**Fabbrica della Conoscenza**

# DEVELOPMENT AND PRESERVATION IN LARGE CITIES
## an international perspective
edition 2012

Edited by:
CARMINE GAMBARDELLA
DAVID LISTOKIN

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# Development and preservation in large cities: an international perspective
### Edition 2012

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Carmine GAMBARDELLA
David LISTOKIN

Carmine Gambardella, David Listokin (edited by)
**Development and preservation in large cities:**
**an international perspective**
Edition 2012

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*Preface*

**Carmine Gambardella**

Director of the
Department of
Architecture and
Industrial Design SUN,
Italy
President BENECON

The lecture series entitled *Development and Preservation in Large Cities: An International Perspective* organized by the Department of Architecture and Industrial Design Luigi Vanvitelli at the Second University of Naples, the Regional Centre of Expertise on Culture, Ecology and Economy (BENECON) – an institutional member of the *UNESCO Forum University and Heritage* – and the *Edward J. Blustein School of Planning and Public Policy at Rutgers, the State University of New Jersey* has been an extraordinary success involving 50 participants which has included academic staff, PhD as well as undergraduate students of both the Italian and U.S. partner institutions, who have received a joint qualification. The results are summarized briefly in this publication, with all the participants having work together as a team through a comparative methodological approach in the following areas: representation, safety and protection of the environment and structures, local government, planning and planning legislation, landscape and cultural heritage, economy and cultural heritage of architecture. More importantly, the wealth of scientific expertise and human resources cannot be merely limited to the five months of the course – from January to May 2012 – but is projected towards future joint projects that have already been agreed upon, such as the 2nd edition of the series to be held in 2013. This experience is part

of a virtuous internationalization process that establishes American universities and institutions as partners. The Department is home to a one of the National Committees of the Italian Fulbright Association for Cultural Heritage, Sustainable Development, Urban Planning, Architecture and Management of the UNESCO World Heritage Sites. The US – Italy Fulbright Commission has sponsored a number of initiatives, including the IX (2011), X (2012) and XI (2013) International Forum "Le Vie dei Mercanti" with the participation of the Massachusetts Institute of Technology Boston (Mobile Experience Lab.), University of California at Berkeley (Department of Landscape Architecture), Harvard University (School of Design) as well as Rutgers, whose teachers and students I would like to thank for this unique partnership.



Aversa, San Lorenzo ad Septimum, photo by Ludovico Mascia

*Preface*

**David Listokin**

Co-director of the
Center for Urban
Policy Research
- Edward J. Bloustein
School of Planning and
Public Policy, Rutgers
University, USA

The class considered the subject of development and preservation from a cross-national perspective in Italy and the United States (U.S.). Via the internet, the class considered the following (see Table 1 for details):

1. *Why*—What are the forces respectively driving development and preservation and what is the larger historical framework of these two forces.

2. *How*—What is the regulatory and financial framework for development and preservation, with a focus on the latter.

3. *Case Studies*—Notable examples of development and preservation cases in both countries were examined.

4. *Future Policy and Planning*—What planning, design, and preservation policies and mechanisms can better synthesize development and preservation in both Italy and the U.S.

The highlights of the class from the U.S. perspective including learning about the justly world famous Italian historic resources, comparing and contrasting the regulatory and financial preservation mechanisms in both countries, learning more about the advanced technologies being used in Italy for preservation purposes, (in applications ranging from remote sensing to seismic protection), and interacting at least electronically with an esteemed group of Italian professors and students.

Regrettably, however, the class "linkage" was limited

to the internet. In addition, there was insufficient time for the student class groups (comprised jointly of Italian and U.S. students) to thoroughly examine their "compare and contrast" from both country topics of landmark regulations, preservation financial incentives, heritage tourism, adaptive reuse, and preserving church and other religious structures.

## *Foreword*

**Maria Grazia Quieti**

Executive Director
The U.S.-Italy Fulbright
Commission

It is a renewed pleasure to contribute to the work of the Second University of Naples on development and historic preservation. For several years, The U.S.-Italy Fulbright Commission has sponsored the International Forum organized by the University and has provided its Fulbright scholars as resources for seminars and workshops as well as resources for the professional exchange of experiences.

This is part of the long standing tradition of academic exchanges fostered by the Fulbright Program in Italy. The Fulbright Program started in 1946 in the U.S. from an idea of Senator Fulbright in the aftermath of the 2nd World War. The founding idea of the Program is to increase mutual understanding between the people of the United States and the people of other countries by means of education and cultural exchanges. The Program exists today in over 155 countries in the world. In Italy it was introduced in 1948 and in 1975 it became binational, i.e. funded by both the U.S. and Italian Governments and managed through a Commission representing both governments. The Program promotes cultural and academic exchanges between Italy and the United States through scholarships to Italian and U.S. citizens for study, research and lecturing. It also provides an information service on the U.S. higher education system.

The areas of architecture, historic conservation, natural and cultural heritage have been and continue

to be of great importance  in the Fulbright Program.  In the early phase of the Program Prof.  Bruno Zevi used to organize five-month courses on architecture to visiting scholars from the U.S.  From this experience and other numerous visits, there has been a constant flow of scholarly and professional exchanges witnessing great interest in the experiences of both countries.  Natural and cultural heritage has recurrently been listed as one of the priority fields of the scientific agreement between  Italy and the United States and consequently of the Fulbright Program, given Italy's rich culture, history and cultural landscapes.  Furthermore, the multidisciplinarity implied in development and conservation of the natural and cultural heritage is at the heart of the Fulbright Program and its goal of promoting knowledge construction and exchange through shared understandings.

# *Foreword*

**James Rodriguez**

Public Affairs Officer
U.S. Consulate Naples

I have had the pleasure of living in Naples for almost three years and I have thoroughly enjoyed getting to know Southern Italy. The natural beauty and archaeological sites of the region are simply astonishing and when it is my time to leave, I will be truly sad. As a diplomat that specializes in cultural affairs, I realize the importance of protecting one's heritage, and the history of Italy is especially significant because it tells the story of Western Civilization. This book, and the other important work done by the Second University of Naples, are imperative for the preservation and promotion of Italian culture. Without conservation efforts like this, it would be challenging for future generations to learn about their past and that of others. Congratulations on a job well done, and best of luck in future endeavors.

Chicago, The Bean, photo by Chiara Ferrari

## Multicriteri@ knowledge of the World Heritage Properties in Campania

**Carmine Gambardella**

Director of the
Department of
Architecture and
Industrial Design SUN,
Italy
President BENECON

The didactic and research criterion of the lecture series entitled *Development and Preservation in Large Cities: An International Perspective* focuses on the multidisciplinary methodological approach which characterizes the national and international projects carried out by both of the Department of Architecture and Industrial Design SUN as well as the Centre of Excellence BENECON. Lecturers and students at Rutgers, along with the members of our scientific community met to discuss case studies in the United States and Italy, with particular attention to the World Heritage sites of Campania. In fact, they are the subject of an ambitious international project based on a *Memorandum of Understanding* signed in 2009 between UNESCO, BENECON and the Department of Architecture and Industrial Design SUN, which I have the honour to preside over. My lecture on complex representation refers to the "Pompeii 0079/2013 Knowledge Factory" project that is paradigmatic of the multicriteri@ cognitive approach. This makes it possible to carry out studies, ranging from landscape scale, the architectural territorial artefact, to minute objects, regardless of the date the object, with the human and natural phenomena being understood as complex and continuing realities through a careful process of discretization and measurement designed to study their every single connotative aspect. The results of the analysis refer

not only to the most important archaeological site in the world but to the entire municipality, and have been placed onto a unique technological platform, a geo-referenced information system that can organically manage the multidimensionality of the environment. This representation system has made it possible to transfer information about geology, morphology, hydrology, vegetation, history, physics, chemistry, environment, facilities, cultural heritage, as well as psycho-perceptual, socio-economic and administrative aspects onto numerous layers, which form an open and dynamic knowledge system. The platform of the acquired data is the basis for an operational project that is currently *in progress* for the development of Pompeii, which involves a partnership of universities, the municipal administration as well as the multinational company, TOPCON, a world leader in the production of optical instruments for the surveying, monitoring and representation of the natural and built environment. The lecture, *Environmental Protection* by Luigi Maffei focuses on Architectural Acoustics, Noise Control and Environmental Conditioning. Maffei presents case studies in Campania dealing with local mobility, the transportation of passengers and noise control through the discipline of *soundscape* in relation to the principles of sustainable development. The lecture by Giuseppe Faella entitled *New Materials for Seismic Safety and Preservation of Cultural Heritage* highlights how both the sustainability and seismic safety indicators of historic artefacts require special procedures in volcanic areas, such as some of those in Campania. Jolanda Capriglione in *Landscape preservation and public participation in the Province of Caserta as well as the City of Castel Volturno* presents major research projects developed through a cooperation between the University, the Provincial Administration, UNESCO Club Caserta and many local communities, for the recovery and development of the landscape in Terra di Lavoro. Elena Manzo in her lecture *Building preservation and reuse for the urban development in the Historical Centre of Naples:*

*from Monasteries to University buildings* gives a historical discussion of the development of religious monuments and their re-use through restoration interventions in the ancient heart of the city, a UNESCO historical urban landscape. The lecture *Tools and financing mechanism for preserving cultural heritage: some experiences in the Campania region* by Fabiana Forte shows how in this age of globalization, competition and global economic recession, the value of cultural heritage cannot only refer to the identity and promotion of the territory, but has to become a powerful tool for sustainable economic development. Nicola Pisacane, through a study of the surveying and inventory techniques of the natural and built heritage into the GIS system, presents a project for the mapping and evaluation of impact indicators on the areas of the National Park of Cilento and Vallo di Diano. Marco Calabrò in *Territorial Governance Legislation in Campania* gives an overview of the national legal framework, while referring to case studies within the specific regional context. He highlights the need for a more balanced relationship between the strategies of planning and coordination at different territorial levels, as well as partnerships between the public and private sectors. Claudia De Biase in *Italian territorial Governance tools* outlines the guidelines of the Italian legislative framework focusing on the laws that regulate urban planning at different territorial and decision-making levels. De Biase presents new experimental laws that would streamline complex bureaucratic procedures in relation to the protection of heritage. Ottavia Gambardella in *New York City and Naples – Examples of the Restoration and Adaptive Reuse of Historic Properties* presents the restoration of the Royal Palace of Naples and Palazzo Corigliano, home to the University Orientale, highlighting the specific value and meaning as well as the symbolic value of the two monuments within the urban landscape of the historical centre. Finally, Alessandro Ciambrone in *World Heritage management in the Campania region and best practices worldwide* proposes management

strategies for sites of regional excellence based on the model of best practices in France and the United States. The lectures by David Listokin of Rutegers integrated and expanded the U.S. context along this path of multidisciplinary shared knowledge. Thus, we have confirmed how important international comparisons are in order to share good examples of the protection and management of monuments, historic sites and environments, in which conservation and development coexist in positive role models and can be exported to other contexts. Within this *framework*, we firmly believe that the historical centres, monuments, even degraded landscapes, are the raw material of our studies, the hardware upon which the thought and integration of skills act as software to define a repertoire of solutions appropriate to return those areas to the community, through a regenerative protection intervention.

# Historic preservation in the United States (U.S.): History and implementing mechanisms

**David Listokin**

Co-director of the
Center for Urban
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Until almost the mid-twentieth century, preservation sentiment was alien to an American society with a reverence for all things new. There were but a handful of exceptions. For example, Mount Vernon (George Washington's home) was saved by a private women's group in the 1860s and an Antiquities Act of 1906 authorized the designation of archeological and other "monuments" on federal lands.

More typical however, was destruction of even acknowledged historic landmarks such as the iconic Pennsylvania Station in New York City. In fact, national federal programs in the 1950s and 1960s, ranging from urban renewal to the interstate highway system, fueled the demolition of many historic buildings.

Partly in reaction to the widespread loss of historic places (often governmentally aided) and growing social environmental sensitivity, a preservation system developed by the 1960s. At the federal level, the National Historic Preservation Act (NHPA) of 1966 created a National Register of Historic Places and a review process (Section 106 of the NHPA) to evaluate federal undertakings that threatened National Register resources. Complementing the NHPA was other federal preservation legislation, with examples synopsized in Table 1.

Parallel actions commenced at the state and local levels during this period. Of great significance was the establishment of local preservation commissions

(LPCs). The LPCs would conduct surveys to identify historic resources and then act to designate those resources as landmarks. Once designated, the landmarks could not be demolished or their facades alters in a fashion not historically appropriate without the approval of the LPC; at the least, these actions would be delayed or commented on by the LPC. LPCs are active throughout the United States and such local historic designation and protection is crucial.

Yet historic designation alone often does not suffice to realize preservation in the United States. Financial incentives have therefore been provided. One example is reducing the local property taxes on historic buildings undergoing rehabilitation.

By far, however, the most important financial tool is the federal historic tax credit (HTC) which provides a 20% credit on the rehabilitation outlay in an income-producing historic building (commercial or rental housing, but not an owner-occupied home). For example, a $1 million rehabilitation of a historic rental apartment house would qualify for a $200,000 credit which investors could deduct dollar for dollar against their federal income tax liability. To qualify for the 20 HTC, the rehabilitation has to be "historically" certified (i.e., it has to be consistent with the historic character of the building/district, using the Secretary of the Interior's Stands for Rehabilitation as a guide) and there are minimum investment and other criteria.

To date, from 1978 through 2011, about $100 billion of historic rehabilitation in the U.S. (adjusted for inflation and expressed in 2011 dollars) in a total of about 40,000 projects has benefited from the federal HTC. In addition, this credit has involved the rehabilitation or adaptive reuse of 440,000 housing units, including 123,000 units affordable to low- and moderate-income families. The realization of multiple goals is increasingly being espoused in the United States (e.g., accomplishing preservation while furthering affordable housing, community/economic development, and "green" energy mandates).

About 30 states have also adopted HTCs applied against state taxes. These state HTCs, which range from 5 to 50%, are applied in addition to the federal 20% tax credit. The layering of subsidies from different sources is a common preservation strategy in the U.S.

While support for preservation in the U.S. has grown over time, there remain critics. Criticisms include an overly restrictive and costly regulatory system, discouraging architectural innovation, and displaced lower-income and often minority residents in gentrifying historic neighborhoods.

Table 1
Overview of Selected U.S. Federal Legislation Affecting Preservation

| Year | Legislation | Activity (Partial) |
|------|-------------|---------------------|
| 1906 | Antiquities Act | Designates and protects historic "monuments"; regulates excavations |
| 1916 | National Park Service (NPS) established | NPS "houses" federal preservation activities (e.g., National Register) |
| 1935 | Historic Sites Act (HSA) | Basis for National Historic Landmarks |
| 1966 | National Historic Preservation Act (NHPA) | Key federal preservation law; establishes: National Register of Historic Places; Section 106 review of federal actions threatening Register properties; Advisory Council on Historic Preservation (ACHP) |
| 1966 | Department of Transportation Act | Section 4(f)—transportation projects shouldn't use historic or park resources unless there is "no feasible or prudent alternative" |
| 1969 | National Environmental Policy Act (NEPA) | Prepare environmental impact report on "major federal actions significantly affecting environment," including historic resources |
| 1974 | Archaeological and Historic Preservation Act (AHPA) | Extends archeological protection and recovery |
| 1979 | Archaeologic Resources Protection Act (ARPA) | Protects archaeological resources on federal/Native American lands; permit system for archaeological excavation on federal lands |
| 1980 | NHPA Amendments | Requires owner consent for National Register listing, establishes certified local governments (CLGs) |
| 1981 | Economic Recovery Tax Act (ERTA) | Establishes tax credits (25%) for historic preservation |
| 1986 | Tax Reform Act (TRA) | Reduces historic tax credit to 20% |
| 1991 | Intermodal Service Transportation Efficiency Act (ISTEA) | Encourages "intermodalism"; Transportation Enhancement Activity (TEA) funds can be used for historic preservation improvements |
| 1992 | NHPA Amendments | Penalizes "anticipatory demolition" by federal agencies; mandates greater federal agency stewardship of their historic properties |
| 2012 | Moving Ahead for Progress in the 21st Century | Modifies TEA funds for preservation (originally authorized by ISTEA) |

*Syllabus*
*International seminar – 2012*
*Development and Preservation in Large*
*Cities: An International Perspective*

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Campania region (SUN,
University of Naples
Federico ii, University
of Salerno, University of
Sannio).
Prof. Carmine Gambardella

*Course objective and framework*
This class will consider the subject of development
and preservation in large cities (and other places)
and will examine this interaction from an international
perspective, considering case studies in the United
States (with an emphasis on New York City) and Italy
(with discussion of Naples and Pompeii). New York
City has some of the leading cases in the United
States of development triumphing over preservation
(e.g., demolition of Penn Central Station) as well
as opposite situations (e.g., preservation of Grand
Central Station). The same is true in Italy, including
Naples and Pompeii.
The class will electronically link (via Skype/other
means) Rutgers University in New Jersey and the
school of Architecture at the Second University of
Naples (SUN) and the Region Centre for Cultural
Heritage, Ecology and Economy (BENECON). The
class will be taught in parallel by David Listokin
(Rutgers) and faculty from SUN and BENECON.
The class will present:
1. *Why* – What are the forces respectfully driving
development and preservation and what is the larger
historical framework of these two forces.
2. *How* – What is the regulatory framework for
development (e.g., zoning, and subdivision codes)
and preservation (e.g., landmark designation, transfer
of development rights, and tax credits), with a focus on

25

the latter.

3. *"Historic" cases* – These are notable past examples of development and preservation cases. Potential candidates for New York City include:

a. Penn Central and Grand Central Stations – two iconic structures with contrasting development/ preservation outcomes.

b. St. Bartholomew's Church – landmarking of religious structure upheld and stopped planned demolition, but fostered a counteraction against restraining religious entities.

c. Greenwich Village – A classic Robert Moses versus Jane Jacobs "battle ground" leading to the preservation of Washington Square Park, and defeat of Urban Renewal and the Lower Manhattan Expressway. (But what happened to Jacobs' vision of a multi-use, multi-income "Village".)

4. *"Current" cases* -- Ongoing preservation versus development situations. Potential examples in New York City include Atlantic Yards (Brooklyn) and Saint Vincent's Hospital (Manhattan).

5. *Future Policy and Planning* – Based on the historic and current cases, what planning and preservation policies and mechanisms can better synthesize development and preservation.

*Dates and topics*

2012 January 23rd Course overview (Prof. D. Listokin)
2012 January 30th An historical overview of preservation in the United States
(US) (Prof. D. Listokin)
2012 February 6th US federal government preservation programs (non-financial) (Prof. D. Listokin)
2012 February 13rd US federal government financial preservation programs
(e.g., tax incentives and grants) (Prof. D. Listokin)
2012 February 20th US state government preservation programs (Prof. D.
Listokin)
2012 February 27th US local government historic preservation in the nation
and New York City (Prof. D. Listokin)
2012 March 5th US property rights and development-preservation tensions
in the nation and New York City (Prof. D. Listokin)
2012 March 19th Representation (Prof. C. Gambardella) and GIS (Prof. N.
Pisacane)
2012 March 26th Territorial Governance (Prof. C. De Biase) and Legislation
(Prof. M. Calabro)
2012 April 2nd Seismic (Prof. G. Faella) and Environment Security (Prof.
L. Maffei)
2012 April 9th Community Case Study Draft Presentations (US class only)
2012 April 16th Landscape (Prof. J. Capriglione) and Economic Evaluation
(Prof. F. Forte)
2012 April 23rd History of Architecture (Prof. E. Manzo) and Cultural
Heritage (arch. Prof. A. Ciambrone)
2012 April 30th New York, Naples and Pompeii: "Compare and Contrast"
2012 May 07th New York, Naples and Pompeii: "Compare and Contrast"

# *Modules and biographies*

**Carmine Gambardella, David Listokin, Luigi Maffei, Giuseppe Faella, Jolanda Capriglione, Elena Manzo, Nicola Pisacane, Fabiana Forte, Marco Calabrò, Claudia De Biase, Ottavia Gambardella, Alessandro Ciambrone**

Benevento, photo by Ludovico Mascia

# Environment Protection

**Luigi Maffei**

Department of
Architecture and
Industrial Design
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Napoli

Among all Environmental indicators, problems related to local mobility and passenger transportation and to noise pollution are introduced and discussed.

With reference to the first indicator the influence of local mobility on quality of local ambient air and the availability of local public open areas has been analyzed. More than half of the world's population lives in towns and cities, a number expected to rise by 2030. The dense cohabitation of people in large areas must be organized so that the need of transportation is satisfied, commuter time is reduced, the resource use are minimized. Classical systems and new trends and ideas on urban mobility and their impact on environment are compared and discussed. With reference to noise pollution, the social handicap caused by a noisy environment is discussed in terms of interference on sleep, work, leisure and learning. Although classical environmental noise surveys are useful to avoid the impact of new projects on population in terms of annoyance and health effects, the classification of rural and urban areas through the Soundscape approach, and its multidisciplinary studies, can involve more population in the decision processes; open new frontiers in designing spaces that fulfill population expectations; contribute to the preservation of the natural and/or cultural heritage of rural and urban areas; help public management for the development of integrated action plans. Several examples in different contexts and scale (rural areas, urban parks, cities, cultural heritage sites) are presented.

Cattedrale di Caserta, photo by Gino Spera

# New Materials for Seismic Safety and Preservation of Cultural Heritage

**Giuseppe Faella**

Department of
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Napoli

A suitable assessment of the seismic safety of historical buildings requires specific procedures to be performed. From the in-depth knowledge of buildings and outlining seismic action and levels of protection, the procedure must achieve the evaluation of safety indices (concerning stability, damage protection and equipment and artworks protection), which are reference for defining priorities and measures (retrofit and strengthening of structures, restriction or change of use, etc.). Recognizing strengths and weaknesses of structures subjected to earthquakes, the elements required for seismic safety can be reliably identified, and then retrofit solutions congruent with the original structural configuration can be designed. For what concerns materials and techniques for increasing the structural safety, nowadays there is both a revitalization of the traditional ones and a wide spreading of more or less innovative materials (composite materials, new metallic materials, bio-composite materials, shape memory alloys), that are undergoing a constant development of production, sometimes accompanied by a sustainable vision. The matter is how these retrofitting materials and techniques can ensure compliance with the restoration requirements (i.e. preservation of the original static behavior, minimum intervention and maximum reversibility), in a context where the seismic issue is constantly enhanced. The lecture presented the key steps and the main features of the above procedure.

# Landscape preservation and public participation in the Province of Caserta as well as the City of Castel Volturno

**Jolanda Capriglione**

Department of
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The lecture presents the characteristics of the landscape in the province of Caserta and projects in progress on its coastal area, in the territory of Castel Volturno of the Litorale Domitio. The landscape of the Province of Caserta, in the centuries-long succession of historical events and up to World War II, has not only been the expression of a rural culture but has also focused on innovative agricultural processes through a conscious attitude of man towards this extraordinary natural heritage. Over the last decades, it has passed, in a short period, from an agricultural to an industrial use, denaturalizing the natural vocation of the territory. This has involved a meaningful variation in the models of life and fruition of the area. The province of Caserta was defined as an "immense Mediterranean garden" by the 18th century travellers and Terra Laboris, due to its characterization linked to agricultural production and extraordinary fertility of the land as well as its exceptional underground and superficial water apparatus. The Province is recovering its cultural and landscape values thanks to the cooperation of institutions, university, entrepreneurs and local communities. In this logic, the UNESCO Club of Caserta organized the IV (2011) and V (2012) summer school "Dialogues aìon landscapes", in the territory of Castel Voturno, which is characterized by the FoceVolturno-Costa di Licola-Lago Falciano natural reserve as well as by the Oasi dei Variconi, protected by the international Convention of Ramsar.

# Building preservation and reused for the urban development in the Historical Center of Naples: from Monasteries to University buildings

**Elena Manzo**

Department of
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Napoli

Naples was founded on two different settlement: the first one around IX century B.C. on Pizzofalcone hill and it was an archaic kind of village, called Partenope, but it was renamed Palepolis - that means "old city" - when a Greek settlers founded the second one in the 470 B.C., that is, Neapolis. It was the real heart of the city and around its crewed up the City, that soon became one of the most important places of the Mediterranean. Naples, in fact, is one of the oldest cities in Europe and, maybe, the only one in the World, which has preserved the traces of its historical urban background of twenty centuries, from the founding up to today. For this reason, since 1995 its Historical Centre has been included in the World Heritage list on the basis of the II and the IV criteria. During the centuries, a lot of its ancient buildings were transformed to adaptive reuse, preserving their specific artistic qualities, but, since the 1767, with the Bourbons Reign, many tens of religious buildings were carry away to the Church and were designed to public use. The Lecture's focus is to analyze and recognize the architectonic heritage which was transformed and reused for the Education and for the University especially the area included, in the South, S. Giovanni Maggiore church, in the North East, from Cavour square to S. Giovanni a Carbonara. Here there is a so vast concentration of monasteries and religious buildings that is one of the most interesting and specific characteristic of Historical Centre: 203 is the tolal number of churches, manasteries and convents identify by UNESCO. Anyway, that is one of that its characteristics which is unique in the Europe too.

Caserta, GIS elaborated by Nicola Pisacane

## Geographic Information System: a tool for built and natural environment knowledge, safeguard and management

**Nicola Pisacane**

Department of
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Industrial Design
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The lecture presents innovative systems for land survey and representation and describe the Geographic Information System (GIS) as an useful tool for the government actions of the territory.

GIS use who manage multidimensional data, acquired from different skills, enables the creation of a dynamic platform fully implemented and queried to support the activities of redesign and management of built and natural environment. This operation starts from a complete knowledge of its resources. The use of GIS technologies for creating an Information System of a territory makes possible to combine physical and intangible components with the aim of safeguarding and enhancing a place. GIS gives a multiple meanings to all information related to territory management that are linked each other. Territory Management in fact considers territory in its global and unit aspects composed of heterogeneous elements that coexist in a certain space but all these elements are interconnected by cross-influences, consisting of trade in goods, services, money, image, people.

Besides representing a strategic variable, the preservation, conservation and enhancement of specific sites constitutes a tool for long-term (i.e. widespread and diversified) and sustainable development. Indeed, an economic process based on local resources ensures a higher multiplicative effect on income; in their turn, wealth and well-being create the conditions for further growth and preservation.

# Tools and financing mechanisms for preserving cultural heritage: some experiences in the Campania Region

**Fabiana Forte**

Department of
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Napoli

In this age of globalisation and competition, along with the particularly difficult economic conjuncture, Cultural Heritage cannot only contribute to the identity and "branding" of a territory, but also to its economic development (in terms of occupation, new activities, direct and indirect impacts, etc.). Its conservation is becoming, for many countries, a national priority, as set out in the International and European Conventions and Charters. From an economic point of view, Cultural Heritage can be considered a kind of scarce resource which may generate some utilities (direct or indirect, individual or collective). It is then possible to identify several values and evaluation methods, as in the approach to Economic Conservation by the Neapolitan School of Monument Restoration. In Italy, there are different financial mechanisms for Heritage conservation. First of all, the public subsides and tax incentives, under different forms. Whereas, among the programming tools aimed at activating building and environmental urban renewal, one of the most significant operational instruments is represented by the "Programmi Complessi". Urban Planning instruments approved by the Italian law, allow for various restoration and urban regeneration proposals on the basis of either private or public initiatives. Among the southern regions, Campania is the one with the highest number of visitors thanks to its extraordinary Cultural Heritage. Nevertheless, this exceptional Heritage is still unable to become a "lever for economic and social development". Nevertheless, it is possible identify some good experiences in several urban areas.

## Territorial Governance Legislation in Campania

**Marco Calabrò**

Department of
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Industrial Design
Seconda Università di
Napoli

This lecture gives an overall description of the Italian legislation relating to territorial governance, highlighting the juridical conditions that allow urban transformations and their own limits. First of all, the essential characteristics of private ownership in Italy are discussed as well as the ways to limit this right in the case of public interest need concerning urban planning. In particular, the main procedural stages and juridical institutes involved into the expropriation subject are illustrated. Secondly, the principles and the specific elements of urban planning are described, referring to our regional legislation. The most relevant principles inspiring this law are: sustainable development; subsidiarity; institutional cooperation; efficiency; simplification; coordination with economic and environmental protection interests. In Campania, there are very few building free areas, thus urban planning has to operate first of all on built-up areas, trying to rationalize them. Another particular aspect of our territory is the need to pay specific attention to land safety, due to the presence of a volcano.

In conclusion, it is possible to notice that – as well as in all the other Countries where private ownership is fully acknowledged – also in Campania most of the juridical issues concerning territorial governance come from the difficult, but necessary, duty of balancing public and private conflicting interests.

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# Italian territorial governance tools

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Nowadays, in Italy, the law that rules the activity of urban planning is n. 1150 of 1942, the so called "legge urbanistica nazionale". This law provides three levels of hierarchically organized planning. The hierarchy refers to both the territorial dimension as well as the objects of each provided instrument. The first level deals with a wide area without specifying the dimension. This level provides a territorial plan, the second level regards the municipal area and provides a general urban plan and the third level comprehends implementation plans that deal with a specific part of the municipal area. Correspondingly, in reference to the object of each provided instrument, there are three planning levels: the first level includes the direction of the project; the second level must provide rules and uses for each part of the municipal area and the third level provides implementation plans and its contents refers to specific areas of the city.

A new phase of experimentation with new instruments began in in Italy in the 1990s , the so-called complex programs.

They aim to facilitate the implementation of the Municipal Plan,  encourage private funding as well as involve the private investor in the different phases of the planning process. The first of these tools are the Programmi integrati di intervento. These programs modify territorial actions, plans, the relationship between municipalities and lobbies and consider the economic, social and environmental aspects in territorial and urban planning.

Benevento, photo by Ludovico Mascia

# New York City and Naples - Examples of the Restoration and Adaptive Reuse of Historic Properties

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Two highly interesting examples of the Restoration and Adaptive Reuse of Historic Properties in the city of Naples are The Royal Palace and the Corigliano Palace. The Royal Palace in Piazza Plebiscito was built in the seventeenth century by Domenico Fontana. It is an emblematic testimony of the Spanish viceroyalty period due to the representative importance that it preserves as well as the urban location, which indicates a convenient choice for the strategic development of the western area from the historical centre. In the eighteenth century, Ferdinando Fuga transformed the great hall into a court theatre, while in the second half of the eighteenth century, the so-called "new arm" in the east was built, with the rooms that were originally intended for parties, now housing the National Library "Vittorio Emanuele III". Founded in 1927, it is one of the world's largest conservation libraries, while the old fabric was designated a residence of the Savoia family after the unification of Italy. The second example is the sixteenth-century palace of the Dukes of Corigliano, situated on the south side of Piazza San Domenico Maggiore. It was a noble residence until 1935, when the Corigliano family sold the building. It then became the headquarters of the National Institute for Social Security and in 1977, it became the site of the University of Naples "L'Orientale". A wide-ranging restoration aimed at recovering the historical and artistic features of the building, while making it functional for the University.

## *World Heritage management in the Region of Campania and best practices worldwide*

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The Campania Region has a unique cultural, landscape and intangible heritage but is not sufficiently protected and enhanced. To this end, the lecture analyzes and proposes policies for managing assets through the study of international "best practices", in particular in France, in the field of cultural tourism, seen as an engine for the sustainable development of local communities. The main aim of this lecture is to demonstrate, in times of global economic crisis, how it is possible to combine economic growth needs and strategies for the protection and enhancement of the heritage in a sustainable way, starting from the assumption that tourism is one of the possible areas for regional development, social integration and improvement of the living conditions of local communities. In this logic, the question arises: How does this cultural, landscape and intangible heritage allow for the development of tourism, intended as a source of sustainable development of the area? More has been added to this question. For example: Why do regions or cities with a rich built and natural heritage fail to protect their properties, unlike others who through tourism have also improved the living conditions of their population? And then: How much and how do history, geography, culture and traditions of the place have to with the actual ability to enhance the assets? And again: What is the real value of cultural and landscape heritage, and how can this value be related to a real socio-economic development of local communities?

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Degree in Law awarded "cum laude" by University of Naples "Federico II" (2000), with a thesis on: "Incidental Appeal in administrative trials". PhD in administrative law at University of Salerno (2004), thesis on "Modelling participation in administrative process and instances of effect: proceedings in environmental issues". Since 2006: Assistant professor in Administrative Law at the Architecture Faculty of the Second University of Naples. Professor of Administrative, Public and Environmental Law. Speaker at several meetings and workshops in administrative law. Member of several research groups on administrative law.

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Graduated in Architecture from the Second University of Naples (SUN) on November 4th, 2000, with a final mark of 110/110 cum laude and a thesis entitled "Urban and Territorial Planning". In 2001, she won a place on the PhD program in Planning and Territorial Science at the DIPIST of the University of Naples "Federico II". In 2008, she won a place as a researcher in Urban Planning at the Faculty of Architecture of the SUN. Since 2005, she has been a lecturer in "Tools of urban planning" and "Techniques for urban plan" at the Faculty of Architecture of the SUN.

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Pompeii, photo by Alessandro Ciambrone

# *Topic A*

## *New York City and Naples-Examples of Restoration and Adaptive Reuse of Historic Properties*

**Ottavia Gambardella, Lidia Padricelli, Pasquale Silvestro, Domenico Spena**

Pompeii photo by Alessandro Ciambrone

# The Royal and Corigliano Palaces in Naples

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## The Royal Palace

Naples lived under the Spanish viceroyalty over a long period lasted about two centuries, from the beginning of the sixteenth century to the early eighteenth century. The Royal Palace in Plebiscito Square is an emblematic testimony of this period for the representative importance that it preserves and for the urban location - a strategic position for the development of the western area from the historical centre. Domenico Fontana - the first architect of the new palace - reorganized the harbor and the arsenal, in addition to the area of Castelnuovo that during the viceroyalty was surrounded by additional, powerful fortifications. With the advent of the Borbone, in 1734, unlike the Spanish predecessors, King Charles actually lived in the new Royal Palace, and for his marriage to Maria Amalia of Saxony, in 1738, he renewed many rooms calling, among others, Francesco De Mura and Domenico Antonio Vaccaro. In 1768 Ferdinando Fuga transformed the great hall built by the Spanish viceroys into a theater of the court and in the second half of the eighteenth century it was also created the so-called "new arm" on the east, the rooms originally intended to parties, are now occupied by the National Library Vittorio Emanuele III, installed in 1927, one of the world's largest library of conservation. In the first half of the eighteenth century, the architect Ferdinando Sanfelice realized the oblique body - a carriage house

- that was then corrected and aligned with the other parts of the building by Passero in 1832. The final completion of the complex occurred from 1843, by architect Gaetano Genovese who designed the facade on Piazza Trieste e Trento after having demolished the old vice regal palace between 1838 and 1840. One of the most significant elements of the new seventeenth-century building is the facade on Plebiscito Square partially modified in 1754 when Luigi Vanvitelli walled up the arches on the ground floor because of structural problems. In 1842 the botanist





The Royal Palace, ancient picture.

The Royal Palace, photo of the National Library.

Frederick Dehnhardt created the "Landscape" garden and later Camillo Guerra enlarged it. The Palace was nominated Neapolitan residence of the monarchs of the Savoia family after the unification of Italy. The bombing during the Second World War and subsequent military occupation of the building caused serious damages that made it necessary a restoration. The oldest part of the whole building is the Royal apartment on the first level that preserves the original distribution. Despite being designed to host totally different functions the destination of the National Library results suitable to the building also thanks to the restoration and renovation that it has had over the time.

*The Corigliano Palace*
The Palace of the Dukes of Corigliano, on the south side of San Domenico Maggiore Square, was built in the sixteenth century for the family of Sangro probably by Giovanni Donadio said Mormando. Later the building went to the Limatola family, who lived there at the end of the seventeenth century, and certainly kept the possession of the building until 1725, when the last representative of the family died. Agostino Salluzzo, Duke of Corigliano, then purchased the property in 1732. The sixteenth-century building was raised of a floor by Filippo Buonocore, who eliminated the attic; the prospect was left essentially unchanged. The intervention on the existing structure was realized mainly in the interior. At the second floor there is one of the most extraordinary room of the European eighteenth century, the Cabinet of the Duke. In the underground room are visible the discoveries made during excavations carried out during the restoration work. It was found that the area, although attended since the fifth century BC, has been urbanized only in the second century BC, after the walls of the Greek city had lost its defensive function and thus, the military nature. The Oriental Institute, now University of Naples "L'Orientale", rented the main floor of the building between 1927 and 1934. In 1935 the family Corigliano decided to sell the building then the building became the headquarters of the National Institute for Social Security until the seventies, and in 1977 the University decided to buy it. A wide-ranging restoration aimed at recovering the historical and artistic sides of the building and made it functional for the University. During the works were discovered Greek-Roman era structures, namely the remains of a Roman road of the city and lower decuman Greek walls. These remains were incorporated in the main hall from here called "Greek Walls Hall". The restoration works were designed and directed by Ugo Carputi, Massimo Pica Ciamarra and Ezio De Felice, from the Faculty of Architecture of Naples. The restoration of the palace Corigliano and its adaptation to the use of university is part of a more general

plan of reorganization of universities in the city center. The building host now well the function of the University. These two examples show how reuse historical buildings giving them useful destination of use is a tool to preserve and maintain alive important testimonies of the past.

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The Corigliano Palace, Painting by Ascanio Luciano, kept in the I.S.M.E.O. of Rome.

## The 14th century Church of Santa Maria di Donnaregina

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The historic center of Naples contains treasures of inestimable historical-architectural value and counts 203 churches of which 75 are either currently closed for restoration or in a state of total abandonment. Following systematic studies, inherent to my PhD thesis, I have analyzed a specific area of the historic center of Naples, and in particular the most ancient part of the urban fabric of the city where there are 110 churches. The research, still in progress, focuses on a series of religious structures that after suppressions, carried out the centuries by various rulers, have acquired a new function in the city.

Extensive documentation is the oldest of the guides, dating from the seventeenth to the nineteenth centuries, with Celano, Parrino, Sarnelli, Sigismondo, Nobile and Galante who have described the city of Naples through the splendors of the past.

At the end of the road called Anticaglia, past the intersection with Via Duomo, there is the large monastery of the insula Donnaregina, with two churches. The main one is in baroque style, while the smaller is gothic.

Mary of Hungary, wife of Charles II of Anjou, in 1293 financed the reconstruction of the monastery, dedicated to St. Peter to Montes, which had been damaged by a seismic event[1]. The fourteenth-century Church of Donnaregina was completed in 1316 and made according to the Franciscan system, with a single

[1] Gino Chierici, *Il restauro della chiesa di S. Maria di Donnaregina a Napoli*, Giannini, Napoli 1934, p. 17. For further study, see the following texts: Pietro Di Stefano, *Desctittione de i luoghi sacri della città di Napoli*, Napoli 1560; Cesare D'Engenio Caracciolo, *Napoli sacra*, Napoli 1623; Giuseppe Sigismondo, *Descrizione della città di Napoli e suoi borghi, presso i fratelli Terres*, Napoli 1788; Luigi Catalani, *Le chiese di Napoli: descrizione storica ed artistica*, tip. fu Migliaccio, Napoli 1845-1853Francesco Ceva Grimaldi, *Città di Napoli dal tempo della sua fondazione sino al presente*, Stamperia e calcografia vico Freddo Pignasecca 15, Napoli 1857; Carlo Celano, Giovanni Battista Chiarini (con aggiunzioni di), *Notizie del bello dell'antico e del curioso della citta di Napoli…*, Tipo-lit. e libr. di L. Chiurazzi, Napoli 1870; Gennaro Aspreno Galante, *Guida sacra della città di Napoli,* Stamperia del Fibreno, Napoli 1872; Roberto Pane, *Il centro antico di Napoli*, Edizioni Scientifiche italiane, Napoli 1971; Cesare De Seta, *Storia della città di Napoli: dalle origini al Settecento*, Laterza, Roma 1973; Vittorio

Inside the Church Santa Maria di Donnaregina, Naples.

nave covered by trusses and pentagonal apse windows with pointed arches, surmounted by a costolonata vault, preceded by a rectangular module, which is also covered with a volt[2].

At the beginning of the sixteenth century, the wooden coffered ceiling built by Pietro Belverte to cover the wooden trusses became one of the most beautiful among those in contemporary Naples. In 1620, the nuns decided to build a new church but there was very little space available, so they decided to use part of the fourteenth-century apse, which had been partially destroyed[3], for the new church.

In the eighteenth century, a rectangular cloister was built, with pilasters and arches, which covered the original facade of the Gothic church .

The monastery following the abolition in 1861, with the Royal Decree of 7 February,  was acquired by the city that divided the space available into small classroom environments and assigned them, over time, to various functions, such as barracks, schools, housing for the needy, the seat of the Court, the Municipal Commission for the Conservation of Monuments as well as the Pontaniana Academy [4].

The degradation and neglect into which the entire church had fallen, led to  the Local Authority ordering its

restoration in 1926, with the work being assigned to the Superintendent Gino Chierici. In addition to revealing the fourteenth-century structures, with it being necessary to make several additions, the intervention was faced with the difficult task of freeing the fourteenth-century apse, with frescoes by Solimena, of structures built in the baroque period by trying to move an entire wall of the new church six metres, with the help of a complex machine designed by Chierici[5].

The restoration work was mainly based on returning the church to its original forms, that human intervention, time and natural disasters had completely altered.

The work was completed in 1934, with it becoming one of the most significant restorations in Italy of that time. Since 1969, the church has been part of the School of Specialization in Restoration of Monuments of the Faculty of Architecture of the University of Naples "Federico II", which oversees its maintenance and upkeep[6].

Anyone who enters in Donna Regina, wrote Chierici, has the feeling of being transported to the Middle Ages The visitor who enters in the penumbra and crosses in front of the nave has an apse and a reservoir full of singular charm of light. The tufo masonry walls in view are essential and in sharp contrast with the entrance, which has three equal aisles, painted, divided by octagonal pillars supporting an arched roof. Above the aisles, there is a choir-stalls for cloistered nuns.

In 2005, the Campania Region bought the nearby Palazzo Donnaregina with the aid of European funding and set up the exhibition of contemporary art known as M.A.D.R.E.. The renowned Portuguese architect and urban planner Álvaro Siza wasminvited to carry out the renovation and conversion of the building into a museum. The Church of Donnaregina is also used for  shows and events, thus becoming an additional exhibition space of rare beauty.

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[3] Carlo Celano, Giovanni Battista Chiarini (con aggiunzioni di), *Notizie del bello dell'antico e del curioso della citta di Napoli …*, Tipo-lit. e libr. di L. Chiurazzi, Napoli 1870, p. 173

[4] Raffaele Mormone, *La chiesa trecentesca di Donnaregina*, Edizioni scientifiche italiane, Napoli 1977, p. 6

[5] Rosa Anna Genovese, *La chiesa trecentesca di Donnaregina*, Edizioni scientifiche italiane, Napoli 1993, pp. 46-54

[6] Arturo Fratta, *Il patrimonio architettonico dell'ateneo fridericiano*, Arte tipografica, Napoli 2004

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Gennaro Maria De Pompeis, *Memorie storiche intorno al monastero ed alle pitture della vecchia Chiesa di Donna Regina*, pe' tipi di V. Manfredi, Napoli 1866

Emile Bertaux, *Santa Maria di Donna regina e l'arte senese a Napoli nel secolo 14.*, F. Giannini, Napoli 1899

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## The Royal Hostel for the Poor

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The construction of the "Royal Hostel for the Poor" dates back to the 2nd half of the 1700s, thanks to King Charles III of Bourbon. Ferdinando Fuga was chosen as the architect of the new building but he did not manage to complete it. Originally, the project involved the construction of a huge penitentiary aimed at housing almost 8000 men and women: the poor and immigrants coming from other parts of the Kingdom of Naples. The hospice was designed to divide its guests into 4 groups according to their age and sex: men, women, boys and girls.

The original project included a much bigger building than the one seen today. It should have extended over 600 meters long and 135 meters wide surface and included 5 huge courtyards. In the central courtyard, a six starred shaped church should have been built.

Although it is unfinished, the gigantic building with its beautiful 354 meters long facade and its usable area of about 103,000 square meters is one of the largest buildings in Europe. Unadopted 7 years old male orphans and naughty girls coming from the Annunziata Holy House were sent to the Royal Hostel for the Poor. For these reasons, the building was also know as "serraglio". The purpose of this charitable Royal Palace for the Poor was to give those not as lucky support and the opportunity to find a job. Over the centuries, it has also housed a cinema, a machine shop, a gym, several public offices, the Court, the Reformatory and the Fire

[1] Giancarlo Alisio, *Urbanistica napoletana nel Settecento*, Bari 1989.
[2] Paolo Giordano, *Ferdinando Fuga a Napoli, L'albergo dei Poveri, il Cimitero delle 366 fosse, i Granili* Edizioni del Grifo, 1997
[3] Eduardo Nappi, Claudio Francobandiera , *L'albergo dei poveri, documenti inediti XVIII – XX secolo* , Arte Tipografica Napoli, Napoli 2001

Department. A wing of the building, still used as hostel, collapsed during the earthquake in 1890 causing the death of some old women and two people looking after them. After being abandoned for many years, today there are many projects to bring the building back to its ancient splendor. After identifying the several reuse scenarios suitable for the building and their careful evaluation, both from a local political and technical points of view, the administration has come up with a new idea for the restoration of the Royal Hostel for the Poor: the Youth City. In 1937, under the Prefect Marziali, a radical renewal was undertaken.[1]

The juvenile Court and the rehabilitation center were in the west wing of the building. At the time, the rooms used were the Court President Office, the Kingdom Prosecutor Office, the lawyers offices, the Council Room, the Witness Room and other offices. The rest of the building was used as an observation center, which included a big hall, an infirmary, an exhibition hall, a refectory with a kitchen, dormitories, two gyms, two gardens, a workshop, a chapel, a Primary School, a psycho technique school and the Didactic Direction.  The studies carried out (in terms of practicality and flexibility), along with the works currently in progress and the knowledge of the building gained over the years, represent useful tools for any political decisions that may need to be taken about the use of the monument. These



The Royal Hostel for the Poor.

decisions cannot ignore the themes of the conservation and enhancement of the monument, the original vocation of the site, the urban requalification in progress, the Administration's attention to hospitality.[2] Reusing such a huge building requires an ambitious project capable of enhancing the container. A step by step project lead by a single director is also required, involving both private and public subjects. The choice of reuse is the realization of the Youth City within the restoration project of the Royal Hostel for the Poor.

With this choice, the Administration wants to promote the full development of young people personalities, both culturally and socially, offering, through a single container, facilities and information, performing spaces, leisure and culture places, spaces for hospitality. At the same time, the Administration intends to enhance and revitalize the monument which, once restored, will be animated in each room (more than 430) and open space (20,000 square meters). Around the great courts of the Royal Hostel for the Poor, it be possible to attend university classes, go to the theatre, play music, go to the cinema, find a job, meet young people from other countries among other things. The following is the description of the spaces of the Youth City and the activities possible in each of them. For their location, see the attached plans. The Agora is the heart of the Youth City: 6700 square meters in the center of the building, the first level from the road, with direct access through the monumental atrium, and more access is through the four side arms, where there would have been the great basilica. This space in its incompleteness can convey charm and inspires the desire for cultural events (music, theater, dance, ...) in addition to the desire of meeting and exchanging (the forum of young people, ...); location coveted by film and television productions, space for playing, it is conceivable that it can accommodate a roof structure that would make this a reversible and modern space suitable for all types of weather. Under the Agora, at street level, the environments for the Center for Cultural Production Film, Theatre and television communication (cinema, video, film library, film clubs, workshops, theater school, ...) interconnected through the triangular courts and linked to the Agora.[3]

Immediately from the Piazza Carlo III to the sides of the monumental staircase, there are all the information service desks (office for the right to education, information for the easy access to entertainment and travels, information point on housing and jobs, Universities information desks, information desks of the Council, Province and Region, ...).

On the ground floor around the side courts, there are environments characterized by large spaces, hosting activities that require large rooms (classrooms and university teaching spaces, halls, rooms for music, literature and publishing).

In the vertical of the monumental atrium, there are welcome and hospitality

services related to the promotion, marketing and communications of the " Youth City". In a few words, the floor at Piazza Carlo III level hosts cultural activities, games and more generally for leisure activities which require large flows.

The whole floor is dedicated to job and training: around the court allocated to the west, there are the classrooms and university teaching spaces, around the east courts there are workshops, space for training, but also spaces for fair trade and a business incubator.

The first floor (level 3), towards the square, is dedicated to the "Study Center of Youth Culture" with media libraries, study areas, laboratories, internet cafes. In the center, there is a permanent forum for young people. On the same floor, there is the School of Journalism. The side wings on the second floor (level 5) host the "Center of the linguistic and multicultural mediation " (laboratories, virtual libraries, ...) and the "languages fair" with exhibition areas. The big side courtyards host multitasking green areas. More than forty yards from the road, there is the panoramic terrace on the oldest part of the city skyscrapers and the Administrative Centre (the gaze can wander up to the Vesuvius, the Sorrento Peninsula and Capri) with the restaurants, cafes, there are also Mediterranean and multi-ethnic cuisine and schools. Just below the terrace, there is the residential accommodation for young people, which occupies four levels from the second mezzanine floor. Young people are also given the memory of the great transformations of the city: on the ground floor with direct access from the plaza, and on the mezzanine to the west courtyard, some large spaces are reserved for to "Documentation Center of urban transformation" intended to document last hundred years of urban history. In the "Youth City", the Holocaust (not to forget) also finds its space.

Youth City: seven main themes have been identified
1. MANAGEMENT (spaces of the management and Foundation of the Youth City).
2. EDUCATION (higher education, continuing education, cooking schools, lifelong learning).
3. WORK (counter services, business incubator, workshops, fair trade, ...);
4. CULTURE (cinema, theater, television communications, dance, music, photography, visual arts, ...);
5. COMPANIES (documentation, forums, cultural and linguistic mediation languages fair, Shoà space, ...);
6. LEISURE (spaces events, multi-purpose parks, fitness, sports and dance around the neighborhood, ...);
7. ACCOMMODATION '(information, accommodation, catering, restaurant, ...).

*Capuano Castle*
*History of change: Royal Residence to*
*Courthouse*

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Capuano Castle, in the Court of Naples, is the Temple of Justice, and it is a place, more than any other, of the town's historical memory. It was the ancient castle-fortress and home of the King. It then was transformed into a Court by the Spanish viceroy Don Pedro de Toledo. Through its history, the building helps to understand Naples. Capuano Castle was a sumptuous palace and fortress[1], it then became a private mansion, and finally a courthouse. During the eight centuries of its history, Roger the Norman, in 1153, commissioned its construction to the architect Buono (but some believe the castle was built by William I, Roger's son, in 1160).

Through stories and legends, so numerous to fill volumes, the building passed from the Normans to the Swabians, then the Angevins and the Aragonese. In the first three centuries of its life, there were murders, sieges and large feasts in the castle. It was the royal palace of the Normans and the Swabians[2], then around 1220, it was transformed into a royal residence by Frederick II of Swabia, who entrusted the extension of the castle to Giovanni Pisano (fake windows were opened on the main facade and the exterior decoration rebuilt). It then became the second home of the Aragonese and Angevin royal family. Then, there were numerous transformations during the period of the Spanish viceroyalty.

In the sixteenth century, Capuano Castle underwent a

[1] In the middle of the past century, archeological relics as well as reliable relics from V century B.C. were discovered during the renovation of Capuano Castle, confirming the foundation of Neapolis (Mario Napoli, *Napoli Greco- romana*, Gaetano Colonnese editore, Napoli 1959, p. 472-474)

[2] Naples until the Swabian era, was the most important military door of the Norman empire where the army was based under the command of Riccardo D'Aquino, count of Acerra. (Lucio Santoro, *Le mura di Napoli,* Istituto Italiano dei Castelli, Roma 1984, volume I, p. 51)

[3] Luciana Di Lernia, Viottorio Barrella, *Castel Capuano: memoria storica di un monumento da fortilizio a tribunale*, Edizioni scientifiche italiane, Napoli 1993, capitolo 3, p. 98.

[4] Don Pedro de Toledo wanted to establish monarchy prestige and authority all over the kingdom. He devoted more than 20 years of his life to this. (Guido D'Agostino, *Il governo spagnolo nell'Italia meridionale (Napoli dal 1508 al 1580)*, in Storia di Napoli, Società editrice napoletana, Napoli 1972, volume V, tomo I, p. 48.)

Tavola Strozzi:The oldest representation of Naples and the Castel Capuano.

Capuano Castle, entrance tower.

major transformation, promoted by Don Pedro de Toledo, who wanted to bring together the various justice offices into one place. Capuano Castle was chosen due to it instilling fear and respect, more than any other place[3]. The building was, by sovereign permission, the property of Philip de Lamas, Prince of Sulmona. Don Pedro bought the building, giving in return a palace in Via Incoronata and a fair trade-in money. The transformation, in the year 1537, was entrusted to architect Ferrante Maglione.

The building was inaugurated in 1540. The new Court was called "the new Vicar," to distinguish it from that one that already existed, "the old Vicar." Three years earlier, in the same castle, the prisons were opened. The transformation marked a big change for the entire area in the heart of Naples.

Capuano Castle remained a Court and prison throughout the viceroyalty, during the brief reign of Austria, as well as during the Bourbon reign. Nobody, not even the French King Joseph Bonaparte and Joachim Murat, changed the destination of the palace, which was a mirror of city life, for better or worse. Over the years, large processes have followed, then structural changes and attempts to restructure it, in order to make it more functional for the court (the best project was started and drafted by the architect John Riegler, on behalf of King Ferdinand II of Bourbon). The prisons were reduced by Ferdinand II, and then finally closed by the Sabaudia monarchy during the Unity of Italy (1861). The judicial offices should have been transferred at the end of the last century. During the Umbertino reign, Parliament gave a great deal of money for important restorations. Over the centuries, only the traditional courtyard of the historic castle was unchanged, as a symbol of Neapolitan law.

*Conversions and renovations*

Capuano Castle, after Castel dell' Ovo, is the oldest castle in Naples. During its long history, it has been altered and restored, with the façade having been significantly changed. The outer walls were rebuilt, and fake windows

on the main facade were built during the reign of Frederick II. During the reign of Alfonso of Aragon some rooms were painted by the Catalan Maco and then, in the late fifteenth century, by the Perrino Colantonio.

In 1752, during the Bourbon period, new frescoes were created and the entire complex was remodeled in 1857-58, losing all traces of the ancient appearance. This action brought the most significant changes: the main facade was renovated and the balconies were transformed back into windows, the arches on the ground floors were removed and a sidewalk was constructed along three sides. The interior decorations were entrusted to the painter Molinaro, and the decorator Perricci. After the unification of Italy (1861), the Savoy family crest was affixed to the exterior facade. During the restoration, under the castle foundations, some excavations were carried out, which brought to light fragments of stone inscriptions, thus confirming the presence of the ancient Gymnasium in the vicinity.

In 1913, excavations unearthed the tombs with terracotta vases and tombstones with Latin inscriptions, which proved the subsequent adaptation of a cemetery.

*From royal residence to the courthouse*

During the Aragonese reign, Capuano Castle had a marginal role, occasionally undergoing some renovation of the interior and exterior structures. In 1517, the marriage of King Sigismund with Bona Sforza of Poland was celebrated there, and in 1535 Charles V stayed there and a year later gave the castle to his knight, Philip de Lannoy, Prince of Sulmona, who modified and decorated the palace. Only with the annexation of the Kingdom of Naples to the crown of Spain and its incorporation as a Viceroyalty (1503), was Capuano Castle used for the first time as a courthouse, which remained until a few years before. In fact, the viceroy Don Pedro de Toledo brought together all the courts scattered in different places in the city[4]: the Holy Royal College, the Royal House of Sommariva, Great Civil and Criminal Court of the Vicar, and the Court of the Mint.

The castle was transformed in 1537 by the architects Ferdinand Manlio and Giovanni Benincasa, to accommodate the new features: all the typical military structures were eliminated, the interiors were changed, while the vaults were used as a prison with torture chambers.

# Topic B
## Italy and U.S.-Heritage Tourism-Magnitude, Profile, Economic Contribution, Promotion and Challenge

Gaia Giordano, Alessandro Ciambrone, Lina Abategiovanni, Gino Spera, Vincenzo Carducci

# The Cultural Landscape as a ʹplaceʹ of identity. Generating processes

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All cultural landscapes originate from the recognition of identity, which, in turn, is the combination of the physical and environmental elements of a landscape as the joint presence of imagery, narrative and representation. All the elements that constitute the identity of a community are rooted not only in its history, culture, social organization, but also its ways and forms of land use and, consequently, in the history of human presence and activities. In fact, every local community has developed an in-depth knowledge process of the identity elements of its own territory with the merger of nature-history-culture. This analysis process makes it possible to recognize and identify the places, placing them within their own "living geography". Within the process of economic and cultural globalization, recognising the identity of a social group, region or nation is a crucial issue, with the issue cultural landscapes affecting not only the Old World as well as the New "westernized" countries but also those that have been "marginalized". Following the lessons of Levi-Strauss, Marc Augé recently returned to the question of the relationship between identity and space, connecting it to symbolization processes implemented by social groups in their "understanding and dominating space" as a way to "understand and control themselves". The identification and symbolization of space recalls technical and social reasoning values and processes, that, even today, can be considered to be at the basis of the relationship

between humans and the natural and built environment, both in "advanced" and so called "developing" countries. Pier Giorgio Gerosa claimed that "those objects that are called Cultural Landscapes, landscapes tout court, because instituted by man, and that the Council of Europe and UNESCO exhort us to take stock diligently, to classify typologically and to protect are, in most cases, only residues of the physical or morphological roots, marks of entities that may not exist any more. In these cases still are, such as photographs, witness and birth certificate and thus contributing factor to the formation of identity" (Barthes, 1981). In 2006, an academic revision of the combined efforts of the Committee, along with numerous specialists throughout the world, to apply the concept of Cultural Landscapes remarked and concluded that: "Although the concept of landscape has been for some time dropped from its original associations art (...) there is still a dominant view of the landscape as a surface engraved, similar to a map or a text, from which the cultural meanings and social forms can be easily read". The same World Heritage Committee has defined the Cultural Landscapes as a distinct geographic area or properties that, in a particular way, "represent the combined work of nature and man". This definition is in line with the European Landscape Convention, which states that the Cultural Landscape "means an area, as perceived by people, whose character derives from the natural and/or humans and their interrelations". It follows that the landscape forms a unique package of the natural and cultural elements, which must be considered simultaneously and in relation to each other. One of the most important changes in the approach to the theme of landscapes was introduced by the Convention concerning the correlation between landscape, people and identity. Identity is configured in the right than the man, over time, has contributed more or less consciously to configure. Identities are constructed and consolidated through the layering of uses and meanings that have sedimented in the sites in close harmony with the changing lifestyles of the community and that cannot be created artificially. Cultural Landscapes, ultimately, contribute – with their peculiarities – to defining both local and regional identity. They are a reflection of the history and interaction between man and nature. The idea of "cultural landscape", which is distinct from a simple spatial configuration defined by a pure appreciation of a formal nature, indicates a variety of events – and thus how descriptive, emotional accessions, perceptions, feelings, - destined to move and change the "image of the landscape and its setting along thematic lines, social or historical". It is worth considering the different definitions of a landscape vision that may be offered from time to time: landscape art or science, natural or anthropogenic, agricultural or industrial, urban or suburban, spiritual or practical, depending on the time span, the collective events, or the simple point of view. This requires considering the "cultural

landscape" as a concept that is neither neutral nor unhistorical, but is rather an irreplaceable integration of a civilization and cultural process that shapes the content and modes of representation, and that is itself, in turn, intimately formed. This not only makes the idea of an identity defined once and for all flexible, but also helps to outline the characteristics of the "cultural" model in question. The issue of landscape as a representation of identity is highly complex, as a "place" and manifestation of historical and ethical values imprinted in its very form. This landscape is not a simple image, but a representation: it becomes increasingly more solemn and symbolic, with it being the face of history, and in this case, recognising the imprint of culture, tradition and a constantly renewed memory. The cultural landscape, understood as a transversal category capable of accommodating the interaction of theoretical and methodological subject areas which are very distant, now more than ever, has become a tool for knowledge and intervention. Society has attributed a conscious and participatory role of the economic, social and territorial choices to the cultural landscape. The theoretical basis of this assumption is based on a sense of finally conceiving the cultural landscape as a large archive of documents that tell of the evolutionary path of the collective identity and take on the value of resources for development due to the heritage values they contain. In comparison to the different geographical approaches, which tend to emphasize the distinctive cultural and environmental landscapes, it should be noted that the first is to be distinguished from the geographical landscape, even when this includes cultural elements. The difference lies in the level of representation, since the geographical landscape should be understood as a typical modern construction, whereas the cultural one is the result of a representation that belongs to a contemporary atmosphere in which the sites (and not space), are the primary object of representation and, in its representation, searching for their cultural identity. The cultural landscape represents the modern symbolic expression of cultural heritage. As heritage diffuses (over the territory), cultural heritage assumes the meaning of a set of tangible and intangible assets as a resource and common identities to a territory as well as the people who inhabit it. The cultural heritage which constitutes this collective heritage includes the material entities, concepts and representations, specific aspects of community life and land, as a synthesis through which individuals reproduce the concepts that are used for their identification and representation. The UNESCO World Heritage Committee defines cultural landscapes as geographic areas "which represent the combined work of nature and of man". The concept is particularly relevant in Europe, where human activity has had a major impact on the environment since the Neolithic period (about 3000-1100 B.C.). Up until the eighteenth century, European landscapes were well

preserved, with the remains of numerous structures from the remote past, however, enormous social and technological changes have fundamentally altered land use. Transport infrastructures and urbanization have fragmented habitats, and intensive agriculture has created a more homogeneous landscape, threatening the diversity of habitats, species and conservation of genetic resources. An important element in the concept of cultural landscape is the recognition that human activities are key drivers of changes in ecosystems, with potentially serious impacts on human welfare. However, the concept also reflects the idea that human cultures have been shaped in harmony with their natural surroundings and great value is due to local ecosystems. Clearly, more than the cultural values, the ecosystems also provide numerous goods and services that are economically advantageous. Recognizing the cultural and economic value of the natural world, the need is clear, for our children as well as future generations, to preserve this "biodiversity values". The initiatives to protect the biodiversity of Europe's heritage at various levels refer to the European Landscape Convention as well as the certification and labeling systems that promote local products and traditional activities. Integrating tools and local initiatives with regional planning, involving local communities, will be critical to ensuring the biodiversity of Europe's cultural heritage as well as maintain multifunctional landscapes. It would, therefore, be desirable to develop the area it passes through with the recovery of specific places and relationships, the development of individual pathways that every citizen carries within itself and that can be shared, so as to become a place dedicated to the territories that have special meaning for the community, of which everyone has personal knowledge in respect of which the community feels protective and caring, with which the population, somehow, has the ability to identify with.

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# Cultural Heritage Tourism in Italy and France: compare and contrast

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The key concepts of cultural network, tourist district and a local community's involvement in the planning process – focusing on the discovery of the *genius loci* – are the basis of management strategies in the best practices for the sites of excellence worldwide. This is not true for Italy, with 47 World Heritage properties (the country with the largest number of sites), lost the highest percentage of foreign visitors in the last thirty years, since tourism started to have a significant impact on the global economy worldwide. Data from the World Tourism Organization (UNWTO 2011), shows that Italy ranks fifth as a tourist destination with 43.6 million international arrivals after France, the United States, China and Spain. Since 1980, Italy lost 3.2 per cent of international arrivals, which is the highest percentage among those of the top twenty tourist destinations in the world. However, what impresses most is the gap what has been created between Italy and France in the period under consideration, or since the brand UNESCO has had a significant impact on the movement of visitor flows interested in cultural tourism[1]. The difference in the number of foreign tourists, in fact, has increased from eight to forty million. In the same period, since the explosion of mass tourism, Italy has doubled the number of visitors, while China, for example, rose from 3.5 million to 55.7 million visitors per year. With regard to the revenue related to the tourism economy, and with reference to the year 2011, the United States ranks first place with 116.3 billion dollars, while Italy, after Spain and France,

[1] UNWTO. *World Tourism Barometer. Madrid*, United Nation World Tourist Organization Publishing, 2011.
[2] *Ibidem*.
[3] Sateriale Gaetano. *C'è Stata Un'epoca, Forse …* In Siti. Anno quarto, numero quattro, ottobre/dicembre 2008. Ferrara, Associazione Italiana Città e Siti Patrimonio Mondiale UNESCO, 2008.
[4] Sateriale Gaetano. *Un Patrimonio Che Vale Una Fortuna*. In Siti. Anno quarto, numero due, aprile/giugno 2008. Ferrara, Associazione Italiana Città e Siti Patrimonio Mondiale UNESCO, 2008.
[5] Donnat Olivier. *Les pratiques culturelles des Français*. Enquête 1997. Paris, La Documentation française, 1998.
[6] Greffe Xavier. *Economie de la propriété artistique*. Paris, Economica, 2005.
[7] Fleury Laurent. *Sociologie de la culture et des pratique culturelle*. Paris, A. Colin, 2008.
[8] Greffe Xavier, Pflieger Sylvie … *op. cit.* ; Ministère de la Culture et de la Communication. « Le budget du ministère chargé des Affaires culturelles de 1960 à 1985. » Développement culturel, n. 67, octobre 1986.
[9] Vourc'h Anne. *Protection, Management and Sustainable Development: The "Grans Site de France" Experience*. In Gambardella Carmine. Less/More. In the proceedings X

ranked fourth with 42.9 billion dollars[2]. The data suggest that the promotion and enhancement of landscape and cultural heritage is not adequately developed, especially taking into account the global scenario that is particularly complex and capable of providing infinite offers to meet many needs. It is therefore clear that the tourist attractions, and more specifically the Italian heritage, are not capable of generating economic flows compared to its potential. The economic, social and environmental impact related to the proper management of cultural heritage and landscape has not been fully understood. This also includes tourism promotion strategies related to different spatial scales and different actors involved in the process. Confirming this view, we observe that the cost of Culture represents a percentage lower than seven per cent in the total annual budget of an Italian family. This percentage is lower than the European average of nine percent, and that of Great Britain, which is the highest in the old continent with twelve percent[3].

The major reasons for such a limited number of tourists, in relation to the expectations and potential, could, inter alia, include: lack of price competitiveness linked to tourist services compared to other foreign destinations, the fragmentation of the tourist offer, the limited use of funds to promote the area, the limited use of the Internet by Italian tour operators (one out of three people books holidays on-line), the quality of tourist

services that often are not up to required standards, and the inability to organize events of international visibility[4].

The situation in France is  different where culture, over the centuries, has affirmed itself in the policies adopted, as the most important tool for achieving a comprehensive development, including social and economic, which ensures the quality of life of every individual[5]. It is a State duty for all to be able to access culture, as provided by the French Constitution. This is also the main objective of the Ministry of Culture, which foresees: making accessible to the widest possible public the works of art, primarily national ones; to encourage the creation of works of art and stimulate the spirit that enriches them (*décret n. 59-889 du 24 juillet 1959*).[6]

In fact, creation is a cornerstone of French cultural policy, with it being expressed through two main actions. The first appears to support the artists in their training, assuring a support system in the absence of work, protecting intellectual property and facilitating access to internal and external market. The second is materialized with the support of business through numerous public commissions, specific tax and financial measures as well as the creation of specific places for exhibitions and events[7]. The main role of the State is recorded in the investment for culture with funding in this economic sector: with a budget of 2.816 billion Euro announced in the national budget for culture in 2009 - and an increase of 2.4 per cent more compared

International Forum of Studies "Le Vie dei Mercanti". Napoli, La Scuola di Pitagora, 2012.

[10] Added value is defined as the difference between the proceeds from the sale and the amount paid for the purchase of raw materials and semi-finished products used in the production process.

[11] Messager Michel, Ruiz Gérard, Warnet Claude. *Le poids économique et social du tourisme.* Conseil national du tourisme de France, section de l'économie touristique, 2010.

[12] Hervé Novelli, ministre en charge du tourisme en France, in Michèle Sani, «Convention culture/tourisme : bientôt des parados «à la française», sur tourmag.com, Samedi 7 Novembre 2009. The seven most visited monuments, cited in the article, are: le Mont Saint-Michel, l'Arc de Triomphe, la Sainte Chapelle, le Panthéon, les tours de Notre-Dame de Paris, la Conciergerie, le château et les remparts de Carcassone. The three museums are the Louvre, Orsay et Versailles.

[13] Initiative endorsed by the Council of Europe in 1991 at the suggestion of Jack Lang, the French Minister of Culture from 1981 to 1986 and again from 1988 to 1993.

Capri, via Krupp (photo by Alessandro Ciambrone).

Paris, Hôtel de Ville (photo by Alessandro Ciambrone).

to 2008 - investments in culture have increased almost continuously over the last twenty five years[8]. Close links unite political and cultural tourism in France, which with eighty-two million international arrivals, is the most visited country in the world. The concentration of natural and cultural heritage is high in the Country, forming the basis for a tourist economy, which represents 6.2 percent of Gross Domestic Product (GDP).[9] The added value[10] of tourism in France, as a percentage of GDP, is higher than that of other sectors which contribute decisively to the national economy. The total tourist income in the country in 2009 was 84.7 billion euro. The value added of 41.6 billion euro, exceeding the energy and agriculture (30 billion respectively), agro-food industry (25.7 billion) and automotive (11.2 billion). Due to its nature, as a sector of services, tourism is a major generator of employment, with an average annual growth of twenty-seven thousand employees over the past ten years[11]. Particular attention is drawn to the policies relating to cultural tourism initiatives such as, for example, the Convention of the National Council on Tourism with the Ministry of Culture, signed on April 18th, 2008, which seeks to establish cooperation in land management, development of cultural resources and local products. The aim is to adapt the cultural offer to continuing developments in tourist demand and specific needs, such as the creation of the brand "*Tourisme et Handicap*", which allows for the labeled sites to be visited by the disabled. The field of cultural tourism has opened new perspectives in order to respond to market needs. The visit to the most emblematic and visited historic sites in France, no longer meets sufficiently and exclusively tourists, who ask and seek monuments and sites that are an expression of a minor heritage. Moreover, they ask for high profile cultural events. In order to meet these growing demands, the Convention "*Culture tourisme*" between the Ministry of Culture and the State Secretariat for Tourism was signed in November 2009. The Convention's main objective is to encourage innovation and practices of tourism development focused on monumental heritage, in order to differentiate the tourist routes and avoid massive flow of visitors that focus exclusively on a few properties, thanks to the organization of large events in other less promoted places. This is in view of the fact that "the greatest problem of tourism in France comes from the over-attendance of a dozen of well-known sites. Seven national monuments, in fact, achieve 2/3 of attendance at such sites, and three museums accounting for sixty percent of visitors to the national museum system"[12]. In fact, these initiatives are consistent with a cultural policy already initiated that allowed for the creation of many annual festivals and events, not only in France, but throughout Europe. These include the music festival which has been held since 1982, every June 21st in all the French cities, the European Heritage Days, which since 1991, is held in the third week of September;[13] the night of the museums, which has been held annually since May of 2005 and the film festival which is held for three days in late June.

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## The Italian Cultural Heritage: the need to update the tools of analysis, representation and knowledge

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Italy is one of the richest countries in the world with its numerous places included in the World Heritage List of UNESCO. A dynamic schedule of forty-five areas, compared with priceless treasures made of a huge cultural and landscape capability (Figure 01). The idea of creating an international movement for the protection of the heritage came about after the Second World War, thanks to the Convention of Paris in 1972 for the protection of the world and natural Heritage.

The Convention wanted that the member countries recognise and protect their own heritage and define as cultural and natural heritage all those goods defined as monuments or historic, artistic, scientific set, those natural areas that have an extraordinary aesthetic or scientific value, the mixed areas derive from the action between nature and man, which hold the memory of traditional ways of life and show the link between nature and culture.[1]

Therefore, a land can be considered as part of the cultural heritage, when its parts became the symbol in the history, qualification of identity and finally the roots for a historical evolution.[2]

Faced with a complex and changing landscape, emblematic of  Italian heritage, there is a need to update of the tools of analysis and representation of the territory, in particular, the cultural heritage.

Today's technology is guided by a survey method based on multidimensional knowledge that makes it

[1] Convention concerning the protection of cultural and natural heritage in the world. Available on line: http://www.patrimoniounesco.it/UNESCO/convenzione.htm;

[2] Maurizio Carta, *L'Armatura culturale del territorio: il patrimonio culturale come matrice di identità e strumento di sviluppo*, Franco Angeli Editore, Milano 2006;

[3] Associazione Mecenate, *Italia paese della cultura e della bellezza*, Fondazione Rosselli, Roma 2008;

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[6] UNESCO SITES Magazine - Quarterly news and cultural policy. Available on line: http://www.rivistasitiunesco.it

possible to "capitalize" the territory, its resources as well as enter in the body of reality, bringing back the value of identity. It is amazing to see how using the tools of modern technology, it is possible to represent a UNESCO site, study its components and measure them in a complex management.

New technologies can break down, analyze, evaluate and manage the land, they also can bring people to cultural heritage, revitalize cultural contents and transfer them to the public in the form of new ideas and encouraging creativity and involvement reviving the past and, at the same time, plan the future.



Localization of 45 sites declared natural, cultural and immaterial heritage by UNESCO (Image elaborated by Lina Abategiovanni).

There is a need to promote in the  areas and monuments, the use of technologies that are used to rebuild the characteristics of the property, to constantly monitor their status as well as plan a more effective maintenance.

Furthermore, in developing programs and funding, priority must be given to those interventions that better integrate the assets with different technologies, rewarding those projects that have groundbreaking elements, paying close attention to the expected results.[3]

There is also the need for a new way to address the representation and protection of property that the area has provided, the awareness of its  cultural assets with the aim of bringing added value given by its knowledge.

The knowledge of the culture of the South makes it possible to resume a comprehensive and challenging debate, especially if the areas of research are supported by developing scenarios, the recovery of  new opportunities that this land and cultural treasure can offer to contemporary society.[4]

In the specific case,  the city of Pompeii, site of universal value without equal, was approved in 1997 as a World Heritage Site due to its strong historical and cultural character of authenticity, it offers its visitors a dual aspect: an ancient Pompeii, historical and classical , defined by the world's most famous archeological area (Figure 02), and a modern Pompeii but at the same time a religious city, one of  the land of the faithful and all those who are devoted to the Virgin of the Rosary. Pompeii, like any cultural heritage in general, is and must be understood as a "knowledge factory", as a concrete territorial infrastructure, that integrating knowledge and technology stands as an innovation in the regenerative cycle of the protection and enhancement of cultural, environmental and landscape goods. Italian cultural heritage, must represent an asset to cherish and protect, but above all, to exploit and disseminate for greater enjoyment.

 It is worth considering how to manage the "cultural capital", so that the identified potential can be expressed in the processes of planning and economic planning; scientific reflection must therefore focus on the effects of the application of theoretical and methodological settings.[5]

The cultural development  must be built through the same policies, aiming to strengthen the professionalism that is intended to be used in the field and then to study, research, training that promotes the understanding of the cultural heritage and enable the construction of a deep sense of belonging.

We are custodians of a world that is watching us, judging us, considering our ability to defend it, manage it, enhance it through  real, timely and passionate renewal. Culture should be given the same importance as the economy, health, security, justice and education.

Italian cultural heritage should be a lever for development and culture, it must be placed at the base of the main investments for imagining the future.                With the creation of a knowledge network based on the integration of knowledge and analysis of multidimensional, Italy must aim at the forefront of landscape protection and enhancement of its cultural heritage, exploiting all potential.

This potential must be fully supported by cultural and tourist policies, that can focus on quality and offer immense growth opportunities for strengthening the roots of the community and offer new opportunities for economic development of the area.[6]

Pompeii. Digital orthophoto of archeological area and its surrounding setting.

## Cultural and World Heritage Tourism in Campania

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The Campania WHSs were added to the World Heritage List (WHL) in the following chronological order:
- the Historic Centre of Naples (1995);
- The 18th Century Royal Palace at Caserta, with the Park, the Aqueduct of Vanvitelli, and the San Leucio Complex (1997);
- the Archaeological Area of Pompeii, Herculaneum, and Torre Annunziata (1997);
- the Costiera Amalfitana (1997);
- the Cilento and Vallo di Diano National Park with the Archaeological sites of Paestum and Velia, and the Certosa of Padula (1998).
- the historical centre of Benevento (*Italia Longobardorum*), (2011).

Moreover, in 1997 the Somma – Vesuvius and Miglio d'Oro, as well as the Cilento and Vallo di Diano National Parks were included in the worldwide reserves under the UNESCO – Man and Biosphere (MAB) program. However, the heritage of Campania is not limited to the WHSs, but it also includes numerous natural, cultural and intangible assets located in all of the five provinces of the region (Avellino, Benevento, Caserta, Naples and Salerno).

The regional heritage also includes the two Underwater Archaeological Parks of Gaiola and Baia, which have been established by the Italian government. These sites are protected by the 1994 United Nations

[1] Campania Region (2005). *Annuario Statistiche.*
[2] ISTAT (2005). *Statistiche in Breve. Il Turismo nel 2004;* ISTAT (2007). Dati demografici.
[3] Veneto Region (2006). *Movimento Turistico.*
[4] De Lucia, V. (2008). *L'Italia non può perdere Napoli.* In Siti. Anno IV n. II. Associazione Città e Siti Italiani Patrimonio Mondiale UNESCO

Convention on the Law of the Sea, and Italy is in the process of ratifying the 2001 UNESCO Convention on Underwater Heritage (Ministry of Environment 2008). Furthermore, five of the twenty most visited Italian cultural and natural areas are in Campania: Pompeii (2.268.000 visitors per year); Royal Palace of Caserta (663.000); National Archaeological Museum of Naples (358.000); Grotta Azzurra in Capri (284.000); Herculaneum (268.000)[1]. In spite of this impressive cultural and natural heritage, cultural tourism and the linked revenues are limited in Campania. Moreover, the flow of tourists is unbalanced within the region. Tourism pressure is especially concentrated along the coastal areas from June to September, with the consequent degradation of cultural and natural assets.

ISTAT Statistical data (2005; 2007)[2] show that Campania ranks seventh in Italy as a tourist destination when compared to the other Italian regions. For example, in 2005 the Region had almost three times less visitors than Veneto (five WHSs), two times less than Toscana (six WHSs), Emilia Romagna (three WHSs), and Trentino Alto Adige that does not have any WHSs. Moreover, Campania, with its almost 19 million overnight stays a year, registered 12 million overnight stays less than Lazio (three WHSs), and 7 million less than Lombardy (five WHSs)[3].

Cultural tourism and the protection of the regional heritage in Campania are limited due to: the negative perception of the region's image at an international and national level, the lack of cultural tourism promotion and the unbalanced distribution of tourism. High levels of unemployment, criminality and a serious lack of waste management are major social problems, and contribute to damaging the image of the region. This negative image has been exacerbated by national and international mass-media, which broadcast images of dirty and unsafe cities in Campania. However, since April 2008, the Italian Government has declared a 'State of emergency for Naples and Campania' in order to solve the waste and

Naples (photo by Gino Spera).

criminal issues. Many results have been achieved in the last months, and the establishment of the network for the WHSs and LTSs, if realized, can contribute to a major socio-economic development for the region.

The tourist season in the region is limited to four months a year, from June to September. The concentration of tourists to only in a few areas along the coast, and in a particular period of the year, is contributing to the degradation and erosion of the cultural and environmental assets. The 1998 Instituto Tagliacarte research on the Cilento shows that the tourist economy is concentrated for 90 per cent in the coastal area. Moreover, in the last 50 years, the urbanized area of Campania has become five times larger, thanks also to an uncontrolled urban development, with a demographic increase of 21 per cent. The coastal area, which represents 15 per cent of the regional territory, hosts 72 per cent of its population. It is easy to understand that the increase in tourist numbers on the coast exacerbates problems such as pollution and waste management. Additionally, there is also a significant discrepancy in the number of tourists among the five provinces within the region. Naples receives 56 per cent of visitors, Salerno 38 per cent, Caserta 4 per cent, and Avellino and Benevento
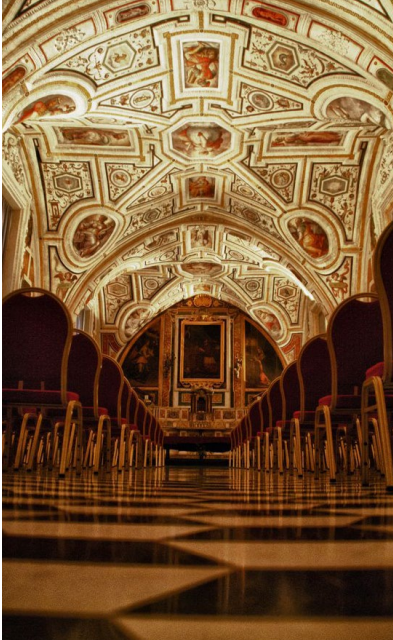
only 1 per cent. The unbalanced distribution of visitors results in an unequal distribution of revenues among the provincial territories. The case of the Royal Palace of Caserta shows that even though the site receives an average of 700.000 visitors a year, it does not bring economic development to the city4. There are no tourist services and commercial activities linked to the local heritage. After their visit, tourists leave the city, increasing problems such as traffic congestion, pollution, and accumulation of waste.

Most visitors and residents do not know that the mainly tourist destinations are WHSs. In fact, the WH emblem seldom appears to promote the Sites on institutional web sites, related publications and tourism catalogues. In other words, the WH emblem, which elsewhere brings more tourism, does not bring any visitor increase in Campania. Even if tourists know about these famous and international tourist destinations, they often do not realize that such sites are all located in Campania, and that they are relatively close together.

## Preservation and enhancement of cultural tourism in Italy

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Italy has one of the most important cultural heritages in the world. Few countries, in fact, can boast such a wide presence on its territory of cities, villages, castles, palaces, churches, monuments, works of art, traditions and landscapes.[1] It is a great treasure, which includes considerable effort to preserve it, with it being a possible economic resource for the country, which is certainly suited to leading the world in cultural tourism.[2] It is from the cultural dimension that Italy should start again. After all, a country such as ours, without sources of energy or raw materials, finds in the enhancement of its natural and historical heritage the only opportunities for growth and development.[3]

Our country has a natural immeasurable resource: touristic potential. The aim should be to promote the diffusion and knowledge of this heritage, and let people know about our heritage, both towards our fellow countrymen and abroad. To win the challenge of international competitiveness, Italy needs to focus on its history and art. This vocation continues to exert an important international appeal, with it being positive to take advantage of our special features, that are often penalized; cultural tourism should be organized as a real industry. Cultural tourism can, if well organized and protected, be an added value for Italy; the cities of art have a huge potential to growth and, if provided with new infrastructures and facilities, could be of decisive importance for future generations, offering numerous

[1 - 3] cit. Fausto Natali, *Lo spread culturale*, in "SITI" (ottobre/dicembre 2011)
[2] cit. Gian Primo Quagliano, *Patrimonio culturale e rilancio del Paese* (Intervista a Mario Resca)
[4] cit. Gaetano Sateriale, *Valorizzare i beni culturali per moltiplicare le opportunità di crescita del territorio*, in "SITI" (aprile/giugno 2007)
[5] cit. Massimo Carlesi, *I nostri beni culturali. Antichi problemi, qualche riflessione e qualche soluzione Ipotesi gestionali finalizzate alla sostenibilità della spesa pubblica*

significant challenges in the field of employment.

Italy should try to maker the culture of protection and enhancement of cultural heritage coexist with the new tourist and economic demands. The demand for cultural tourism is growing (art cities, exhibitions, museums, galleries, archaeological sites, churches and historic buildings show positive signs anywhere) and Italy can still play a leading role, but it must have the "courage" to transform its cities from places to contemplate in growth opportunities for territories. Cultural heritage can not be





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decontextualized. We can not ignore the fact that every monument, every building, every street, every city is located in a very specific context, in an urban and territorial frame that we can not ignore. In order for the immeasurable heritage of art and nature to best express the great potential it has, to a proper restoration must necessarily follow an effective enhancement.[4]

Enhancing to increase knowledge opportunities  and improve their mode of use. In this context, the management plans of UNESCO sites may play a basic role. The experience of Italian UNESCO sites also confirms the possibility of additional and new ways of valuing the Italian heritage. However, these tools should not be seen as a costly constraint which must meet only the management bodies. The management plan must be integrated with a strategic program of  interventions which converge on the skills, competencies and responsibilities at various levels. The alliance between the State, local governments and private entities becomes vitally important.

Our country has a natural immeasurable resource: the tourist potential.

Cultural tourism is an important business activity for several reasons:

- has a positive economic and social impact;
- establishes and strengthens national identity;
- help to preserve the existing heritage;
- it facilitates harmony and understanding between people.[5]

This sector in Italy pays the lack of innovation, coordination and diversification. Structural limitations, poor organization, lack of coordination and grueling delays hamper the development of tourism and slow the growth of the entire system. In a world, where most transactions are conducted via Internet, Italian companies are not yet fully market-oriented ; there is also a low diffusion, in the Italian territory, of accommodation capable of intercepting a medium-low application (hostels, bed & breakfast), which is becoming increasingly effective in tourist flows. Concerning node connections: our resources seem to work for isolated atoms, due to a lack of physical infrastructure and lack of projects to create and publicize integrated tourist routes (which can put together the different attractions). The Italian transport situation is a mirror of the problems of the country, a deficit that is first of all cultural among an idea of mobility that helps people to move and improve the livability of our cities. A more "European" model of traffic able to create real alternatives to road transport, may be able to change the scenario of Italian mobility.

However, if it is true that tourism can generate economic growth and employment, it is also true that its disordered development may cause serious environmental and social problems. The demand for tourist values is mainly, though not exclusively, demand for environmental and cultural values:

climate, nature, history and arts resources. Nevertheless, the conservation of these assets may be threatened by an excessive and disordered tourism development. Paradoxically, tourism can destroy tourism.

In the delicate relationship between tourism, environment and culture can indeed trigger a vicious circle: the attraction of many places for tourists can lead to an excess of tourism - the excess of tourism can lead to degradation of the environment - the degradation of environment inevitably leads to the loss of tourist flows. For these reasons,  a sustainable development, must be programmed, thus making tourism an element of exploitation and consumption of environmental quality and cultural territories. The environmental quality and enhancement of cultural, gastronomic and traditional, that is, all the specific resources of the territory, are increasingly becoming a strategic variable to compete in increasingly globalized markets and standardized. The future of the tourist industry can not therefore leave the preservation of the environment in which it takes place. Its competitiveness will therefore have to rely on the development of quality tourism, based on respect and a judicious balance between the natural, historical and cultural heritage.

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# Topic C
## *Italy and U.S.-Financial Mechanisms for Preservation*
**Fabiana Forte**

*Financing tools and mechanisms for preserving cultural heritage: some experience in the Campania Region*

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*Introduction*

In this age of globalisation and competition, along with the particularly difficult economic conjuncture, Cultural Heritage does not only contribute to the identity and "branding" of a territory, but also to its economic development (in terms of occupation, new activities, direct and indirect impacts, etc.). Its conservation is becoming, for many countries, a national priority, as set out in the International and European Conventions and Charters.

In Italy, Cultural Heritage has a considerable impact on related economic activities, especially cultural tourism[1]. As it is known, Italy has more UNESCO World Heritage sites than any other country in the world. Notwithstanding, the present state of the auxiliary services (audio guides, bookshops, gadget sales, cafeterias, booking, pre-sales, self-service restaurants and guided visits) and their capacity to generate income, does not show a positive performance. Although the Italian institutions are also equipping themselves to meet the growing requirements of the public and ever higher international standards, Italy still seems to lag behind other countries in this field. The RAC indicator (Return on Cultural Assets: the ratio between revenues from merchandising and UNESCO sites ) for Italy is significantly lower than that of other countries[2]. This is only one of the several paradoxes that characterizes our exceptional Heritage. If we consider the Italian cultural policy model from an economic point of view, it is a <<mixed economy system, with the

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public sector historically being the primary funding source for cultural heritage. However, due to heavy constraints on the national budget in the recent years, Italy's Government is strenuously promoting a more direct involvement of the private sector>>[3]. In this perspective, after briefly discussing the economic value of cultural heritage, the article analyses several financing mechanisms, programming and planning tools for preserving cultural heritage, focusing on some experiences in the Campania Region.

*The economic value of Cultural Heritage*

From an economic point of view, Cultural Heritage can be considered "a kind of scarce resource which may generate some utilities (direct or indirect, individual or collective)". The approach to Economic Conservation by the Neapolitan School of Monument Restoration[4] has identified several values for cultural heritage: from the 'social surplus value'[5] to the 'complex social value'[6]. On the basis of these different values, several evaluation methods have been proposed. In Italy, Carlo Forte was the first to set out a specific economic analysis for the renewal of the historic centre of Naples[7].

*Financial Mechanisms, programming and planning tools for Heritage Conservation*

Italy has developed a decentralized system for heritage conservation with the active involvement of local authorities in heritage work. At national level, the Ministry for Heritage and Cultural Activities (MiBAC) was created in 1998 to administer the cultural policies through its local administrative branches (Soprintendenze). Article 9 of the Italian Constitution establishes the country's obligation to protect and preserve the landscape as well as the historical and artistic national heritage. Legislative Decree No. 42, *Code of the Cultural and Landscape Heritage*, was passed in 2004 as the principal legislation governing heritage conservation. In Italy it is possible to identify several heritage conservation and "economic valorization" strategies[8]. First of all, the public subsides (considerably reduced over recent years): the MiBAC as well as the local and regional authorities provide

public funding, under different forms (direct contributes, tax relief, etc.). The Lottery fund was introduced with the 1997 Budget with a fixed percentage of the national lottery revenue being allocated to the restoration and preservation of cultural heritage. Bank Foundations, introduced by the Amato Reform in 1990 and established by local savings banks, play a key role in financing cultural activities. Fundraising and contributions from non-governmental organizations and private associations serve as another funding source. Further mechanisms for heritage conservation are tax incentives. It is possible to identify different forms: the exemption of the listed buildings from inheritance tax; the deduction from taxable income of all donations and sponsorship given by individuals and corporations; the allowance for property owners to deduct from their taxable income the expenditure incurred in the maintenance and restoration of their listed buildings. The level of VAT for restoration on properties is only 10% of the value of the work done, instead of the normal 20%. "Restructuring" interventions also benefit from the incentives (tax deduction of 36% or 55% ). Furthermore, protected buildings are excluded from the inheritance tax base and the annual property tax for this kind of buildings is applied on the base of the lowest rateable value for the land register area in which the building is located. Finally, individual taxpayers can donate 0,8% of their annual tax liability to the MiBAC in order to help fund programmes for the restoration of important monuments. In recent years, one of the main funding resources for preserving and valorising assets and activities in the cultural field is the European Structural Funds[9]. One of the most significant operational instruments aimed at activating building and environmental urban renewal is represented by the so-called "*Programmi Complessi"* introduced by the Minister of Public Works with law n.179/1992. In order for it to be applied, it is necessary to provide: a) integration of public and private economic funds; b) easy administrative procedures; c) access to the public economic fund by exam procedures. Urban Planning instruments approved by the Italian law, allows for various private or public restoration and urban regeneration proposals

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[14] http://www.urbanercolano.it/

to be presented. Since the beginning of the 1990s, a growing number of urban plans have been based on the so-called "equalization" (the equal distribution of developing rights to all land-owners involved into the plan) as well as the principle of the TDR (transfer of development rights), not only for the transformation of the areas, but also for the conservation of historic city centres.

*Some experiences in Campania Region*
Among the southern regions, Campania has the highest number of visitors due to its extraordinary Cultural Heritage. The ancient Roman Amphitheater in Santa Maria Capua Vetere (Province of Caserta) is second after the Colosseum in Rome. However, upon analysing its "use value"[10] disconcerting data emerge: 75 visitors is the daily average recorded in 2010, while the Colosseum records millions of visitors per year. This is one of the many paradoxes which characterizes our exceptional Heritage that, still nowadays, is not able to become a "lever for economic and social development"[11].

Nevertheless, it is possible identify some good experiences in several urban areas. In Naples, with the Programme to Restore Common Parts of Buildings in the Old Town Areas and outskirts ("Sirena Project"), a detailed activity of urban fabric renewal has been carried out. Since 2002 S.I.RE.NA. started its activities managed by a "joint stock consortium" between public and private shareholders, with public institutions as the majority partner[12.] The European Program "Urban" (2003) was the first integrated program in Naples to promote social and economic activities. The target area covers the "Quartieri spagnoli" and the "Rione Sanità"**.** Economic resources allocated for the realisation of the programme (€22,838,000.) have been divided among all the partners (Community contribution 46,20%; Italian State 37,65%; Naples City Council 16,15%)[13]. With funds from the European Community, Palazzo Donnaregina, in the historical heart of Naples, was restored and transformed into the Museum MADRE for contemporary art on the project of Alvaro Siza (inaugurated in 2005 with an investment cost of €45,476,000). In the city of Ercolano the Program "URBAN Herculaneum" has been financed by the European Program "Urban Italia" (overall budget of €48 million)[14]. Some experiences of the plans use "equalization" and TDR to stimulate conservation and valorization of historical heritage, involving private subjects, as in the Master Plan of S. Maria Capua Vetere, drawn up in 2004, (but never approved) as well as the Master Plan of Capaccio Paestum (UNESCO Site), in 2011. For the UNESCO site "18th-century Royal Palace of Caserta with the Park, the Aqueduct of Vanvitelli and the San Leucio Complex" the Management Plan is **currently under development, with the collaboration of Benecon (**Centro Regionale di Competenza per i Beni Culturali Ecologia Economia).

# *Topic D*
## *Italy and U.S.-Preservation Regulatory Mechanisms-Survey, listing, regulatory review*

**Marco Calabrò, Nicola Pisacane, Manuela Piscitelli, Fabio Converti, Enrico Formato, Giuseppe Guida**

San Leucio, photo by Rossella Bicco

# Urban planning and expropriation in Italy

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*1. Private property and expropriation.*

The aim of this paper is to give a general and overall description of Italian legislation concerning territorial governance in order to explain what the juridical conditions that permit urban transformations and their own limits are. In particular, we will see the essential characteristics of private ownership in Italy and the ways to limit this right in the case of public interest need (for example in urban planning).

Private ownership is one the fundamental rights recognized by Italian legislation. This right is significant when discussing territorial governance, because most of our national territory belongs to private citizens and not to the public administration. This is the reason why the Italian Constitution permits that, on the basis of specific conditions, the public administration can acquire private areas, through a complex procedure known as expropriation. Art. 42 of the Italian Constitution disciplines the exercise of right of ownership and its limits. In particular, the first paragraph sets out that "*Private property is recognized and guaranteed by the law, which prescribes the ways it is acquired, enjoyed and its limits in order to ensure its social function and make it accessible to all*". It is worth noting that the Italian Constitution also assigns private property a social value, with the possibility of putting limits. In other words, the law can (on a quantity or quality level) reduce the way of exercising the right of ownership only if it is possible to justify this operation in

function of the pursuit of a general interest aim. As we will see, another required condition (but only to expropriate the property, not simply to limit it) consists in the payment of an adequate compensation by the public administration.

### 3. Expropriation procedure.
### 3.1. Constraint apposition.
We can find the whole Italian discipline of expropriation procedure in one law, the d.p.r. n. 327/2001, called Expropriation Consolidate Law. Firstly, there are the several subjects involved in the procedure: we have the dispossessed, who are the owners or possessors of the area; the expropriating authority, which can be a national or local administration; the beneficiary, who can be the expropriating authority itself, or, in other cases, another public administration or a private entity (individual, association, cooperative) who obviously has the duty to realize a public interest activity. Not every area is legitimately expropriable: in particular, for obvious reasons, State property cannot be expropriated (it would not have any sense); but the same rules also concerns Ecclesiastic property, that has several privileges in our Country. As with other procedures, expropriation also has different stages, necessary to permit all the verifications required as well as guarantee the respect of the participation principle. In particular, when a public administration decides to expropriate an area, it has to place the relating constraint; then the same authority has to declare the public interest to whom the expropriation is connected; thus begins the fundamental (and problematic) moment of the determination of the compensation for the citizen; only after all this, the administration can issue the final measure. The public administration has several ways of placing expropriating constraints on an area. Generally, we can find them in city planning, or in specific measures entailing zoning variance. In any case, the constraint has to be linked to the following realization of public works aimed at general interest fulfillment. When it intends to place a constraint, the expropriating authority has to communicate to the interested parties (owner and possessor), the start of the procedure in order to allow the participation (through the submission of written observations) before the adoption of a final decision.

### 3.2. Domain declaration.
Once the constraint has been placed, the authority has 5 years to declare the eminent domain; in other words, if the public administration does not justify the expropriation with that declaration within 5 years, the constraint forfeits. In this case, the area is no longer constrained, but it does not the free exercising of the right of building, because the law establishes that the area becomes a so called "white zone": the areas in relation to whom the planner does not determine a specific

destination, hence the law assigns them a very low buildability index.

With the domain declaration, the public administration declares that the work responds to a public interest purpose and justifies the private interest sacrifice. In other words, this fundamental act is necessary to guarantee that the public administration action respects the Constitution's rules, expressively showing the social function able to justify the limits to the private property. We can find this declaration in an independent measure but, more often, it is implicit: it happens with a public work definitive project approval, or by implementing an urban plan approval, or agreement between public administrations.

Considering the negative impacts that this declaration has on private interests, the public administration has to respect some rules to act legitimately. First of all, the declaration has to contain the specific indication of the areas and buildings involved in the procedure; then, it is necessary to guarantee private parties participation, respecting an appropriate timeframe and modalities; finally, the declaration has to set the time-limit window for the expropriation order to be enacted (not more than 5 years).

*3.3. Determination of the compensation.*

Before acquiring the ownership, the public administration must pay a compensation to the expropriated citizens. The authority draws up the list of goods existing on the areas involved. Exercising his right of participation, the citizen can communicate the value of the area to the public administration, who has to verify the reliability of the value declared. Thus, the expropriating authority determines the provisional compensation and notifies it to the interested parties, who has to answer in 30 days. The owner can answer in three ways:

1) The owner remains silent. It means that he disagrees with the whole expropriation procedure, but does not want to oppose in this phase. The amount is deposited by the public administration into a Deposit and Loans Bank, to allow the public administration to carry on the procedure;

2) The owner accepts the proposal: in this case the unilateral expropriation procedure is interrupted and turned into a voluntary disposal agreement. Due to the lack of any opposition by the citizen, the amount is increased by 10%;

3) The owner does not accept the proposal. In this case, the compensation must be determined by a neutral party, not involved into the expropriation procedure.

To calculate the compensation amount law gives several criteria. The Italian civil code – which contains the fundamental rules concerning citizens rights and duties - establishes that every time the public administration dispossess a citizen, it must pay a fair indemnity. Nevertheless, how can we verify if this indemnity is fair? First of all, it does not have to be necessarily equal to the market value (in this sense, it is

not a price); but it is neither a reparation, because – considering the public interest involved – expropriation cannot be assimilated to an illegitimate act. Jurisprudence clarifies that the indemnity has to be determined in accordance to the characteristics of the area at the moment of the expropriation order. Thus, improvements made in order to increase the compensation are obviously irrelevant.

In absence of specific rules, in the past, the Constitutional Court established that the compensation would represent a "serious restoration" for the dispossessed. After many years of uncertainty on what we have to intend for "serious restoration", the Italian legislator enacted D.P.R. n. 327/2001, whose art. 37 draws specific criteria for the calculation. With regard to building areas, the compensation is equal to the saleable (or market) value of the area; with two exceptions: 1)if expropriation is aimed at implementing economic-social actions, the compensation is reduced by 25% (for example, in the case of the Public housing plan); 2)if, as already discussed, the provisional compensation is accepted, the amount is increased by 10%. With regard to unbuildable areas, the compensation is equal to the agricultural value of the area.

### 3.4. Expropriation order enacting.

The expropriating authority has to enact the expropriation order (final measure) within the effectiveness term expiry of the domain declaration (not more than 5 years). This measure marks the property transfer, and has to be notified to the owner at least 7 days before, indicating the day and hour of its execution, in order to allow the evacuation of the area. It always worth remembering that on the basis of the expropriation, there are general interests; only the demonstration of the existence of a strength functional connection between the expropriation and the pursuit of these interests can justify the dispossession. For this reason, in the case of not building of the public work within 10 years, the citizen initially dispossessed can ask for: 1)the declaration of the expropriation order forfeiture; 2)the payment of an indemnity, different from that one previously received for the expropriation; 3)the retrocession (even partial) of the area.

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*Drawing landscape*
*The case study of ʹRegi Lagniʹ*

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The increasing attention in recent years to sustainable development has provided new opportunities in strategic places that until a few years ago have a marginal role. In this direction moves the study and knowledge of the territory of the Regi Lagni in Terra di Lavoro, a site with environmental and natural characteristics, but at the same time, strongly compromised by human action. The study of historical documentary sources and the use of innovative methods of investigation are the tools for a complex knowledge of the landscape. The landscape, in fact, is a layering of signs of contamination and that the time dynamically overlaid and opposed to relinquishing a fragment, a possible representation of human and natural phenomena.

Already in 1311 an edict of King Roberto d'Angiò provides a document on the phenomena of waterlogging of the waters of the territories crossed by Clanio channel and about the committing abuses that already existed in those areas, also providing details on its tortuous and dimensional information with all sorts of barriers and deposits derived mainly from the operations of maceration of hemp and flax. The rainy seasons certainly did not improve the health of the area, even causing flooding of the surrounding land and epidemics, as well as the inability to cultivate the land. The channel, starting at the Tower of Fellino in the district of Nola, crossed a lot of territories, and finally flowed through the channel of Vena in Lago di Patria. Despite the detailed requirements that

the royal edict required for the immediate removal of all obstacles and to provide, each for its part, to return to the channel its lost efficiency, the consequences were not such good as to improve the quality of places, representing the waterway a barrier to the expansion of towns located along its path. In fact, the lack of codification of rules, the many privileges granted to landowners, in addition to limited economic resources, deleted every effort and attempt recovery.

It was in the mid-sixteenth century that started the early works of reclamation wanted by Don Pedro of Toledo through the hydraulic engineering interventions for the regularization of the flow of the river water Clanio. Gaetano Corporali, in the nineteenth century, based on knowledge of the places and on cartographic and archival research, documented that in the sixteenth century the territories of Acerra had fallen on the condition of villages depopulated due to the presence of extensive marshes due to the poor state besetting the route of Clanio. Two large marshes, formed in natural depressions , interested in south-east and north-west the site. The first was fed by rainwater from agricultural lands near Nola. The second dealt with the vast land called Pantano, Frassitelli and Sant'Arcangelo received continuity with the spring waters of Mofito and the Gorgone. The work that included the draining of swamps and the remediation of a large portion of Campania Felix, however, were soon abandoned due to the location of contrast baronial class that believed them to be unnecessary and related to the resolution of a minor problem. The area quickly became depopulated, population migrated in large part to the city of Naples, in less than a century, the resolution of the recovery of wetlands became urgent because it is completely abandoned. In the last decade of the sixteenth century the most serious epidemics of malaria led to an acceleration of the healing process.

With the knowledge that all steps necessary to make healthy a place should be preceded by a careful knowledge, a group of some royal engineers surveyed "the level, plant and section". The survey operations were directed by Rinaldo Casale. Site was visited also by physical Giovanni Bernardino Longo, the surgeon Emilio Azzolina, the expert Gregorio Orefice, the scientist Giambattista Della Porta. The measurements were transferred to a scale drawing by Mario Cartaro defined with the qualifications of "engineer and designator". The representation provides us with the first image of the Gulf of Naples in a topographic scale, of considerable interest. With proper colouring shows the areas of flooding of Clanio and bridges along the new channel, with their names. It is also notable finding the name of roads and towns.

Only a few years later began one of the most important works of hydraulic engineering and agrarian transformation implemented during the Spanish viceroyalty: the Regi Lagni. The interventions were born from the need to capture

the waters of Mefito channel, the mountains of Avella, the valley of the Quindici and the slopes of Mount Somma, all converge in the plain of Nola, and make them flow to the sea through a manifold. The creation of a network of canals that would regulate runoff into the sea water, resulting in the removal of most of the swamps, allowed the gradual recovery in agriculture of about ninety thousand hectares of fertile plains and the recovery of crops.

The works were planned through the ambitious plan of remediation by Domenico Fontana and directed by Giulio Cesare Fontana in about six years and then subsequently enhanced with the creation of new channels, new ways of bypassing the towns, new branches that promote watering of the fields and the power of the water mills spread in areas crossed by Lagni. For the realization of the works were employed hundreds workers engaged in expanding, deepening and especially in the correction of the yardstick by which Nola arrives at the sea, in the suppression of the natural channel of Vena, reaching up to Lago di Patria, in order to replace the winding bed of the Clanio with a bundle of three parallel canals and straights, in addition to tracking some complain. The guiding principle adopted in the work of reclamation was to separate channels of high water, which flows received rain from the mountain areas by entering in the main channel, those of shallow waters receiving the stagnation of the plains, directing them according to the slopes in the central manifold.

At the conclusion of the works was ordered to Mario Cartaro a survey with the update of the situation by donating to the Viceroy and two years later he was commissioned a paper similar to Orazio Spina.

With the Bourbons, in 1750, started constant maintenance and improvement works. These include the accommodation of more than six thousand plants in order to stabilize the banks of the levees and configuring that image of the landscape come down to us. Almost a century later began serious studies on the problem of remediation of unhealthy territories in Terra di Lavoro, in particular, were drained territories between Regi Lagni and Lago di Patria.

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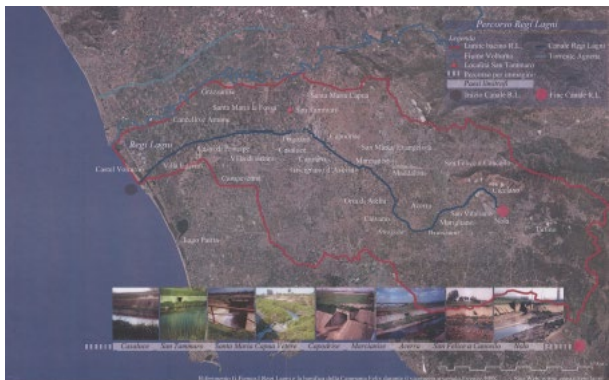
Multidimensional analysis
of Regi Lagni. Land
and landscape; history;
managment

## The legal regime of the "rights of common" for the protection of the landscape and the local identity

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The "rights of common" are the rights of a society organized and resident on a territory to profit from the land, from the woods and waters. Mainly refers to the right that it is up to each component of a community to gather fruits or other utilities from a land or other real estate owned by other public or private subject or by the same society, limited to the needs of his family. The rights practiced and still recognized today are to wood, pick up water and grazing animals, build shelters, gather mushrooms and other products of wood.[1]

This type of right belonging to a community represents one of the oldest forms of legal rights, which in recent times people are trying to rediscover and protect. The collective use of the soils was in fact practiced already in Roman times, despite the strict distinction between public and private property.[2]

The changes in the socio-economic conditions, in particular in the modern society, has resulted in the partial loss of the original purposes for the protection of the rights of common, such as the preservation of the right to use the wood as a resource, now looking more toward reasons of environmental protection, which recognize the right by the local population to the enjoyment of the landscape and a healthy environment.

It is significant to note that in this direction the recent legislation relative to the landscape considers relevant

[1] M. Vaccarella, *Titolarità e funzione nel regime degli usi civici*, BUP, Bologna 2008.
[2] V. Cerulli Irelli, *Proprietà pubblica e diritti collettivi*, CEDAM, Padova 1983.
[3] Convenzione Europea del Paesaggio, Firenze, 20 ottobre 2000.
[4] E. Sereni, *Storia del paesaggio agrario italiano*, Laterza, Bari 1972.
[5] A. Magnaghi, *Il progetto locale*, Bollati Boringhieri, Torino 2000.

also social identity processes that lead a community to recognize itself in the form reflected in the stratification of the territory on which it is established, and the testimonial values that lead to recognize in the area an archive of signs evocative of past events. [3]

The Italian agricultural landscape, for example, still bears the traces of Roman limitatio perfectly legible, with the rigorous demarcation of arable land, the system of roads and the water supply, that made roads and aqueducts characteristic features of many landscapes. Even today, these major lines of centuriatio affect the orientation of fields and rows, as the traces of boundaries and local roads, and even modern drainage works had to be put in this predetermined context, adapting to it its forms. [4]

Beside the material traces, the stratification of the territory has a strong identity that actively intervenes in individual and collective existence, in the mental, linguistic, perceptive, sensorial processes. The unique identity of each historical society helps in the understanding of the
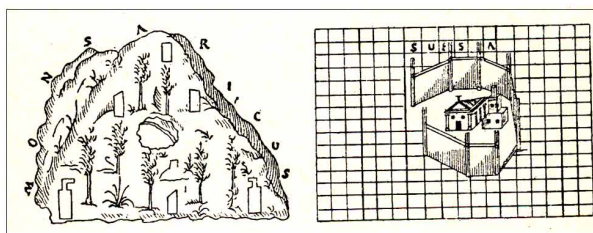


Roman centuriatio: 1. Assignments of lots and common lands in the centuriatio of Suessa; 2. The silva and pascua publica in a map of "gromatici".

foundational values of a city or a territory, and identifies with myths, rites of foundation, religion, identity, social relations, economy, etc.

This delicate balance between man and environment has been broken in modern civilization by urbanization forms which take no account of the vocation of places and limited resources, but impose their own rules standardizing any territory, erasing the characteristics, identity, complexity, burying land and agrarian landscapes in chaotic conurbations, unconnected with the local history and traditions.

The gradual release from territorial constraints has led over time to a growing ignorance of the relationship between human settlement and environment that had generated the history of places and their identity, unique, recognizable and unrepeatable. The destruction of the memory of an area makes us live in an indifferent site, deprived of the synergistic and sustainable relationship between the society established and the environment intended as subsoil, soil, water, climate, lights, colors, flavors, that interact with the building materials, lifestyles, economies, local cultures, creating an unique equilibrium dynamic and constantly changing that we call landscape.

The effect of this detachment, the loss of environmental awareness that all non-urban and urban civilizations, from the first Neolithic village, developed building sites with a clear identity, is the environmental degradation of societies that destroy their reproductive resources. [5]

The lack of protection of biodiversity and traditional landscapes in recent years has led to a dramatic simplification of the rural landscape, a time characterized by many different uses of land that formed the pieces of a rich landscape mosaic. Today, in many regions, pastures and mixed crops have almost disappeared, partly because of the abandonment of agricultural and pastoral areas, partly for requirements related to industrial agriculture, which imposes specialized crops reducing the variety. The consequence is the disappearance of many traditional landscapes and local production, and at the same time, the loss of memory of local traditions and practices related to land use, such as canalizations, stone buildings, dry walls, paths, fences, and even the use of ancient materials.

The recognition of "rights of common" in this context can be a defense against the urban sprawl, the destruction of the environmental and natural resources, the pollution of aquifers. The protection of common lands constitutes a valuable resource for the conservation of plant and animal species, and for the preservation and development of traditional activities, which may be become a resource for the future. As such, these assets can be considered both environmental and cultural assets, as them bind landscapes and territories

to their natural vocation, at the same time preserving the ancient traditions associated with those uses, which are the deep roots of our country.

The common lands over time have affected the area with its various balances, needs and emergencies, protecting the environment due to the legal rules of unavailability and inalienability, which prevented the alteration and destruction of places that are often unique. Obviously, this would not mean immobility, but respect and preservation, that is the possibility to take utility from the environment respecting the natural vocation of the land, especially if it has a particular value, for example where is occupied by valuable crops.

The common properties are today a defense of culture and housing identity, beyond the historical role played in the past to ensure the material livelihood to local populations. The maintenance of the rights of common means preserving the roots of the inhabitants to their own territory, which is the place where they carry out activities related to the traditions and ancient crafts that in the past have played a very important economic role, just think of the grape of products of brushwood, firewood, grazing, livestock farming.

It is evident from these considerations how the link between the protection of the rights of common and the landscape is very narrow. The recent legislation considers landscape as a "value inherent in the land" that cannot be protected occasionally, with a series of constraints, but with an organic discipline that analyzes the peculiarities of the territory, and a long-range planning that takes into account the different vocations of areas and the transformations that have already occurred, not only to pursue a conservative function, but also for enhancement.

From landscape protection cannot be excluded common lands, which constitutes a large part of Italian territory, the protection of which contributes to the protection of the landscape, ecosystem and environment.

Manage the landscape means to plan and promote it from the perspective of sustainable development. The common properties, intended as a set of economic assets and natural heritage, is important both from landscape and economic points of view, and can be enhanced through efforts to seek a strategy of managing the resources on it, through the involvement of local holders of common goods, to promote the productivity of the places with an alternative use (recreation, sports, tourism), or complementary (related to the use of agro-forestry-pastoral resources) to that practiced locally.

## Representing the plan: between spatial dynamics and conservation of urban space

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In the context of continuous planning and land management, both at a European and Italian level, the importance of having ex-ante detailed data on the effects and effectiveness of future management actions of the territory that are being planned and defined has been recognised.

The basic rules for the representation of the territory and the processing of geometric data are always the same. In fact, maps make it possible to translate the reality through a code and with graphic devices, conventional symbols and descriptions into a two-dimensional representation.

Describing the whole environment "specifically" often becomes difficult. A great deal of information is required to fully understand a territory as well as a phenomenon that interests it or identifies it with precision. It is no longer enough to represent a particular point in the territory from a two-dimensional perspective, with it becoming multidimensional.

The communicative aspect is even more evident when considering not only the role of information but also the decision-making one of the data that is conveyed. The information should always be detailed, in order for it to easily represent the changing phenomena of that asset over time. The descriptive and cognitive aspects of the territory, however, can be further enriched and enhanced by systems that make it possible to be integrated with other elements, be they urban, morphological, natural or economic. This is an opportunity to make it a more

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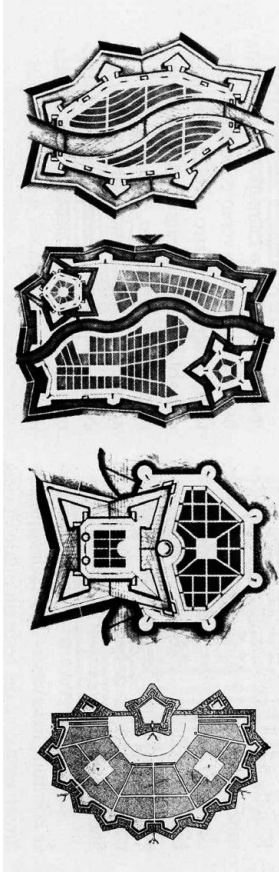
complex but more complete representation due to it connecting the graphic elements at different scales of detail with other information, thus enhancing the representation and improving management and communication.

Therefore, the integration of geographic and cartographic data is useful, with it being structured in a conventional way, using multimedia which includes images, videos and sounds.

From what has been discussed, it is worth noting the enormous value given to this irreplaceable source of historical data and information, which can be used to obtain a thorough knowledge of the area not only as a whole but also in particular detail. It is important to "discretize" the territory, analysing it in detail, measuring the asset, the neighbourhood, in order to know how, when and why it changed.

Knowledge acquired through historical cadastral sources about the transformations and changes to the territory or the asset as well as the causes which caused them, constitutes a fundamental element for the planning and management of the natural and built territory .

An analysis of the historical maps makes it possible to understand how the territory evolved and the historical choices made as well as assess the evolutionary dynamics, the effects on the present structure of past actions and how current interventions may affect the future.

Re-learning about certain distinguishing past features of the territory and re-constructing the perception that contemporaries had about it are an enormous contribution of historical maps when representing the area. Thus, by comparing past and present, it would be possible to anticipate events, learn about current trends and predict future ones, with positive consequences that can be easily foreseen.

The evaluation dynamics are developed by acquiring knowledge of the connotative nature of the property or the areas to be dealt with, in relation to the context in order to establish their relevance to a broader significant system that identifies the landscape within which that building or that area

lie. This analysis sets the invariants of the whole or at least, the elements with which to benchmark the project in order to ensure a cultural awareness to the "dynamic protection" intended as an innovative aspect of the "Galasso" law.

Taking this concept of knowledge into consideration, it is necessary to examine the extent of the territorial modifications produced by the project, analysing both the changes introduced in the asset of the protected territorial representations, with it being in "composition" with the territorial context. Regarding the protection of the structural plots of the territory, the modifications of continuity of the elements of the natural landscape should be examined along with the conservation of those elements as well as the historical and artistic ones.

It is not always necessary to intervene through the' "invasion" of new architectural landmarks and infrastructures but rather operate on existing ones, through small interventions to repair the crumbling parts of the territory.

The analysis/project relationship should be initially examined using several basic valuation parameters.

Analyzing the cities, the plan should facilitate the decompression of the historic centre, while creating multifunctional activities, not in immobilizing non-places, but taking specific and consequential decisions. In this perspective, the reading of the territories implies a continuous reformulation of the images and established descriptions, through the use of keys capable of understanding the interrelation characteristics obtained from the qualities that every layered place is in a position to assert, be they historical, morphological, environmental or social.

For example, in the east part of the city of Naples, about 45 interventions are planned to be carried out by private investors, but not all cities have these opportunities to redevelop brownfield or underused sites. These interventions will require consulting with the local authorities in order to ensure that the interventions are not carried out wrong due to the fact that the urban planning instruments that control the area are good but do not take account of where they are applied. This often results in the historic urban fabric
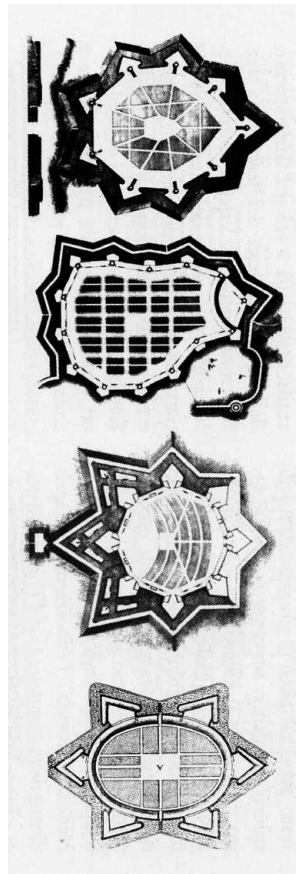
Francesco De Marchi piante città.

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having difficulties in implementing compatible development policies, with it being impossible to bring to the spaces of the latter a recognizable formal matrix, thus becoming an expression of the complexity of the contemporary city and often a desire to distance it from an unknown planning.

The institutional mission of the local administration should be extended and renewed, reducing the emphasis on the political and administrative role of authority, in favour of cooperation with other stakeholders and inclusiveness as a basis of legitimacy of democracy. In addition, it should increase the importance of coordination of a plurality of players at different levels.

Cities today, more than ever before, are rapidly changing and in particular with brownfield sites and the outskirts being affected by the regional dynamics that reconfigure the city and are given a new role.

These interventions should sometimes leave the plans in order to be more effective, with multiple processes such as galvanizing the territory with local development agencies, which bring together more players, creating infrastructures in the area along with stations, which are an important element for the supply network of a region crossed by flows.

It is also known that the same local administrations can create local development from below, creating a real inter-local development network (with other provincial and regional authorities). It is evident that the need to overcome the traditional segmentation of the interventions and policies in order to give appropriate responses to the multi-dimensional problems of the local context, implies and reinforces the introduction of a greater level of internal coordination, and project management procedures, and, in some cases, the definition of specific structures.

It would be appropriate if the administrations created more streamlined regulations, addressing a  specific programming because the rules included in the plans immediately age with time. From urbanism to the management of the territory.

The city should be concerned with improving the quality of urban life with eco-friendly methods, as well as its logistics, businesses and safety, and not a social replacement in the historic centres but with political integration and urban regeneration so that these areas remain super artistic sites.

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## From cataloguing to project. The conservation of the historical centre of Visciano
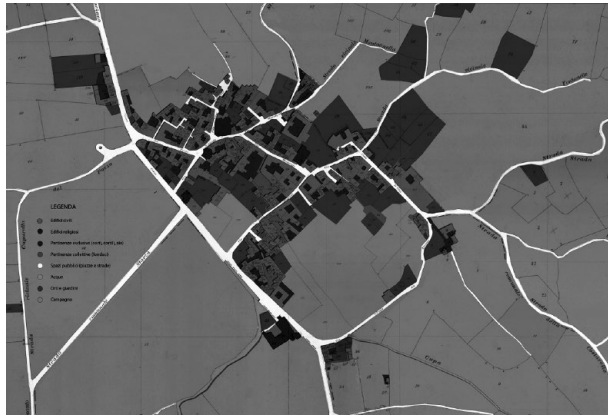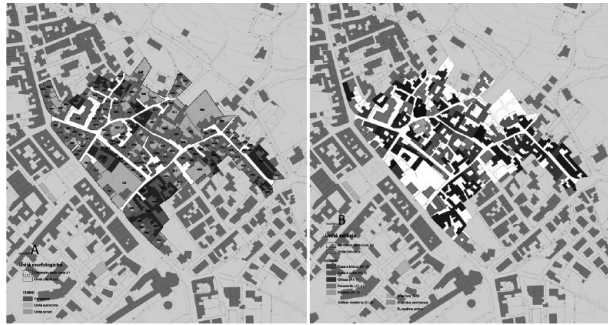
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This paper gives discusses the conservation project for the historical centre of Visciano, a small urban village in the hills of Irpinia, to the east of the conurbation of Nola.

The project was developed as part of a General urban plan coordinated by Leonardo Benevolo which I attended as associated designer[1]. Convinced supporter of the need to include in the General Urban Plan a specific, detailed, regulation of the historic urban centre, Benevolo and his studio (Studio Architetti Benevolo) have been working for decades using a methodology that brings the best of urban Italian tradition to professional practices: "type-morphological analysis" introduced by Saverio Muratori, "integrated conservation" that was initially tested in the experience of Recovery plan for the historical centre of Bologna (where Benevolo was also one of the protagonists) and finally codified in the Charter of Amsterdam (1975).

The theme assumed a particular interest in Visciano, due to both for the nature of the place (an old fifteenth century centre, eccentric, foothills and concentrated, even in partial relationship with the natural setting) as well as the presence of a previous Recovery plan drawn up after the 1980 earthquake by Agostino Renna. The comparison between the reality "photographed" by Renna and the current condition – but also the comparision between the "recovery"

The historical town at 1897 (drawn on the basis of "Catasto di Primo impianto").

Conservation project: typological and morphological settings.

project of the Irpinian architect and the "conservation" approach of Benevolo – can draw considerations that I consider to be highly interesting:

1) "conservation" implies knowledge of reality. It operates not by analogy but by the patient comparison between the series and historical land-depth knowledge of the condition of the premises and functioning mode of the urban organism. Operationally, this translates into the definition, within a hypothetical perimeter of historical town (roughly coincident with the "Castato di primo impianto", the first

Italian register plan, 1897) of a "historical net", i.e. that which has survived to the most recent transformations. Recognized within this perimeter, a grid formed by "morphological units" is formally and functionally defined. These units – whose boundaries are often independent of the current fragmentation of ownership – outline the "structure" of the ancient settlement that currently survives. The morphological classification of the 142 units recorded reduces the historical town into "complex", "serious" and "autonomous buildings" and noted, in relation to the open spaces, the presence of environmental factors and historical value: orchards, gardens and trees, fences and floors made with local stone, sinks, ovens, fountains, etc.. Within this first grid – a division of the space that operatively introduces a kind of "minimum area" which relate projects to the whole building even in the case of a partial intervention – are then defined in 201 "building units" (each detected and classified typologically). For each " building unit", compatible uses and ways by which it will be possible take action (specified by a Guide of the restoration attached to the Plan) are then set. It is important to note that, from a conceptual point of view, this technique of cataloguing/planning implies the recognition of an equal role between "exceptional" and "basic" building, as the first without the second would not be a part of the urban texture; this may be just something like a empty quote. Thus, passing from the logic of "monument" and "exception" to a more complex concept of "integration".

2) this philosophy, apparently based on a simple recognition of places and a philological reconstruction of their historical evolution, leads, unexpectedly, to very radical design solutions, more glaring when compared to the project of the "neo-rationalist" Renna. While, in fact, the reconstruction plan of 1981 ends up working with "Haussmanian" tools such as "demolitions" (Piacentini) and "rarefactions" (Giovannoni) and, on a more global scale, aiming to mend the old centre with the modern city (including through a ring road road, only partly realized, that would separate the town centre from the nearby hills), our project reconstituted the historical settlement as an autonomous part, even marginal to the modern urban aggregate. More than with the modern city, "our" settlement searched for relationships with the natural landscape and reintroduces – in contrast to vehicular traffic – the time of slow-moving and walking: a public pedestrian space that from the historical town would creep into modern Visciano and natural contexts. Instead of the "functionalist modernization" of Renna, we search for the "porosity" of the courts and farmyards, the "intra-moenia fields" that become the nodes of a new system of public open spaces. No need for new squares: looking hard enough, they already exist in the ancient urban texture, even if they do not have the

stereometric shape and the "out of scale" size that modernity has taught us.
Overall, the plan breaks down the rhetoric of the "historical centre": rather than reinforcing the centripetal model, it consolidates a duality of meaning and function, in which the ancient and modern parts are in mutual dialectical lasts. So much so that, for example, the recovery of the centre, finally passes to local "restores" (of the open spaces but also of certain construction types), with the identification of incoherent modern units to relocate in special areas stimulated by the General town plan. This another advantage due to having developed the Recovery plan as part of the new General urban plan.

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In Italy, the crisis of the common planning model is not only an endogenous crisis, but is also a highly complex issue, triggered by the recognition that the "traditional", comprehensive, functional urban planning model is practically no longer usable in its substance, or at best, has the sole function of control and regulation.

In this scenario, cities and territories are apparently central elements, but basically remain in the background, away from political and planning agendas, both still devoted to developing and guiding the urban spatial growth, even where there is no longer urban growth or the growth follows other rhythms, parameters and directions. The "urban sprawl", for example, reminds us that the urbanization trend, with its new forms, proceeds through new ways and has the power to create centrality and new nodes, density and sprawl, interstitial areas as well as new centres.

*Plans and Projects*
However, facing these questions – and the consequent challenges -, the Italian planning system has not remained motionless. Over the last decades, in Italy, several options have been put in place: often experimental attempts, quickly failed, but also relevant proposals, especially with regard to the existing heritage of the city.

The methodological and operational fracture between

architecture and urbanism, operated by Rationalism, whose role was to keep them conceptually aligned and complementary, had a response in the 1980s, when the first attempts were made with an inner urban tool, the "urban design". In those years, stimulated by a general distrust of the unrealistic excesses (especially during the 1960s and 70s) and the simultaneous ineffectiveness of "deterministic" planning, several parts proposed the use in plans (particularly, in town plans) of "project explorations" for specific urban areas: spatial models of intervention, in order to better identify the plan purpose. The use of these tools had a triple role.

First of all, it helped planners to check rates, heights, density, and so on, through the tridimensional representation of the project: what could be called the "measurable" parts of the town. Secondly it provided a "vision" of the future city to the people who had to manage the urban plan.

Lastly, the joint action of plans and urban projects, made the instrument more communicable and encouraged the opening of the discussion among the actors (politicians and stakeholders).

A good example is the Masterplan of Turin, designed by Italian architects Augusto Cagnardi and Vittorio Gregotti. In this plan, the effectiveness of metaphorical images (e.g.: the "plug") was complementary to the tridimensional representations of the most important urban areas, assuring the coherency of the transformations in accordance with the plan, also using the so called "complex programs" (e.g.: Urban Rehabilitation Programs).

In the following few years, since the second half of the 1990s, urban design has recalibrated its functions, going back to common routine planning activities, through the use by the public sector (particularly in transforming and regenerating existing cities and historic parts) of the wide range of "complex programs" (eg Urban Rehabilitation Programs or Programs of Urban Renewal).

The undoubted ability of the urban project "to reveal opportunities and hopes" can readmit architecture into the

Aerial view of public housing neighbourhood in Castellammare di Stabia, Naples.

Section of the neighbourhood.

Tridimensional view along the railway.

process of city transformation by new ways, fostering the ability to compete for the definition of new central nodes and new forms of metropolitan life, that the fundamentally rhetorical nature of the rational-comprehensive Italian model plan failed to propose.

*A case study: urban renewal in Castellammare di Stabia*
The theme of the waterfront, its conversion or redevelopment, is strategic not only for the functionality of the ports, but also for planning a new urban quality: an issue that affects not only big cities and valuable areas, but often also "peripheral" sites, characterized by architectural and environmental degradation. In these cases, the intervention on the waterfront can become an opportunity for even larger impact on disadvantaged surrounding areas, providing infrastructures and facilities.
The case study will attempt an analytical examination of the outlined assumptions by analyzing the recent intervention of the Port of Castellammare di Stabia, the "Marina di Stabia", analysing the boundaries, characterized by the widespread presence of public housing neighbourhoods, which are in a state of profound decay and still not included in the redevelopment project. In such cases, urban and architectural design are considered devices through which to cope with the environmental, economic and social issues of regeneration, delivering aesthetically and functionally valid outcomes.

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# *Topic E*

## *Italy and U.S.-Preserving Sacred Structures-Special Issues and Procedures in preserving historic churches and similar resources*

**Pasquale Argenziano, Alessandra Avella, Maria Di Gabriele, Ingrid Titomanlio, Italia Arboretto, Mariagiovanna Palmiero**

*Three-dimensional survey and modelling as a first approach to the preservation of sacred sites. The case study of the historical Cemetery in Naples. From the real configuration to a multidimensional database.*

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In this paper, a study on architectural surveying methods and techniques by laser scanning technology, applied to some chapels located in the Monumental Cemetery in Naples is presented[1].

By deduction, the geometric and morphological characterization was aimed at creating a 3D database, implemented with the spectral (NIR), colorimetric and photorealistic data, that are useful for an accurate modelling of textured surfaces[2].

The founding of the Neapolitan historic cemetery dates back to the Napoleonic decade, when the edict of "Saint Cloud" was also applied in Italy (1806); this law required the construction of suburban cemeteries in every city. In 1813, the King of Naples, Joachim Murat decreed the construction of the cemetery according to Francesco Maresca's draft, which provided a large garden for the dead extended on the hill of "Poggioreale", a pleasant site where the gardens of the Aragon royal palace (15th Century) were located. With the Bourbon restoration, the cemetery was only partly constructed and the work continued according to the general plan of Maresca: the Doric church is part of two main cloisters' system, and represents the settlement mainstay around which the great English landscape garden is developed with the burials, chapels and buildings of the congregations[3].

The survey carried out by the working group[4] focused both on the procedures for the metric data

[1] The study is part of a wider study conducted under the Scientific Advisory entitled "Progetto di Ricerca Applicata per la Catalogazione dei Beni Cimiteriali", carried out by the City of Naples - Servizi Cimiteriali – and the School of Architecture "L. Vanvitelli" of the Seconda Università di Napoli.

[2] This topic is covered in detail by A. Avella in the next essay: *The Monumental Cemetery in Naples: an 'open-air museum' to preserve through knowledge acquisition. The photorealistic and colorimetric characterization of the 3D surfaces from 'point-cloud' model.*

[3] On this subject, see Mangone F. (2004), *Museo a cielo aperto. Guida al Monumentale di Napoli,* Massa Editore, Naples.

[4] The direct and instrumental survey, the next processing step, and the photo-realistic

integration, acquired with different techniques, as well as the wider topic of the discrete/continuous combination in architectural surveying by laser scanning devices[5].

The integrated digital surveying operations allowed for a "layer geometry" definition that is especially important to the multi-dimensional digital modelling of the Monumental Cemetery in Naples, in reference to the Multicriteri@ Analysis methodology.

In the first step, the planning, settling and measurement of a geo-topographic network along the Cemetery were made; then, each chapel was scanned by 3D laser scanning.

The geo-topographic network, made up of a large number
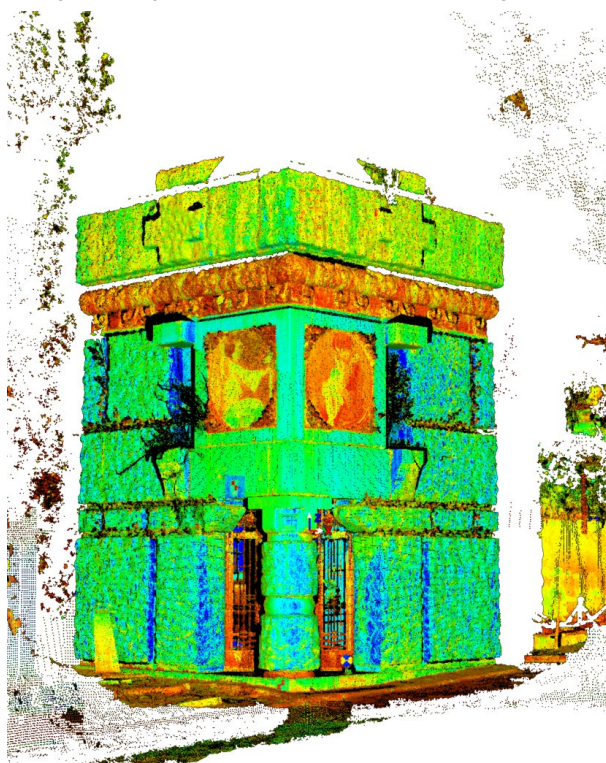
of benchmarks, was used to report the 3D chapel model mutually as well as choose a geodetic and permanent system that could help to integrate and compare further measurements.

The benchmarks' georeferencing operations were performed with GNSS antennas: each benchmark was defined by its WGS84 coordinates and drawn according to the UTM projection system (33 zone)[6].

In the Eighties, laser scanning technology was developed in USA military laboratories in order to detect with accuracy and speed large areas of territory by satellite or airplane, as well as continuously monitor the shipyards and aircraft ship. Marketed in the USA since 1993, this technology

modeling were conducted in teams by: Fabrizio Agnello, Pasquale Argenziano, Alessandra Avella, Mirco Cannella, Carmen Lagrutta.
[5] The instrumental surveys were performed with digital equipment owned by the CRDC Benecon - Laboratory ARS Immaterial Factory - under the scientific coordination of prof. Carmine Gambardella.
[6] The local topography network was attached to the National Geodetic Network IGMGPS95, taking as the benchmark, the trigonometric vertex VTP49, existing in the Seaport C. Marinella of Naples.
[7] On Multidimensional analysis, see Gambardella C. (2003), *Le Vie dei Mulini: Territorio e Impresa*, ESI, Naples; Gambardella C. (2006), *Identità e contaminazione*, in Spazi e culture del Mediterraneo, Giovannini M., Colistra D. ed, Edizioni Kappa, Rome, pp. 17-23.



Caracciolo di Santobono (1916-1919). Integrated digital survey: photorealistic acquisition, point cloud model and 3D textured model.

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has experienced a continuous scientific-technical evolution, combined with the significant distribution in the world market: both public research institutes and private companies – specialized in remote sensing and precision engineering – have these instruments, both airborne and terrestrial.

According to this technology, a natural or manufactured object is scanned by a laser beam and reproduced in more or less dense points, depending on the spot definition degree or the distance between the laser sensor and the measured object. The scan result is a "point cloud" in a three-dimensional space where each point is characterized by the three Cartesian coordinates and the value of the 'reflectance'. The latter is a function of the material constituting the object, the incidence angle of the laser beam and the surface and environmental temperature.

The correspondence between the coordinates set and the ideal concept of the cloud is not merely formal: the points are in a 3D space without any mutual constraint; each point is uniquely identified and defined by the XYZ coordinates, referred to a 'local system' (the sensor barycentre) or "absolute system" (geo-topographic network).

The point-cloud model constitutes the "fundamental geometric layer", and thanks to its intrinsic characteristics can be considered a 'digital data base' in which each point of the cloud corresponds to a tabular row with its own ID, and the absolute coordinates XYZ are the three fundamental columns.

This methodological planning could help to develop numerous aspects and applications:

- the georeferenced point cloud can be sectioned along coordinated plans to create two-dimensional graphs (the usual architectural representation: plan, elevation, section), and be modelled in virtual and/or photo-realistic 3D space, to enjoy captivating views to mimic realistic consistency of the object (see A. Avella);

- the absolute orientation of the 'point-cloud model' allows for multi-temporal analysis, that is a critical engagement with further geometrical measurements (3D laser scanning, photogrammetry, surveying) for the characterization of surface deterioration or structural stability;

- the point-cloud table structure allows for a continuous implementation according to the multidimensional model, in which every scientific investigation (by specific SI unit) can be linked to the XYZ coordinates and ordered, analyzed and put in relation to the whole, according to a unique multilayer planning[7].

## The Monumental Cemetery in Naples: an 'open-air museum' to preserve through knowledge acquisition. The photorealistic and colorimetric characterization of the 3D surfaces from 'point-cloud' model

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This paper presents the results of research[1] dealing with the modeling of textured architectural surfaces by 3D geo-referenced laser scanning data, applied to several chapels located in the Monumental Cemetery of Naples.

The Monumental Cemetery, the original core of the much larger Poggioreale Cemetery, on the basis of its historical and cultural value, the pricelessness of its tombs and statues, the large number of chapels and churches contained within it as well as the 'Square of distinguished men', can be considered an 'open-air museum' of architecture, statuary, and memory, in such as to discover, protect and improve through the survey of the site.

Founded in the early nineteenth century through the Napoleonic edict of Saint-Cloud, which was applied to Italy in 1806, it was built on the lovely and panoramic hills of the 'Poggioreale'. The nineteenth-century cemetery offered a wide repertoire of styles, trends and artists. In the chapels, which are scale models of ecclesiastical architectural styles, can be recognized the characteristic features of the work of the masters of various Neapolitan architecture schools.

Walking along the avenues of the cemetery, it is possible to see the multiple transitions of the languages and various changes in taste that have accompanied it in time: from a variety of forms of aedicule since its foundation to the expressions of the neoclassical

style, declined into the Greek and the Pompeian ways, and to the Gothic of the thirties in the nineteenth century, to the numerous stylistic expressions adopted in the following decades - neo-Egyptian, neo-Byzantine, neo-Romanesque, Renaissance - with the rise of eclecticism, up to the possible combination of different styles. With the Liberty experience, present in Poggioreale with several interesting examples, begins a relative emancipation from the imitation of the past in simplified forms[2].

The study carried out by the research group[3] focuses on procedures for the integration of metric data acquired with different techniques and issues related to the discrete/continuous combined detection of architecture by laser scanning equipment. The survey activities carried out[4] on the Monumental in Naples, a 'field' to investigate and explore with rigorous methods, constitute a research experience that is configured as a paradigmatic
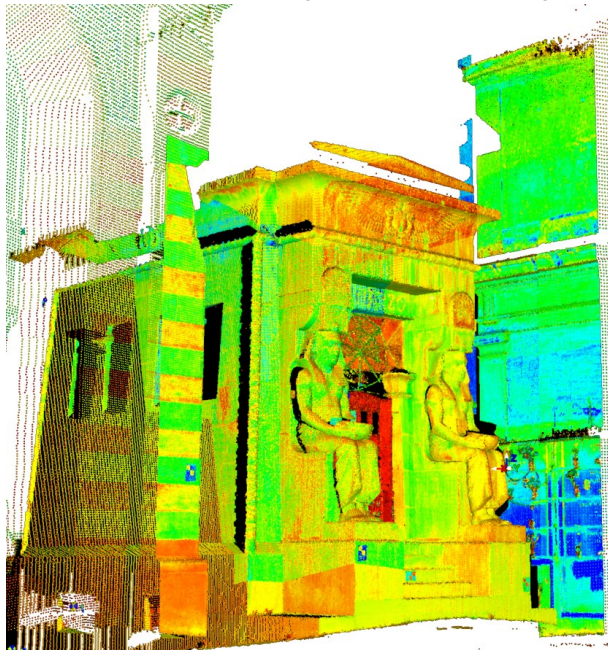
methodological example of the analysis and critical 'n' dimensional[5] reading of the object under investigation. From the general to particular, the geometric and morphological characterization aimed at constructing a 3D database based on the spectral, colorimetric and photorealistic dimensions,[6] from which to extract geo-referenced data for the 3D modeling of textured surfaces in the visible spectrum (nm) by photos and spectrophotometric sensors.

An initial digital model of the chapels was obtained from the clouds points through the automatic extraction of a surface pattern in a triangular mesh, obtained by the interpolation of the cloud points. The distribution of the triangles, conditioned by the step taken in the scanning process, is almost homogeneous. Therefore, a flat surface is described with the same density as the triangles of a complex surface. Consequently, a surface model is

Di Marzo Chapel (1893). Integrated digital survey: photorealistic acquisition, point cloud model and 3D textured model.

generated, which is excessively detailed for the surfaces of a simple geometry but inadequate to describe complex surfaces. In this study, an alternative solution is proposed, with a "smart" reduction in the number of polygons, through a discretization process: every plain, sphere or cylinder – describing the chapels surveyed with the 3D laser scanning technique – is likened to a single geometric element that best approximates the corresponding portion of the cloud points. It is clear that the discretization involves a slight loss of definition, in that, the surfaces of a structure do not accurately comply to the corresponding geometric surface. The disadvantages of this simplification can be overcome by extending it to the entire physical reality, i.e. the notions of flat or straight are abstractions and simplifications that are used to interpret or prefigure a constructed reality. The 3D model produced at the end of the process represents the geometric and metrical features of the structure.

The post-processing aimed at the use of the digitally designed three-dimensional for the visualization and rendering require a conversion of the analytical model into a triangular mesh surface model (numeric). The result of this process is a new mesh, in which the distribution of the triangles is linked to the shape of the surfaces, unlike the mesh automatically generated from the cloud points, in which the distribution of the triangles is almost homogeneous. The next step in the construction of three-dimensional model of the chapel in question was dedicated to the "mapping" of 3D models by the acquisitions of photographic and spectrophotometric sensors[7]. Through the integration of such digital instruments we managed to characterize the architectural structure's surface in the visible spectrum - or in the electromagnetic range of 360-740nm - and to implement, through the relationships between points and coloured pixel, the 3D model with other 'dimensions', or the correspondent 3D database. The mapping occurs through a process of *texture projection* that determines a correspondence between the pixels of the texture and tridimensional model.[8]

The map projection consists in the image raster of the three coordinates UVW, defined by the mapping, connected to the analogous XYZ coordinates of the model, which determine the spatial position of the objects. The textured 3D model combines what in literature has always been defined, namely the tectonic properties of the structure – usually described with graphic or physical patterns – as well as the quality of the materials and colors of the decorative layer and coating materials, which is often only photographically documented.

# The design of a functional conversion of Ecclesiastical Architecture into Auditoria for Concert Music with a multi-sensory approach. The experience of the church of Santa Maria Maggiore in Naples

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In the recent times, we frequently witness the reuse of monumental buildings, often disused, through restoration and functional conversion interventions.

Current literature shows how this new tendency concerns religious buildings converted into concert halls.

Nevertheless, to make these spaces suitable for music representations, several architectural modifications are necessary, with these modifications having to met certain constrains connected to the preservation of the cultural heritage of the sites. These complex operations often require a compromise between the need of architectural modifications for its new destination, the duty of protection and conservation of the monument considered as a cultural heritage and the subjective judgment of the public. The conversion of churches into music auditoriums is quite problematic because of the interventions needed to reach acoustic sufficiency for the concerts.

In this paper, a preliminary acoustic study of the baroque church of S.Maria della Pietrasanta in Naples (Italy) for its conversion into a concert hall is presented. Several architectural, non-invasive and removable solutions are presented in order to control the acoustic parameters without modifying the emotional sensations of the visitors. Through an immersive virtual reality system based on the auralization and visualization of the solutions, a sample of visitors and experts could express their judgments on the proposed projects. This study based on an audio-visual method could obtain a promising response in

validation of architectural and acoustic projects, simplifying the compromise between the different aspects.

*The baroque church: acoustic analysis and project alternatives*

Being built between 1653 and 1678 in baroque style, the church S. Maria Maggiore della Pietrasanta is located on one of the most crowded touristic streets in the historic center of Naples (Italy). It has approximately 1380 m² of ground floor area formed by side chapels, a central dome and an apse. Having no partition between these parts, the church has approx. 28410 m³ of single volume covered with multiple domes, one of which, the central one, reaches a height of 50m from the ground floor (Fig.1). Ceramic tiles with painting
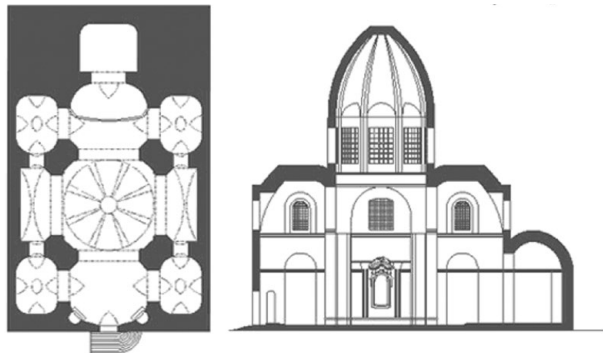


Church of Santa Maria Maggiore della Pietrasanta: plan and section.

Acoustic parameter analysis of different scenarios.
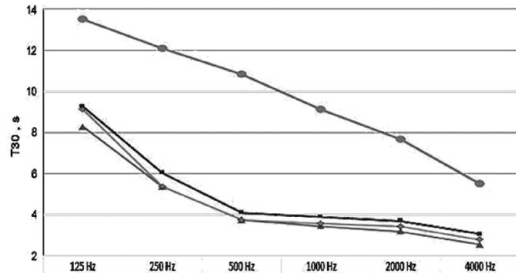
Render images three different design solutions and current situation.



| | 125 Hz | | | 250 Hz | | | 500 Hz | | | 1000 Hz | | | 2000 Hz | | | 4000 Hz | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | T30 | C80 | D50 | T30 | C80 | D50 | T30 | C80 | D50 | T30 | C80 | D50 | T30 | C80 | D50 | T30 | C80 | D50 |
| Scene 1 | 9.27 | -1.90 | 0.21 | 5.37 | -1.90 | 0.57 | 3.74 | 5.09 | 0.00 | 3.44 | 3.10 | 0.65 | 3.15 | 5.00 | 0.54 | 2.54 | -0.10 | 0.49 |
| Scene 2 | 9.25 | -6.20 | 0.17 | 6.04 | -3.00 | 0.30 | 4.10 | -0.20 | 0.45 | 3.90 | 1.00 | 0.50 | 3.69 | 1.40 | 0.50 | 3.05 | 2.60 | 0.56 |
| Scene 3 | 9.11 | -7.30 | 0.14 | 5.37 | -3.50 | 0.29 | 3.74 | -0.10 | 0.48 | 3.56 | 0.50 | 0.49 | 3.43 | 0.70 | 0.48 | 2.78 | 1.80 | 0.54 |
| Current situation | 13.52 | -9.50 | 0.08 | 12.10 | -9.00 | 0.09 | 10.83 | -8.40 | 0.10 | 9.12 | -7.60 | 0.12 | 7.67 | -6.80 | 0.14 | 5.50 | -5.00 | 0.20 |

for the ground, plaster with partial fresco for walls and domes, marble for balustrade and altar, and also partial baroque decorations of stucco were used in the original building. The church, with existing geometry and characteristics, has non-optimal acoustic parameters to be used as an auditorium for concert music.

In order to obtain better acoustic parameters for the new function of the church, three various design solutions were prepared, with the use of analogous materials in different positions and lay-out, resulting in similar acoustic improvement, but diverse visual impression. The acoustic response of the design solutions has been analyzed with the Odeon room acoustics software (Fig. 2).

The proposed scenarios and design solutions were:

Scenario 1 (Fig.3): axial disposition, lateral wall absorbers, curtains to separate lateral aisles, a curtain covering altar, that separates the apse, Plexiglas reflecting panels over the orchestra.

Scenario 2 (Fig.3): transversal disposition, lateral wall absorbers, curtains to separate lateral aisles, the altar is visible, the orchestra is closer.

Scenario 3 (Fig.3): axial disposition, lateral wall absorbers, curtains to separate lateral aisles, a curtain that separates the apse, the altar is visible, the orchestra is
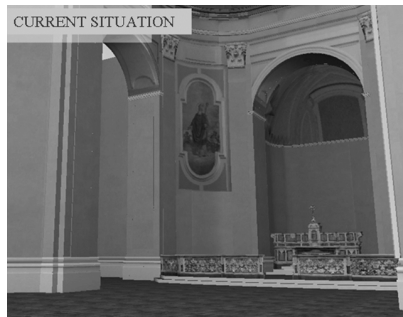
closer to the altar. Current situation (Fig.3): axial disposition, current situation without any changes. The visual component of the virtual environment has been created with GoogleSketchup 3D modeling software, and the audio component was based on the auralizations gathered from the Odeon room acoustics software. One minute long anechoic recordings of a classic orchestral music were used in auralizations for each scenario. The audio and visual components were merged with WorldViz Vizard 3.x Development Edition software for the immersive representation by means of virtual reality system. This system consists of a NVisor SX head mounted display unit, two InterSense InertiaCube position trackers, equipped with high precision orientation sensors, one precise position tracker (PPT H) and Pioneer SE-CL17-H earphones.

*Conclusions*

In last years, there has been a trend to functionally convert historical artistic buildings. In this paper, the acoustic study of the baroque church of S.Maria della Pietrasanta in Naples (Italy) for its conversion in a concert hall has been presented. Three architectural non-invasive and removable solutions were proposed in order to control the acoustic parameters without modifying the emotional sensations of the visitors. The acoustic analysis of the current scenario as well as three design proposals was performed. The three design solutions and the existing situation were modeled with a 3D modeling and Virtual Reality software.

In the laboratory of Immersive Virtual Reality, installed and available at the Second University of Naples (Italy), the audio-visual test was performed on a sample of subjects, which asked to express judgments on the proposed projects as well as indicate a preferred audio-visual scenario.

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# The seismic safety of cultural heritage

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The procedure for assessing the seismic safety of historical buildings is unavoidably different from that recommended for ordinary buildings, since their specificity and variability do not allow to define a unique and reliable modeling and analysis method. The comparison between the safety level in the current situation and what could be achieved by retrofit should be performed in reference to different levels of seismic protection depending on the relevance and use of the construction.

The Italian National Seismic Code identifies three categories of relevance: limited, medium, high as well as three categories of use: no use or occasional, frequent, very frequent. To evaluate the seismic safety of existing masonry buildings, knowledge construction (knowledge achievement, knowledge levels, confidence factors) is required in order to define the seismic action and the protection levels (category of relevance, use category). Both processes lead to an evaluation of seismic safety that defines the seismic safety Index (reference to defining retrofit priorities and measures as well as strengthening of structures, limits on accessibility, restriction or change of use, etc.). The seismic safety index establishes the stability safety, damage protection, equipment and protection of the work of art.

Knowledge of the building consists of: Knowledge course; identification of the structural system and

surrounding context; historical analysis of the building structure; dimensional survey; survey of displacements and cracks; survey of materials and building details; mechanical properties of the structural materials; investigations into subsoil and foundations. A more detailed analysis identifies the knowledge level (LC1 - limited knowledge; LC2 - normal knowledge, LC3 - full knowledge) and defines the confidence factor that affects the seismic safety index of the building (ranges between 1 and 1.35 allows considering the knowledge level in the safety evaluation).

The territorial configuration of Naples has different features between the single buildings and town center. Urban agglomerations are the result of a complex historical aggregation of the buildings. The seismic vulnerability analysis requires taking into account the interaction due to the structural contiguity among buildings either connected or bonded to each other. The structural unit to be investigated has to be identified in order to carry out the analysis but the aggregate must preliminarily be considered in order to identify the main spatial connections, with particular attention to the context and mechanisms of superimposition. The preliminary step of such an analysis should be the reconstruction of

Historical Greek-Roman table drafted in 1800 by Julius Beloch.

Topographic map showing the city of Naples as it appeared in year 1815 (drafted by Strozzi).
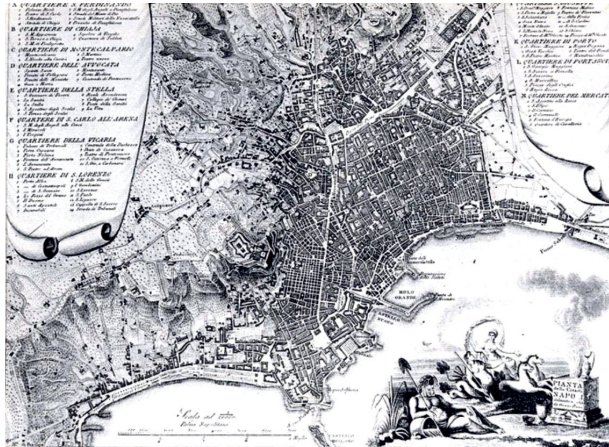
the historical events that led to the origin and growth of the agglomeration, thus resulting in greater knowledge of the characteristics, repetitiveness and homogeneity in structural behavior of each building unit under static and seismic loads and subsequently the designing retrofit solutions congruent with the original structural configuration. The process should gather information such as:

1. Main events that influenced the morphological aspects of the historical construction:

The ancient center of Naples grew on the Greek-Roman plan, and the permanence of the Hippo Damian grid made further development impossible, allowing only changes that strengthened the original structure. The history of Naples is long and varied, beginning in the 9th-century BC, and full of action on the fabric of the city.

2. Morphology of the streets (course, width, deviations in plan, misaligned façades).

3. Relationship between the aggregation of buildings and development of the street system:

The high population density found a balance in a rigidly defined planning through the development of typical building types.

4. Spatial relations between masonry units, as well as the proportions of regularity, modularity of building floors, repetitiveness:

Many buildings are not sorted into perspective. The first inhabited floor is about 6 meters high from the road surface, the subsequent stories are 4 - 5 meters high.

5. Alignment of masonry walls (checking orthogonality with respect to the streets, extensions, intersections and sliding of wall axes):

The perimeter walls of the buildings are located along the streets, following their layout.

6. Layout and hierarchy of the courtyards and location of the external stairs:

The building architectural organization reads from the threshold of the doorway, watching the courtyard highlighted by open stairs.

7. Masonry (material of units and mortar, geometry, pattern in which the units are assembled):

Naples - old town centre: mainly tuff masonry & pozzolan mortar.

8. Misalignment and tapering of walls, staggering in height of contiguous floors:

The Neapolitan building is mainly in tuff masonry, with a thicknesses of approx. 90 cm on the ground floor, sometimes tapered, sometimes no. Staggering in height of contiguous floors is very frequent

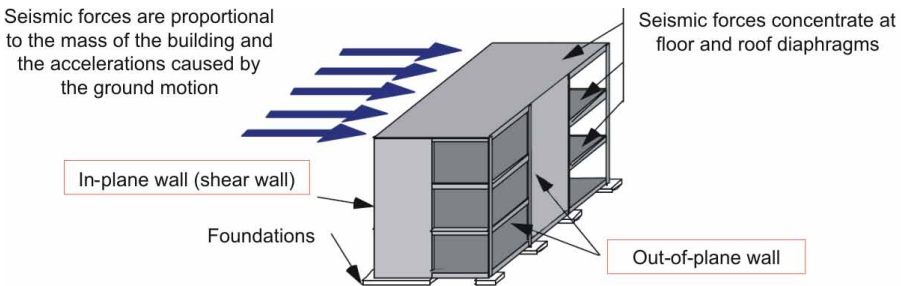9. Geometry and location of openings within walls (axis, symmetry,

repetitiveness):

Along the alleys and narrow streets, architectural elements must be taken separately and cannot be easily related to the entire façade.
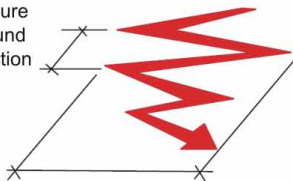
Most of the masonry buildings that collapsed under recent earthquakes did not comply with requirements that new masonry building would have to satisfy according to modern earthquake standards and appropriate buildings rules. The resisting system is composed of footing, foundation walls, piers, braced columns, walls, wall bracing or any other element or combination of elements which helps to transfer the earthquake forces back to the foundation wall and footing.

Effects of earthquake shaking on buildings.

Seismic forces are proportional to the mass of the building and the accelerations caused by the ground motion

Seismic forces concentrate at floor and roof diaphragms

In-plane wall (shear wall)

Foundations

Out-of-plane wall

Frequency is a measure of how often the ground motion changes direction

*Seismic forces follow a load path from the foundation, to shear walls to diaphragms*

Amplitude is a measure of the magnitude of ground motion

# Catacombs

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Before the official recognition of Christianity in 313 (year of the Edict of Constantine), worshippers met in basements (underground) or funeral or home environments. Christian architecture did not take shape   until the year 200 , due to the low number of worshippers and the simplicity of the rite. This made it possible for them to meet in the street. The increase in the number of believers led to a growth of religious and social structures: in the cities, the number buildings for religious meetings increased; outside the urban areas  cemeteries and funeral monuments dedicated to the martyrs also increased. The liturgy became more complex: the first part was dedicated to the worshippers and catechumens (the people who carried out a mission to be baptized) and a second part consisted of a procession, Eucharist and Holy Communion (for those who are baptized).

In order to meet the new requirements, the "domus ecclesiae" (literally Christian homes) was built, offering to the community a permanent equipped and freely available building. Domus ecclesiae were composed of a courtyard linked to a main room surrounded by seats and a series of secondary rooms necessary for the preservation of sacred objects.

The funeral buildings of the Christian communities of the early third century were very simple. The Christian burial chamber was different from the pagan one, due to the different faiths not allowing promiscuity.

Furthermore, the burial place was very simple and had large rooms for funeral  banquets. When the coexistence of the pagan and Christian worlds became difficult, new structures were built below ground: "catacombs". Catacombs are damp, dark and intricate spaces, that, differently from what is said, were not created as spaces of refuge, but as places of underground worship of death. The catacombs were made up of a complex (dense) network of tunnels called "ambulacri". The tunnels were dug into the rock, oriented in a free and irregular way.





Pictures of the Catacombs of San Gennaro, Naples.

They were also on various levels. Inside the walls, there are the "lolucus", 180 cm long and 30 cm high rectangular hollows, with various depths, depending on the number of bodies to contain. These cavities were closed by a slab with inscriptions and decorations. With the loculus, there were also the ''arcosolia''; tombs of greater value that contain an urn, named ''solium'', placed in an arch dug into the tuff stone.

These sarcophaguses, with mosaic decorations and frescoes, are very common in  the Neapolitan areas because in the entire region there are a lot of tuff banks; tuff is a tender stone that makes the excavation of these catacombs easy. Catacombs also feature some spaces that overlook the galleries, named "cubicula", with squared or rectangular plan, to bury entire families or important members of society.

Religious services took place in the "crypt" (an underground chapel with a central plan) that contained the martyr's grave, from whom the catacomb took its name.

The entrance to the underground catacombs was excavated creating a system of stairs (deep up to 7 meters from the ground floor) with a gallery up to 200 meters long.

Since 313 (date of the Edict of Milan signed by emperors Constantine I and Licinius that proclaimed religious toleration in the Roman Empire), a lot of churches were founded next to ancient catacombs, to exercise religious services that since then had taken place in underground crypts.  For outside burials, new spaces are created; they were called "areae" and are groups of sarcophagus closed by slabs.

The first Christian sacred sites were very simple, until the Emperor Constantine (in 313) improved the major sacred sites, keeping the "domus ecclesiae", and building new valuable buildings so that they could stand out in the urban centres against the simplicity of the ancient sacred sites.

*Catacombs of San Gennaro, Napoli.*

The Catacombs of San Gennaro are underground burial sites going back to II century. They are situated in the northern part of the city of Naples, named Capodimonte, next to the church of Madre del Buon Consiglio.

The original core of the Catacombs, that nowadays consists in the "inferior vestibule", developed next to the ancient family tomb of a Roman family. This is the first room of the lower floor that in III century contained the remains of Saint Agrippinus, the first patron saint of Naples.

In the V century, the site was consecrated to San Gennaro on the occasion of the entombment of his remains, which were later moved to the Cathedral of

Naples. Between the 13th and 18th century, the catacombs were the victim of severe looting.

Only in the 18th century, did experts return to the catacombs, and they became an inevitable step of the Grand Tour. During the Second World War, the catacombs of San Gennaro were used as a refuge and were victim of further looting.

*Structure*

The entrance to the catacombs consists of a system of stairs that leads to the second floor (the upper catacomb), where there is an ancient fresco of San Gennaro. The most interesting parts of this floor are the "Bishop's Crypt" with mosaic decorations and the "underground basilica" entirely dug into the tuff. On the first floor, there is the lower catacomb, where the remains of Saint Agrippinus were contained. The most important part of the lower catacomb is the "vestibule" that rises on an ancient tomb of a Roman family. Nowadays of this tomb four sarcophagus dug into the tuff remain. The ceiling of the vestibule is decorated with frescos. In the lower catacomb, thereis also the "cubicle of San Gennaro" where the Saint's remains were contained before being moved to the Cathedral of Naples.

*Bibliography*
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The lecture series entitled Development and Preservation in Large Cities: An International Perspective organized by the Department of Architecture and Industrial Design Luigi Vanvitelli at the Second University of Naples, the Regional Centre of Expertise on Culture, Ecology and Economy (BENECON) an institutional member of the UNESCO Forum University and Heritage and the Edward J. Blustein School of Planning and Public Policy at Rutgers, the State University of New Jersey has been an extraordinary success involving 50 participants which has included academic staff, PhD as well as undergraduate students of both the Italian and U.S. partner institutions, who have received a joint qualification.

Carmine Gambardella


The class considered the subject of development and preservation from a cross-national perspective in Italy and the United States (U.S.). Via the internet, the class considered the following : 1. WhyWhat are the forces respectively driving development and preservation and what is the larger historical framework of these two forces; 2. HowWhat is the regulatory and financial framework for development and preservation, with a focus on the latter; 3. Case StudiesNotable examples of development and preservation cases in both countries were examined; 4. Future Policy and PlanningWhat planning, design, and preservation policies and mechanisms can better synthesize development and preservation in both Italy and the U.S.

David Listokin