the eastern side (Stern 1805-7) and the other one on the western side (Valadier 1827): it was the first phase of a long action of recovery and archaeologi- cal research, that changed the Colosseum from ruins into a monument.

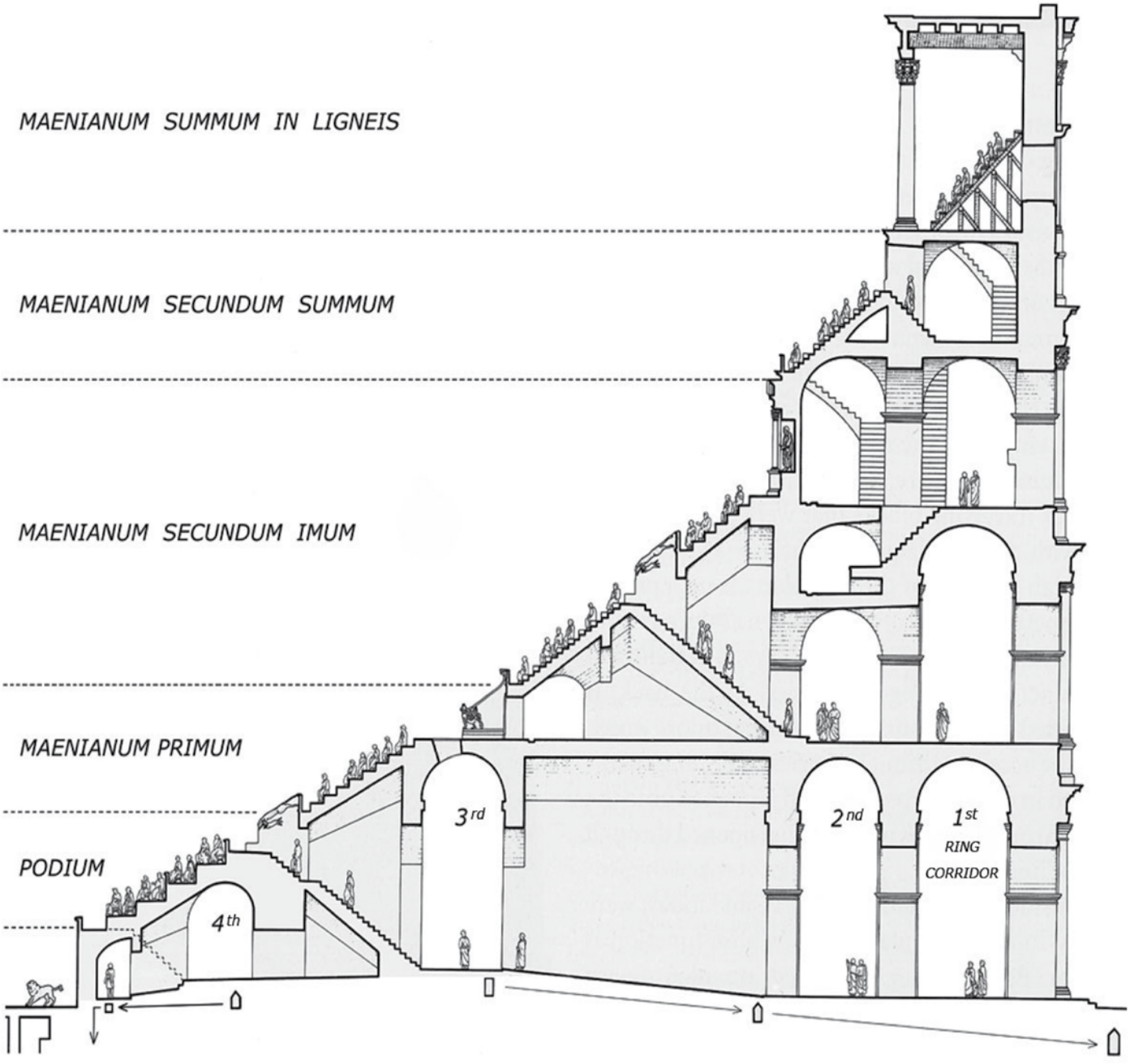
THE ARCHITECTURE: THE STRUCTURE OF THE AMPHITHEATRE AND THE CELLARS

The structure of the amphitheatre is made of blocks of travertine (external walls and load-bearing pillars), bricks and blocks of tufa (radial walls and stairs). The exterior of the building is divided into four levels that add up to a total height of about 50 meters. The last level was crowned with a marble colonnade, whose fragments are still visible on the ground floor.
The building has an elliptical shape with a long axis of 188 m and a short one of 156 m.
In the centre of the building there was the arena, a wooden floor (now partly reconstructed on the eastern side) on which the games took place and that was covered with sand (arena in Latin). The amphitheatre had 80 archways: 76 entrances were numbered and intended for the spectators while four ones, located on the ends of the ellipse's axes, were reserved for the emperor, for the political and religious au- thorities and for the protagonists of the spectacles.
The monumental entrances on the short axis led to two royal boxes near the arena, one of which reserved for the emperor.
On the occasion of the spectacles the public took a seat according to a rigid division based on social classes: a ticket indicated the seat as- signed and obligatory pathways led to the tiers of seats (cavea) through numbered archways.

The cavea, that could contain between 40.000 and 70.000 spectators, was divided into 5 horizontal sectors (maeniana), separated by corridors. The senators occupied the section of seats closest to the arena (podium). The upper stands were reserved to the knights and to other social categories, whereas the highest columned sector (summa cavea) was designed for the plebs and furnished with wooden structures. On the top there was a mobile structure in wood and cloth (velum) to shelter the public from the sun.
Originally, the building structures today visible in the middle of the monument were cellars, covered throughout with the floor of the arena. They were built mostly some years after the amphitheatre's inauguration, under Domitian's empire (AD 81-96) and were restored several times during the five centuries of the Colosseum's activity.
The cellars were organized into 15 corridors, made in blocks of tufa and bricks, parallel to a central gallery running east-west along the long axis of the ellipse. The cellars housed the equipment needed for the games, the weapons and the cages of the animals.
A system of goods-hoists moved by winches was used to lift gladiators, animals and stage machin- eries just below the level of the arena, which was reached through trap-doors and inclined planes. The goods-lifts set along the side corridors, the largest ones, were equipped with cages for hoisting the animals; instead, those located in the middle cellars were used for people and scenographies. The housings of these machineries and of the load-bearing poles of the arena are still visible on the cellars' floor.

The central corridor under the arena continued underneath the eastern entrance, connecting the cellars with the most important barracks of the gladiators, the Ludus Magnus, today partially visible in the archaeological area between Via Labicana and Via di San Giovanni in Laterano.
Another underground corridor, known as Passageway of Commodus (the emperor who, according to historical sources, underwent an at- tempted assassination there), connected the cellars with the outside; the gate leading from this passageway to the cavea is still visible to- day near the terrace on the southern side.

(taken from the website of "Sorintendenza Speciale per i Beni Archeologici di Roma" (SSBAR)
www.archeoroma.beniculturali.it/siti-archeologici/colosseo)



TECNOCHEM® ITALIANA SPA

SOME REFERENCES OF RESTORATIONS EXECUTED IN LAST YEARS WITH
SPART® TECHNOLOGIES

"ZANDOBBIO" MARBLE

Monastery Church
SAN PAOLO D'ARGON (Bergamo)
17th Century

Restored in the years 1986-1987

"MAIOLICA" LIMESTONE

COLLEONI CHAPEL
Bergamo - 14th Century
Restored in the years 1988-1990

HISTORICAL MASONRIES AND APENNINE CALCAREOUS LIMESTONES

Basilica S. MARIA IN COLLEMAGGIO,
L'Aquila - 16th Century
Restored and consolidated
in the year 2005.
The façade resisted to the April 2009
seism!

CALCAREOUS LIMESTONES

DIOCLEZIANO TEMPLE
Split, Croatia
3rd Century

Restoration and consolidation since
the year 2005 and ongoing

Maria Luisa Rosignoli
Roland Vaes
Tecnochem Italiana S.p.A.

29 MAY

_ Vatican City State - Saint Peter's Square

Restoration of Bernini's Colonnade consolidation of the statues of Saints, blazonries, and decorative travertine

In the restoration and consolidation of the statues of Saints, blazonries, and decorative travertine found in Bernini's Colonnade, one of the operations was the filling of cracking patterns with a consolidating and re-aggregative grout with high penetration ability.

TECNOCHEM ITALIANA has been engaged long time in research and evolution of these formulations and has provided the products LIME INJECTION 9000 and LIME INJECTION 9000/POZ

The general formulation criteria of these products are:

- Slow and gradual development of mechanical strength.
- Adequate values of elasticity modulus.
- Total compatibility with the stone elements in general and, specifically, with travertine.
- Absence of potentially harmful soluble salts.
- High penetration through cracks or in thin pores (even < 1 mm).
- Mixing water retention capacity and the absence of bleeding (separation of the mixing water).
- Very low heat of hydration.
- Water vapour transmission.
- High adhesion to stone supports, especially if porous, and bricks.

The hydraulic setting of the consolidating grout is based primarily on the reaction lime-pozzolan-active micro-silica and the presence of hydraulic limes without harmful soluble salts. It is of decisive importance to have the presence of micrometric particles (carbonate and silica mineral fillers) and nano-metric particles (additives, specific for the reduction of shrinkage) in the product, to enhance the performance of the grouts especially for the following characteristics:

- Adhesion to the support and mineralogical compatibility (with development of micro-crystals of very small dimensions, especially in contact with stone of carbonate nature).
- Ability to penetrate through cracks or porosity also very thin (< 1mm).
- Dimensional stability.

DNA.italia
TECNOLOGIA CULTURA ECONOMIA PER IL PATRIMONIO

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

Ivan Delettera
Councillor of Assorestauro

_ convegno DNA - Assorestauro

RIUSO, RESTAURO SOSTENIBILE, CONSERVAZIONE "INTELLIGENTE" DEL PATRIMONIO IMMOBILIARE DEL '900

RE-USE, SUSTAINABLE RESTORATION, "SMART" CONSERVATION OF THE XX CENTURY BUILT HERITAGE

The constructions built between 1900 and 1960 represent about 70-75% of the residential/services structure of our cities: from the industrial/craft complexes of the early 20th century to the schools and sport facilities of the fascist age; from the liberty real estate boom to the "modern" one in the '50s and the '60s. Therefore it is in the already existing common buildings that we can measure the real regeneration of our cities in terms of energy efficiency, sustainability, urban comfort. The investment is more profitable today (and will be in the next years) on reuse and "management" of real estate, and for this reason, also the procedures of Conservation and Restoration, until recently purely self-referential, are now facing methods , technologies, materials, certification systems that redefine, in a new synthesis, the concept of quality of the project intervention. From the building envelopment to its use: the most significant change that affects today the requalification field is the redevelopment and expansion of project borders; the interest confined to tangible property (the building) opens to nonmaterial necessity (efficiency, safety and comfort of its inhabitants).

The meeting in Naples is the third step of the roadshow DNA.italia, sponsored by the Ministries of Cultural Heritage and Economic Development, and various institutions (ENEA, CESVITEC-Chamber of Commerce of Naples, National Council of Architects etc.), will consist in a session of B2B meetings (in the morning) and a conference (in the afternoon) in which companies and experts (from Paolo Rocchi for the consolidation to Mario Losasso for the technology retrofit) will discuss design patterns and real intervention experiences.

_ Presentation of Internationa Project in progress

MED-ART – TRANSNATIONAL COOPERATION FOR CULTURAL HERITAGE PRESERVATION”

MED-ART
transnational cooperation for culturage preservation

RegioneEmilia-Romagna

REP
INTERNATIONAL BUSINESS DEVELOPMENT
C Group

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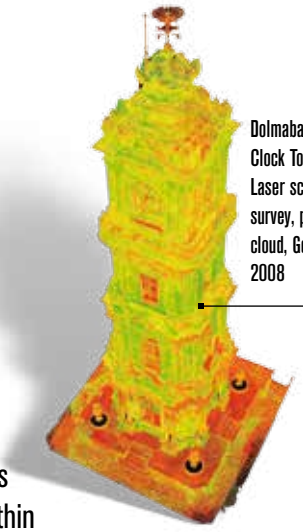
italian association for architecture, art and urban restoration



Dolmabahçe Clock Tower, Laser scanner survey, point cloud, Geogra, 2008

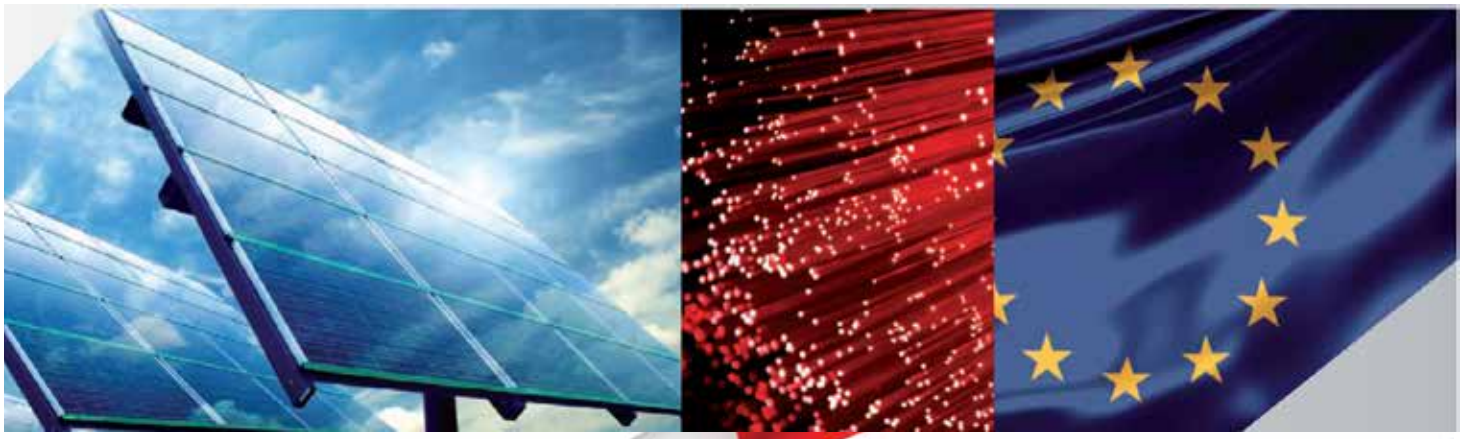
Med-Art *(Transnational Cooperation for Cultural Heritage Preservation)* is an international project financed by Regione Emilia-Romagna within the Program “BRICTS 2012” launched in order to promote the internationalization of local enterprises in emergent economies. Med-Art involves directly Assorestauro, the Italian association of the architectural renewal sector, together with its member companies. It also envisages the collaboration of the consulting society Roncucci&Partners (Bologna) specialized in supporting enterprises along all the phases of the internationalization path. The project will be implemented from the second part of 2012 over 1 year and a half.

Med-Art is an ambitious initiative which aims at fostering the cooperation within the Mediterranean region in the field of cultural heritage preservation. Specifically, the project will focus first on Turkey and in a later time on Morocco, as countries which are experiencing a rapid growth and fast development. Since ever both countries occupy an important location within the Middle-Eastern commercial network, other than being relevant economic partners of Italy. Furthermore, both Turkish and Moroccan cultural heritages are among the most important and appreciated ones in the world.

The initiative will give Italian companies which belong to Assorestauro and operate in the architectural renewal sector the opportunity to get in touch with the Turkish and Moroccan economic reality. Med-Art represents the attempt to promote *the exchange of competencies and know-how heritage between Italian and foreign companies and the establishment of a proper international network involving both economic and institutional subjects*. In the future the project might involve other countries of the Middle-Eastern region, and it will be implemented across several steps taking place both in Italy and in the target countries. It is an important occasion

for Assorestauro to further increase its outstanding role within the sector of architectural renewal and make the long Italian tradition known also abroad. Since 2005 the Association has been coming a long way in order to represent, and promote, the Italian sectorial know-how. The engagement of Assorestauro is not only on the national market, and one of its most important commitments was about the preservation of the beautiful clock tower *(Dolmabahçe Clock Tower)* in Istanbul in 2008.

Med-Art will be based on the creation of a public-private partnership that must be strengthened through meetings between institutional partners, both foreign (Turkish and Moroccan institutional representatives from the local Minister of Culture, the Italian Ambassady, local universities, and local association of the sector concerned) and Italian ones (Regione Emilia-Romagna), and private subjects. The implementation will include a deep analysis of Assorestauro companies in order to identify their needs and specific advantages, a partner scouting on the two foreign markets and an entrepreneurial mission in the target countries, other than the pre-feasibility study for the establishment abroad of an association like Assorestauro. All the steps will be coordinated by the consulting society Roncucci&Partners which will be also responsible for the follow-up phase.



MED-ART Project
is Financed by Emilia Romagna Region
BRICST Promotional Programme

FOCUS BRICST

PROGRAMMA PROMOZIONALE DELLA REGIONE EMILIA-ROMAGNA

BRICST 2011-2013

OBIETTIVI E AZIONI | 2012

REGIONE EMILIA-ROMAGNA
Viale Aldo Moro 44 - 40127 Bologna - Italy

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Segreteria organizzativa Programma BRICST
Servizio Sportello regionale per l'internazionalizzazione delle imprese (Sprint-ER)

Dott.ssa Maria Angela Onofri
Tel. +39.051.527.6420
Fax. +39.051.527.6512
e-mail: monofri@regione.emilia-romagna.it

CHINA

PROJECT "MAE-REGIONI-CINA"

RegioneLombardia

assorestauro

CULTURAL HERITAGE, THE SOURCE OF WISDOM, HERITAGE OF ALL HUMANITY

Institutional partnership between Italian Regions and Chinese Provinces in the Cultural Heritage Restoration and Valorization

The interregional project is financed by the Italian Ministry of Foreign Affairs, coordinated by Veneto Region and co-financed by each participating Region and Deputy Organization. Assorestauro is participating as Deputy Organization of Lombardy Region, Directorate of Cuture.

The project aims at

Conservation and restoration of Architectural Heritage
Valorization of Cultural Heritage
Museum Exhibition and Light Design

Cinese Partners for Lombardy Region

Nanjing, Nanjing Museum
Beijing, Hebei: Chinese Academy of Cultural Heritage
Beijing, Hebei: Museo di Piazza Tien a men

Stages of the Project:

Presentation of the Project to the Chinese Delegates in Italy. Presentation of the Lombardy Region Program in Milan.
Training program and internship program in Italy for Chinese Delegates from Partner Organization
Seminar and workshop program of Italian companies in China host by Partners Organizations

RUSSIA

RUSSIAN SCHOOL OF RESTORATION

Further to the first edition of a series of training courses in Moscow financed by the Italia Institute for Foreign Commerce (ICE – Rome) and coordinated by the architect Elisabetta Fabbri – May 2011

GUP CNRPM MK RF and **ASSORESTAURO** are planning an annual training course in Moscow. The structure of the training course is divided into **three tightly integrated modules** that address the general theme of the restoration of architecture. The division into sessions aims to open the course to the participation of professionals already working in the field of conservation as a course to pursue.

Part I

General approach to the "Conservation" of Historical Architecture and cognitive approach to conservation through knowledge, project, programmed maintenance, on site restoration, technological systems for cultural heritage.

Part II

Improvement of the knowledge on Materials, Techniques, Tools, Instruments,... through Company Case history.

Part III

Stage in the Italian company (in Italy) and practical workshops and project implementation process on a worksite to be defined in Russia

The course consists of lectures and discussion with experts, group work led by conductors, tutorials, guided visits, company case studies, internships in Italian companies and practical work on a historical building to be defined.




PRESENTATION OF

Государственное унитарное предприятие «Центральные Научно-Реставрационные Проектные Мастерские» (ГУП ЦНРПМ).

GUP CNRPM MK RF
Central Scientific Restoration Project Workshop
Russia, Mosca, 109544, Shkolnaya ul., 24. GUP CNRPM

State Unitary Enterprise, Central Laboratory of Scientific Restoration Projects of the Ministry of Culture of the Russian Federation. The Central Laboratory of Scientific Restoration, created in December, 10th 1947, is currently the oldest and the largest organization in Russia involved in planning and design in the field of restoration of Cultural Heritage. During its 65 year old history, CNRPM has acquired a great scientific and practical reputation in the field of studies of historical protected buildings, in planning of scientific conservative projects and re-use of architectural heritage for contemporary use.

COLOMBIA


LOBBY
CORREDOR DE VISITA
PATIO COLONIAL
JARDIN
INFORMACIONES
CORREDOR PEQUEÑOS PARA SERVICIOS
stand

INTERNATIONAL FAIR FOR RESTORATION AND CONSERVATION OF CULTURAL HERITAGE AND LANDSCAPE

Convent of San Agustín, Cartagena de Indias
26th- 27th-28th June 2012

in collaboration with the Italian Institute for Foreign Commerce (ICE), the "Opificio delle Arti e dei Mestieri" of Matera, the University of Basilicata and the University of Cartagena the headquarter of the University of Cartagena de Indias, Convent of St. Augustìn, will host the first edition of the "International Fair for Restoration and Conservation of Cultural Heritage and Landscape", the first and most important event in Latin America, on the occasion of the bicentennial celebration for Colombian Independence.

FULL STAND € 800
Services included:
- Individual stand 3x3 m, including table and chairs, lights and electricity;
- Advertising banners: vertical banner 1m x 2 m high; internal banner 1 m x 3 m wide;
- 500 Advertising colored flyers to be printed on site;
- Daily Company presentation (20 min.) in the meeting rooms
- B2B meeting and private meeting room.
- Interpreter service

HALF STAND € 400
Half stand solution is dedicated to the Companies that do not intend to take part in the event with its own personnel. It includes the assistance of Assorestauro's staff on site and B2B videoconference meeting in (AIUTATEMI A RENDERE IL CONCETTO IN INGLESE)
Services included:
- Individual corner 3x1,5 m, including Cube Display, lights and electricity;
- Advertising banners: vertical banner 1m x 2 m high (doule branded); internal banner 1 m x 1,5 m wide;
- 250 Advertising colored flyers to be printed on site;
- Direct assistance by Assorestauro's staff for the daily presentations, stand and B2B assistance;
- Daily Company presentation (20 min.) in the meeting rooms by Assorestauro's Staff
- B2B meetings and private meeting room in Video-conference.
- Interpreter service

GENERAL LOGISTICS SERVICES
Official Dinner; Official welcome and greeting aperitif; Coffee break during the fair;
Attendance Certificate
Acta of the conference

Antonio Lo Presti
L.A.P.I.S. di A. Lo Presti

Livio Talamona
Architect, Naples

Claudio Procaccini
Architect, Superintendency BAAPSAE Naples and province

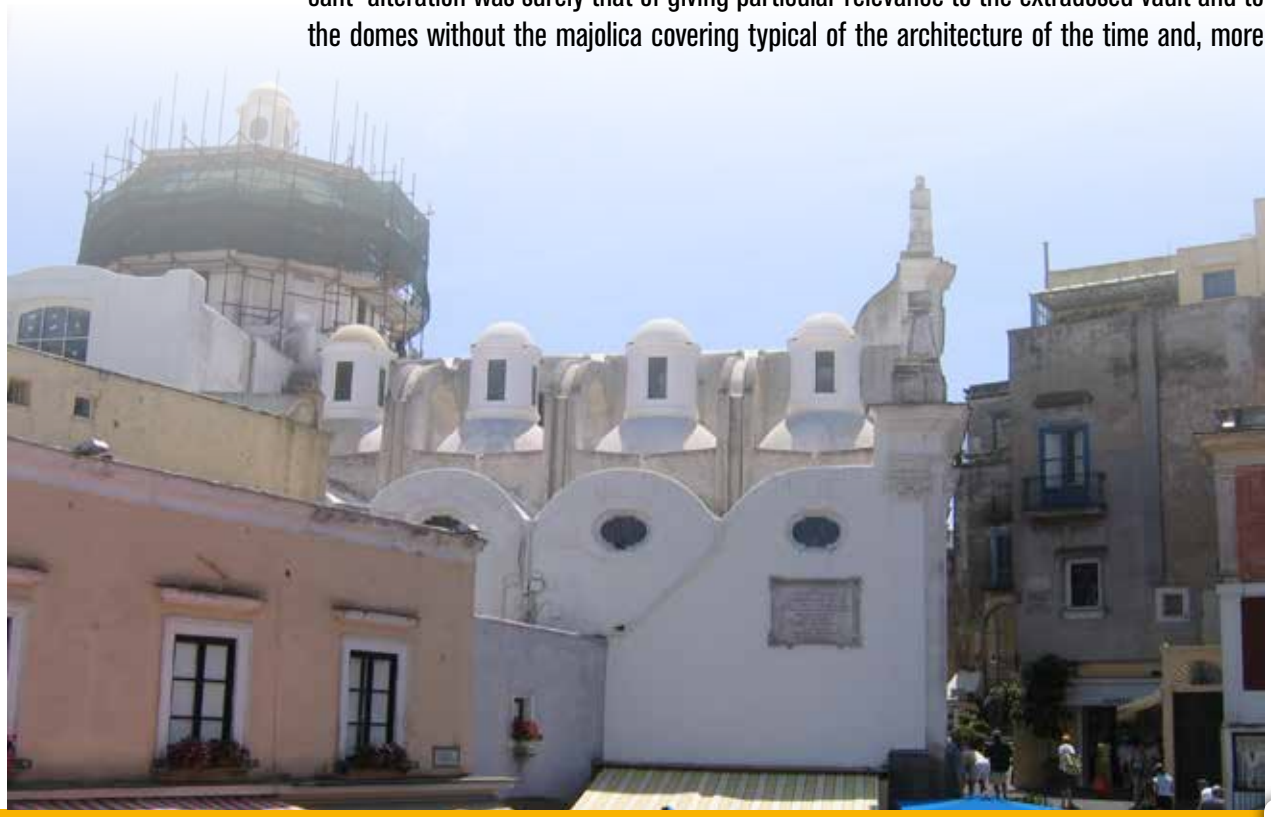
_ The church of S. Stefano Protomartire in Capri, Naples: Preliminary study and project for the restoration

The church of *S. Stefano Protomartire*, for its position overlooking the famous Piazzetta and for having once been the Cathedral, is one of the symbols the people from Capri identify with.

The original Latin cross plan with a main nave covered by a vaulted ceiling and two aisles surmounted by four small domes on each side dates back to the end of the seventeenth century. However, during the years it has undergone numerous interventions that have partly modified its external aspect.

The construction works began on February 25, 1688. The project was by the Neapolitan architect Francesco Antonio Picchiatti, while the execution was entrusted to the master builder from Amalfi Marziale Desiderio, who was already renowned as an expert in vaults and domes in his homeland. In 1697 the building of the structures was completed and on May 17, 1723 the Church was consecrated by the Bishop of Capri Michele Vandeneynden.

The original project, which followed the solutions adopted by Picchiatti for the Neapolitan churches of S. Paolo and S. Maria degli Angeli, was modified by Desiderio. The most significant alteration was surely that of giving particular relevance to the extradosed vault and to the domes without the majolica covering typical of the architecture of the time and, more



in particular, of the Amalfi coast, bestowing an architectural dignity, not only a functional purpose, on beaten lapillus, chosen as finish. The dome, visible also from the *piazzetta*, is characterised by the presence of the counterforts of the tambour alternated with the arch vaulted windows with polychrome glass, and the meteoric water draining system, splendidly reconciling both the functional and the formal aspects.

The sudden detachment of a portion of plaster from the nave vault on March 14, 2006 determined the urge to carry out an immediate assessment of the safety conditions and preservation status of the Church.

The survey specifically executed by Antonio Lo Presti's L.A.P.I.S. - a specialized lab in the propaedeutic diagnostics of architectural restoration interventions – highlighted a severe level of degradation, widespread throughout the whole sacred building, both externally and internally.

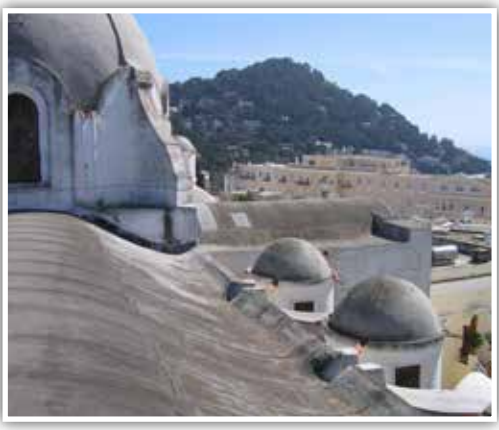
Thermo- hygrometric controls, mineralogical and textural studies on the materials used for the structure of the vault were carried out to ascertain the state of deterioration and identify its mechanisms and causes.

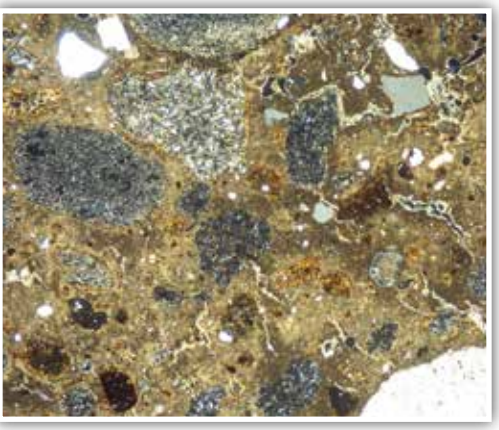
In brief, the internal plasters proved to be deteriorated and unsafe due to their detachment from the wall, caused by the humidity generated by condensation and rainwater seepage, probably as a result of some rough restoration interventions carried out in the 80s: on that occasion, the whole of the external surfaces (walls, vaults and domes) was thickened with a heavy layer of cement plaster and reinforced with metal nets and nails, whereas bituminous coatings were applied to waterproof the extrados.

The tests performed on the outside made it possible to ascertain that several layers (up to 8) of this "waterproofing" system had been applied on a cement levelling compound that appeared cracked and detached from the original support constituted by beaten lime, pumice and yellow tuff (see photograph below: inspection of a fragment of mortar using a petrographic microscope with crossed nicols).

Other tests carried out on the domes and the main lantern highlighted that the interventions made, all using cement mortars and including a "jacketing" of metal nets, had caused a reconfiguration of many decorative elements, hiding their original colours and shapes.

In other words, an external "render" that, besides reducing the natural breathing of the





building, triggering off the deterioration mechanisms which caused the plaster of the intrados to collapse, modified its original and elegant architectural lines.

Furthermore, the oxidation of the metal parts damaged the wall structure as well as the waterproof layers coating it, thus favouring humidity seepage and accelerating the deterioration of the internal plaster. This latter, as already mentioned, appeared almost totally detached from the wall and damaged in various points. The tear tests carried out on some portions of it highlighted a high risk of detachment due to a scarce adhesion to the support. Even more severe problems were detected in the state of the plaster of the main dome's tambour, badly damaged in various points.

The decorations (rose windows, beads, protruding sculptures, etc) in the intrados of the vaults and domes, besides presenting a considerable "levelling" of the figurative details caused by the overlapping of many coats of repainting, were damaged and made unstable due to oxidised metal anchors. In some cases large sections were missing.

The Church's technical systems were found to be totally obsolete and not in line with the latest safety standards. The external lighting system was totally neglected, with exposed electric wires.

The parish couldn't therefore avoid urgent and important, though expensive, restoration interventions, trying to leave the Church open to the community of believers, at least on Saturdays, Sundays and public holidays.

The restoration project was conceived on the basis of what emerged from the surveys with the approval of the Superintendency of Naples. Moreover, thanks to the support of an illuminating engineer, the project related to the technical system was also created and approved.

The studies carried out made it possible to define the guidelines of the restoration project, which had a clearly conservative stamp aimed at keeping and recovering those original materials that, not soaked with seepage water, still had good performance characteristics and even the original colours, now completely hidden, on the shades of white and yellow ochre.

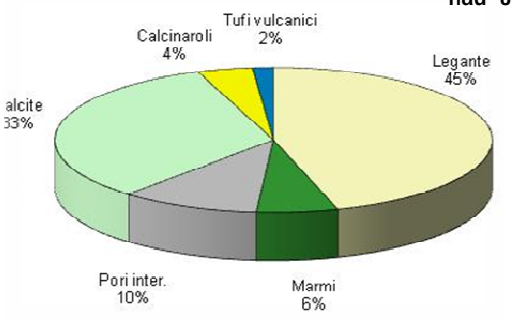
This is how, for example, micrometric thin pictorial layers were discovered on the small dome of the main lantern, highlighting the presence of thin grey- black decorations on a yellow ochre ground.

Photographs showing some of the original configurations of the Church's external walls and decorations found (the original outlines and the overlapping lines of the two interventions recognised on the dome are highlighted in red)

To this day they represent an absolutely original event for the type of finish used for the lapillus domes of the island of Capri.

However, in general, the original materials and structures were hidden and reconfigured by at least two big "maintenance" interventions (as shown in the following photographs).

The materials (bedding and plastering mortars) used to restore and finish all the surfaces were expressly prepared on the basis of the product's technical requirements deriving from the study of the original materials carried out also by modal analysis to determine the volumetric definition of the composition percentages of the mortars to be used. The aim was to create materials (see the picture on the side) whose texture, colour and performance could assure a compatible restoration intervention on the original materials that had only been freed from the superfluous additions and incongruous materials, cleaned, strengthened, integrated and finally completed with a new finish layer, whose composition and colour was similar to the original one, now totally disappeared, except for very few fragments found below the "maintenance" carried out during the 80's.



All the products used for these interventions were prepared by Bartolini Malte srl.

Started in July 2006, the intervention was commissioned to different specialised companies. With specific reference to the restoration of the extrados and intrados, the task was assigned to Federestauro di Bartolini, which is specialised in the application of traditional lime mortars and in the consolidation of wall surfaces, supported by two other companies from Capri, which provided the restoration firm with service and assistance.

Here is a summary of the interventions carried out during the restoration:

EXTRADOS OF THE COVERINGS

The waterproof layers and the wired screeds previously made on the vaults and on the lateral domes were removed; the damaged portions were repaired using mortars similar to

the original ones and a protective layer of NHL 3,5 natural hydraulic lime and selected light inert materials (pumice, opus signinum and volcanic cinder) having similar characteristics to the original ones was applied, followed by the final application of a water resistant transparent product.

As far as the main dome and the small lateral domes are concerned, a layer of lime wash paint and yellow ochre natural pigments was applied to the cover surfaces, to reproduce the original decoration recognised thanks to the stratigraphic studies in optical microscopy and to the stratigraphic tests on the covering.

The Superintendency of Naples took care and financed the intervention on the main vault extrados and lantern, while arch. Claudio Procaccini planned and supervised the works.

INTRADOS OF THE COVERINGS

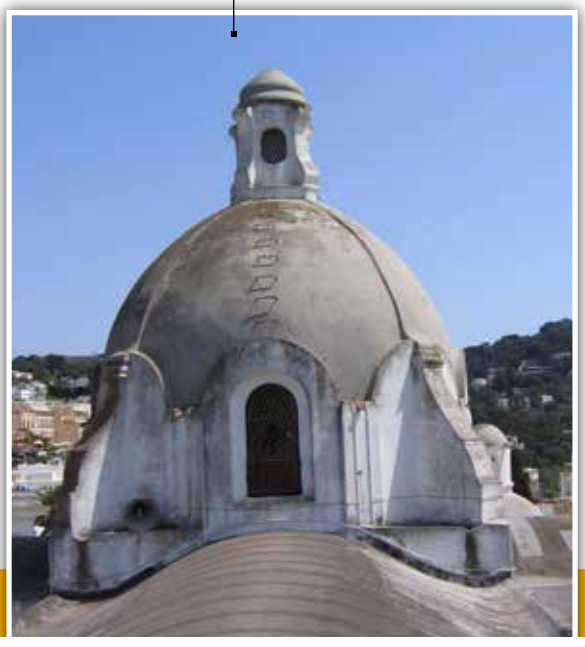
The plaster portions that were detached and irrecoverably damaged were removed and repaired through the use of NHL 3,5 natural hydraulic lime mortar finishing and selected inert materials (pumice, opus signinum, carbonates and volcanic cinder), and reinforced, in the sections that were geometrically more subject to detachments, with a grid made up of bars of the diameter of 2 mm tied to fibreglass pivots driven into the wall by means of epoxy resin injections.

Where the plaster was not deteriorated but detached from the support, the adherence to the walls of the plasters, frames and kerbs that could be recovered was restored through the use of fibreglass pivots, sunk into the wall by means of epoxy resin, injection, between the wall and the plaster layer, of NHL 3,5 natural hydraulic lime mortar and selected inert materials, preceded by washing with acetone and sealing of cracked plaster.

Once the damaging materials (iron nails) possibly exposed after the parts in relief had fallen off had been removed, the damaged and unsafe stuccos and decorations were recovered and secured by building a fibreglass “skeleton”, repairing the cracks with mortar, gluing them and/or anchoring them with fibre-glass and epoxy resin bars and sealing them.

All the internal walls of the Church were brush painted using lime wash pain, after stuccoing and preparing the underlying layer where necessary.

Photograph of the dome and of the covering of the vault: before the intervention, on the left; after the intervention, on the right.



MAIN STRUCTURAL WORKS

The attic walking surface in the initial portion of the left aisle was strengthened and the cracks present in the covering vaults of the right transept and of the chancel, as well as the ones in the dome's tambour, were repaired by means of full brick insertions.

Furthermore, the following actions were undertaken to complete the works:

- restoration of all the polychrome and artistic windows present in the aisles, domes and lanterns by replacing the old casings with new galvanized iron frames and by removing, restoring and setting back leaded glass panels, protected by an external multi-layer glass sheet
- repairing, integration and restoration of the flooring, coatings and marble decorations (thresholds, steps, windowsills, skirting, altars, gravestones, balustrades, etc.)
- polishing of the flooring in the aisles, transept and lateral chapels
- updating and bringing up to standards of the outdoor (plumbing, electrical, telephone) and indoor (lighting, sound diffusion, anti-burglary, etc.) systems.

The overall cost of the operation was slightly over 2 million euros.

Catello Pasinetti
Superintendency BAAPSAE
of Naples

CAPRI (Naples). Certosa di San Giacomo

RESTORATION INTERVENTION, UPGRADE OF SYSTEMS AND ENHANCEMENT

FIRST OPERATIONAL SECTION

Designers arch. Enrico Guglielmo, arch. Adele Pezzullo, arch. Marilena Palombo

Restoration supervisor arch. Catello Pasinetti

Contracting company Costruzioni S.r.l. Via Monte Rosa 8, 70022 Altamura (BA)

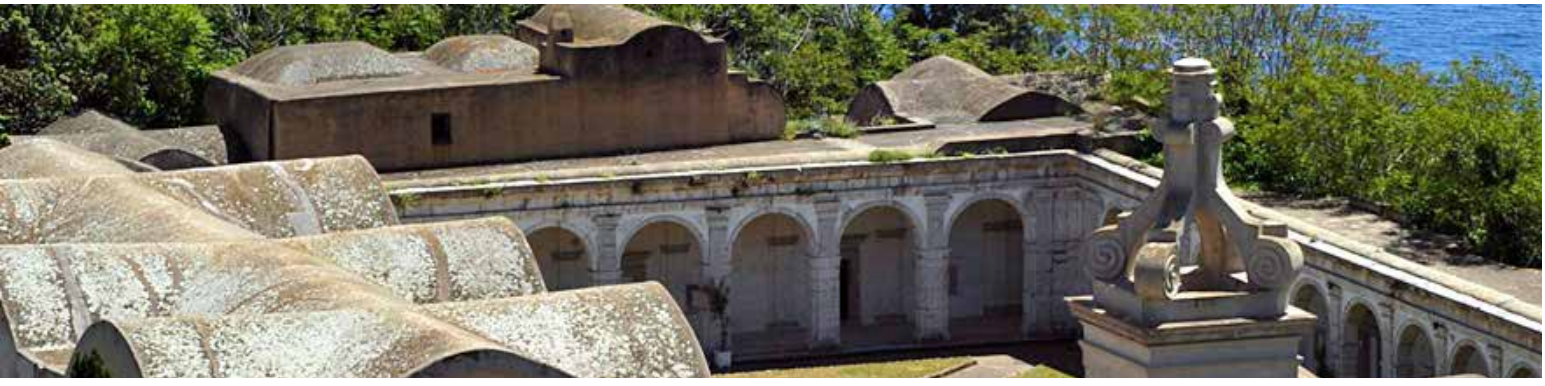
Start work date 28/06/2004

Finish work date 16/01/2007

In the Charter-house of San Giacomo, the restoration interventions and upgrading of the systems were carried out in the *Cappella delle Donne*, the watchtower, the big *Chiesa Conventuale* and its annexed spaces, the *Quarto del Priore* and relative cloister, the first part of the uphill pathway leading to the belvedere.

The restoration project provided for: restoration of the roofing - and relative layers of beaten lapillus - of the extradossed vaults; rehabilitation and consolidation of the masonry by means of traditional materials and techniques; restoration of the internal spaces and external façades (plasters, flooring, windows, painting, etc); upgrading of systems and technologies (air-conditioning, light sources, fire and burglar alarms); creation of a control station and video monitoring system of the whole complex, telematically connected to the police station of Castel Sant'Elmo in Naples; building of a new boiler house for the climate control of the Church and of the Dieffenbach Museum; restoration of the *Chiostro del Priore* (new flooring, restoration of the citrus plantation and pergola, increase of green areas; new watering and lighting systems); restoration of the panoramic pathway leading to the belvedere, characterised by a lapillus concrete pavement.

Coperture



corridoio ingresso
al Chiostro

Ala del chiostro grande

Chiostro piccolo

chiostro grande e chiesa

Ugo Carughi
Superintendency BAAPSAE
of Naples

_ Restoration and arrangement of st. Aniello at Caponapoli church, Naples

The St. Aniello at Caponapoli Church, on the acropolis of the ancient Neapolis, dates at the early decades of the '500. After being damaged by bombing in 1944, it was abandoned for two decades, suffering relevant damages and despoliation. In the 60s the roof and the esonartece were rebuilt. Some tests, followed by widened excavations, laid bare important finds, that were studied and documented in the course of this intervention: three successive walls' alignments of the III Century BC Greek city in the nave and one in the transept, behind the high altar, which also acted as retaining walls for the ridge sloping to the present Cavour Square.

Then, Roman walls made of opus reticulatum dated to the I Century AD, intersected with tombs of the Early Middle Ages. Close to the high altar, there are traces of the apse belonging to an early Christian chapel. Under some chapels – that now are able to be visited - typical tombs, with "to drain" seats, were discovered. The detailed reconnaissance, the survey and the filing allowed the reconstruction of the marble pieces' giant puzzle in the whole church.

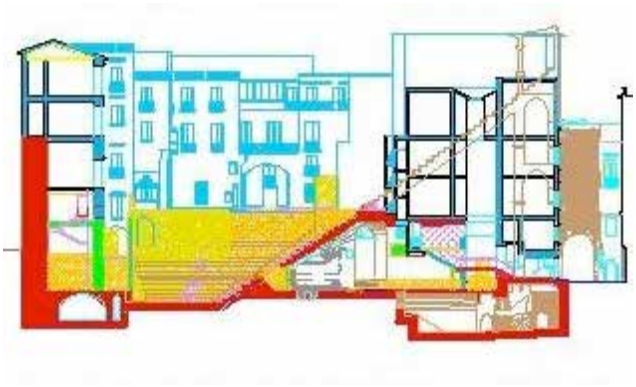
The project foresaw to open a big rectangular void space (ml. 9.65 x 5.15) in correspondence with the reconstituted pavement of the nave, with routes of adequate width between the edges and the side chapels. So, it is possible to make all the city's history synchronically visible on the inside of the church, from the foundation to contemporary times, through the findings of those ages which are fare in time, but close in space. On the other hand, differently from the Cathedral and St. Lorenzo church, here the extremely variable archaeological layers would not have allowed an independent visit. From the nave, through an intermediate step, it is possible to get to a continuous structural glass walkway located along the inner

perimeter of the great void, at ml. -0.40 level. It is supported by structural glass beams, about ml. 2.00 long, that are attached to steel beams holding up the nave's ceiling, set back from the edge of the void. Steel corners halve the free span of the glass beams, suspending them to the perimeter cantilevered of the nave's floor. There would not exist other examples, at least in Italy, of such glass cantilevered beams.The glass balustrade, projected to be dismantled into modules of ml. 1,5, as well as the walkway, in order to avoid the waste in cutting bars of ml. 6.00, is fixed by points to the free ends of the glass beams.
Wooden benches are placed on a wooden platform, which is put up on the floor in earthenware. Among the benches, those placed parallel to the longer sides of the void space, which are divided into two seats, can be also placed in two different orientations, by a manual rotation around a steel pin with a block. Then, along the transverse position, a mechanism lets the backs rotate to become a working plan for those sitting on the bench behind. Size, number and placement are determined by the optimum width for the working plan and the platform's width (ml. 1.40), which, in turn, is depends on the size of the side route (ml. 1.20). The benches near the entrance and the high altar are fixed. The system cables, including heating coils, are placed through the floor in earthenware.

Giancarlo Ferulano
Director of
Valorization Office
of the Historical
Centre of Naples

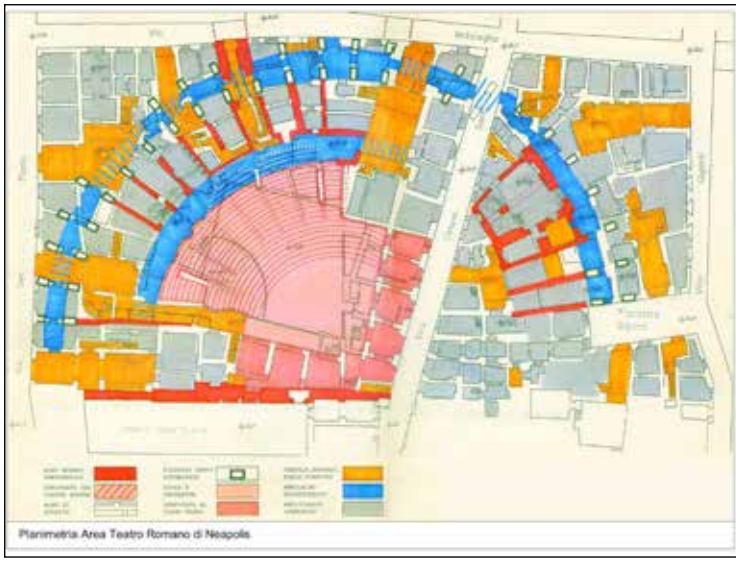
_ The unveiling of the ancient Neapolis theatre

The following paragraphs belong to a previous communication (1) in which the complexity of the experience and the peculiarity of the work in progress of the "Unveiling of the ancient theatre of Neapolis" are described, an operation that constantly raises new questions and issues. The paragraphs describe some elements related to the reconstruction of the events, a sort of journal, written down during the works so as not to loose any reactions - even emotional ones - generated by the circumstances; notes were also motivated by the willingness to make operational and planning choices more conscious, by comparing the various converging components that would risk to be selected, during the work progress, only according to their dimensions or major significance. Another objective was to attract and entice people not involved in these topics on a quite specialistic matter and to clarify the role of the RUP (Sole responsible of the procedure), often considered as a mysterious role, which instead is the intermediary between bureaucracy and public administrators and the actual work implementation.
Describing a process during its development is not easy, above all when, as in this case, the trend of events is not strictly consequential and their development has the characteristics of a typical chess game with sudden movements forward and, metaphorically speaking, a leap over by the knight. Such "disorder" derives from various causes. Among them, the fact that the area devoted to the excavations, at first, did not correspond to a planning choice,



Section on the cavea, the ambulatory and substructures up to the '"Anticaglia arch"

The emergence of the cavea after the excavation of the garden



The prospect of the cavea forecasted by Roberto Einaudi

but derived from the casualness of the real estate acquisitions. The actual availability of the excavation area was obtained only progressively.
Another issue was that the initial funds proved to be insufficient to fulfill the project objectives; the search for financial integrations was carried out in parallel with the effort to reorganize the intervention choices so as to continue with the works without interrupting them. Besides, the problems related to the safety of the above wall structures often caused the displacement of the excavation sites and their interruption.
At the end of the nineteenth century, an excavation work in a six-meter embankment, a garden within via san Paolo 4, had emptied the final part of one of the vomitoria of the theatre, its access to the cavea and a section buried under an accumulation of material.
This fragment of Roman spirit was accessible only from on high, from a "hole" inferred on the ancient wall of the inner ambulatory. The foreshortening on fragments of white marble large slabs leaning against the walls, or simply laid on steps and brickworks, clearly visible in their weaving and sometimes covered by portions of plaster, suggested the ancient theatre, inducing for more than a century romantic evocations and diversified restoration proposals.
The ambulatory was used as shirt factory up to the 1980's earthquake, when the big vault, freed from a false ceiling, was shored up with a mass of oak chestnut piles. The first recovery interventions were carried out right on this vault, charged with the heavy structures of the building above, for the strengthening, centering, reconstruction of demolished brickworks and other delicate recovery works. The excavation could bring back the ground surface to the same height as the part of vomitorium already recovered during the nineteenth-century excavation.
It is quite simple and usual to put back together the constitutive elements of the original Roman theatre, while it is much harder to reorganize and systematize the numerous traces that have been left in these places over the centuries. In some rooms, the neglect phase was long, certified by a layered accumulation of slime, while in other rooms an incredible amount of ceramics for conventual use was found.

The prospect of the cavea in its current phase

In another sector, the first level and the theatre structure were still used, even if for unknown reasons, the huge masonry and pillars were reduced, sliced making the structure completely unreadable.
You don't have to forget that in the third century, when Christendom became the unique religion of the empire, the Emperor Theodosius forbade performances on Sundays and public holidays. Moreover, during the fourth century, the excommunication was ordered both for actors and members of the audience. The last record of a theatre performance dates back 533 a.C when Roman theatres and odeons began to collapse almost everywhere and their stones where then employed as construction material for new buildings.
In our experience we were simultaneously confronted with very different dimensions. Moving through masonries of unusual height and thickness, giant spaces, deep substructions, huge niche-fountains, the high barrel roofs of the vomitoria, the imposing wall of the scenae frons, we came upon very narrow spaces and little objects, such those found in the burials or the small earthenware money-box hidden within the enclosing walls of a room, the poor tuff lancet window dating back the late middle-ages and the various basins and channels manufactured over the centuries on the overlapping layers, the repeated hollows that housed mangers and utility rooms.
A consolidated cultural habitus that tends to favour the most ancient elements, the imagination and the awareness of the original space quality that one attempts to recover are very strong conditionings that influence the openness and lucidity necessary to accept the presence and value of the endless microspaces which the theatre huge surfaces and volumes had turned into.
Yet, we tried to empathize with those far situations of extreme need. The need for warmth, safety and protection that made everyone retreat into themselves. They dug into the walls to obtain new centimeters because the available space had been remarkably reduced after the various collapses; or for waste dumps on which they used to live without any problems, and because of fear of the outer situation, they used to cuddle up in adjoining hollows, sheltered by those great walls that could protect them from the outside, even though they were not reliable in their structure. To live and to work, cohabiting with mysterious and unexplainable spaces, in rooms where light and air sources were difficult to be found, whose height make them similar to pigmies' houses.
It is often impossible to preserve them, to imagine their original configuration, to give them a sense. Nevertheless, our aim is to try to provide a description and an account of this constipated and poor people, and in the same time to describe the braggarts and pleasure-seekers who introduced water games in the theatres during the Roman empire and who, with the same snobbery and detachment of our days, traced graffito in Greek rather than in Latin.
It is therefore difficult to compare this monumental work to other ancient imposing buildings. The Byzantine church of Saint Aspren, built within the stock exchange palace, the Temple of Augustus within the Pozzuoli Dome and, above all, the triumphal Santa Maria degli angeli in Rome built within the Baths of Diocletian, engender a sense of marvel thanks to their beauty and neither incredulity nor confusion.

This a quite different situation: walking along the narrow streets, teeming with countless suggestions that need to be protected and enhanced, one can reach, through a durazzesco-catalan style portal, a courtyard and enter into the ambulatory of the ancient theatre and a sense of certain and sudden disorientation will occur.
The kind of works within an archaeological site are various and surprising. This derives from the great variety of situations that can occur and from the extreme specialization of single elements that involve many professionals who need to be recruited with formal procedures. Many are the project managers and technical/administrative professionals involved in the project. Let's start describing the needs of documentation: archaeologist, assistant archaeologist, pointer, topographer-surveyor, better if also architect, speleologist; than the analysis and interpretation experts: experts in ceramics and earthenware, plasters and paints, mortars, stone materials, coins, jewels and metals, inscriptions and epigraphs, bones and other materials of animal and human origin, biological and agricultural materials, molds, lichens and various saprotrophs; experts of specific periods or epochs, type of building, beliefs. For some of the listed roles, some skilled restorers may be required.
In order to let these subjects emerge from the oblivion, the right tools need to be employed: shovels, picks, sharp floats, small scrapers, brushes and small brooms to isolate and extract the archaeological finds that are afterwards accurately cleaned and catalogued. After this stage, they are stored in numbered boxes and recorded, according to the corresponding layer and day.
Simultaneously, a structural engineer is always kept informed by a system of signs and sensors that detect every single movement of the horizontal and vertical structures; he is often questioned in order to receive temporary or final technical solutions that are extremely reassuring for the people working on the site and for those who are living in the upper floors; the structural engineer is generally subject to harsh criticism and insolence due to the excessive prudence imposed and above all due to the dimensions, intrusiveness and encumbrance of his safety devices that sometimes need to be reorganized.
Among all these figures who work in the archaeological site, the system of relations is very peculiar. Among the archaeologists, the project managers and the project director, the representative of the commissioner, who is half technician half bureaucrat, the structural engineer, the tester, the various professionals of the company, the restorers, the surveyors, the earthen work expert, the pieceworkers and the subcontractors, the monitoring technicians there is a steady reciprocal exchange on the ongoing works, everyone making his own contribution.
Another peculiar aspect of this kind of working site is the almost constant contiguity between workers and archaeologists in the excavation process; this method requires the establishment of a mutual respect and empathy relation that is fundamental for both of them. The archaeologists will rely on the worker's capability to distinguish an earthen work from a stone and to recognize a fragment of plaster or bone, and of course, they rely on the fact that the worker will hand over any coins or jewels found. On the other hand, the confidence of technicians reassures the worker, who is often involved in situations of great logistic and safety uneasiness and criticality. Sometimes, the private sphere intervenes with sudden

The remains of the Republican era "cut" by the theatre

The remains of the curved facade of the theatre in a courtyard before backfilling

problems, modifications on the image layout, causing stress and fear for interruptions on the work continuance. Or he simply starts conversations about hobbies and passions.
The uniqueness of the site has attracted much attention and, therefore, since the early stages of the work it was deemed appropriate to arrange visits. The reasons of political convenience, "diplomatic" or academic need and achievement of consensus for the residents of the vicinity or dissemination of scientific findings to scholars in the field have motivated the formation of groups of visitors. These have always been exceedingly limited either due to the small size, not so much of the place rather than the accesses and the passages or to reduce the risks of safety in relation to the permanence of construction activities.
The regulation of visiting routes for the public involved the provision of safety systems that over time have been adjusted to the different conditions of the premises. These planks and railings were added to the protection elements and to the stairs that connected to the various excavation levels required for conducting the site. The scaffolding supporting the floors and the upper vaults crawled along, as each intervention was completed; then more effective ones were mounted for smaller restorations of plasters or restoration of structures removed over the centuries and the closing of numerous perforations made in walls and vaults.
I think that this maze of scaffolding and underpinnings, mounted and dismounted with extreme caution to avoid damage to flooring and decorative parts, for those who have seen it, is reminiscent of the incessant procession scene in Helzapoppin, in which logic often seems to get lost because it fails to keep up with the complexity of reality.
In a city where the tradition of worshiping the dead is so ancestral and vibrant it seems impossible that the remains of men, women and children could have been stored in the houses for sixteen centuries without anyone perceiving the presence or preserving the memory. Nevertheless, they buried their dead in the thickness of the walls, on the path of the routes still used after disposal of the spectacular role.
Single or paired burials, frequently mothers with their children, protected by the typical tiles

or in mass graves, forgotten after a few centuries and covered with other burials, enclosed, it would seem with indifferent construction practices, between the massive Roman tufa brickwork that still resisted and precarious dry stone walls. Perhaps under the rainy sky that emerged from the collapsed vaults and in the shadow of the mighty high wall of the scenae frons that is still towering.

The research and investigations of the carefully laid corpses with some jewellery or piled in bulk with entwined limb may reveal the cause of death and explain the unusual arrangement, far from the sacred buildings found: an unexpected epidemic, war-like massacre, inexorable famine or perhaps a burying that could not be consecrated because of denominational alterity. However, these existences are too detached from us, and the blending with the materials and the recent levels of life disperses the emotional aura. After removing the bodies with meticulous care and placing them in boxes, the unchanged roman floor studded with coloured marble chips reappears.

A separate chapter should be opened on the acquisition procedures. I would like to emphasize how this work is due to the constancy of the superintendence officials, state representatives, believers in the ancient tradition of care and attention to public affairs, which is becoming extinct. These subjects are slowly and patiently committed to purchasing the first group of private property through the exercise of the right of first refusal on the sale of property subject to archaeological restrictions or direct purchase making this Government property. This was followed by the patient work of acquisition, implemented with funds from European funding.

A careful analysis of materials produced on the historical excavations and architectural surveys, the interpretation of artefacts that can still be seen, comparison with the large set of examples of ancient theatres has motivated the choice of spaces to be acquired for the project.

The procedure to reduce the permanent transformations of the stratification accumulated thus far has allowed to limit the surfaces to be “distorted”. Following this line of reasoning, the choice focused on parts that are not particularly compatible with contemporary uses: lodgings that are unsuitable because of their salubrity and size, general deposits, cellars and spaces under staircases. The truly strategic nucleus and, we could even say, “sore point” because of the irreversible change that would have affected it, was the private courtyard garden, which covers a third of the terraced cavea.

Beyond the obvious “cultural” reasons, the specialist reports of the agronomists that have highlighted the young age of the species present, the mediocre vegetative state and the lack of a plantation model played in favour of the proposed excavation. This study was also validated on a historical and architectural level because neither traces of a seventeenth-eighteenth century planting nor an architectural project of the garden were found. The stratigraphic excavations carried out confirmed this.

Water flows into life and life is marked by its wake. In ancient times the collection and disposal of water was done with a design that was rational and consistent with the building; afterwards randomisation, put it where I need it, broke out.

The first trace appeared immediately: a descending faeces, a plastic tube with a horrifying

aspect and sound that reached the courtyard from the upper floors along a gash in the old face and a horizontal path, that crossed all rooms with an implacable diagonal. The infamous diagonal channelling soon proved to be responsible for the excavation of a trench in the wall of the vomitory, obliquely from the tufa block face to the opposite face in the nucleus of the masonry.

The fact that we pursued this pipeline for two years, first on the ground, hooked, clinging, shored, then moved to the top to the suspended vault pending final removal is an incident that fits into the bureaucratic simplification chapter. A lot of time was needed to complete the process in order to allow the specialized company to remove the untouchable grafting made of deadly asbestos. Now the sewage happily starts off on a new path along a different trajectory that we will, unfortunately, meet again in the excavation.

However, in the less recent past brickwork foundations and soils were torn open because of the channelling. The storm water that splits the abutment and the Catalan pier cap, the sewer brace covered in painted majolica or the water collection, more likely storm water, conveyed with brickwork tiles made by piercing the vault of the stair buttress of the theatre that from the external ambulatory leads up to the upper level.

Moreover, the large reservoir formed in a wedge, perhaps after having emptying the debris is a modern work of great execution accuracy and intelligent reuse; it was finished with a fully preserved tenacious hydraulic plaster that guaranteed the perfect tightness of the storm water.

However, water, just like fire, can be highly destructive. It Deletes, dissolves, corrodes, covers with tough limestone or slippery silts, the ravines where it seeps. Sometimes it undermines foundations, impregnates the masonry and creates effloresce, mildew, mould and unhealthy conditions.

In order to work we had to wrap ourselves up well, even with wool hats, to counter the relentless humidity hovering throughout the excavation and that resulted in an significant increase in fever and rheumatic problems, backaches and frequent back strains, which were also induced by the frequent prone or bending position.

Even fire leaves its mark. Situations and periods of abandonment or underuse are often testified by areas marked with traces of burning, black streaks, burning and charred fragments,

Workers digging in the open

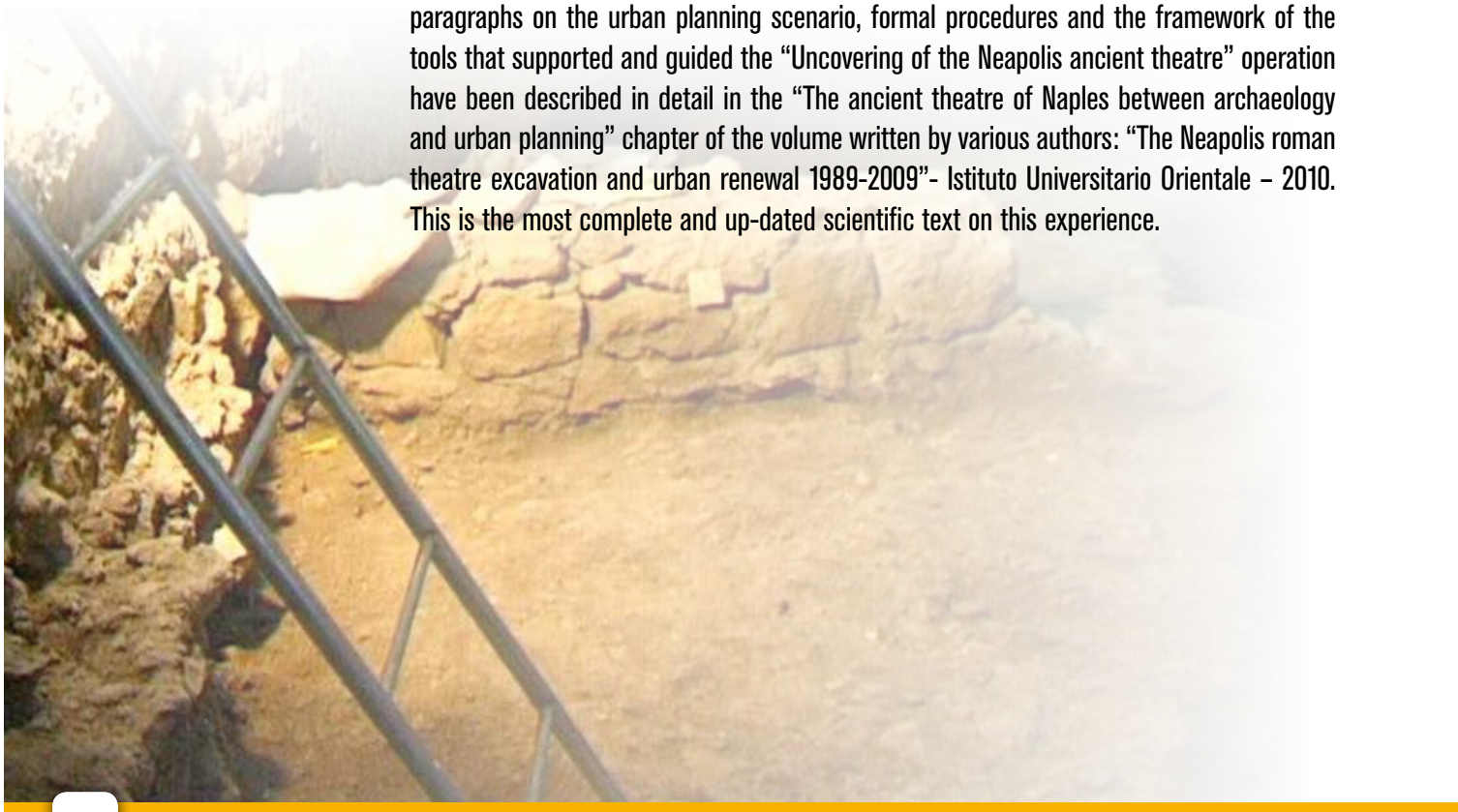
The work team with the site engineer and Project Manager Roberto Einaudi and Fabiana Zeli

Workers during cataloguing and storage

resulting not from unstructured use but from the ordinary need to survive, for example the need for heat or to cook, or arising from the presence of real braziers made for artisan uses. Sometimes, however, its use is structured with interventions in juxtaposition with existing structures; chimney flues carved into the walls, seeking open areas above it, and ovens of different sizes and shapes made at different heights.

In the oral tradition of the area there is talk of an Anticaglia oven that had long been identified in a particular site; then another structure was found in a local workshop that replaced the initial placement. Which of the two was it?

Certainly, fire played the most devastating role in the limestone and marble calcination workshop; spitefully, in medieval times, the heritage of decorative marble slabs was not of interest and so they were calcinated to produce extremely useful mortars without transportation problems and at a small cost. The reappearance of the functional level of the theater does not conclude the adventure. I wonder if elsewhere, such as below the orchestra, the deeper area of the theater, where premises and service structures should not appear, we will come across Greek relics and can completely reconstruct, as has happened in other places, the reverse path of the formation of the Neapolitan civilization. But to continue in this work, we must fall under political and administrative decisions, or rather the choice to distribute financing, which may determine, if well supported, operations of this level that are in progress. Text of the intervention “L’inquadramento urbanistico e gli strumenti attuativi” (The framework for urban planning and implementation tools) read during the conference held on 28 March 2008 at the National Archaeological Museum of Naples Lavori in corso nel teatro antico di Napoli dallo scavo alla valorizzazione (Work in progress in the ancient theatre of Naples from excavation to upgrading) during the Week of culture 25-31 March 2008 organized by the Soprintendenza Speciale per i Beni Archeologici di Napoli e Pompei (Special Superintendence for the Archaeological Heritage of Naples and Pompeii). The paragraphs on the urban planning scenario, formal procedures and the framework of the tools that supported and guided the “Uncovering of the Neapolis ancient theatre” operation have been described in detail in the “The ancient theatre of Naples between archaeology and urban planning” chapter of the volume written by various authors: “The Neapolis roman theatre excavation and urban renewal 1989-2009”- Istituto Universitario Orientale – 2010. This is the most complete and up-dated scientific text on this experience.



Francesca Brancaccio
B5 S.r.l., Napoli

Consolidation project and architectural reconfiguration of the Real Albergo dei Poveri, Naples

Design and site supervision by:
RTP CROCI-REPELLIN. Constituted in 2002, this temporary working group of experts includes professionals of different nationalities having complementary competences and specific skills in historic building restoration (Eng. Giorgio Croci, Arch. Didier Repellin (team leaders), Eng. Mario Biritognolo, arch. Francesca Brancaccio, Eng. Giuseppe Carluccio, Arch. Nicolas Detry, Arch. Laurence Lobry, Arch. Pascal Prunet, Arch. Paolo Rocchi). Head of architectural renovation office for the *Real Albergo dei Poveri* in the municipality of Naples: Arch. Giancarlo Ferulano.

Realization:
the consolidation, carried out through modern techniques and experimental materials, accompanies the reconfiguration of the Real Albergo dei Poveri, in compliance with the principles of critical restoration, between philological respect and new planning, in view of its conservation and its handing on to the future, of the possibility of a compatible re-use and safeguard of the incomplete parts. Flexibility, potential reversibility and sustainability are at the basis of plant engineering and upgrading solutions: an Eco-building, chosen as emblematic case-study within the European project SARA, in relation to the optimisation of compatible re-use and energy saving choices.

Addresses:
RTP Croci-Repellin: e-mail: info@b5srl.it; mail@giorgiocroci.com / Municipality of Naples – architectural renovation office of Real Albergo dei Poveri: e-mail: progalbpoveri@comune.napoli.it

For a sustainable project in complex cross-cultural spaces

by Francesca Brancaccio[1]

In 1964 the Venice Charter[2] supports the ideas of "urban restoration" and "urban site" which, referring back to the principles of the Athens Charter (1931), integrate the cultural debate between building and context: on the basis of the distinction between "building" and "architecture" they integrate "literature" and "poetry", reaching the definition of "environment" intended as a place where "monuments" and "minor buildings"[3] coexist. The debate between "old" and "new" leads to the principle of "coexistence", intended as the guarantee to preserve the "old", needing to recover stratification, and to preserve the logical

1 PhD graduate in history of architecture and town planning, Politecnico of Turin; specialist in monument restoration, Federico II University of Naples; contract professor at Faculty of Architecture, Federico II University of Naples, master in Cultural Heritage management, University of Tor Vergata, Rome. Together with some RTP Croci-Repellin members, she is the project architect of the consolidation and architectural reconfiguration of *Real Albergo dei Poveri*, Naples, as well as its site supervisor.

2 The records of the 2nd International Congress on Restoration, venice 1964, are published in VV.AA. *The Monument for the Man*, Padua 1971. The urban character represents the "new note of our historical period", as the following readings of the Charter also underline.

3 The subject of "monument environment", already studied in Germany at the beginning of the new century, is first further discussed in Italy by Ambrogio Annoni of Milan, then by the Roman Gustavo Giovannoni and finally by the Napolitan Roberto Pane through his theoretical work. Cfr, among others: A. E. Brinkmann, *Platz und Monument: Untersuchungen zur Geschichte und Ästhetik der Stadtbaukunst in neuerer Zeit*, Berlin 1908, rist. Mann, Berlin 2000 and Giovannoni G., *L'ambiente dei monumenti*, in *Questioni di architettura nella storia e nella vita*, Rome 1925.

perpetuation of this process towards the future[4]. The switch from the concept of "monument" to "cultural asset", together with the definitions of "monument restoration" and "old town centre planning"[5], becomes representative of a method focusing on the study of the environmental characteristics determined by monuments and by "minor buildings", considering as "monuments" also those "modest buildings" having acquired a cultural value throughout time. From Renato Bonelli to Giovanni Carbonara, the Italian school invites to conjugate, through the theoretical premises of critical restoration, old and new, starting from the design, the historical survey through the architectural analysis, the historical research, the reading of the document-monument, the observation and study of the context, taking into consideration the needs of a compatible re-use, of a sustainable architectural project by means of potentially reversible technologies.

The cultural heritage safeguard and preservation policy refers to the wider subject of integrated conservation, also seen as a factor of economic development: the relationship between "monument" and "site"[6], connected to the concept of "ensemble" (1978)[7], integrate the historic and volumetric spaciality with the ethnological and social one, concepts further developed in the international charter on the safeguarding of historic towns (Washington, 1987), closing 20 years of cultural debate[8]. Restoration is no longer a mere physical safeguard intervention, but it becomes re-use and re-vitalisation, with the need of studying the problem of adapting old buildings to "living functions": the issue eventually focuses on the compatibility of the new functions with the building , its structures and the relationship "building/context". Current trends see conservation as the activity aiming at promoting heritage, contributing to improve the image and reality of a social context. [9]
The awareness of the importance of the bond between spatial context and social reality attributes to the existing material heritage a crucial role in defining the right operative strategies. Pragmatically speaking, when operating on existing buildings, this leads to strengthening the ability to gather collectively-known elements and working, from the very first phases of the project, in order to determine the different actors involved and strengthen the sense of belonging and identity towards the necessary, gradual acquisition of and comparison with reality: this, through a better knowledge of the places, the participation in

4 Pane R., *Città Antiche, Edilizia Nuova*, ESI, Naples 1959, p.71.

5 By Stefano R., *Roberto Pane. La difesa dei valori ambientali*, in "Restauro", 143, 1998, pp. 7-8.

6 Since the 60s, the debate on the relationship between "monument" and "site" has been faced, both on a European and international level, through studies promoted by governmental as well as non-governmental institutions, with specific reference to the definition of "monument" and "site" given by ICOMOS, founded in Warsaw in 1965.

7 Born in 1962 under the Malraux law, the concept of "ensemble" opens the path to the so called *secteurs sauvegardés*. It broadens the concept of safeguard of a single monument to conservation of urban centres having an artistic or environmental interest; in other words, to groups of isolated buildings or complexes having some historic, artistic, scientific, social or ethnological value, thanks to their unique architecture or integration with the environment.

8 Suffice it to bear in mind how, together with the UNESCO convention on the protection of world cultural and natural heritage adopted in 1972, the Council of Europe promoted the European architectural heritage year (1975), concluded with the Amsterdam Declaration and with the European Charter of the Architectural Heritage. Here stems the principle of "Integrated Conservation", later revised by the 1985 *Convention* for the Protection of the *Architectural Heritage* of *Europe*, Granada.

9 In this respect, the 90s start with the Aalborg Charter (1994) and with the Lisbon Charter (1996) and Habitat Meeting (1996).

the choices and the configuration of the interventions. Quite a few European countries have already started to consider the whole of the territory as a "seamless canvas" (Ian McHarg) in favour of a global vision of the heritage, supporting, even legally, the meaning of space free of artificial boundaries. This contributes to foster the sense of belonging through a shared acknowledgement of the values in their structural (physical, functional, formal), cognitive (aesthetic, perceptive, interpretative) and social (cross-cultural and multi-ethnic) sense. At the same time, over these years, subjects such as territorial quality and transformation "compatibility" led to the creation of new tools (regulatory, sectorial and awareness-rising)[10], which ought to be defined and compared also in relation to recent protests or episodes of discontent burst in some countries at the hands of social or ethnic groups, so far confined in marginal suburban areas with no history or tradition whatsoever.

In Italy, too, the new European concept of landscape and heritage affects the legislative revision of the Cultural Heritage and Landscape Code (2004), basing architectural safeguard and enhancement on landscape planning. The law expresses a new awareness of the conservation of the values conveyed by a territory, of the quality of the interventions in line with the context, leading towards a consideration on "the need to design within a context and not on the context, without an uncritical and, at times, brutal superimposition on that mix of nature and history created by time"[11]
Intervention projects on existing buildings must take into account the history, meaning, image and character of the territory, creating harmony between the contemporary transformations and the specific nature of the context, in order to guarantee that the interventions appear part and parcel with the landscape they contributed to modify and that the actions, compatible with the acknowledged characters and qualities, lead to social, economic and environmental development processes, able to produce new values, new qualities and new opportunities within heterogeneous contexts. The safeguard and conservation activity turns into planning activity: architects, restorers, town planners work hand in hand with sociologists and anthropologists on documents and projects introducing and reinforcing the concept of sustainable development, in view of the elaboration of strategies for towns and territories. Nowadays, urban heritage is therefore defined by the development of the material aspect – respect of materials, urban integration and passing on of the heritage to the future – and by intangible aspects – social habits. Heritage conservation seems therefore an option where the complexity of the cultural asset is expressed in terms of complex social value, stemming from economic, social and cultural values, from its presence and its ability to become a pole in a space of influence, within an integrated conservation strategy. The "humanization" of urban development is one of the current goals of conservation and

10 Cfr. In Great Britain: *The Landscape Institute e Institute of Environmental Management & Assessment, Guidelines for Landscape and Visual Impact Assessment*, London 2002 – Second Edition); in Germany, *Bayerisches Staatsministerium für Landesentwicklung und Umweltfragen*, 2003, *Einführung in die praktische Anwendung*, München. For France, it is crucial to focus on the changing of the Loi paysage (1993) into the new law on "solidarity and urban renovation" (LSRU 2000), introducing social remarks, with the aim of minimizing wastes of space, enhancing the existing heritage, favouring a sustainable urban renovation, encouraging urban and social *mixité*.

11 Cfr. Cecchi R., in AA.VV., *La Relazione Paesaggistica*, Gangemi, Rome 2006, p. 3. Decree by the Prime Minister, December 12, 2005

intervention activities on cities, to be carried out through the implementation of "good choices" and the spotting of "best practices", so to re-create a dialogue between building and context, history and contemporary times, as well as the sense of belonging and identification with the urban context. The conservation of monuments and heritage objects, the integration and modification of urban contexts, the safeguard of urban shapes all go hand in hand with contemporary architecture which does not clash with the old fabric; rather, it integrates the urban project with the plural and multi-ethnic character of modern societies. The intensification of communication and information, the increase and acceleration of capital flows, people and goods, the hybridization of cultures and life styles, in other words: the globalisation characterizing extended social relations and intensified social forms[12], determined – and continues to do so – the urban mix of peoples having no common ancestors, land, history, language or traditions. The co-existence, in a given physical or relational space, of different ethnic groups having opposite cultural heritage constitutes the foundation of a multi-ethnic society, conceived as a "social aggregate made by ethnic components interacting and behaving on the basis of a presumed ethnic/cultural diversity, claimed from within or imposed by the outside".[13]

(...)

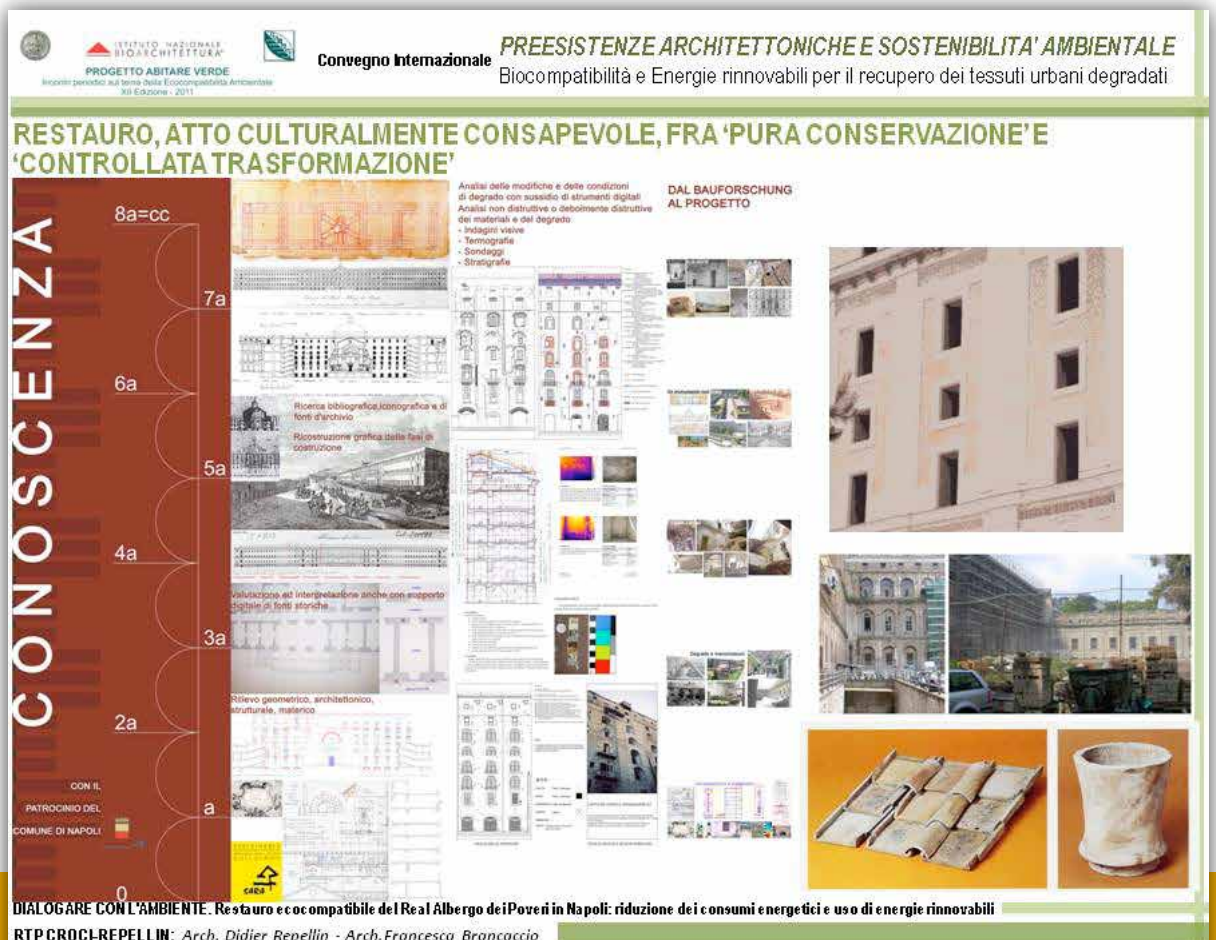
12 Giddens A., *The Consequences of Modernity*, Polity Press, Cambridge 1990, Transl.. it. Le conseguenze della modernità, Il Mulino, Bologna 1992

13 Cfr. Cesareo V., by *Globalizzazione e contesti locali*, FrancoAngeli, Milan 2000, p. 13.

1,2. Clock Tower at the Dolmabahçe Palace in Istanbul.

The restoration of the Real Albergo dei Poveri, Naples, turned out to be a complex experience. The project was assigned in 2002 to RTP CROCI-REPELLIN, an interdisciplinary European group of architects and engineers, currently committed in the executive planning and site supervision of the Real Albergo dei Poveri, Naples.
The Municipality of Naples wanted and planned accurate operations of "urban marketing", crucial actions for the conservation of the building, as well as the reconstruction of the façade and the repairing of the area in front of it.
The restoration project aims at conjugating a philological respect for the history of the building and of its stratifications, of its architecture, of the materials and building techniques, with critical removal and replacement operations; this, through an integration, in the dialogue between history and contemporary times, of eco-friendly solutions regarding rainwater and solar power collection by means of solar panels or green roofs.[14]
The consolidation, through modern techniques and experimental materials, accompanies the reconfiguration of the Real Albergo dei Poveri in compliance with the principles of critical restoration, between philological respect and new planning, in view of its conservation and its passing on to the future, of the possibility of a compatible re-use and safeguard of the incomplete parts. Flexibility, potential reversibility and sustainability are at the basis of plant engineering and upgrading solutions: an Eco-building, chosen as emblematic case-study within the European project SARA, in relation to the optimisation of a compatible re-use and energy saving choices.

14 Final and executive consolidation project and architectural reconfiguration of the *Real Albergo dei Poveri* and relative site supervision – Client: Municipality of Naples. Projects by: RTP Croci-Repellin, Eng. Giorgio Croci, Arch. Didier Repellin, Eng. Mario Biritognolo, Arch. Francesca Brancaccio, Eng. Giuseppe Carluccio, Arch. Nicolas Detry, Arch. Laurence Lobry, Arch. Pascal Prunet, Arch. Paolo Rocchi.



In 1749, Florentine architect Ferdinando Fuga was assigned by Charles I of Bourbons the task to build a huge building for the poor of the kingdom, with the political aim of representing an example and conveying a social message to the enlightened Europe of the XVIII century.
The comprehension of the "social royal" wanted by the first owner guides the philosophy and approach of the consolidation and restoration project, accompanied by the need to have a thorough knowledge of the ensemble in order to guarantee a shelter from social decay, to remedy the undergone changes, to safeguard from potential future tragic events and enhance the value of the building itself. The consolidation project and architectural reconfiguration stems from the need of a priority operation onto a large container in need of rescue from physical degradation and neglect.
While awaiting further indications on a more precise and flexible private and public use, the goal now is to preserve, pass on, favour the historical and aesthetic reading, offer solutions wherever the discussion is still open.
The importance of history and the possibilities given by restoration to the city's future represent a challenge for Naples as well as for the entire national territory, in that they are emblematic of a large-scale restoration intervention of a "poor and royal" monument, traditional inner characteristics of the city's history, representative heritage of a kingdom, already European at the time, today a real world's heritage.
The restoration project was preceded by a detailed study of the original configuration and later transformations of the monument: a new phase of knowledge of the building was defined through historical research, direct and instrumental surveys, an analysis of the modular grids and planning schemes, architectural analysis and study of its conservation status, probings, samplings, surveys on the surfaces, materials and structural behaviour – illustrated in the technical documents and reports.

The project intends to respect what history has passed on as well as pass on the building to future generations, in the best conditions possible. The need to intervene through "consolidation" and "architectural reconfiguration" works is to be intended as the will to evaluate all the possible interventions aimed at safeguarding and restructuring the building, so to preserve – where possible - make the building efficient again – where necessary – make its reading easier and pass on its values.
Restoration - intended as a "tool" for the conservation, consolidation and configuration of the building, for the protection of the masonry, of the horizontal supports and of the original surfaces, of the accurate planning of new structures where necessary - aims at finding appropriate solutions, intervene protecting and consolidating, eliminating additions and offering compatible alternatives.
Case by case, a thorough assessment was carried out regarding the possible elimination of the most inappropriate or defacing additions with respect to the work's historical and architectural values or those threatening the formal and structural integrity of the building. The new solutions, clearly identifiable, restore the effectiveness of the work and its old significance, eroded and modified by time. The architectural and structural project intends

to: preserve, pass on and increase the value of the monument, consolidating the damaged parts through partial reconstructions and new structures in compliance with the concepts of "minimal intervention", of structural, chemical and physical compatibility and of durability; make sure that the intervention will increase the readability of the visual unity of the monument and of its historical stratifications; exploit geophysical and natural phenomena, such as earthquakes and storms, as well as natural resources such as water and sun, so to achieve a high environmental quality thanks to the use of green energies; work out technical solutions for a long-lasting restoration; create flexible and multifunctional spaces as an answer to the necessary contemporary utilization of social re-appropriation and re-use; regulate the restoration proposals, the management of the missing parts proportionally to the level of knowledge of the historical stratifications.

Re-use requires the opening of the building to the city, intended as a tissue where the exchange and interaction among different flows is vital: not only will it be crucial to open a direct access to the building from the street level, but a new, more complex urban project will be needed in order to allow the access from the city through the use of open spaces such as public parks, gardens, commercial areas, sport and entertainment centres, where people can walk freely around the "agora" on the first floor of the building or find a shelter, hospitality and assistance in the ground-floor squared or triangular courtyards.

The closure, even temporary, of the building, or the choice to isolate the building from the street by means of an enclosure, would be totally inappropriate now, not only in terms of image – people expect the building to be opened whereas it is closed – but it would mainly represent a strategic mistake, given the urban staircase of the monumental asset and the position of the building in its context, making any "protection fence" totally useless anyway.

The time has come now to stress the importance, for Naples, of a pilot project regarding a conservation intervention, designed in total compliance with the values expressed by the territory and based on quality intended as an opportunity to focus on an organic landscape management, able to look beyond the mere "piece of land" or beyond the interests of the single citizen or local Administration.

It is important to maintain a continuous osmotic exchange between the monument, the city and its citizens, just like the local Administration already started to do organizing a series of guided tours of the building sites, or – like on occasions such as a Memorial Day - a series of shows in the Napoli Teatro Festival or exhibitions of great popular appeal, teaching the city the sense of belonging and strengthening the awareness of a heritage. A paradoxical place of social mixing and separation, historically enclosed and confined due to its original use, would eventually be open and freely accessible, thus constituting a really integrated conservation example.

The future challenge is therefore based on the ability of this world heritage building to integrate in the city and on the opportunities it will be able to offer from within and to coexist with the differences, with the ultimate goal of being a civitas, namely the place where the people can feel fully-fledged citizens.

Conclusions

Public policies regarding heritage today, subjects of many theoretical debates or legislative and bureaucratic premises in most European countries, are international (registration in the world heritage), national (different binding procedures or heritage protection systems) or local (in cities showing interest for such challenges). Conversely, it is harder to find in Europe concrete operational answers allowing to elaborate, in the design phase, the relationship between building and monument, cultural asset and context. It often happens to be influenced by the nostalgic desire to preserve the evidence of the past at the expense of the power of contemporary tension, or where this latter explodes, the past tends to be uncritically neglected. A new dialogue needs to be found, as well as the ability to enhance heritage through innovative activities, allowing a cultural and sustainable continuity. The exchange, the relationship between building and context – in architecture and town planning – between monument and site – in the disciplinary field of architectural and urban restoration – require a patient research. The work based on points, constraints, suggestions highlighted by the analysis - following the traditional guidelines of the Italian School - together with the "informal" paths of private initiatives and social relationships, form a new project of compatibility between new and old: this helps to unveil the traces which will allow to share and build new identities constituted by the integration of the values of different cultures, forming a new sense of belonging. Such strategy enables to safeguard tradition as well as to strengthen the contacts with the hosting culture and the new place of living.

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