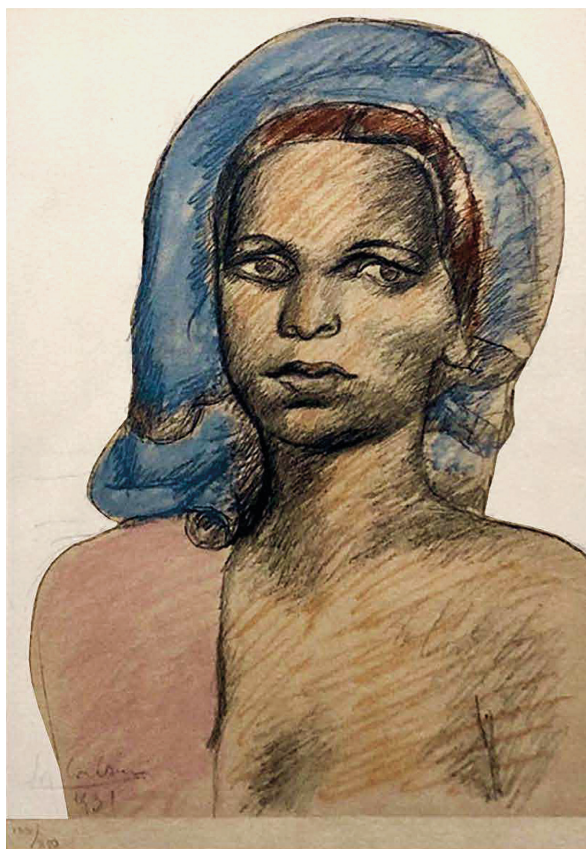


ARCHITECTURE HERITAGE and DESIGN

Carmine Gambardella

XVIII INTERNATIONAL FORUM

Le Vie dei
Mercanti



World Heritage and Contamination

ARCHITECTURE | CULTURE | ENVIRONMENT | AGRICULTURE | HEALTH | ECONOMY
LANDSCAPE | DESIGN | TERRITORIAL GOVERNANCE | ARCHAEOLOGY | e-LEARNING

Carmine Gambardella
WORLD HERITAGE and CONTAMINATION
Le Vie dei Mercanti
XVIII International Forum

Editing: Alessandro Ciabrone

©

Proprietà letteraria riservata

Gangemi Editore spa

Via Giulia 142, Roma

www.gangemieditore.it

Nessuna parte di questa
pubblicazione può essere
memorizzata, fotocopiata o
comunque riprodotta senza
le dovute autorizzazioni.

*Le nostre edizioni sono disponibili in Italia
e all'estero anche in versione ebook.*

*Our publications, both as books and ebooks,
are available in Italy and abroad.*

ISBN 978-88-492-3936-2

ARCHITECTURE HERITAGE and DESIGN | 5
Series founded and directed by Carmine Gambardella

ARCHITECTURE HERITAGE and DESIGN | 5

Series founded and directed by Carmine Gambardella

Scientific Committee:

Carmine Gambardella

UNESCO Chair on Landscape, Cultural Heritage and Territorial Governance
President and CEO of Benecon

Federico Casalegno

Professor, Massachusetts Institute of Technology, Boston

Alessandro Ciabrone

Ph.D., UNESCO and FULBRIGHT former fellow

Massimo Giovannini

Professor, Università "Mediterranea", Reggio Calabria

Bernard Haumont

Professor, Ecole Nationale Supérieure d'Architecture, Paris-Val de Seine

Danila Jacazzi

Professor, University of Campania "Luigi Vanvitelli"

Alaattin Kanoglu

Professor, Department of Architecture, Istanbul Technical University

David Listokin

Professor, Director of the Center for Urban Policy Research
of Rutgers University / Edward J. Bloustein School of Planning and Public Policy, USA

Sabina Martusciello

President of the Degree Course in "Design and Communication",
University of Studies of Campania "Luigi Vanvitelli"

Paola Sartorio

Executive Director, The U.S.A. - Italy Fulbright Commission

Elena Shlienкова

Professor, Samara State Technical University

Rosaria Parente

Ph.D. in "Architecture, Industrial Design and Cultural Heritage"
University of Studies of Campania "Luigi Vanvitelli"

Nicola Pisacane

Professor, Head of the Master School of Architecture – Interior Design
and for Autonomy Courses, University of Studies of Campania "Luigi Vanvitelli"

Riccardo Serraglio

Professor, University of Campania "Luigi Vanvitelli"

Editorial Committee:

Lucina Abate

Alessandro Ciabrone

Gilda Emanuele

Rosaria Parente

Carmine Gambardella

WORLD HERITAGE and CONTAMINATION
Culture, Creativity, Contamination

Le Vie dei Mercanti _ XVIII International Forum

GANGEMI EDITORE®
INTERNATIONAL

Topics:

Heritage

Tangible and intangible dimensions

History

Culture

Collective Identity

Memory

Documentation

Management

Communication for Cultural Heritage

Architecture

Surveying

Representation

Modelling

Data Integration

Technology Platforms

Analysis

Diagnosis and Monitoring Techniques

Conservation

Restoration

Protection

Safety

Resilience

Transformation Projects

Technologies

Materials

Cultural landscapes

Territorial Surveying

Landscape Projects

Environmental Monitoring

Government of the Territory

Sustainable Development

WORLD HERITAGE and CONTAMINATION

Le Vie dei Mercanti

XVIII International Forum

Naples | Capri

11 - 12 - 13 June 2020

President of the Forum

Carmine Gambardella

President and CEO Benecon,
UNESCO Chair on Cultural Heritage,
Landscape and Territorial Governance

International Scientific Committee

Aygul Agir,

Professor, Department of Architecture, Istanbul Technical University, Turkey

Ahmed Abu Al Haija,

Professor and Head, Environmental Design, Urban and Architectural Heritage,
Faculty of Engineering, Philadelphia University, Jordan

Ali Abu Ghanimeh,

Vice president Al al-Bayt University Almafraq – Jordan

Pilar Garcia Almirall,

Professor, UPC Ecole Tecnica Superior d'Arquitectura Barcelona, Spain

Harun Batirbaygil,

Head, Department of Architecture, Okan University, Istanbul, Turkey

Artur Beu,

Professor, University of Art, Tirana, Albania

Cevza Candan,

Professor, Istanbul Technical University, Turkey

Orazio Carpenzano,

Professor and Director of the Department of Architecture and Design, Sapienza University

Maurizio Carta,

Professor, University of Palermo

Alessandro Ciabrone,

Benecon University Consortium, UNESCO and Fulbright Former Fellow, Italy

Annamaria Colao,

Professor, UNESCO Chair on Education to Health and Sustainable Development

Joaquín Díaz,

Professor and Dean, Technische Hochschule Mittelhessen-University of Applied Sciences,
Department of Architecture and Civil Engineering, Germany

Yurdanur Dulgeroglu,

Professor and Head of the Department of Architecture, İstanbul Technical University, Turkey

Yonca Erkan,

Chairholder UNESCO Chair, Kadir Has University, Turkey

Kutgun Eyupgiller,

Professor, Department of Architecture, Istanbul Technical University, Turkey

Giuseppe Faella,

Professor, University of Campania "Luigi Vanvitelli"

Yankel Fijalkow,

Professor, Ecole Nationale Supérieure d'Architecture Paris Val de Seine, France

Cherubino Gambardella,

Professor, University of Campania "Luigi Vanvitelli"

Stefania Gigli Quilici,

Professor, Università della Campania "Luigi Vanvitelli"

Xavier Greffe,

Professor and Director, Centre d'Economie de la Sorbonne Paris, France

Manuel Roberto Guido,

Italian Ministry of Heritage and Culture, Italy

Bernard Haumont,

Professor, Ecole Nationale Supérieure d'Architecture Paris Val de Seine, France

Pedro António Janeiro,

Professor, Faculdade de Arquitectura da Universidade de Lisboa

Tatiana Kirova,

Professor, Polytechnic of Turin

Alaattin Kanoglu,
Professor, İstanbul Technical University

Ilknur Kolay,
Professor, Department of Architecture, İstanbul Technical University

Antonio Lampis,
Director Museums, Italian Ministry for Cultural Activities

David Listokin,
Professor, Edward J. Bloustein School of Planning and Public Policy,
Rutgers University, USA

Andrea Maliqari,
Professor and Rector of the Polytechnic University of Tirana, Albania

Sabina Martusciello,
Design and Communication Degree Course (President)
University of Campania “Luigi Vanvitelli”, Italy

Massimo Menenti,
Department of Geoscience and Remote Sensing, Faculty of Civil Engineering
Delft University of Technology, The Netherlands

Rusudan Mirzikashvili,
Ministry of Cultural Heritage, Georgia

Doe Morelli,
Professor, University of Campania “Luigi Vanvitelli”, Italy

Louise Mazingo,
Chair, Landscape Architecture and Environmental Planning,
University California Berkeley, USA

Maria Dolores Munoz,
Professor, UNESCO Chair, EULA Environmental Centre, University of Concepcion,
Chile

Florian Nepravishta,
Dean of the Faculty of Architecture and Urbanism,
Polytechnic University of Tirana, Albania

Luis Palmero Iglesias,
Politécnica de València UPV, Spain

Jorge Peña Díaz,
Professor, Facultad de Arquitectura,
Instituto Superior Politécnico José Antonio Echeverría, Cuba

Rosaria Parente,
Ph.D. in “Architecture, Industrial Design and Heritage” at the University of Campania

Rosario Pivonello,
Professor, University of Naples "Federico II"

Mosè Ricci,
Professor, University of Trento

Daniele Riccio,
Professor, University of Naples "Federico II"

Paola Sartorio,
Executive Director, The U.S.- Italy Fulbright Commission

Lucio Alberto Savoia,
Ambassador, Secretary General Emeritus,
Italian National Commission for UNESCO, Italy

Maria Anita Stefanelli,
Department of foreign languages, literature and Culture,
Università degli studi RomaTRE, Italy

Elena Shlienкова,
Professor of Architecture and Construction
Institute of Samara State Technical University, Russia

Eusebio Leal Spengler,
Professor, Historiador de la Ciudad de La Habana,
Presidente de Honor del Comité Cubano del ICOMOS, Cuba

Ana Luiza Thompson-Flores,
Director of the UNESCO Regional Bureau for Science and Culture in Europe, Venice (Italy)

Isabel Tort,
Professor, Universitat Politècnica de València UPV, Spain

Marco Trifuoggi,
Professor, University of Naples "Federico II"

Andrey V. Vasilyev,
Head of Department, Samara State Technical University of Russian Federation

Leandro Ventura,
Director of the Central Institute For Ethno-anthropology, Italian Ministry for Cultural Activity

Yaliang Xiang,
Professor, China Academy of Art, China

Yang XiuJing,
Professor and Director, China Academy of Art, China

Organizing Committee

Alessandro Ciambone, Coordinator of the scientific program and relationships with the International Scientific Committee

Rosaria Parente, Scientific Assistant of the International Committee President

Luciana Abate, Gilda Emanuele, Vincenzo Ferraro
Graphics and layout

Dario Martimucci, Web master

Peer review

Scholars has been invited to submit researches on theoretical and methodological aspects related to Smart Design, Planning and Technologies, and show realapplications and experiences carried out on this themes. Based on blind peer review, abstracts has been accepted, conditionally accepted, or rejected. Authors of accepted and conditionally accepted papers has been invited to submit full papers. These has been again peer-reviewed and selected for the oral session and publication, or only for the publication in the conference proceedings.

Conference report

300 abstracts and 650 authors from 44 countries:

Albania, Arizona, Australia, Benin, Belgium, Bosnia and Herzegovina, Brasil, Bulgaria, California, Chile, China, Cipro, Cuba, Egypt, France, Germany, Georgia, Greece, India, Italy, Japan, Jordan, Kosovo, Lebanon, Malaysia, Malta, Massachusetts, Michigan, Montenegro, Montserrat, New Jersey, New York, New Zealand, Poland, Portugal, Russian Federation, Serbia, Slovakia, Spain, Switzerland, Texas, Tunisia, Turkey, United Kingdom.

At the state of art, with profound pride I register that the previous editions of the Forum "Le Vie dei Mercanti" have favored the creation of an international scientific community with over six thousand researchers, distinguished professors, institutional and business sector representatives from more than one hundred Universities and Research Centers from fifty countries in the world. The XVIII edition of the Forum titled "World Heritage and Contamination" aims to create a cross-critical dialogue, open to cultural contamination and "without limits", in a logic of integration between competences which extends, and is not limited to, the following disciplines: Architecture, Culture, Environment, Agriculture, Health, Landscape, Design, Territorial Governance, Archeology, Economy, e-Learning.

The activities of protection and promotion of World Heritage, understood as a asset shared by all Humanity, are particularly relevant in Italy, responsible towards the world of custody of the largest number of assets protected by the UNESCO. To the World Heritage Properties is added a landscape heritage of enormous variety and beauty to be protected also through the regeneration of degradation and of the "minor heritage", in line with the provisions of the UNESCO Conventions on material and intangible assets as well as the European Landscape Convention. In this framework the multidisciplinary topics of the Forum represents a "thing tank" of confrontation, exchange and cultural contamination oriented towards the United Nations Millennium Development Goals.

The location of the Forum is of excellence. Campania Region with six World Heritage Properties, two Unesco Man and Biospheres, three assets registered on the Intangible Heritage List is one of the richest Regions in the world for cultural and landscape heritage, particularly "contaminated" by Mediterranean cultures. No coincidence that the Forum takes place in Naples and Capri, with site visits and presentations of scientific research and operational projects by the Benecon University Consortium, consisting of five Italian Universities, head office of my UNESCO Chair on Landscape, Cultural Heritage and Territorial Governance. The papers, selected by the Forum's Scientific Committee, will be published in the Proceedings of international relevance. Furthermore, the most innovative research and projects will be published in the "Quaderni" of the A Class international magazine "Abitare la Terra / Dwelling on Earth".

*Prof. Carmine Gambardella, General Chair XVIII Forum
UNESCO Chair on Landscape,
Cultural Heritage and Territorial Governance*

Con profondo orgoglio, allo stato dell'arte, registro che le precedenti edizioni del Forum "Le Vie dei Mercanti" hanno favorito la creazione di una comunità scientifica internazionale costituita da oltre sei mila ricercatori, distinguished professors, rappresentanti istituzionali e del settore dell'impresa provenienti da più di cento Università e Centri di Ricerca di cinquanta paesi nel mondo. La XVIII edizione del Forum "World Heritage and Contamination" si propone di creare un dialogo critico trasversale, aperto alle contaminazioni culturali e "senza limiti", in una logica di integrazione fra le competenze che si estende, e non si limita, alle seguenti discipline: Architecture, Culture, Environment, Agriculture, Health, Landscape, Design, Territorial Governance, Archeology, Economy, e-Learning.

Le attività di tutela e promozione del Patrimonio Mondiale, inteso come bene condiviso da tutta l'Umanità, sono particolarmente rilevanti in Italia, responsabile nei confronti del mondo della custodia del maggior numero di beni tutelati dall'Unesco. Alle Properties del World Heritage si aggiunge un patrimonio paesaggistico di enorme varietà e bellezza da tutelare anche attraverso la rigenerazione del degrado e del "patrimonio minore", in linea con quanto previsto dalle Convenzioni Unesco sui beni materiali e immateriali e dalla Convenzione Europea del Paesaggio. In questo framework i topics pluridisciplinari del Forum rappresentano un "thing tank" di confronto, scambio e contaminazione culturale orientati verso gli Obiettivi di Sviluppo del Millennio delle Nazioni Unite. La location del Forum è d'eccezione.

La Campania con sei siti iscritti nella lista del Patrimonio Mondiale, due Man and Biospheres Unesco, tre beni iscritti nella Lista del Patrimonio immateriale è una delle regioni più ricche al mondo per beni culturali e paesaggistici, particolarmente "contaminata" delle culture del Mediterraneo. Non a caso il Forum si svolge a Napoli e Capri, con sopralluoghi e presentazioni di ricerche scientifiche e progetti operativi a cura della Consorzio Universitario Benecon, costituito da cinque Atenei italiani, sede della mia Cattedra Unesco su Paesaggio, Beni Culturali e Governo del Territorio. I paper, selezionati dal Comitato Scientifico del Forum, saranno pubblicati negli Atti di rilevanza internazionale. Inoltre, le ricerche e i progetti più innovativi saranno pubblicati nei "Quaderni" della Rivista internazionale di Classe A "Abitare la Terra/Dwelling on Earth".

*Prof. Carmine Gambardella, General Chair XVIII Forum
UNESCO Chair on Landscape,
Cultural Heritage and Territorial Governance*



ID 002 *Structures and infrastructures of the central Adriatic.
Topics for new environmental policies*

Ottavia ARISTONE

Lucia SERAFINI

Università of
"G. d'Annunzio"
Chieti-Pescara, Italy

The period starting from the Unity of Italy constitutes a fundamental step for the creation of services and infrastructures of the entire peninsula. This circumstance is particularly evident in regions affected by secular delays linked to their geographical and economic marginality.

The opening or strengthening of some ports on the Middle Adriatic coast, such as those of Ancona, Pescara and Bari, is linked to events of redesigning the respective cities; moreover it leads to developments that are very often the result of conflicting relationships between the reference spaces. In the same way, the passage of the coastal railway and the creation of additional routes in the inland areas, have in a short time brought down a denser and more ancient network of roads, redistributed the populations and fixed ever more binding territorial hierarchies. This contribution has the objective of analyzing the dynamics of the transformations that have taken place both at small and large scale. The attempt is above all to reconstruct the scope of the structures and infrastructures that for about a century have made the glory of cities and territories. It is also important to investigate the parts that the heavy dismissals of the last decades have left as residual.

In fact, the new environmental policies call for the conversion of places to be compatible with their nature and their stratified identity.

ID 005 *Çilehane as A Place for Thinking*

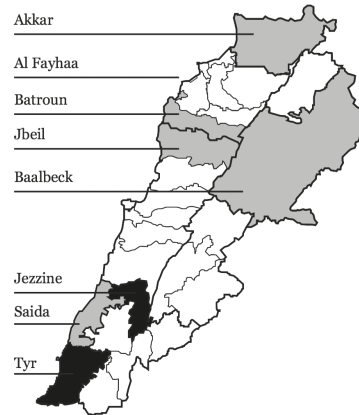
Melih KURNALI

Kırıkkale University
Turkey

Duygu KOCA

Hacettepe University
Turkey

Thinking, which a person does at any moment, is the process of the data obtained through several processes before someone's move even without noticing. However, the thought we use in daily life intuitively is different than the thinking we use to produce ideas. The act of thinking, which is the key to produce ideas and to offers solutions, seeks a place, an environment, a space for itself. This space defines an isolated place for areas mainly based on thought-based idea generation. Philosophy and belief systems have ruminated and discussed such spaces in this sense. Philosophy focuses on thinking and aims at a thought-centered production. Likewise, belief systems place emphasis to thinking and personal development not only to perceive the world order but also to present a purpose for life. These goals are eminent for these areas; and spaces having specialized functions are needed to achieve these goals. Philosophers and Sophists searched for spaces, which only meet their basic needs, to isolate themselves from society in order to think and to produce ideas. In Turkey, there is a special building type called Çilehane that is used by Sophists for both production of thought and mediation for centuries. These places have been at the basis of Turkish culture; however due to the cultural degradation and contamination, these structures have undergone both physical and semantic changes. The study assesses the current status of these structures on-site and examines how they have lost their ontological bases.



ID 006 *Processes behind regional planning in Lebanon's Hinterland: The Cases of the Unions of Municipalities of Jezzine and Tyr*

Balsam MADI

Phoenicia University
Tyr, Lebanon

Today's city has been described as a loose agglomerate of quasi-autonomous socio-spatial entities evolving independently. The paper will look into the series of adopted responses of territories in Lebanon to define their planning processes and reasons behind fragmentation. Lebanon has been described as a merchant economy where communitarianism and market-friendly policies are embedded in the heart of social, political institutions and the economic system. Considering this socio-political context the research questions presented in order to gain an understanding of Lebanon's alternative governance and its implications on the alternative urbanism are: (1) What tools can be used to understand Lebanon's alternative governance and urbanism in its macro and micro levels?? (2) How can these tools help reach a standardization of what appears to be ad-hoc development? (3) Where do these tools fall in today's bottom-up approaches to developing complex territorial of regional planning in South Lebanon's hinterland? (5) If the planning processes of territories are depicted and analyzed through a narrative tool could this allow for the adoption of more suitable responses for the management of development aim of informing the responses considered in Lebanon's future planning policies and practices. The relevance of this topic comes at a crucial time where Lebanon is looking at governance reform in order to move towards sustainable development.



ID 007 *The “Terzo Paradiso”: the meeting point between Man, Art, Agriculture*

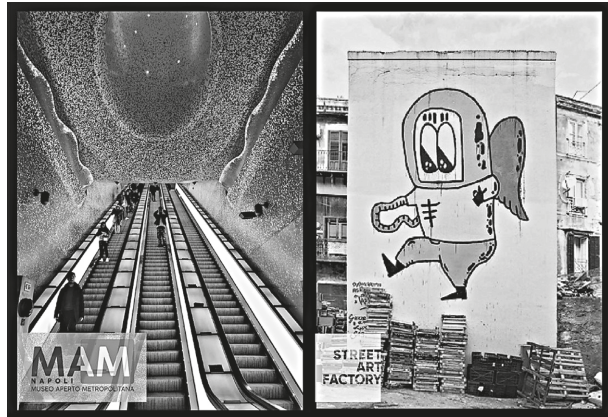
Francesca MUZZILLO

Fosca TORTORELLI

University of Campania
Italy

The paper starts from the analysis of Bosco di San Francesco environmental recovery in Assisi with the Land Art work “Terzo Paradiso”. It looks at the conjunctions among artistic, agricultural and economic experiences and competences. Within an olive trees grove, art and natural elements range in a mutual adjustment from the concepts of creativity, sensibility, production. It can be felt in the words of Michelangelo Pistoletto: “I believe that a balanced relationship should be found between nature and technology, on this point we have to do a big work. Art is somewhere in the middle as a dynamic of a good equilibrium”.

In this perspective the “Terzo Paradiso” is the great myth which leads each person to take responsibility in the global vision. The term “paradise” in the antique Persian language meant “protected garden”, so our aim is to protect our planet, taking care of human society who lives here. Starting from this case study in the paper the focus is on the wider relationship with nature, in a concrete way to be followed in order to making an inclusive improvement design. Through the commitment to a more sustainable environment it is possible contribute to create new development opportunities and new design strategies in order to give to agricultural territories through the research a different value.



ID 008 *The role of art for the regeneration of the public city. The experiences of the Metropolitan Cities of Palermo and Naples*

Chiara AMATO

Giulia BEVILACQUA

Sapienza University
Rome, Italy

The progressive dissolution of common heritage of material and immaterial values, caused by the intensification of phenomena of congestion and fragmentation of public spaces, transforming them into residual and abandoned spaces even in historic areas, requires the development of a regeneration strategy in marginal contexts, promoting functional and morphological approach through an innovative and creative way of public spaces uses.

In this context, culture and art become propulsive elements for regeneration strategies, being bearers of new values of inclusion and urban quality, as developed by the experience of the Strategic Plan of Metropolitan City of Palermo, a city of intense and widespread cultural and artistic creativity, which attributes the role of socio-economic development of the historic city to culture and art, involving Palermo community in the activation of virtuous regeneration processes.

At the same time, the use of art as a leitmotif of regeneration projects, integrating city flows with architectural and functional aspects of the public city for realization of widespread and interactive museums, is at the base of the experience of Stazioni dell'Arte and of Strategic Plan of Metropolitan City of Naples, with policies that integrate urban planning, mobility and cultural heritage, for a paradigm shift of mobility spaces, previously seen only in their functional aspect, but today also as public spaces, integral part of the metropolitan identity and of city transformation.

ID 009 *Abandoned for good? Peenemünde as an example for dealing with a cultural landscape facing multifaceted contamination issues*

Peter I. SCHNEIDER

Constanze RÖHL

Brandenburg University
of Technology Cottbus
Germany

On the Baltic island of Usedom lie the remains of the former Heeresversuchsanstalt/HVA Peenemünde. Scattered over an area of 2.500 ha, architectural and infrastructural remnants of military and civilian character remind of the areas former designation. Established in 1936, the HVA served the needs of the German weapons program until February 1945 and was partly demolished during the 1950s. Research, production and testing facilities advanced the development of long-range guided ballistic missiles, resulting in the notorious “Aggregat 4” or “Vergeltungswaffe 2/V2”. Today, many of its remains lie in a restricted area, among these the concrete ruins of Fertigungshalle 1/F1. F1 was an industrial building designed for the assembly of the V2, including in its history the temporary use as forced labour concentration camp. Due to several Allied air raids and phases of subsequent use by the Soviet Army and the NVA, the area is contaminated by various and often unknown remains of warfare. Invasive research can therefore only be undertaken after prior expertise from EOD. Potentially, toxic substances from the V2-assembly process, hazardous building materials and pollutants caused by the site’s illegal use as a dumping ground have to be taken into account as well. The paper wants to present the results of four years of field work, aimed at establishing a plan of procedure for landscapes which otherwise would be left to scientific oblivion due to their diverse contamination issues.

ID 013 *Preliminary approach to conservative actions on artefacts of historical and monumental value. Application to 4 old bridges crossing the Savuto river in Calabria*

Caterina GATTUSO
Domenico GATTUSO
University of Reggio
Calabria, Italy

In the valley of the Savuto river, in the Calabrian Apennine area, located about thirty kilometers south of Cosenza city, there are still some interesting traces of the Via Popilia, the ancient Roman road built in 132 B.C. to connect Capua to Reggio Calabria. In particular, a bridge of great historical-monumental value and unique aesthetics resulting from an arched stone structure. Other bridges were built to cross the Savuto river in more recent times, around the 16th century, recalling shape and structures similar to the Roman bridge. Within the framework of a specific research, three of them located in the middle valley, have been identified, a short distance from each other. It seemed interesting to analyze their characteristics, to highlight their historical-monumental value, but also to draw attention to the opportunity to use advanced investigation and analysis tools, in order to prevent risks of degradation or irreparable failures. In the awareness that only through targeted and balanced actions, based on knowledge, can it be ensured the future for valuable manufacturing monuments, to consider furthermore as relevant resources of a fascinating tourist-cultural journey. The paper proposes a methodological study approach aimed at safeguarding and enhancing the 4 bridges that have endured the centuries, with particular emphasis on the preparatory phase of knowledge.

ID 014 *Urban regeneration policies to enhance touristic mobility and economy*

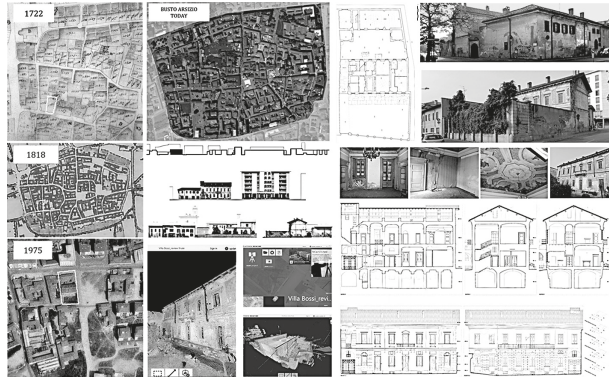
Domenico GATTUSO

GianCarla CASSONE

Margherita MALARA

University of Reggio
Calabria, Italy

Urban regeneration and tourism development are two closely related phenomena. There is no doubt that the regeneration of urban neighbourhoods, sometimes even on significant dimensions, translates into a growth in the relative attractive potential and in greater traffic flows. It has been found in many cases of recovery and enhancement of historical centres, neighbourhoods, waterfront for coastal cities. On the other hand, it is intuitive that appropriate actions aimed at improving the mobility conditions within the neighbourhoods (or of the whole city) and of the conditions of accessibility to the neighbourhood (or the city) from outside, contribute to increase their economic potential and to induce regeneration and recovery actions. The circuit could be virtuous, however, as long as the actions on the urban sector and those on the transport field are coordinated and integrated. Otherwise, counterproductive effects could occur, such as an excess of traffic in districts that are unable to support them, or ineffective requalification measures that are excessively expensive in relation to demand. The paper proposes some thoughts based on the analysis of some emblematic case studies and specialised literature, aimed at bringing out objectives and opportunities related to urban regeneration actions and coordinated transport policies, also drawing on the wide range of new Technologies of Information and Communication (TIC) and Intelligent Transportation Systems (IST).



ID 015 *Advanced knowledge techniques and proposals for a compatible reuse and enhancement of a disjointed urban area: Villa Bossi in Busto Arsizio and its surroundings*

Daniela ORENI

Gianfranco PERTOT

Polytechnic of Milan
Italy

Erika BAGLIO

Architect, Milan, Italy

Villa Bossi is located in the historical centre of Busto Arsizio (Varese), a city north-west of Milan and today an important industrial and commercial centre, densely urbanised. The urban development of Busto Arsizio had a great impulse starting from the nineteenth century, due to the cotton industry. The Villa, built in 1850 in a closed courtyard, today is inserted in a heterogeneous urban environment, characterized by a mixture of functions and discordant buildings. Moreover, the perception of the Villa is now altered: the twentieth-century demolitions have in fact left space for a large unresolved urban void all around the Villa, which today shows as the main facades two services fronts. Apparently, the building is the result of a single neoclassical project but it preserves traces of previous ones, investigated with accurate analysis of the geometry (using laser scanning techniques, photogrammetric and direct) the materials, the structures and their state of conservation. The activities of urban scale analysis, using geo-referenced historical maps, photos and historical views, has allowed to identify the specificities of the existing, essential to formulate a proposal for conservation, reuse and enhancement of the entire area. The aim of this paper is to show the results of this articulated research, both on urban and architectural scale, in order to plan a new use both of the Villa and of an entire portion of the urban landscape, re-connecting the various parts.



ID 016 *Structure/external envelope relationship in the Monte dei Paschi di Siena headquarters in Colle Val d'Elsa (SI) by Giovanni Michelucci*

Frida BAZZOCCHI

Cecilia CIACCI

Vincenzo DI NASO

University of Florence

The new MPS headquarters in Colle Val d'Elsa (SI) is one of the latest works in which the Archt. Michelucci was directly able to attend both to the design and to the construction. It represents a symbolic building that contains many significant features of the master's design, both as regards the design philosophy and in relation to the technical and technological features of the construction. The most characterizing element of this project is certainly its load-bearing structure. The building basically consists of two volumes for which Michelucci chose different structural solutions: a steel structure for the main volume and a steel-reinforced concrete one for the tower of the stairs. The first solution is undoubtedly more interesting from a technological point of view. From the first sketches the architect's willingness of declaring the steel load-bearing structure arises and in according with this solution he decided to use a dry solution for the external envelope. Nowadays these design choices lead to obvious problems of thermal discomfort inside the building. This work aims at analyzing in detail the technological system of the external envelope of the building, to identify the critical energy issues mainly related to the relationship with load-bearing structure and to develop possible corrective measures.

ID 018 *Eleusis, European Capital of Culture 2021, Greece:
Landscape contamination, from weak point to urban
redemption element*

Costantino PATESTOS

Politecnico di Torino
Italy

Neratzia TZORTZI

Politecnico di Milano
Italy

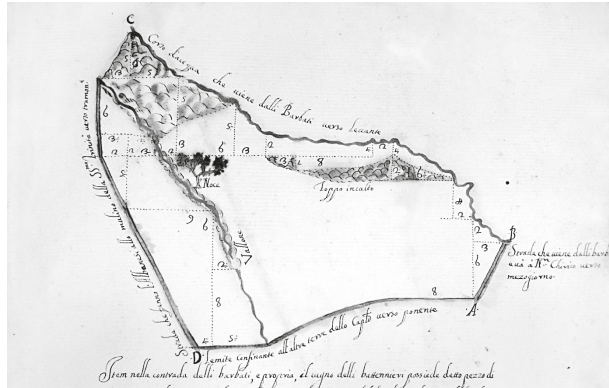
In the case study it is examined, the contamination concerns the historically poorly planned relationship between the city's historic center, the archeological site and the industrial area currently being decommissioned. The urban resilience project is elaborated in the context of the candidacy of the city (and the subsequent assignment) to European Capital of Culture 2021. The main objectives are the realization of a new "ecology of functions", the urban regeneration of the historical center through the rehabilitation of existing monuments, the rational organization of the archeological site with the replacement of the current museum (in situ) with a new one (in a neighboring abandoned area), the redesign of the relevant natural landscape, the recovery and reuse of some industrial buildings as critical evidence of "industrial archeology", the "smart" connection between the archaeological site, the restored industrial buildings and the city itself, in the context of a new daily life, transforming an economy based exclusively on the secondary, now in irreversible crisis, into a cultural "industry". It is therefore a matter of solving the main contradiction between two important memories that build today's reality (ancient: archeological site; contemporary: abandoned industrial areas), combining them with the redesigned urban center, for the creation of a new landscape characterized by a valuable "contamination" between old and new.

ID 019 *Management Plans for cultural heritage sites, as tools for inclusive approach in the developing countries: Case study of Prizren Historic Center Management Plan*

Nora ARAPI KRASNIQI

Ministry of Culture
Youth and Sports
Prizren, Kosovo

Cultural Heritage of Kosovo represents the conjunction of different cultures and rules that were part of its history, from antiquity, to medieval period until today. This heritage today is experienced by diverse community that live and act in the country. The beginning of the 21st century finds the country in struggle for its independence and establishment of a democratic functioning state. This difficult political condition is reflected also in the field of cultural heritage protection and management. Cultural heritage is still not ranked among priorities, and is treated as an exclusive right of professionals of this field. This paper focuses in the process of development of a management plan for Prizren Historic Centre. Prizren is known as the cultural capital of the country, and embraces rich cultural diversity. A town with a site listed in UNESCO World Heritage list in Danger, with a special protective zone, and a special Law for its protection and management. Despite existence of legal and institutional framework, the state of conservation of the values is not satisfactory. The development of the Management Plan for Prizren Historic Zone encompasses challenges of bringing together the key stakeholders as well as finding a proper balance between conservation and development, between institutional responsibility and role of the community. Paper analyses how drafting a management plan for a protected historic zone, could play a catalyst role in building bridges between institutions, the local community and business sector.



ID 020 *Lucanian Landscape of the VI and VII century through travel sketches and land surveyor's notebooks*

Enza TOLLA

Giuseppe DAMONE

University of Basilicata
Italy

The analysis of iconographic evidences from the past allows to rebuild the anthropic landscape and its changes over the centuries. In Basilicata, a region of Southern Italy, the iconographic evidences of landscape and territory previous XVII century are insufficient.

It is from the following century that the proofs come down to us, become more conspicuous to allow to read the changes of territory for some areas of the region and to find a graphic comparison of what can be seen better in written documents.

Maps and cabrei, through the geometric drawing give us a different Region by the current one before the large estate diffusion moreover they permit us to retrace architectures now disappeared.

Particular graphic documents are the notebooks by the land surveyors from Venosa kept at the State Archive in Potenza, they are important tools to understand the techniques used by land surveyors for the survey and so to restore territory drawing

They are books with notes of measures and sketches used for the following drawings of stalls area for religious orders and University.

Starting from a direct analysis, portions of territory are identified by symbols and icons which allow to describe in a simple way the crop species, existing architectures and certain aspects of landscape.

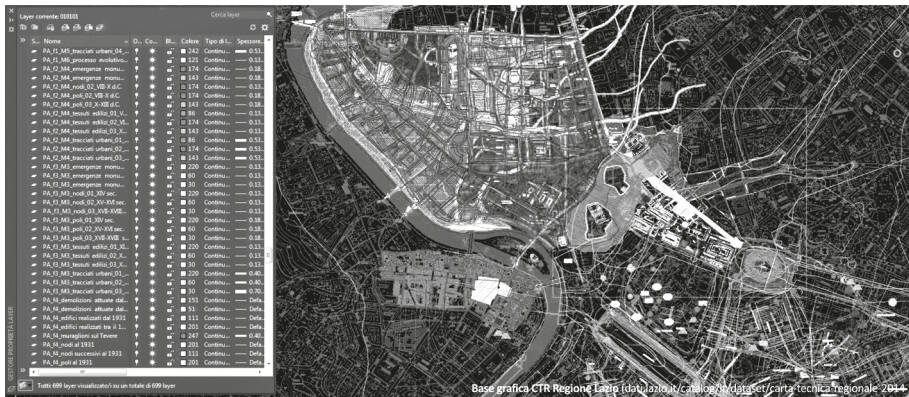
ID 021 *The Mendia-Maione's office and the female professionalism in the Neapolitan post-war*

Chiara INGROSSO
University of Campania
Italy

The female contribution to contemporary architectural heritage is still mostly underestimated, not only by comune people, but also by scholars and students. Women had often (and perhaps still have) difficulty accessing to the profession, and their names were sometimes hidden from projects and professional offices. Yet, leaving out the pioneers, women commonly worked in architecture, civil engineering and industrial design since the second half of 1900s. To try to “rediscovery” female involvement in post-war professionalism, the paper focuses on one of the first associated professional offices in Naples all-female: the Mendia-Maione's office, founded in 1954 by Elena Mendia and Delia Maione and active until the mid-Nineties.

The two architects were among the first women graduates in Architecture Faculty of Naples, where they studied with Stefania Filo Speciale. Immediately after, in 1950, they were both employed as designer in the Technical Office of the Mostra D'Oltremare, to reconstruct the pavilions of the complex after bombing. In this occasion, they realized ex novo the Teatro dei Piccoli (1950-52). Afterwards, they were engaged in many Ina-Casa settlements as well as private dwellings and condominiums.

Retracing the work experience of these two women, the paper aims to investigate the Neapolitan post-war architecture in a more “horizontal” way, trying to overcome the mainstream history mostly male focused.



ID 022 *Dynamic Atlas: production of a geographic information system for the knowledge of the historic city of Rome*

Asia BARNOCCHI

Luca MENEGATTI

“Roma Tre” University
Italy

The Dynamic Atlas is an original geographic information system of critical character on the historical city of Rome, aimed at improving its fruition and environmental security through the spread of cultural information and the definition of the hydrogeological and seismic risk.

The atlas consists in the research and computerization of an extensive collection of historical, regulatory and cadastral maps, historic iconographies and archival documents of architectural-urbanistic nature, that constitutes an “organized form of knowledge” of the city and its no longer existing parts.

This paper draws the attention to the database obtained from the digitalization and the georeferencing of standard geographical base obtained from cartographic sources and relevant production techniques. The system is structured on an archive of vectoral data, produced in CAD and OpenOffice environments, and the migration of selected topics in a GIS platform.

ID 023 *The Role of Evaluation and Participation in developing Cultural Heritage Enhancement Projects. A Participatory Multicriteria Analysis applied to the “Certosa di Pisa” in Calci (Tuscany, IT) case study.*

Agnese AMATO

Massimo ROVAI

Maria ANDREOLI

University of Pisa
Italy

Public cultural heritage sites need considerable funds for restoration and maintenance. Required resources may be found by activities providing a proper mix of private and public functions. Enhancement scenarios have to be adequately evaluated, taking into account the historical, architectural and social values of cultural heritage. Consequently, scenario outcomes need to be estimated using both by qualitative and quantitative indices. This paper analyses the case study of Certosa di Pisa in Calci (PI), a publicly owned museum centre located in a former monastery. Certosa is currently suffering for architectural and structural deterioration, especially of unused areas. Urgent restoration works are necessary to put the building in adequate condition. New functions and activities for the unused areas of Certosa have been identified and evaluated, which would allow economic sustainability by raising funds for the annual maintenance of the whole monumental building. The Authors propose a participatory multicriteria analysis (MCA) model, based on economic criteria and public cultural heritage evaluation criteria, which have been identified with the involvement of Certosa museum directors. Three different scenarios were presented to stakeholders: a) an accommodation structure for a specific tourist niche market, i.e. digital detox; b) a structure for university complementary education (e.g. winter and summer schools) able to provide accommodation for participants; c) a co-working structure where to host also laboratories for expert craftsmen.

ID 025 *Numerical evaluation of environmental performance of a renaissance building to address a comprehensive retrofit strategy: the case of Palazzo Tassoni Estense in Ferrara (Italy)*

Marta CALZOLARI

Barbara GHERRI

Victor MARANHAO

Davide POLETTI

University of Parma
Italy

Energy retrofit of historic heritage has become a priority of Member States in order to reach new level of sustainability. Strategies to enhance the energy performance of historic building (HB), however, mainly aim at improving indoor comfort and reduce their energy consumption. The scale of interaction among the indoor climate, building envelope's and outside microclimate is still disregarded, although their relationship is very important to i) improve the indoor comfort levels; ii) enhance the outdoor fruition quality (i.e. in museum where the outside perceived temperature and relative humidity may affect the tourist's appreciation); iii) to control the heat urban island effect. Hence, awareness about both indoor and outdoor performances is relevant to address effective strategies to improve natural ventilations, absorption of heat wave, shading, to select finishing materials or add natural elements (water and vegetation). HB present often a courtyard or porches, which play a strategic role to control the outdoor microclimate. Many authors have studied their performance in hot and arid climate (i.e. Islamic houses) but deepening the knowledge on their contribution in warm humid climates and in other architectural typologies is still required. Using ENVI-met® simulations the paper presents a numerical environmental analysis to address design solutions for Palazzo Tassoni Estense in Ferrara (Italy), an example of renaissance typology widely spread in the European area.

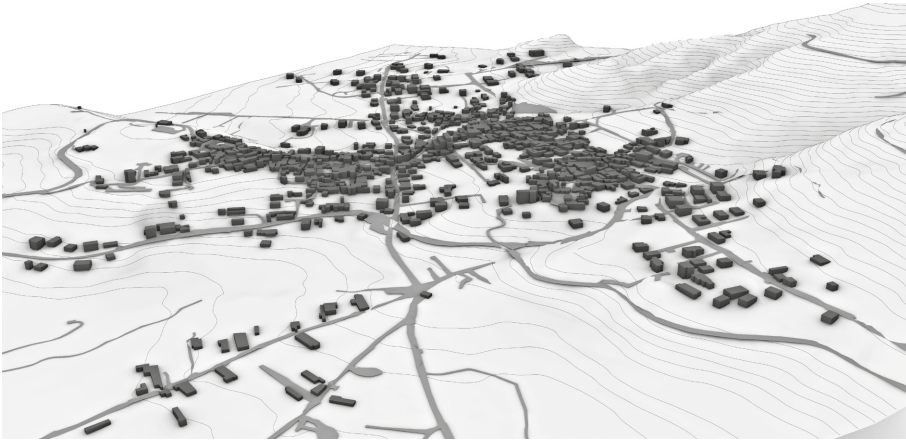
ID 026 *Alternative museum in Rome. Industrial architecture heritage colonized by XXI century's art*

Miriam CONFETTO

Universidad de Sevilla
Spain

University La Sapienza
Rome, Italy

Industrial heritage is one of the suggestive architectural stratifications existing in the urban fabric of Rome, which in recent decades has also been the object of significant redevelopment projects. Exhibition use is one of the functions characterizing these spaces, many of which still present in the memory of the population. It is possible to observe, however, a double type of musealization: the one that concerns the architecture itself restored or left in ruins, and the one that uses the spaces as exhibition places, especially for the exposition of contemporary art often requiring spaces that can receive new and evolving forms of expression. The phenomena mentioned above can be better understood through the study of both the birth of these spaces and the social and economic dynamics generated by them in the context. As in other European cities, Rome has two types of scenarios concerning the use of industrial heritage. On the one hand, official exhibition spaces financed by institutions, such as the MACRO and the Mattatoio, and, on the other, "alternative" spaces where both the community and contemporary art can express themselves by redeeming abandoned buildings, considered as reference points in central or suburban areas, such as the MAAM and the MAGR. The analysis of these exemplary cases makes it possible to explore both the architectural intervention and the different approaches currently used in the capital to host contemporary art.



ID 027 *The Experience of Parametric modeling design GIS: An
Abruzzo hamlet case study*

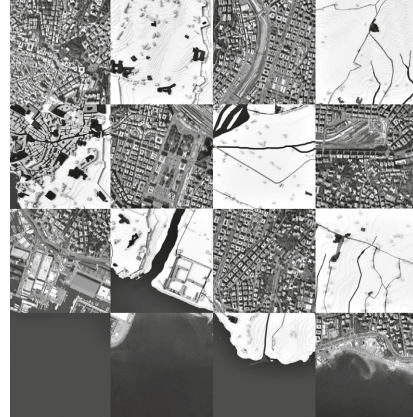
Domenico D'UVA

Politecnico di Milano
Italy

Federico EUGENI

Università degli Studi
dell'Aquila, Italy

With this research work, the aim is to structure an innovative modus operandi aimed at representing a territory with a multi-scalar approach, consistent with vector modelling, which allows to make analysis from an urban and architectural point of view in a synergistic way. The data at the base of this system are GIS type, therefore georeferenced, associated with geometric primitives. The intuition lies in the elaboration of three-dimensional vector models of even very large portions of territory, realized through a visual scripting digital tool (Grasshopper) and processed in a NURBS modeling software. At this stage of the research the attention is mainly focused on the faithful representation of the territory. The case study presented is Arischia, historical center of the province of L'Aquila, located at the foot of the Abruzzo Apennines. For the realization of the model we start from geotiffs of the DTMs that are vectorized in order to get a three-dimensional grid of points that is used to create a NURBS surface that represents the orography of the territory, roads and buildings. The use of NURBS mathematical surfaces allows to lighten the computational burden, obtaining these results in a very short time. The criticality of this methodology is mainly inherent in the availability of accurate spatial data and in some manual operations to make the procedure work. Further development of this work will be the use of remote sensing for perceptive comparison between these two methods of representation.



ID 028 *The representation for the knowledge and development of the city and its territory*

Massimo MALAGUGINI

University of Genova
Italy

The great urban upheavals that have characterised European cities since the 19th century and the rapid and sometimes uncontrolled developments in contemporary cities risk leading to a progressive loss of the city's historical memory and identity. This consideration is confirmed by the most recent examples of contemporary architecture that have lost all ties with the cultural traditions of places and tend towards a "globalization" of architecture.

With the aim of safeguarding the history of the city, its culture, its link with the territory, and to lay the foundations for a controlled and sustainable development of the city itself, a model of investigation is being defined that can visualize the evolution of the city from its birth until today and allow a more conscious future planning.

The graphic representation of the transformations of the city and its territory can then become a model of investigation that allows the dissemination of knowledge of the identity of the city itself and visualizes possible future visions while respecting the territory.

This model has found an interesting field of implementation during the laboratory activities conducted within the Festival of Science and has allowed an innovative approach to the dissemination of knowledge of the territory and the built environment.

ID 029 *Elements of seismic aspects to architectural design*

Marsida TUXHARI
Markel BABALLËKU
Polytechnic University of
Tirana, Albania

Durrës earthquake, dated 26.11.2019 caused lot of damages to buildings of different construction period, structural systems and volume shapes.

This paper is focused on buildings damages due to earthquake and seismic technical design code in force in Albania, which provide guidance on seismic design and recommendations to be considered by urbanists and architects as well as eurocodes.

The scope is to identify the building damages resulting from design concepts, which directly or indirectly involve also the architect designers, eg: the simplicity of the building in layout and volume, regularity in layout and height, including first story height, size of seismic joints, etc.

The main task of this paper is to analyze these factors and compare their effects with the relevant requirements in seismic technical design code.

Through these facts, the paper goes to show that the earthquake damages are caused also from the improper use of technical design code recommendations in seismic prone zones. It does not assume to exclude or restrict the functional and aesthetic choices on buildings, but to emphasize the importance of recognizing seismic technical guidelines for architectural design in seismic prone areas, considering that these buildings have to be constructed with an optimal cost.

ID 030 *Water as architecture*

Enrica PIERAGOSTINI

Salvatore SANTUCCIO

Università degli Studi di
Camerino, Italy

The research carried out in an Architectural and City Surveying course concentrates on contamination between architecture, sculpture and water: various wash houses, fountains, and cisterns present in Italian historical centres. The works examined were built between the 13th and 19th centuries and are located in the Marche and Abruzzi Regions, territories that host interesting cases. In past centuries, these buildings were vital places for cities; today, however, they risk disappearing, along with their related history, building techniques, and traditions. The research examines problems related to the use of various surveying methods applied to real case studies, and it reflects on the conservation and use of wash houses and fountains present in urban centres. For each fountain and wash house, a survey campaign was made using direct and indirect methods. The materials were studied using orthographic views of the cardinal directions and sections that highlighted the parts that had degraded or been restored. Three-dimensional models were made to understand the forms and show the relationships between the parts of each work and between the work and the urban context in which it is inserted. To understand the role of the contamination between sculpture and architectural construction, an explicative historical centre was also examined. All urban sectors in the city were studied using both surveying methods and the data acquired were presented in orthogonal and axonometric projections.



ID 031 *Notes on the material communication of design intentions:
a case study in Molise of particular collective value*

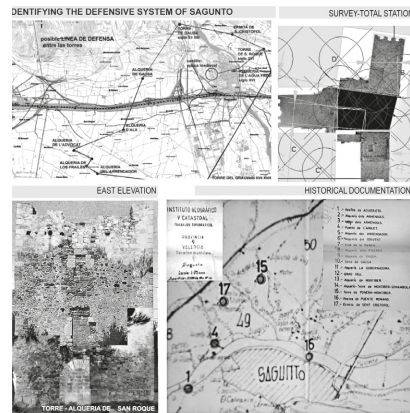
Piero BARLOZZINI
Università degli Studi del
Molise, Italy

Ongoing research at the University of Molise is looking at the architectural space in which man lives and works. The intention is to catalogue and document such spaces with the aim of making known the architectural heritage of this region and with it the culture of the representation of design.

The study's object is to examine the religious sanctuary of Castel Petroso, a late 19th century building in Neo-Gothic style designed by the engineer Francesco Gualandi. Specifically, our chosen aim was to analyse the project's documentation and then to verify the level of fidelity between the plans and what was actually built.

Therefore, this activity involved the examination and comparison of the documentation drawn up for the design's approval and for the construction site, but also that prepared in order to keep the desire to see the building completed alive in the hearts of the faithful. Today, this material is housed in the archives of the Curia in Campobasso and in those of the Library of the Archiginnasio of Bologna where all plans from Gualandi's practice are kept.

The research results clearly showed a late development/improvement in the design that occurred during the construction phase, and also showed that although the drawn design is irreplaceable in the definition of architectural thoughts, it is the material model that renders the plasticity of the architectural solutions obvious to the eyes of the profane. The expressive particularities of this form of communication are very appealing to observers and often cause strong feelings of ownership and conservation to arise in their minds.



ID 032 *Enhancing the Defensive System of the City of Sagunto*

Giulia PETTOELLO

University of Rome
La Sapienza, Italy

The numerous defensive buildings and sighting towers spread throughout Spain hold great architectural and cultural value. The present research investigates the defensive system of the city of Sagunto, situated to the north-east of Valencia. Many architectural objects, especially the most isolated and least known, are found in a state of degradation that compromises their conservation. The present research begins with a study of the Tower of San Roque. The analysis of the building addresses different levels of reading: production of freehand sketches, photographic documentation of the current state, historical research, surveys using total stations, and realization of CAD elevations highlighting the state of degradation. Drawing is a key element of this work and it functions as a tool to understand, analyse, and document the subject and its context and to record the state of conservation and degradation. A future objective of the research is to apply this same process of knowledge-building to other constructions in the territory surrounding the city of Sagunto and to collect them on a website that can be easily consulted and accessed by all. The objective is therefore not only to enhance and communicate the individual architectural objects, but to enhance them as a whole to shed light on an ancient route of great architectural, historical, and cultural value.

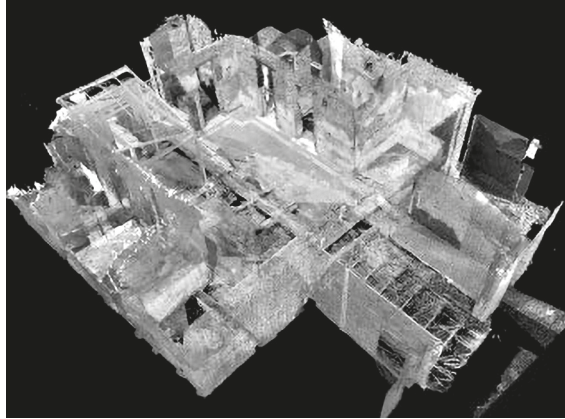


ID 033 *Conserving the Chromatic Value of Plaza Doctor Collado in Valencia*

Giulia PETTOELLO

University of Rome
La Sapienza, Italy

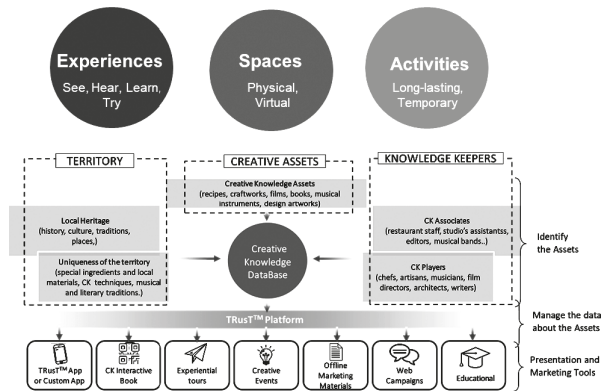
The objective of the present research is to analyse and document the chromatic characteristics of historical buildings with the goal of preserving or restoring their original colour, which is an essential element of the architectural heritage. Plaza Doctor Collado in Valencia was chosen as a case study precisely because this square is characterized by the polychromatic façades of different historical buildings. Each building has a personalized façade that is often painted with various colours that have little or nothing to do with the original colour. It is therefore of great importance to address this problem with the goal of raising awareness about all the realities present in the cultural heritage, which should be protected. The present research is characterized by a series of steps: development of preliminary sketches to read the place and proportional technical drawings of the façades, a chromatic survey using watercolour techniques, and historical research related to colour and the various types of buildings. A later step in the present research is to create a web platform in which various studies related to additional cultural heritage sites will be inserted. Protecting the chromatic/environmental value of a place is fundamental, not only regarding the aesthetic worth of the place, but also and especially to conserve the architectural, urban, and historical identity that makes each place unique.



ID 034 *A perfect example of a Vitruvian atrium: the main atrium of the Casa del Centenario in Pompeii*

Alberto CUSTODI
University of Bologna
Italy

The Insula of the Centenary, the eighth in the Regio IX in Pompeii, was given this name because it was excavated in 1879, the eighteenth centenary of the eruption of Vesuvius. The greater part of the Insula is occupied by the large domus of the Centenary. The domus shows traces of a long and troubled building history; restoration work has been carried out on various occasions, with variations in the dimensions of the rooms and their intended use and significant remakes of flooring and, especially, wall covering decorations. At the time of the eruption in 79 A.D. the appearance of the house was that of a large building with a peristilium and two atriums, one of the few in Pompeii, looking out over via di Nola, where its two main entrances were located. In the past twenty years, the entire Insula of the Centenary has been the object of numerous studies carried out by various teams from the University of Bologna. Various surveys have been carried out, both with conventional methods and also with two laser survey campaigns repeated after a few years. Based on these surveys, the main atrium, the most prestigious entrance to the domus, has been shown to reflect the canonical measures of the Vitruvian atrium. A possible method of tracing in plan are illustrated, with reference to the measurements in osci feet, and the consequent volumes are proposed for a basis of possible reconstructions, in particular of restoration roofs for the protection and creation of museum spaces.



ID 035 *The UN2030 Sustainable Development Goals and the Parrhasian Heritage Park*

Giuseppe BIAGINI
International Traditional
Knowledge Institute
Tucson, Arizona, USA

The author has developed the Creative Knowledge Platform, following the United Nations 2030 Sustainable Development Goals (UN2030 SDG) to the purpose of actively promoting sustainable economic models build around Traditional Knowledge-based practices.

The author believes that the wisdom hidden in practices that have been tested and have evolved over centuries, if not millennia (i.e. Traditional Knowledges), are an immense treasure-trove of solutions for contemporary problems related to the neglect of the basic rules of Nature. Over time most traditional practices adapted to the Rules of Nature, learned how to work with Nature, and not against it, and became what we call Creative Knowledge. This paper will focus on describing how the UN2030 SDG and can be used to leverage the cultural landscape, the Traditional and the Creative Knowledge of the Parrhasian Heritage Park to create a sustainable economic model for the park inhabitants and visitors.

Examples of application of the model to other territories around the world will be briefly described. Finally, a possible application of the model to the Parrhasian Heritage Park is discussed in detail.

ID 040 *A Study on Distribution Planning for Citizens' Hydrants with the User Experimental Drill of Extra Connectable Hoses in Kiyomizu WCH Zone, Kyoto JAPAN*

Takeyuki OKUBO

Dowon KIM

Ritsumeikan University
Shiga, Japan

Tomohiko OWADA

Nippon Telegraph
and telephone East
Corporation, Japan

Michiko HAYASHI

Kansai University
Osaka, Japan

The historical districts in Japan, are difficult to stop the spread of fire on traditional wooden structures in high population density, because of that, initial firefighting by residents is indispensable for mitigation of fire damage. Kiyomizu area as Core & Buffer Zone of World Cultural Heritage in Kyoto which is the representative historical city in Japan has the Citizens' Hydrant which is easy to be operated by single community people.

This research improved the current Citizens' Hydrant for extending reachable range with the proposed Connectable Hose System. Usual hose of Citizen's Hydrant has limited length as 30 m at most. But in case of historic city in Japan, most of traditional narrow street are complicated and most of traditional Machi-ya townhouses have fire-place in deep side from street, so the length of usual hose cannot be enough for effective firefighting.

For the reason, the special nozzle was developed which can connect directly with another hose-end and easily extend the distance of reachable range using the rest hoses in nearby Citizen's Hydrants. An experimental drill was held to estimate the required work time to extend the hoses by various citizens and it was compared with the time limit for firefighting in early stage controlled by citizens. This research clarifies possible extending range for initial firefighting stage with Citizens' Hydrant and proposes an installation plan with the possible expanded range covered by Citizen's Hydrant for Kiyomizu WCH site.

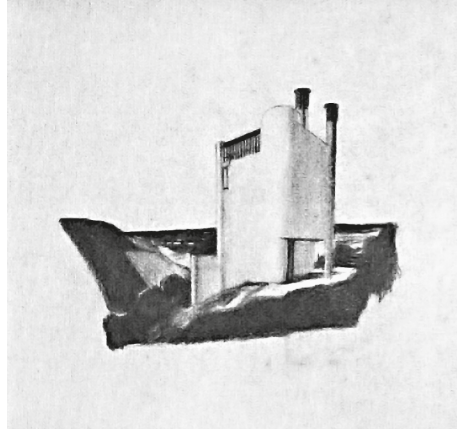
ID 041 *The right to pursue happiness: the overseas contamination of Gaetano Filangieri's thought*

Maria NATALE
Pegaso University
Italy

The intense correspondence between Gaetano Filangieri and Benjamin Franklin clearly shows the wonderful fruits produced by the contamination of ideas. With his writings, the Neapolitan jurist and philosopher influenced Benjamin Franklin's political thought. Although he never landed in America, Filangieri contributed to create the constitutional bases to promote the public happiness in the U.S. As a consequence, in the Declaration of Independence, the pursuit of happiness is listed together with the other unalienable rights of life and liberty.

So, while in Europe the new ideals of freedom went against a reality dominated by residual feudal bonds, the United States of America represented the place of their concrete application.

A strong remark of this idea was found in the letter of December 1782 that the Neapolitan philosopher wrote to Franklin: "Fin dall'infanzia Filadelfia ha richiamati i miei sguardi. Io mi sono così abituato a considerarla come il solo paese ove si possa essere felice che la mia immaginazione non può disfarsi di questa idea". The American myth had enchanted the heart of the Neapolitan philosopher and even thanks to him, the "right to the pursuit of happiness" was included in the Declaration of Independence of the States of America.



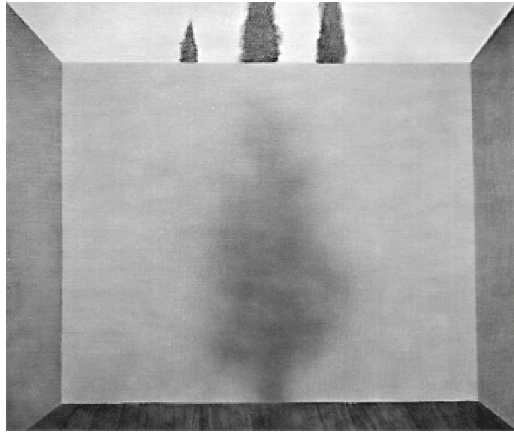
ID 042 *Drawings and Utopias: A Never Built House by the Sea; A Project by Noronha da Costa to Magoito, Sintra, Portugal, 1971-...*

**Pedro António
JANEIRO**

**José
FERREIRA CRESPO**

Universidade de
Lisboa, Portugal

Unless we are mistaken, “House”, “eternal return” or “I”, is what Architecture is about. Not only as a Discipline but rather as Mode, by which a drawing or any other image foresees it. House meaning Home, or “Seashell”, as Bachelard tell us, or in a different Mode, Botticelli. The childhood home, as an installation of a world, is present in the space between the fingers of the architect’s hand whilst holding a pencil and killing the opacity of a sheet of paper with a point — the point which starts a line — thus conquering such world in foreseeable depth. With a rather particular technique, Noronha da Costa draws his other-house, a house for himself, a house where he may gaze out at the Sea and watch the same boats pass by — the ones he saw framed within the openings of the house where he was born, in Estoril, Portugal. An unbuilt home, an utopian place(?) — perhaps, somewhat like Filarete’s Sforzinda. This text aims to present a project of a house by the Sea, drawn by the Portuguese Painter, Sculptor, Filmmaker, and Architect: Luís Noronha da Costa. Not being built, or rather, being unbuilt(?), we set out to dwell within this house through its drawings all the while looking to unveil the world(s), the promise(s), the dream(s), they hold within. How does this house come to be?



ID 043 *The Drawing and the Painting as a Possible or an “Impossible”(?) Architectural Project(s) or Hypothetical House(s) in Luís Noronha da Costa*

**José
FERREIRA CRESPO**

**Pedro António
JANEIRO**

Universidade de Lisboa,
Portugal

Painter, Sculptor, Filmmaker, and Architect Luís Noronha da Costa (b.1942) is generally considered as one of the most prolific artists in Portugal, in particular due to his paintings. In this text we set out to understand how this artist's Painting practice is deeply connected, not only to his Architectural practice, but to Architecture as a whole. On the other hand, our aim is also to understand how his own Architecture — whilst project and/or object — relates to Painting. Although it is well understood that both these Disciplines share common borders we hypothesise that in Noronha da Costa's work they actually exist in a common Space, where Architecture and Painting in-form each other and lastly, become one.

It seems quite obvious to state that there are many ways to dwell: one dwells within a painting, a drawing, a house. Our work seeks to understand the specific case of Luís Noronha da Costa — who trained and practiced as Architect, but who is known as Painter — who draws and paints Architectures, as project; and, projects architecture while drawing and painting. A paradoxal and unique case in the disciplinary studies area of Drawing, Painting and Project in Architecture — as well as the bordering territories which lie between them.

ID 044 *Overcoming the risks of building for the universal values of UNESCO heritage in the Cultural-Historical Area of Kotor*

Goran RADOVIĆ

University of
Montenegro

David RADOVIC

Studio Prostor d.o.o.
Podgorica, Montenegro

The natural and cultural historical area of Kotor, in Montenegro, because of its extraordinary values of architectural ensembles of the old palace cities, churches and archeological sites, were essential for the use of a nationally-constituted cultural and historical entity in 1948, and in 1979 by the UNESCO World Heritage Committee it was inscribed to the World Heritage List, as well as in 2017 the Kotor fortification system within the Venetian fortifications from 16th to 17th century. The cultural landscape, as a symbiosis of the multi-millennial part of man and nature, and its richness of natural and cultural heritage, represents a strategic potential for the economic development of culture and tourism. Due to the exceptional cultural and natural values of the protected area of Kotor, spatial development is planned on the principles of integral protection, while respecting traditional urban models and preserving the cultural landscape on the principles of sustainable development. Meeting the contemporary living needs of citizens and the speed of urbanization are a danger and a risk for this area, which can irreversibly destroy their attributes of universal value. Particular danger and risk is the investment initiative for the commercial construction of residential buildings for the market and larger hotel facilities. It is no doubt that heritage initiates social development, which is why development projects must be carefully planned.

ID 045 *Small construction sites for the regeneration of public space*

**Francesca
CASTAGNETO**

Fernanda CANTONE

Università di Catania
Siracusa, Italy

Public space is an area full of contradictions, but also the place to overcome them. It is an essential propulsive factor that results in a tight dialectic between different intentions and expectations. It talks about the management policies of the Public Authorities, often it needs a shared process of urban and territorial transformations that can give different opportunities to economic and social actors and outline a new, fluid and flexible management model. These are historicized contexts on which the hand of man has made transformations in a discontinuous manner, which preserve the identity and settlement typical of the territorial context. The outcome of such interventions, in the role of public-run pilot experiments, should highlight the qualities of the existing building stock and stimulate similar processes on private construction.

The research takes into consideration the public space of Monterosso Almo (RG) thanks to a Convection between University of Catania and Municipality, in place since 2019. The requests of the municipal administration are aimed at identifying urban regeneration strategies on the Matrice district, the first nucleus of settlements.

The methodology adopted involves the identification and mapping of material and immaterial urban elements (margins, overlaps, characteristics of material culture) and their classification between public and private. The construction of a palimpsest of elements and classification leads to the identification of the pilot yards and intervention for prevailing technical elements

ID 046 *Fès and its Medina: a key-case study of architectural contamination*

Elena DE SANTIS

Tiziano INNOCENZI

University of Rome
"La Sapienza", Italy

The Fès Medina, UNESCO site, represents today a key case study to acknowledge the contamination of architectural and urban heritage. The Medina is a unique example in the Mediterranean area of an intact Islamic urban centre of large dimensions, characterized by a drift road system and ancestral construction techniques: tadelakt, raw earth, fired bricks, lime mortar. Today the city of Fès grows outside its Medina, with a strong western character: boulevard instead of small-market streets, reinforced concrete instead of Atlas stones. The thrust of modern ville, which began with the French colonialism, is also changing the Medina: the absence of a plan for the maintenance and protection of the historic centre and its tangible and intangible heritage, is driving rapid change in the ancient Islamic core, contaminating usual techniques and materials with more western uses. This form of contamination can be considered a form of wealth, if studied and organized. The city is into a seismic area, and the use of innovative materials can improve parts of Medina in abandonment conditions or hydrogeological risks, while maintaining the use of more traditional techniques by respecting historic buildings and urban form. In conclusion, the proposal for a studied and well-planned contamination between innovative techniques and traditional knowledge can lead to a more modern but not different Medina, and can address necessities of a contemporary society, whose heritage is effectively protected.

ID 048 *Revitalization the integrated values of the Darius I the Great inscription, as the cultural property belonging to humanity. Bisitun, Iran*

**Sara
POURYOUSEFZADEH**

University of Ferrara
Italy

In the early days of 2020, world cultural heritage members, cultural preservationists, and activists in this field heard the alarm about the Iranian antiquities' cultural heritages. Although targeting Iranian cultural sites by threatening in a possible war had a shocking impact, pushing aside the concept of belonging, cultural heritage of all humanity as the underpins foundation of world heritage convention ratified by the Hague Convention in 1954 and the WHC convention in 1972, could not be acceptable. Identifying the Iranian heritage sites can encourage the rise of awareness and increase the shared discernment to aide warning against destroying these human cultural belongings and attempts to the rational protection of them.

Obviously, any attack to these features of human culture and history have immeasurable impact on sustainable development, holding back the development progress, and actually there can be no sustainable development without peace as manifested in 2030 Agenda. Regarding Francesco Bandarin's declaration on 6th January 2020 several monuments of the cultural heritage of the great Persian empire could become the target of attacks, such as the site of the inscription of Darius I the Great at Bisutun of 521 BC. This paper will discuss about this inscription and bas-relief as one of the universal outstanding value of Iranian civilization, which is coined as the longest multifaceted, ancient text written in the Iranian literature.



ID 050 *A network of slow routes between Italian UNESCO sites. A territorial strategy to enhance the in-between territories and the inner areas*

Andrea ROLANDO

**Alessandro
SCANDIFFIO**

Politecnico di Milano
Italy

The current paper aims at investigating how a network of slow routes, connecting UNESCO sites, could represent a strategy to enhance the in-between territories and inner areas. Italy counts the higher number of UNESCO World Heritage sites, integrated in rich and vary landscapes. Most of the times, the UNESCO recognition has a positive influence on the sites, preserving and enhancing their natural and cultural values; nevertheless, there is a risk that the attractiveness of each monumental site can also produce negative impacts. Therefore, a broader territorial strategy can be developed to promote a network of slow routes, to improve connections between the sites, and, at the same time, to revitalize the inner areas where spatial, environmental and cultural assets of great value are also present. In this sense, the territorial strategy allows to move the focus from the points (UNESCO sites) to the landscape, enlarging the vision on the whole territory. In this research four different itineraries in Italy have been mapped (north, center, south), with aim to connect UNESCO sites, but also to include National Parks and other protected areas, minor historic settlements and cultural heritage. The strategy also considers accessibility and mobility issues, by integrating the existing infrastructural network, such as railways and highways, improving inter-modality in the nodes (stations and service areas), with specific care to the UN goals of Sustainable Development (SDG 3, 9 and 11).

ID 051 *Interventions on Cultural Heritage: Architecture and Neuroscience for Mindful Projects*

Valeria MINUCCIANI
Nilufer SAGLAR ONAY

Politecnico di Torino
Italy

The paper aims to investigate the intersections between the disciplines of Architecture and Neuroscience focusing on interventions on cultural heritage. Starting from the assumption that the main objective of architecture is ensuring the well-being of the inhabitants at different scales, and that architecture (with its forms, its proportions, its spatial hierarchies, its relationships) generates behaviors, the authors investigate the terrain of overlap with neuroscience, (particularly in its openings towards the disciplines of psychology, social and behavioral sciences) in order to design meaningful cultural experiences.

The concept of disciplinary contamination regarding cultural heritage is not to be discussed only in physical terms, but also in intangible terms including all social and cultural values of heritage buildings and sites. This is also because values associated with cultural heritage can be protected and enriched by an approach that generates reactions on a cognitive and emotional level, and it needs to be mediated both at the level of architectural interventions and museography.

For this reason, starting from the first intuitions that some designers had during the twentieth century, the paper investigates possible ways of collaboration and experimentation and refers to studies currently underway.



ID 052 *From sunrise to sunset. Market as space contamination*

Salvatore SANTUCCIO

Scuola di Architettura e
design E. Vittoria

Marta MAGAGNINI

Università di
Camerino, Italy

Markets are identity spaces of society, contamination is the main focus of the market. The market is an architecture created by contamination made up of people passing by, of eyes looking, of voices, and of goods, of overlapping colors and stacks, of non-design. It is the opposite of architecture designed with control and glamour, the market realizes its space in its chaos, this is its strength. A street market transforms any anonymous, gray street into a colorful, dynamic urban space. Every open-air bazaar, once stops working, becomes an anonymous road again and this reveals the sense of contamination that becomes space. Even the large Middle Eastern souks or European nineteenth-century markets with iron architectures designed, seen in the closing hours seem dull, lacking: their architectural quality needs life to reveal its energy. This essay aims to investigate the relationship between space and its contamination, proposing in this relationship the definition of a greater cultural value of space, which molds into chaos. With this objective, spaces of market will be analyzed not only in their most vital phase, but also during the transition and silence phases. Using examples placed around the Mediterranean will be proposed a market type classifications (street market, fair, souk, open-air market, etc.), with representations by different mediums (photographs, maps, videos, paintings, project drawings...) which can show not only these typological specificities, but also the ways in which contamination perpetuates itself, in the cyclical times of its existence.



ID 053 *An intervention on an emerging industrial architectural heritage: the transformation of a chemical plant in Tarragona*

**Josep M.
TOLDRA DOMINGO**

**Joan Manuel
ZAGUIRRE
FERNÁNDEZ**

Universitat Rovira i
Virgili Reus, Spain

**Jesus M. ÀLVAREZ
ESCOLANO**

Building Engineer
Tarragona, Spain

**Àngels CAÑELLES
GENIUS**

La Selva del Camp
Spain

In the mid-70s the company Messer built a plant for liquefied gases production in Vilaseca (Tarragona, Spain) to supply the back then incipient petrochemical industry of the metropolitan area of Tarragona. In 2013 the start-up of a new production line made the machinery of the first phase of the implementation obsolete and was dismantled. At the same time, studies were being carried out to expand the technical and administrative offices of the plant, a chance that led to the idea of housing them in the spaces of the original industrial shed that had been emptied. We present here the materialization of this idea. We can summarize the project by saying that the works consisted in generating two completely glazed facades. The first opens to the outside: it is the result of demolishing the opaque brick wall that closed the south end of the main nave. The second is an interior facade: it opens to the triple height space on the north side, illuminated by a skylight and located in front of the wall that has been raised as a separation from the part of the nave that still houses industrial uses. The project has tried to generate diaphanous spaces, showing the amplitude of the interior volume generated once the production machinery has been removed, looking to recognize the qualities of a relatively recent industrial architecture, but with a remarkable constructive quality that from our point of view deserves to be considered by its emerging heritage values.



ID 054 *From Italy to Montenegro: cultural contaminations and disciplines exchanges for the enhancement of the Roman town of Doclea*

Lucia ALBERTI

Bruna DI PALMA

National Research
Council of Italy, Institute
of Sciences of Cultural
Heritage, Italy

Since 2017 a multidisciplinary research project is in progress for the study and enhancement of the Roman town of Doclea in Montenegro and the area in which the archaeological site is inserted. Located few kilometers from the capital Podgorica, Doclea has seen in the last century long phases of abandonment alternated with few archaeological excavations, apparently not integrated in a long term strategy. The necessity to give new life to a site so important for the cultural identity of Montenegro encouraged cross-critical dialogues and frequent exchanges between the Italian team of the National Research Council, made by archaeologists, topographers, remote sensing experts, geophysics, architects, and the Montenegrin team, made by historians of the University and conservators of the Superintendence. The Italian expertise to face the issues of very complex cultural settlements and landscapes worked as a stimulus for the creation of a shared intervention protocol and methodology. The need to preserve and enhance the entire area, in cultural and economic terms, produced a real “cultural contamination” between different views and actors, such archaeologists and architects, with points of convergences and divergences. The final result is a project with the goal to profoundly modify not only the area with the construction of infrastructures and facilities, but also the global perception and appreciation of an ancient site by the local populations and the international visitors



ID 055 *A new Renaissance for the ancient villages: between field valorisation and guidelines*

Gigliola AUSIELLO

**Manuela
COMPAGNONE**

Francesco SOMMESE

University of Naples
Federico II, Italy

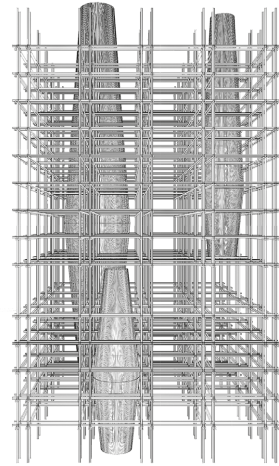
Ancient Italian villages could be candidates for progressive decline and depopulation that limits their historical and cultural value, resulting in isolation from the surrounding context, a condition not in line with today's globalization. This raises awareness of the need to enhance them. Highlighting them with strategies that aim at valorisation is certainly a necessary action to grant them a new life, so as to stop emigration from the ghost villages and to revitalize the socio-economic fabric of that place. In recent years many examples of enhancement have been tested throughout the national territory with different levels of impact. Thanks to the careful analysis of the range of actions taken for the concrete revival of some small historical centers, we can adopt measured strategies that have a clear response to reality, guaranteeing them new perspectives. The purpose of this report is to provide a proposal of guidelines starting from the field trials already experienced by other villages, considering the preservation of the existing one to reserve memory, culture and the necessities of modern life. Measuring and weighing the interventions on the basis of both impact and effects is a necessary action to design the enhancement, whose innovative character can contribute to a territorial renaissance. We should start from the combination of innovation and tradition to propose a revival of microterritoriality through social actions that increase tourism and the circular economy.

ID 057 *Discovering, conserving and communicating the past. Synergies and antagonies between archaeology, restoration and museography in order to make accessible the past legacy*

Michela BENENTE
Valeria MINUCCIANI
Politecnico di Torino
Italy

Melania SEMERARO
Archaeologist
Torino, Italy

The paper aims to investigate the spaces of overlap, collaboration and even contrast between the disciplines of Archaeology, Restoration and Museography. While archaeologists share the view that the public's "enjoyment" of the archaeological heritage in situ could jeopardize its integrity, paradoxically the surest way to preserve an archaeological site is back filling. The only architectural intervention in an archaeological site is a protective element insertion, but this often distorts its identity: therefore, the possible compromise for a "direct" fruition of an archaeological site is the restoration, although it has been intended in different ways over time. The past must be preserved and protected keeping in mind the centrality of people (to whom the preservation of the past is addressed) that instead is often forgotten or postponed to other urgencies. It should also be underlined that conveying these often fragile remains to the future depends on their acknowledgement as elements of cultural identity. In recent decades, however, new ways of intervening have emerged, in order to preserve but also to communicate in the best possible way the cultural meanings and contents of the archaeological heritage, making them really "accessible" and dialoguing with the city and with the present. The paper illustrates some significant case studies to investigate the potential of a real disciplinary contamination between the three above mentioned fields.



ID 059 *Without Borders.
I don't see any enemies in my neighborhood*

Efisio PITZALIS

Caterina BELARDO

Barbara BONANNO

University of Campania
Italy

In the socio-economic context defined by the migratory flows into and out of our country, the additional policies of cohabitation and shared protection of the environmental heritage and degraded urban systems are becoming increasingly urgent. These thematic are mainly associated with the conversion of large housing areas for accommodation and cultural needs and it develops a new space for collective living linked to the joint participation of different identities. Within the Degree Laboratory of the Department of Architecture and Industrial Design of the "Luigi Vanvitelli" University of Campania, some researches express paradigmatic case studies in regards of the recovery of disused architectural elements or pieces of the abandoned agricultural landscape. In particular: the first proposal fits into the landscape as a metaphor for breaking down social and cultural boundaries, configuring itself as a place of welcome and use for classes in need of social integration; the second proposal prefigures a process for successive pieces capable of progressively systematising the recovery of a chain of ghost villages. ▸



ID 060 *Drawing as a Legacy: the drawn landscapes of the city and its reading in the thickness of the present*

**Pedro António
JANEIRO**

Universidade de
Lisboa, Portugal

The drawing is an image. A drawing is an object like any other. It is an object that, when instrumentalized by Architecture, for example, allows it to happen. It is an object that testifies to the reading of architecture and the city, contributing to a notion of urban landscape.

Like any other object, drawing: it does not have an existence in itself, it does not exist by its own means – drawing needs experience, the feeling of the subject, in order to enter the world of things. Things make up the world of the city, but this composition only becomes possible if, in some way, these things are significant. So, we will have to admit, there is no meaningless world or city. And as with other objects, drawing so that it is understood as drawing, and not just any other object, enters a process of recognition, elaborated by the subject and which allows his experience as a drawing.

The city is virtual because it exists around, in function and through, the subject that draws it. When we say that drawing is a manifestation of that reality, a representation or a model, we come to the conclusion that more than the phenomenon it evokes, drawing is a virtual manifestation, which is constructed through the exploration of the transparent quality of the support, instead of another virtual manifestation that is the idea that the subject builds around what he calls “real city”.

ID 061 *For an intercultural approach to knowledge of cultural heritage*

Rossana GABAGLIO

Politecnico di Milano
Italy

Cultural heritage is a tangible proof of every local culture: we cannot limit ourselves to recognizing the existence of a multiplicity of cultures, without offering opportunities for encounters and exchanges, for crossings and contaminations with ours. Knowing the heritage of other cultures does not mean using our point of view as an interpretative key.

In the field of Emerging Countries, what are the problems and boundaries of responsibility for conservation? Is it possible to know the existing heritage, improve urban quality and living conditions and, at the same time, maintain its unique identity?

The implementation of the process of knowledge and care of heritage is not only a disciplinary activity but has to be defined through social participation, environmental and economic sustainability.

The concept of interculturality allows us to build a respectful and responsible dialogue capable of defining new cultural horizons and improving the existing heritage.

Starting from these premises, it may be useful to indicate the essential phases of the knowledge project, not through an aseptic list, but to try to define them in depth, declining them based on the specificity of the heritage to be investigated and its context (cultural, environmental, constructive...).

ID 063 *Industrial heritage regeneration in Beijing: a sustainable case study*

Marichela SEPE

University of Naples
Federico II, Italy

In China, two categories of industrial heritage regeneration can be identified. As Shin-lian (2014) has pointed out, the first concerns the districts which are created by renovation of old buildings and factories which are frequently found in major cities such as Beijing. These factories, and streets and houses in the surrounding area, were in many cases transformed into art or cultural districts including facilities for tourists and visitors. The second category is focused on entertainment areas connected to cultural activities as well, which include theme parks and performing arts areas.

The 798 Art Zone in Beijing's Dashanzi Art District is included in the first category and support the mobilization and engagement of the government with the recovering warehouses and old factories.

In the last years, the Chinese government has invested many financial resources in order to support and incentivise these kinds of districts, even though these operations have not been successful in all cases. (Fulong et al. 2007; Hui, 2006; McCarthy, Wang, 2016).

Starting from these premises, the paper – carried out in the framework of EU-FP7-PEOPLE-2011-IRSES Planning, Urban Management and Heritage (PUMAH) and the Italia-China Bilateral Cach Programme “Cultural routes: valorisation and management of big historical sites” – is aimed at showing the case of the regeneration of the 798 Art Zone in Beijing.

ID 066 *Art and public space. Between history and nature*

Francesco CRUPI

Laura RICCI

Sapienza University of
Rome, Italy

Responding to problems related to the new characters of the city and contemporary territories requires the development of strategies, tactics and actions characterized by high levels of integration, interdisciplinarity, and a multiscale and multidimensional vision. The reflection between art and public space is grafted on the cultural and disciplinary passage born from the crisis of modernist urban planning where art, moving away from the concept of monument for celebratory purposes, is constituted as a driving force of the interventions projecting, new languages, new forms of communication, interaction and contamination between the work of art, the public and the context. Since the seventies public art, which includes multiple modes and forms of representation and use of art, permeates the urban structure, the social fabric and the forms of the landscape, becoming the engine of actions designed to restore recognition to marginal areas, to redefine the design of the public space, to protect and enhance the common identity goods, through a strong pedagogical, cultural, social and inclusive connotation. In this reference framework, starting from the analysis of some case studies, characterized by common cultural references and by an integrated and multidimensional vision of art, public space, history and nature, the contribution proposes a reflection on the role of the different expressive forms of contemporaneity in the regeneration of public space in the city and in contemporary territories.

ID 067 *Famous architectures in urban contexts: the impact of colours and materials*

Gigliola D'ANGELO

Marina FUMO

University of Naples
"Federico II" Italy

Claudia LOMBARDI

**Pia LOPEZ IZQUIERDO
BOTÍN**

Universidad
Politécnica de Madrid
Spain

Architecture is not just a container or a place in which it is possible to perform functions; architecture is everything that surrounds us, it is the space in which we immerse ourselves and with which we communicate. It is not the shape of the project that first influences our perception of space, whether it is open or closed, but the colours and materials that characterise and define it, making it harmonious and pleasant or, in the opposite way, hostile and inhospitable. In 1981 the UNI 8289:1981 "Construction. Needs of the final user. Classification" defined the term "well-being" as "the set of conditions relating to states of the building system appropriate to life, to health, to the performance of the users' activities", how do colours and materials contribute to the conditions of well-being? Which are the targets that can be achieved through the wise use of these elements?

The aim of this work is to analyse the application of colours and materials in famous architectures in order to determinate the impact at urban and human level, how they dialogue with the context and how they dialogue with human perceptions, identifying three directions of intervention: colour and materials as anthropomorphic relation, colours and materials as pictorial support, colour and materials as function.

ID 068 *Survey, Modeling, and Documentation for Preservation:
Digitization Challenges towards Cultural Heritage
Enhancement and Conservation*

Federica MAIETTI
Federico FERRARI
Marco MEDICI
University of Ferrara
Italy
Marinos IOANNIDES
Cyprus University
of Technology

Fostering digital technologies to record, document, and preserve Europe's Cultural Heritage and their accessibility is one of the main challenges nowadays. The great potential of 3D digital modeling and representation to new ways of visualization and data management can lead to new avenues of understanding, enhancement, and conservation of Cultural Heritage. Applications in digitization fields can be helpful to minor or unknown Heritage sites or Heritage at risk; moreover, Digital Cultural Heritage is a highly interdisciplinary field, in which contaminations of integrated skills are merged.

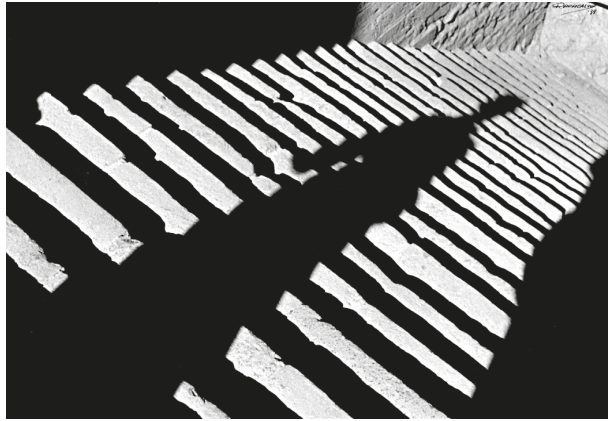
This inter-sectorial value is the key factor in gathering the inclusive involvement of different users, which is the starting point for fruitful interdisciplinary cultural contamination and cross-disciplinary dialogue. This contribution will present the latest achievements by two funded and concluded H2020 European Projects focused on digitization challenges: the project INCEPTION "Inclusive Cultural Heritage in Europe through Semantic Modeling" and the project ViMM "Virtual Multimodal Museum".

The first one focusing on efficient 3D digitization methods and tools for enriched semantic modeling; the second one on policies, strategic decision making, and the use of breakthrough technological developments and their impact on Digital Cultural Heritage and Virtual Museums.

ID 070 *Italy and China. Historic Infrastructures and Ecological Networks for an Integrated Urban Regeneration Strategy*

Laura RICCI
Chiara RAVAGNAN
Hui YANG
Sapienza University of
Rome, Italy
Yezheng TANG
Soochow University
Suzhou, China

The paper illustrates part of an international research activity that a group of professors and researchers from the PDTA Department of Sapienza University of Rome has been carrying out on the topic of urban and territorial regeneration, within a framework of cultural and scientific collaboration with Chinese Universities. In particular, the research path is aimed at defining a “methodology” of analysis and planning for the regeneration of the contemporary cities and territories characterized by the widespread presence of cultural and natural heritage, with particular reference to the historic infrastructures (walls, channels, historic road network) and ecological networks as founding elements of the “historic territory” (ANCSA, 1990) and of the “historic urban landscape” (Unesco, 2011). In consistence with the research path, to this end, the paper starts from the analysis of Italian and Chinese historical urban contexts, combining three different disciplinary perspectives that involve structural and morphological issues with ecological-environmental ones. Furthermore, the contribution deepens integrated and multi-scalar regeneration strategies focused on the strengthening of the relations between public space systems, historic infrastructures and environmental networks. This complex network requires the definition of strategic planning zones for urban and territorial planning and urban projects that involve, in the case studies, waterways and historic walls.



ID 071 *Early-Medieval Benedictine settlements and monastic landscape in Italy. A shared path and a case study*

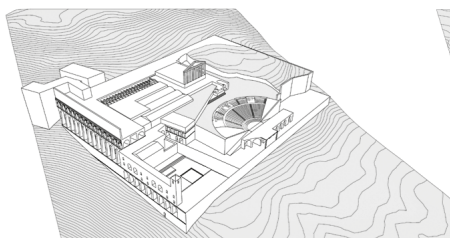
Ruggero LONGO

Bibliotheca Hertziana –
Max Planck Institute for
Art History
Rome, Italy

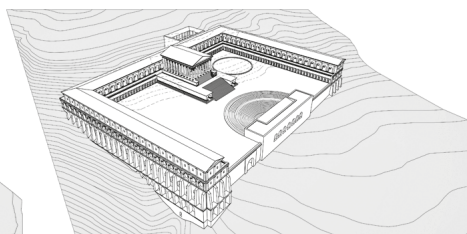
Enrico MONCALVO

Politecnico di Torino
Turin, Italy

The UNESCO nomination process of Early-Medieval Benedictine settlements and monastic landscape in Italy represents a great opportunity for the preservation and the cultural promotion of a global heritage originated in Italy. This heritage stands out by a strong relationship between the cultural, immaterial phenomenon and its influence on the material shaping, arrangement and organization of architectural spaces and natural places in Medieval Europe. The thematic study retraces the beginning of a track that, starting from Benedict's journey, gave rise to an infinite thread across Europe (Rumiz). The monastic landscape indeed reveals its multiple facets and meanings: a natural, specific environment – i.e. the desertum – inspiring the ascetic meditation and the anchoritic life, being also a favorable place for the monastic settlement; finally, a cultural landscape, shaped by the coenobitic organization of space and marked by the territorial arrangement and organization of the anthropic settlements. From Benedict's journey, circumscribed in the Apennine landscape of central Italy and evoking ancient cults and sacred spaces of worship, this path developed in Medieval and Modern Europe, spreading across the Apennine ridge, up to touch the Carolingian Holy Empire in the North territories and the finis Galliae in the western Alps.



3D model of the Sanctuary of Hercules Victor in its current state



3D model of the Sanctuary of Hercules Victor in its original appearance (based on C.F. Giuliani's studies)

ID 072 *Dynamic Atlas (DynASK): University Spin-offs and Digital Technologies for preservation and promotion of Cultural Heritage. Tivoli and the Sanctuary of Hercules Victor*

Giorgia CECCONI

**Giulia LOPES
FERREIRA**

"Roma Tre" University
Italy

The proposed study describes the authors' contribution to the research project "DynASK_Dynamic Atlas: a System of Knowledge" concerning the use of digital technologies in the field of preservation and promotion of cultural heritage. The Dynamic ASK's purpose is to develop a methodology in the study of cultural assets by building an organized and geo-referenced system of overlapping information. The system, a digital platform, can be interrogated in order to obtain new and specific themes and "never seen before" maps. This method can be applied to both territorial and architectural context. Digital technologies provide many opportunities for improving public access to different forms of cultural assets. The aim is to maximize the potential of academic research by turning it into a business idea: a university spin-off in the development of creative learning and educational tools. This paper will be focusing on the application of this approach to the city of Tivoli. The platform can be used to develop originals "urban museum itineraries" able to emphasize the role of Tivoli's cultural assets as tourist attractors. Technologies such as 3D modeling, Virtual and Augmented Reality are important tools for showing evolutionary processes of urban areas as well as historical monuments: presenting the case study of the Sanctuary of Hercules Victor, this work aims to describe the impact that innovative digital technologies can have on the preservation and promotion of cultural heritage.

ID 075 *Is the conservation of Lombard Industrial Heritage a potential cultural/economic trigger at small/medium urban scale? The study case of Carugo - CO*

Alessia SILVETTI

Chiara BONAITI

Marco STELLATO

Politecnico di Milano
Italy

The factory system of Como area has a historic root that deeply characterised the economy, the urban sprawl, the infrastructure and landscape of the area since the 18th century. Together with the spreading of the industrial sites, the railway network developed along preferred historic directions to connect the city of Milano to the markets of the border countries. The paper deals with the multi-scale analysis of the residual potential of the Ferri&Boucard textile factory in Carugo, a village developed beside the train tracks, as representative of most of the industrial site scattered in the Lombard-Venetian territory. The factory itself has a diffuse typology, it is a historic one store large complex of articulated buildings and it was designed according to the most advanced international study of the 18th century. Some hypothesis of re-launch for the site and the entire territorial system are explored: the large volumes and open spaces are suitable for additional functions to the usual museal ones. The innovative proposals are based on preservation, respect of documentary value, sustainability and social aggregation by means of reversible and recognizable interventions. The main idea is to install new sustainable manufacturing processes, hand-craft labs, transformable theatre and workshops directly accessible by train. This can promote the possibility of collaboration with high level institutions of Milan, supporting a system synergic with its territory at small-medium scale.

ID 076 *The threat of religious terrorism on cultural heritage: summarizing international intervention and future perspectives*

Colomba LA RAGIONE

Pegaso University Naples, Italy

Giuliano LUONGO

International University for Peace, Rome, Italy

The rise of terrorism rooted in religious extremism struck many aspects of civil society at global level. A crucial aspect of such threats regards the attacks against historical monuments and cultural heritage. The international attention to the destruction of historical sites raised in 2017, after the attacks that took place in Mali; this set an important starting point for paving the way to joint international efforts, with particular engagement from UNESCO and UNODC. On the basis of this background, in this paper we will discuss the topic of the protection of cultural heritage from physical harm deriving from assaults of religious extremist matrix: the scope of the papers consists in providing a summary of the international- and national-level measures undertaken until now, discussing their effects – manifest and potential – while concluding with the future perspectives on this relevant issue. The paper will introduce the topic by summarizing the main attacks of recent years; then, it will identify under a geographical profile the areas under most relevant threat in relation with the most active perpetrators, identifying the main terrorist groups involved in such actions. Consequently, it will report and comment on the main measures taken by the global community via international organizations and at national/governmental level. In conclusion, it will point out the necessary relation between practical security-related activities and socio-cultural promotion activities.



ID 078 *Strada Nuova: as an example of a resilient cultural landscape*

Patrizia BURLANDO

University of Genoa
Italy

In Liguria since ancient times the landscape systems with villas and gardens have structured the territory as strategic elements of the frame between agricultural land. A real network of villas, gardens and adjoining agricultural areas constituted the recognizable element of the territorial organization with a systematic control of rural properties. For centuries a surprising number of villas and gardens has connoted the landscape of the great city of Genoa, admired by travellers and by artists, who have described the fundamental role of connotation of the image. The historical evolution of the Genoese landscape is explored until the twentieth century: from the abbeys and parish churches, the first nuclei of transformation of the agricultural space of the Middle Ages, to the villa systems reached maturity in 1600 especially in the Albaro hill and in the plain of Sampierdarena until 1800, where urban growth has led to the disappearance of many elements of landscape systems. The survival of the Genoese cultural and historical landscape to the idiosyncrasies of the contemporary age is the demonstration of the resilience of the whole complex system of villas and gardens structured over the centuries. Among the most significant examples the system of terraced gardens of Strada Nuova, which has characterized the Genoese landscape to such an extent, to contribute to the inscription on the UNESCO lists of the palaces of the rich Genoese merchandise.

ID 079 *Contaminated Architecture*

Luca ZECCHIN

University of Trento
Italy

This paper investigates the “contamination” design strategies intended as compositional operations that work with the existing. The introduction of new architectural bodies into pre-existing buildings and urban structures, even minor and marginal ones, can reconfigure the sign and meaning of the current situation, rediscovering the traditional matrices of “a completely new grammar of relationship with the world and an equally new possibility to reformulate the meaning of the word context”. “Contamination” is the place of what is above all impure and partial, the time and the life, the reopening of a built work and the unfinished as the possibility for another fulfillment. It means that “a writing does not close within the limits of the aptitude to repeat its structure and its own training method”. As a constructive and relational structure, it is a device able to interpret diversity, to enhance dissonances, to establish a different harmony. It is not just about grafting one organism into another, but a project practice that can be implemented through the insertion of new elements in the already given matter and space to improve the ability to be still “present at the present time” as a new unit of related parties.

ID 082 *Aversa towards a new instrument of territorial governance:
a proposal*

Claudia DE BIASE

Irene D'AGOSTINO

University of Campania
Italy

Aversa is a town in the province of Caserta of about 53,000 inhabitants. The Territorial Plan of Provincial Coordination, PTCP, has highlighted, in Aversa, a deficit of public space and a huge denied territory and has set as objective a requalification of the urban fabric. The city has a precious historical heritage, decisive for the future social and economic development of the whole territory and that is why in 2000 it was involved in a Recovery Plan of the historical centre, whose aim was the functional, urban and building requalification of the same, thus stopping this degradation through actions attentive to the social, cultural and economic condition of the historical centre. The city, today, is still endowed with a General Regulatory Plan of 2001, but notwithstanding this, with the Regional Law n.16/2004, the Campania Region has introduced the Municipal Urban Plan, a general urban planning instrument of the Municipality, which regulates the environmental protection, the urban and building transformations of the municipal territory. The various administrations that have taken turns, have tried to bring Aversa towards a PUC, but to date we are still far from having a new instrument to govern the territory. The paper thus reconstructs the urban planning of the municipality, with particular attention to the historic center, to analyze the current situation, the effects of the plans on the territory and the historic center itself and to give ideas to the future administration.

ID 083 *Capri and modern architecture in Plinio Marconi's drawings*

Simona TALENTI
University of Salerno

Famous especially for his career as an urban planner, Plinio Marconi showed from his young age a particular interest in architecture and its history. A few months after his participation in the famous "Capri conference for landscape beauty" (July 1922), Marconi undertook a careful iconographic study of the architecture of the Isle of Sirens as well as the Amalfi coast. His drawings represented that spontaneous, anonymous, "minimal" architecture, already appreciated since Schinkel's time and taken up by the Viennese Hoffmann at the end of the nineteenth century. The architect-engineer aimed to highlight not only the importance of the environmental and choral value of architecture, but the volumetric compositions, the luminous contrasts, the rational choices of the building materials, the absence of superfluous decorative elements, thus emphasizing the indissoluble link with the solutions adopted by modern European architecture. At the same time, the plasticity of the forms, the curved and broken lines of the stone vaults, the "flowing" character of those small white houses, led Marconi to claim their superiority with respect to the solutions of "sharp-edged" architecture incapable to speak to the soul of man. The paper aims to analyze the reading of "nameless" architecture undertaken by Marconi and reflect on its link with the formal expressions of modern architecture.

ID 085 *Surveying the material and immaterial qualities of a shared urban landscape. Flows of users in transit in a contemporary Adriatic city*

Antonella SALUCCI

Giovanni MATALONI

**Francesca
LIBERATORE**

University of Chieti and
Pescara, Italy

The contribution presents the final results of a path, between research and teaching, which concerns the representation of the material and immaterial aspects of an urban sector of a university city.

The interpretative keys of the transformation processes of an urban landscape of the Adriatic coast are proposed. The study concerns the university district of the city of Pescara (Abruzzo, Italy) – close to the centenary since its foundation in 1927 – crossed by an articulated system of flows of users in transit.

The contribution aims to illustrate an analysis and documentation supported by the multiple identity dimensions of the Drawing and the Representation.

The documentation of the material and ephemeral aspects that characterize these shared places – through multidisciplinary theoretical-operational methods inclusive of the photographic medium in all surveying phases – makes it possible to identify and represent some interesting specificities.

The main objective of the study is to define several aspects of the identity of this complex architectural and environmental system creating certain sequences captured by walking through and surveying these areas.



ID 087 *Rethinking the building envelope. Rehabilitation project and maintenance strategies for the RAI Auditorium in Naples*

Pasquale MIANO

Maria Rita PINTO

University of Naples
Federico II, Italy

Stefania DE MEDICI

University of Catania
Italy

The building envelope is a key element in characterising the image of architecture and its relationship with the urban context. Preserving the identity of the envelope in valuable buildings is a priority in the rehabilitation project. In architectural projects based on experimentation and technological innovation, the durability of components and materials is often a critical issue. The building rehabilitation plays an essential role in reinterpreting the original design solutions, while respecting the building's identity and extending its life cycle.

The research analyses the case of the RAI Production Centre in Naples, designed in the late 1950s by Renato Avolio De Martino, Raffaele Contigiani and Mario De Renzi. Over time, the building underwent extensive alterations, mainly due to production needs arising from the change in television filming systems. The impressive volume of the Auditorium was originally entirely clad with multi-faceted ceramic tiles. This cladding, which resulted in a refractive effect of natural light, decayed quickly. As a result, the ceramic cladding was partially removed and replaced with aluminium panels.

The paper aims to develop design strategies for the rehabilitation of architectural and performance qualities of the building envelope, as well as for the maintenance planning, in order to improve the durability of the Technological System.

ID 088 *Ancient Noto. Reading the “absence” as a strategy in the conservation and enhancement of the archaeological ruins*

Emanuela SORBO

Sofia TONELLO

luav of Venice
Italy

The analysis develops the theme of the interpretation as a multidisciplinary tool to understand the archaeological fragments. The case study is the plain of Mount Alveria. It was the foundation site of the Ancient Noto before it was rebuilt in today's position, after the earthquake of 1693. The ancient city had a fundamental role in the control of the territory, both during the Arabic and Spanish domination. The site contains essential pieces of evidence of its history, but, for many aspects, its knowledge is only at the beginning. The Ancient City “suspended in the time” is a significant site to test a method of approach to intangible values through the edge between conservation, reconstruction and reuse. The analysis uses the study of archival documents, the report of the archaeological excavation reports, the architectural surveys and the cataloguing of the fragments associated with the placement of all these elements in the urban settlement and landscape. These tools are necessary to deepen the knowledge of the place and to identify a structure of signs characterized not only by the material historical data but also by an intangible memorial meaning. Through the use of the architecture's narrative values, each fragment has been interpreted as a sign that can explain itself by its material significant and through its relationship with the other fragments. This reference to Semiotics is an instrument to relate the evaluations on a system of limits, previously said, as a preliminary evaluation for the design proposal in the conservation of archaeological ruins.

ID 091 *From historical railways to cycleways. Re-functioning the heritage of linear monuments*

Andrea Alberto DUTTO

Stefano DIGHERO

Erika Josefina

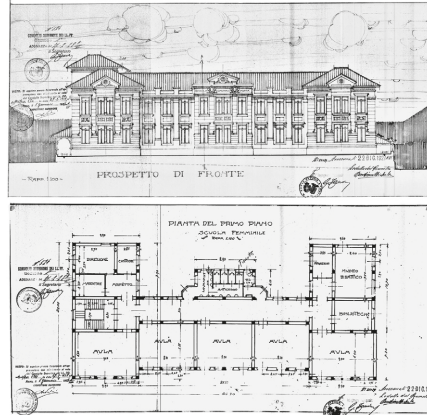
FRANCO GONZALEZ

Politecnico di Torino
Italy

This paper proposes a reflection on the relationship between historical infrastructures and cycleways. In Italy, with the law 2/2018, rules have been provided for the development of bicycle mobility and the creation of a national cycleway network. The recovery of historical infrastructures is particularly promoted. Among these, disused railway lines reveal a specific vocation for cycling reuse. Unlike highway infrastructures, whose design is bound to parameters that imply a substantial autonomy from the landform, historical railways show how the project of territorial infrastructures can stage the architectural geography of anthropic and natural landscapes. Moreover, recovered in view of slow mobility usage, they appear as linear monuments capable of restoring the identity and stratified memories of the territory.

With particular reference to the international cycleways EuroVelo 5 and 7, longitudinally crossing the peninsula, along the Apennines, this paper focuses on the description of the architectural characteristics of several historic railway infrastructures, selected according to different geomorphological contexts. Aim of the two cycleways is also to contribute to the strategies of revitalization of "inner areas" of the peninsula.

The knowledge of historical infrastructure is, in fact, assumed as a prerequisite for the design of cycleways that are able to relate to the territories and the multiplicity of their settlement forms.



ID 092 *From the project drawing to the survey model: the Enrico Fermi school in Celano 1932-1934*

Alessandra TATA
University of L'Aquila
Italy

The Enrico Fermi school in Celano was built between '32 and '34 by the Civil Engineers of Avezzano on a site previously occupied by the prison, destroyed by the earthquake that hit Marsica in 1915.

The building, which constitutes the evolution of the second project, consists of a C-shaped structure composed of a central body overlooking the main road and two short lateral ones which contains the main entrances to the school. In 2010, after a rehabilitation project, the building complex underwent major transformations that altered both its intended use and plant. In fact, the school became a multifunctional building and an auditorium, built in the internal courtyard and joint to the rest of the building, was added. The study starts from an in-depth analysis of historical documents to understand the features and differences of the two projects of '27 and '32. The integrated survey carried out with the laser scanner allows the creation of a complex restitutive model of the current state of the school and, through the integration with the information deriving from the historical documents, of a reconstructive model of the original building. The use of complex 3D models favours the study and understanding of architectural, typological and spatial characteristics of the building. The aim is to comprehend the story of the building and how it has evolved over time according to the needs of the residents, by comparing the initial projects with the reconstructive and the restitutive models.

ID 093 *The power of collective imagination: a methodological opportunity for reading the presence of architecture's hidden explanatory potential*

Francesca SIBILIO
Sapienza University Italy

The cultural contamination in the transcription of the Word Heritage architectural projects are described by means of narrative fictions, which activate body extrasensory perception and mechanisms of simulation incarnate, reflecting on the formulation of a judgment or a project. The living body of architecture is a continuous transmigration of tradition into the new, in a circular process that, in architecture, involves a composite set of elements. An analytical and reinterpretation system, a method by which to write, overwrite, rewrite the project, a real instrument of the architectural design process. This design process does not propose a work of expressiveness, but attempts to carry out a spatial, conceptual, historical analysis and to present itself as a methodological opportunity for reading the building, its documents, materials, transcriptions and contaminations as an indissoluble unity, that could show the process of the construction and the power of the collective imagination on the architecture, revealing a hidden explanatory potential created just by the collective imaginary on architecture.



ID 094 *Crisis and Conflict in Agriculture*

**Maria Gabriella
ERRICO**

Anna ATTADEMO

University of Naples
Federico II, Italy

The Agricultural Landscape is the result of the interaction between man and the environment in constant change and as a consequence of changing social conditions, the evolution of culture and the progress of agricultural techniques. Periurban agriculture differs from rural agriculture, which lies further away from town. Periurban agriculture's proximity to the city implies that farming output is made more suitable for an urban way of life. This means that whilst rural agriculture provides for both those who live in the countryside and those who live in the city – in the second case thanks to intermediaries – periurban agriculture only provides for city dwellers. Today, some periurban areas are farming new crops, vegetables, fruits and nursery gardens in order to better meet the city's needs, especially the demand for quality products. Contemporary society is constantly in demand of leisure space. But, agriculture sectors face many risks, such as climate and market volatility, pests and diseases, extreme weather events, and an ever-increasing number of protracted crises and conflicts. Natural disasters have cost billions of dollars in lost agricultural production. The human food chain is under continuous threat from an alarming increase in the number of outbreaks of transboundary animal and plant pests and diseases. Conflict and protracted crises are forcing more and more people into conditions of poverty, food insecurity and displacement.

ID 095 *Cultural and Agri-Cultural Heritage “contamination” at the Milan south periphery*

Nerantzia TZORTZI

Laura GUAITA

Politecnico di Milano
Italy

Aspassia KOUZOUP

University of Athens
Greece

The metropolitan city of Milan, driven by the EXPO first and the Winter Olympic Games currently is going through important urban changes, that affects mostly the periphery. In the south of the city, a significant number of abandoned or undefined spaces are replaced by new buildings. That trend is creating a strong fracture within the industrial and multicultural identity, and the traditional agricultural character (adjacent to the protected Parco Agricolo Sud) of the district, thus revealing its vulnerability. Keeping in mind environmental and climatic issues and their mitigation, the aim of the research is to explore the possible strategies and solutions for a more sustainable and resilient local development. A Landscape Urbanism approach is applied, as urban design tools – such as a mixed uses approach and the emergence of strategic catalyst nodes – are “contaminated” by green infrastructure mechanisms and a strategy for biodiversity enhancement



ID 096 *Coast-amination. Regeneration paths between water and land along the Lazio southern coast*

Francesca ROSSI

Sapienza University
Rome, Italy

Antonella CANTARO

Municipality of Minturno
Italy

Metropolisation processes and indiscriminate land consumption have had negative effects on more than half of the national territory and in particular on the most usable areas in terms of urbanization, the coastal areas. Place of transition, of contamination between water and land, in which the natural and anthropic elements become more delicate and complex, this particular landscape can represent an essential contribution in the construction of new regeneration paths. Territorial regeneration is, in fact, the expression of an integrated strategy aimed at responding to environmental, social, economic and cultural issues affecting contemporary territories, through the experimentation of new methodological and operational references, shared internationally (Convention on Biological Diversity, Rio 1992; European Landscape Convention, 2000; Millennium Ecosystem Assessment, 2005) and based on the concepts of sustainability, biodiversity and resilience. A regeneration project along the southern part of the Lazio coast, between the Delta of the Garigliano River and the Natural Park Riviera di Ulisse grabs the opportunity to enhance the natural vocation of a territory, through the construction of new public spaces, eco-sustainable tourism services, low environmental and energy impact interventions, based on the fundamental issue that the existing natural and cultural heritage is the expression of a material and immaterial value indispensable for the well-being of the communities.



ID 097 *Towards principles of Eco-Planning A regeneration masterplan for Torre Annunziata centrale-Cancello scalo decommissioned railway*

Salvatore LOSCO

Claudia de BIASE

University of Campania
Italy

The town itself is spreading more and more out along the territory even though the notion of the traditional city is changing urbanity circumscribed about the urbs together with the spatial forms through which it spreads in the territory; it is however an urban condition, though new and not a typical one. This new urbanity is made up of very different realities and parts. In some of them urbanization is thicker, human presence is heavier, relationship flows among people and activities are deeper, while the presence of nature is weaker. In others, on the contrary, human presence is weaker, the density of urbanization and the intensity of flows are lower. The expansion of the city on the territory does not set the territory against the city anymore: it is included in the territory so much as to give birth to the definition of urbanized or anthropized territory as a reality including together cities and territory. The land use also modifies the balance of territorial ecosystems, these effects are not always immediately clear, they manifest itself after a long time and/or in far places from where the land use occurred. For these reasons, the battle for a sustainable development, is to fight in the cities and especially in the areas of urban/metropolitan suburbs and urban sprawl. City-planners thus need a set of overarching principles that provoke thought about larger concerns fundamental to improving and ensuring the quality of urban life.

ID 099 *Surveying and Actioning the Tangible and Intangible dimensions of Rural Heritage in Ruritage H2020 Project*

Rosa TAMBORRINO

Politecnico di Torino
Italy

Rural Heritage is as important as it is difficult to circumscribe, identify and survey but it can also play a major cultural, social and economic role. This paper focuses on the methodology developed by the funded Horizon 2020 Project “Ruritage” where digital tools constitute a focus strategy for the regeneration process for rural regions. In this process the cultural and natural heritage of rural regions includes both tangible and intangible features the identification and visualization of which are very important for the new understandings created and effectiveness of its potential to be developed by local communities. An Atlas permits a simultaneous contextualization of various pilots for the uses required by the project where several pilots create networks for mutual learning process. A digital platform including a web GIS, based on OpenStreetMap, and a database constitute Atlas final output. It is part of a set of digital tools devised to support local stakeholders and monitor territorial developments.

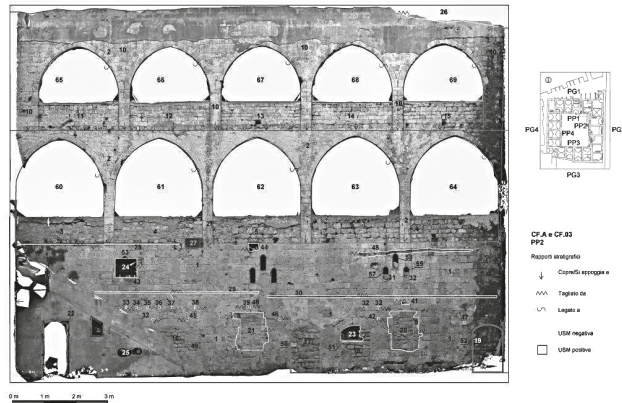
The paper will discuss different kinds of contaminations: (i) highlighting cultural and natural heritage together with other resources; (ii) processing different kinds of data for a common purpose (iii) matching direct involvement of individuals and digital tools; (iii) creating a multilevel approach to combining tangible and intangible heritage through a multidisciplinary team. Critical issues of the developed methodologies will also be discussed.

ID 100 *3D data modeling toward social innovation. The documentation of the minor cultural heritage damaged by the earthquake*

Fabiana RACO
University of Ferrara
Italy

3D integrated surveys, processing and 3D modelling procedures, as well as BIM modelling solutions, have greatly improved the overall knowledge on both monumental and minor cultural heritage toward maintenance and conservation. The semantic enrichment related to the production of 3D digital models of cultural heritage is one of the main topic of this research framework, as well as the limits and opportunities, from the point of view of scientific research, offered by the automation protocols in the phases of acquisition, modeling and data sharing between geometric and non-geometric information. Moreover, integrated digital platforms of existing built heritage are emerging as an effective tool for social innovation. This is the main objective of this research project carried out in collaboration with the Emilia-Romagna Region, the Agency for Reconstruction 2012, Mibac and Clust-ER BUILD on the more than 55 municipalities and 4 capitals affected by the 2012 earthquake.

One of the main challenges of the research project is to support closing the gap between effective user experiences of minor Cultural Heritage via digital tools and representations and the inducement, uptake and scaling-up of social innovation solutions. Within this framework, the project goals are consistently aligned with the main objectives of increasing both innovation and awareness by means of enriched digital solutions in order to address unmet social needs more effectively.



ID 101 *KHAN EL ECHLE SAIDA: a case study for stratigraphic analysis supporting the structural strengthening and conservation design*

Laura NICOLINI

University of Florence
Italy

The case study is an amazing trip to understand an Ottonian Lebanise Caravanserail, Khan el Echle, to outline a holistic conservation proposal including the structural strengthening concept design. The paper delaines the historical contest when the khan was built and the intense commercial and politic relations established by the old city of Saida with an extended territory including the other Mediterranean countries. The study explains how the khan is the result of a particular intent to develop the trading on the old city of Saida (Sidone) during its period of reborn under the Ottonian empire. The construction of the Waqfi block which includes the khan, was used by his promotor as a parallel opportunity to show his power. The study of the Khan's construction revealed several modifications on the building structures to the point of showing that the Khan is a completely different building compared to the assumption based on the information contained in the Arabic inscription located on the arched portal. The inscription, in fact, states that the Khan had been built in 1721 by a member of the Hammud family, but the study of the building components revealed that the building is the result of a progressive construction of several parts added one to the other and without connections.



ID 102 *Built heritage contamination: the case of João Pessoa, Paraíba, Brazil*

**Ivan
CAVALCANTI FILHO**

**Jessica SOARES DE
ARAÚJO RABELLO**

**Emanoel Víctor
PATRÍCIO DE LUCENA**

University of Paraíba
Brazil

Though founded on 5th August 1585, João Pessoa, the capital city of the state of Paraíba, located in North-East Brazil, precisely on the eastern edge of South America, had its “golden days” in the beginning of the twentieth century when the cotton production in the state activated its economy, thus motivating the city growth and therefore new urban initiatives. In that context architecture played a crucial role by means of the provision of both institutional and residencial buildings which were set along the newly opened streets, avenues and squares. Deeply influenced by European models e.g. French Eclecticism, those edifices together with existing colonial and neoclassical ones shaped the city image, providing it with a rather formal unity, if one considers morphology and height. By the middle of the 1900's, new buildings and skyscrapers destitute of ellaboration were inserted in the city thus contaminating its identity. The aim of this paper is to highlight such contamination by pointing out constructions and other physical interventions that have affected traditional buildings and their immediate surroundings. The issue is approached considering characteristics of the new works that clearly affront the conservative architectural lines used in most of the buildings located in the area today representing the city historical centre. Structures, materials and colors are adressed in the study so that the lapse of the new and the ellaboration of the antique can be assessed.



ID 104 *Liberty winter gardens in Palermo: contamination from solar design*

Simona COLAJANNI

University of Palermo
Italy

At the end of the 19th century the city of Palermo boasted a tradition of winter garden that could include the most beautiful railings and light steel structures of the time. The paper will show how the technological, formal and spatial aspects of the metallic construction was derived by the application of Central Europe areas examples to the local reality, providing notions on designs, experimentations and originalities. Canopies, verandas, winter gardens and orangeries are architectural elements in iron and glass that represent an added value for the building, they improve the life quality of the people who live there. In particular, in the Liberty architecture these elements took shape through bold and richly decorated iron structures. These systems offered multiple configuration possibilities and they combined quality, design and innovation with the extraordinary advantages of iron, such as durability, stability and strength. These elements took on a decorative value and at the same time they substantially contributed to the image and characterization of the building. In addition they contributed to the improvement of the indoor comfort, especially in winter. The integration of glass and decorated iron had an excellent application especially in Ernesto Basile's architecture in Palermo. Ernesto Basile's Liberty period in Palermo is a happy example of technical, material and formal experimentation that is reflected also in the handbook of the time.



ID 106 *Acireale Living Lab Culture and Technology. Small towns, internal areas and new landscapes: strategies to protect heritage*

Mariagrazia LEONARDI

University of Catania
Italy

Inaugurated in 2018, the Acireale Living Lab of Culture and Technology is the first experimental laboratory, in the city of Acireale, for the enhancement and protection of cultural heritage. The Living Lab was born and developed, on proposal from Ingegneriarchitettiacesi Association in partnership with the CNR-IBAM (Institute for Archaeological and Monumental Heritage) of Catania, as part of the "Participatory Budget year 2016" of the Municipality of Acireale. The laboratory aims to promote the sustainable and smart development of the territory through the enhancement of its archaeological, historical, artistic, cultural riches and landscape. Innovative technologies offer citizens and visitors a knowledge experience on the material and immaterial heritage of the city and its neighborhood. The internal spaces are equipped with touchscreen monitors, video walls and projection systems that show multimedia products. The Interior space with a strong visual impact and a projection system are designed to carry out, also, techno-scientific dissemination activities, cultural training, entertainment and free consultation. A standalone desktop application, allows the exploration of the territory thanks to a geo-localized and interactive map in which it is possible to enjoy specific contents (points of interest) enriched with images and information. Cultural events and ludic-didactic workshops were created and a communication campaign was launched with the creation of a website.



ID 107 *Under modernity sky. Pierre Bossan's industriousness in 19th century European sacred architecture*

**Maria Carolina
CAMPONE**

Military Academy
"Nunziatella", Italy

In the second half of the 19th century, Pierre Bossan's experience (1814-1888) was characterized by the search for a language suitable for combining, in the architectural field, the needs of faith and the demands of a world in rapid evolution and ever more "global". Trained first at the École des Beaux-Arts and then in the atelier of Henri Labrouste (1801-1875), Bossan, already in his first tests – the churches of Couzon-au-Mont-d'Or, Bessenay, Ars – marks the decisive break with the neo-Gothic language and the search for a new expressive modality, which leads to the rediscovery of the Romanesque style. Notre-Dame-de-Fourvière in Lyon is a manifesto of the French religious architecture of the period and condenses the polemical fervor of the contemporary cultural debate. The basilica, built on the hill of the same name overlooking the city, was to arouse wide echo in Europe and, at the same time, to spark a debate, which was very lively in those years, on the need for a "style" that could truly be called Christian.

The adoption of the neo-Romanesque language for this temple, in apparent adhesion to the dominant eclecticism, derives from profound instances, which weld art, philosophy, politics and religion. The break with the neo-Gothic, perceived as "Jacobin", implies for Bossan – and for all the French culture of the period – support for a local regionalism that makes Lyon the "second Rome"

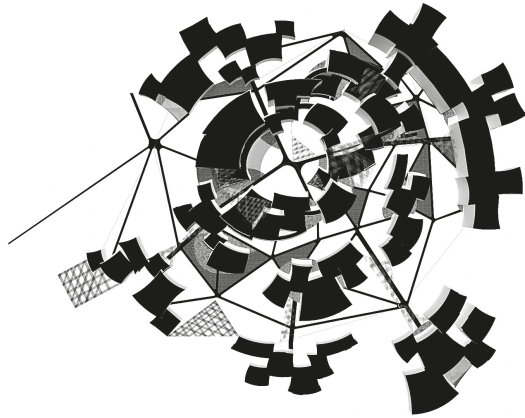


ID 109 *Umbria, not only the Middle Ages. The project as a recomposition of the antinomy of tradition/innovation*

Paolo BELARDI

University of Perugia
Italy

The medieval image that Umbria has and gives of itself is as artificial as it is reductive. The DNA of the Umbrian historical centres, in fact, is not monotonous, but multifaceted: an intricate and intriguing palimpsest, where all the historical eras coexist and where every single stone, every single brick, every single capital has not been disposed of in some suburban landfill, but has been recovered and reused to seamlessly build on previous constructions. As demonstrated in an exemplary fashion by the Paolina fortress of Perugia, erected in the middle of the sixteenth century incorporating the Baglioni district and incorporated in turn at the end of the nineteenth century by an Umbertine acropolis. It is no coincidence that Umbria's main aspiration in the third millennium is precisely to overcome the impasse produced by the medieval stereotype: especially in the historic squares, which already host with equal dignity both the parades of historical re-enactments and jazz music concerts. This is the meaning of two urban furniture projects designed by Hoflab studio for the central squares of Todi and Bastia Umbra. In Todi, a series of sinuous shapes, borrowed from the anatomical details of Michelangelo's casts preserved in the plaster casts of the "Pietro Vannucci" Academy of Fine Arts, set up a temporary museum space in the heart of "Piazza del Popolo", contrasting with the stereometric rigour of the cathedral and the town hall.



ID 111 *History and project. Reuse of historical tracks*

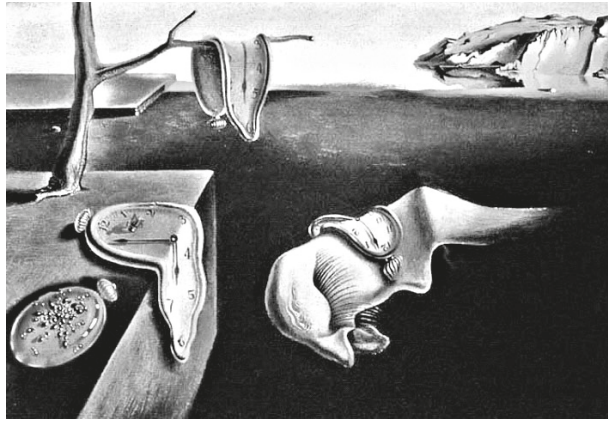
Efisio PITZALIS

Marco RUSSO

Annarita ZARRILLO

University of Campania
Italy

The article presents the partial results of a research carried out within the “Final Exam” course at the Department of Architecture and Industrial Design of the “Luigi Vanvitelli” University of Campania. Some research projects address paradigmatic case studies in relation to the recovery of disused historical areas through a modular logic and the reuse of local materials. In both cases proposed, the new wall textures are influenced by the influence of artists such as Jannis Kounellis with the stone works, Anselm Kiefer with the dematerialization of the surfaces, Maria Lai with the cable braiding technique. These thematic hypotheses, here mainly associated with the conversion of urban voids and disused historical structures, constitute a new hybrid space linked to the sharing of the present and the past through an ongoing compositional scheme. The first case deals with the recovery of an abandoned area within an abandoned area in the city of Aversa (CE). This project has the dual purpose of providing university institutes with suitable spaces for study and research and of grafting into the urban context. The other study aims at the conservation / tampering of a ruined artifact of 1850 in the military district in Maddaloni (CE) to project it in the renewed promotion of its original statute.



ID 112 *The creation of values through Art and Design thinking*

**Mariacarla
PANARIELLO**

Pompei, Italy

In pursuit of the Sustainable Development Goals of the 2030 Agenda, the need to make sustainability an opportunity for change and development has increasingly been recognized.

Confronted with the numerous challenges to be faced and the fear of the future, which arises as an unknown factor after the failure of futurist utopias, the risk is, according to the sociologist Zygmunt Bauman, "Retrotopia".

Design is seen as a project tool capable, through a creative approach, of managing relational tools to translate explicit or tacit needs into strategies, provides meta project answers aimed at developing innovative solutions for solving complex problems.

In this way, design can act as a cognitive mediator between the universal dimension of emotional and sensorial language, characteristic of Art, which transforms intangible thought into tangible matter, and the agents of the processes. The emotional, sensitive, aesthetic, experiential and creative dimension allows the transfer of the artistic moment in the definition of the creation of value for the social system.

In a holistic society approach, the membranes between the different disciplines become permeable and allow a transfer of knowledge through the interaction of interdisciplinary cultural processes, which admit the encouragement of new shared behavioral attitudes, capable of building new inclusive visions and new scenarios of meaning and design.

ID 114 *E-learning: design, school, educate/produce*

Enrica PAGANO

University of Campania
Italy

The proposed research is an analysis of the progress of the training and learning path proposed by the laboratory "LANDesign" ® (Prof. Sabina Martusciello, Prof. Maria Dolores Morelli), Department of Architecture and Industrial Design, University of Campania with Ministry of Education, University and Research of the Campania Region. With the implementation of the School-Work Alternation and with the inclusion of the orientation towards tertiary education, the interactions between Universities and Schools in laboratory activities have increased and structured. Many high school students were able to experience the university method of study and above all, the commitment and opportunities deriving from continuing their studies at the most advanced levels. Educate/produce in the sense of an effective and efficient methodology tested in the research proposed. "The educational process was born on a larger scale, engaging the participants, university students with pupils of a chosen school, their families, companies and entities, in the field of cognitive and exploratory experimentation of a concrete action by re-establishing the didactic/formative, economic/social, perceptual/sensory value or the deeply ethical and aesthetic value of the action" as mentioned in the POT-DESIGN National Competition educate/produce I Edition. The experimentation of the model of School-Work Alternation and the educate/produce model of the I.I.S. "F. De-gni" is proposed below.



ID 115 *Waterfront regeneration in front of heritage protection: challenges and opportunities in Catania waterfront*

Daniele RONSIVALLE

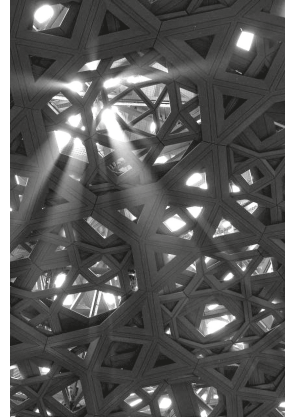
University of Palermo
Italy

Catania waterfront identity is based on spatial relationships between the “Late Baroque Towns of the Val di Noto” UNESCO site and the infrastructures – rail and harbour – that are in front of the XVI century city wall.

Many realised and ongoing regeneration projects in this area (will) have impacts on cultural heritage. Protecting the cultural heritage will be critical to the promotion of a sense of identity and it should be a part of a further development that balances transformations with heritage protection. Like in some realised projects – “Le Ciminiere” expo centre and Old Customs building restoration – this will be relevant in “Archi della Marina” viaduct ongoing regeneration project.

This is the focus in Catania case study of the ESPON targeted research “ENSURE – European Sustainable Urbanisation through port city Regeneration”.

The research has analysed the ongoing transformations in Catania historical waterfront, inspiring some solutions for regeneration project, based on a good practice framework drafted by the research group (RAMBOLL sa, School of Geography at University College Dublin, Department of Architecture at University of Palermo).



ID 116 *Contamination Through a Second Skin
on Contemporaneity Architectonics*

Alexandra AL QUINTAS

Universidade de Lisboa
Portugal

Mário SALEIRO FILHO

Universidade
Federal Rural do Rio de
Janeiro, Brazil

Austrian artist Friedensreich Hundertwasser, in one of his reflections about Man's identification with Environment and Nature, asserts that the second skin works as a sort of social passport, establishing a parallel with the relation between clothes and the individual in social interaction. Through the analogy between "Man" and "Architecture", especially materialized in contemporaneity, we can guarantee that there is a proliferation [and here we are putting an emphasis on the concept, as well as the term of "contamination"] of the second skin. Therefore, understood as a second façade, it contributes to create a phenomenon out of that architectural artifice, not only consubstantiating it as a social passport to establish a guaranty, but also raise it to a somewhat higher level in the status of design "par excellence", qualifying it paradigmatically. Furthermore, we aim at demonstrating the results of our research using the study of some cases to better illustrate our viewpoints.



ID 117 *The fortress city of Palmanova. Act on the driver of cultural values and new development of derelicted borders to enhancement the overall landscape quality and its identity*

Claudia BATTAINO

University of Trento
Italy

In 2017 the defence works system carried out by the Venetians for the city of Palmanova became part of the UNESCO World Heritage Site. It is an urban and military border that delimits an interior of the city, as an autonomous element that stands out in the landscape with its strong formal identity. Outside the city, the size of the ramparts, surrounded by empty spaces, identifies the monumental thickness of a natural anthropized space as a composition of earth and stone. This duality represents the genetic code of this city, it is the result of a difficult agreement between nature and human construction, and it is what has been most preserved in its enduring value of closure, limiting the possibility of modification. The closure of the barracks has opened up large empty spaces inside the city, abandoned spaces waiting for new forms of urbanity. The recent tourist enhancement has made the absolute impermeability of the boundary formed by the ramparts weaker. These elements are useful to re-think and reinterpret the meanings of these boundaries, no longer just military. These contemporary borders can become threshold spaces and connecting infrastructures, more resilient and green, that can be used by all citizens, through creative reuses and over-writings that do not change the landscape perception, do not prevent the transmission of historical memory, but that are able to activate processes of environmental regeneration of the urban and territorial form.



ID 119 *The analyses of the settlement strategies of the minor historic centres. The case study of Piedicastello in Trento*

Valerio DA CANAL

University of Trento
Italy

The current public attentions are more and more focused on the theme of the minor historic centres, because it is widely spread the big cultural value of these centres but, these attentions are normally concentrated only on the historic, architectural and artistic aspects of these centres. Another significant cultural heritage of the minor historic centres, probably less known, but surely not less interesting, is the understanding of the typical natural capacity of the historic minor settlements, to dialogue with the territory and the natural environment. The theme of the analysis of the original motivations that had led to choice a site where, in a specific time of the history, the man has decided to settle and the analysis of the modalities followed by the settlement for growing up, could be yet a source with which we could enrich our knowledge. To face this topic has been studied the small historic centre of Piedicastello in Trento, for its own particular location and conformation, where is possible to read and understand the original settlement settings and the link with the other centres. The considerations that can be obtained by these analyses, can help us to understand even better the high environmental value conserved in these historic settlements yet. These additional attentions can probably help us to sustain the importance of the contemporary role of those minor historic centres that are currently facing a crisis of abandonment and that need to be regenerated yet.

ID 120 *Intimate/etymological design contamination-confines
Mediterranean*

**Maria Dolores
MORELLI**

University of Campania
Italy

The contribution starts from the Basic Design, a discipline that involves two important moments of the aesthetic-formal aspect of design: the first relating to the transition from the education of the designer's taste, based exclusively on the learning of the techniques of artistic design of academic tradition, to the studies of the morphological principles of the ornament; the second, however, is related to the introduction of *Formlehre* (teaching of form) and *Gestaltungslehre* (teaching of configuration) both practical and theoretical in the context of the preparatory course at Bauhaus. The word "contamination", is the action of contaminating in its own and figurative sense, but also the effect that follows; fusion of elements of different origins in the composition of a work, or the reworking of an artifact of some element taken from another, or a cross-section of two forms or two constructs, so that a third form or a third construct arises. The word "confines", means limit; transition zone where the identifying characteristics of a region disappear and the differentiating characteristics begin. Both words are composed of cum [lat. (or from lat.) con-cum], nominal and verbal prefix of many compound words, which usually indicates union, participation, connection and if, in the first case, "contaminations" are relationships between different strong, mixed parts, originating hybrid forms; in the second case "confines" connections are subtle, punctual, clearly readable.

ID 121 *Urban Revitalization: “Domus in via degli Orti” Area, in Santa Maria Capua Vetere*

**Francesco Pio
ARCELLA**

University of Campania
Italy

The project area is located in the municipality of Santa Maria Capua Vetere, within the walls of ancient Capua near via Appia. The project intervention involves the re-generation of a lot in which there are archaeological excavations of an ancient Roman domus called “Domus in via degli Orti”.

The archaeological investigations carried out on site materials and construction techniques have made it possible to place the archaeological heritage chronologically in a period between the first and fifth centuries AD. The typological characteristics of the house are comparable to the rich domus and Pompeian villas spread by the Romans from the second century BC.

At present the archaeological finds of the domus are protected by a dilapidated iron canopy which negatively affects the overall view of the domus. The project intervention involves the insertion of a new protective structure ensuring the protection and enhancement of the property present on site. The new protective pavilion respects the principles of reversibility and compatibility by performing the dual function of welcoming visitors and at the same time allowing excavation activities on archaeological finds.



ID 124 *The intangible landscape: between heritage protection and territory development*

Giorgia DE PASQUALE

Serena SAVELLI

University of Rome 3
Italy

This contribution aims to investigate the multiple possibilities of protection of an Intangible Cultural Heritage by examining the landscape of the Island of Pantelleria. On this small area (about 8000 hectares in the middle of the Mediterranean Sea between Africa and Europe) two UNESCO elements are present: "Traditional agricultural practice of cultivating the "vite ad alberello" (head-trained bush vines) of the community of Pantelleria", and the art of dry stone walling. Protecting and enhancing these intangible elements is one of the goals of the recent National Park which has begun, in collaboration with the Department of Architecture of the University of Roma Tre, to identify the most suitable actions for this purpose. Protection strategies necessarily go through transformations and plans: each intangible heritage has a landscape that corresponds to it, and every landscape, as a "living" heritage entity, remains only if the local community continues to carry out its traditional activities. Therefore, what the intangible assets require in order to remain in the present is an active protection, and not in a constraining-normative way. All actions must be aimed at increasing the vitality and profitability of the community's activities. Beginning with a socio-economic analysis of Pantelleria's agriculture and society, this contribution investigates the vulnerability of the rural dry stone landscape of Pantelleria and outlines a strategic framework of initiatives aimed at the protection of the two intangible assets identified by the WHL.

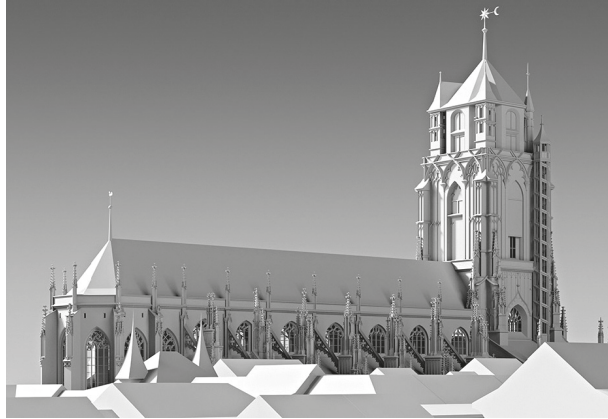
ID 126 *Historical Vessels as Cultural Heritage. An Italian heritage nowadays underrated by law and community*

**Maria Carola
MOROZZO DELLA
ROCCA**

Giulia ZAPPIA

University of Genoa
Italy

During the last two years, Cultural Heritages belonging to any country opened up their boundaries to tangible and intangible assets that were little known and not adequately enhanced. Following the recent trend, those heritages yearn for being part of our Cultural Heritage as much as Gioconda or David. Italian maritime museums, also supported by governmental and institutional associations like ICOM, activated some good practices such as the diffuse museum or the network between territory and museums belonging to the same category. Nevertheless, also considering the improved scenario just mentioned, Nautical Heritage is still little known and it is considered as niche product. The difficult perception of the Maritime and Nautical Heritage like a "real" Cultural Heritage depends on the past bad attention to this kind of goods and, before that, on inappropriate legislation. Recent update to the DLgs. 42-2004, Codice dei Beni Culturali e del Paesaggio, completed the Italian Cultural Heritage with specific kind of vessels. However, our relevant legislation is currently disregarded and not easily applicable to our case. After analysing critically the last twenty years evolution of our legislation, with this paper we mean to underline the innovative characters that our legislative system needs with the goals of updating the identification and the enhancement of our Nautical Heritage within the Cultural Heritage and, finally, identifying best solution for conserving and protecting it.



ID 128 *Abstract architectural design for the contamination by cultural ideas*

Dominik LENGYEL

Catherine TOULOUSE

University of Technology
Cottbus-Senftenberg
Germany

Cultural contamination means an open and limitless exchange of ideas. Ideas are the base of all disciplines. If architecture deals with buildings, culture with material and intangible assets, archaeology with the past and design with the future, it is the ideas that bind these disciplines together. Last year we presented our method of visualizing hypotheses as a humanist approach to represent architecture as intellectual legacy. This is what builds the bridge to landscape heritage as architecture is bound to its genius loci. The visualisation of architecture and landscape is the tool of choice for protection through promotion of World Heritage. The presentation illustrates the role of the cross-critical dialogue of archaeology and architecture leading to a culturally contemplated design in two complementary case studies: First the ideal forms of the building principles and building changes in the intertwining and contradictory history of planning and building the Bern Minster in its first century as a building erected on site of a former predecessor and creating a landmark on an already exposed landscape position: a terrace resting high on a rock in a large and winding river bend (project realized for its Foundation). Second the extension of the subject of the antic metropolis Pergamon into the landscape especially towards the nearby sea harbor being object of recent research (project within German Research Fund Excellence Cluster TOPOI for German Archaeological Institute).

ID 129 *Cultural and Natural Landscapes at risks: Challenges and Opportunities in the Campania Region*

Adriana GALDERISI

Giuseppe GUIDA

University of Campania
Italy

Campania Region is a multi-risk area that is affected by multiple hazard factors threatening a territory very rich in historical, cultural and natural heritage and, meanwhile, more and more fragile due to land use choices not always based on an adequate understanding of the risk features and to an urban growth often occurred in the absence of or outside planning rules. Moreover, the numerous hazardous events occurred in the last decades have contributed to significantly change morphological and functional features of the Campania landscapes.

According to the main goals of the Italian Strategy for Sustainable Development, this contribution will provide some paradigmatic examples of the heterogeneous typologies of landscapes at risk in the Campania Region, highlighting both the role of urban development in the generation/ amplification of the risk features and the potential role of planning measures in enhancing the resilience of these landscapes in respect to traditional and emerging hazard factors. In particular, best practices and guidelines emphasizing the role of multi-objective risk reduction measures, capable of increasing resilience of urban, periurban and rural landscapes in the face of different hazard factors, while ensuring new opportunities for improving the quality of life and enhance agricultural and recreational activities, will be provided.

ID 130 *Villa La Gallietta on Lake Como: an example of best practice in the design, restoration, management and development of cultural heritage*

Roberto DE PAOLIS

Politecnico di Milano
Italy

This text concerns the presentation of a case study on the restoration, functional conversion and renovation of a privately-owned cultural asset in order to restore to the community a historical and architectural asset in an advanced state of disrepair. The property, a neoclassical villa on Lake Como, already subject to restrictions imposed by ministerial decree, underwent a careful architectural renovation, including the restoration of the decorative and ornamental structures (some of which emerged after recent repainting work or had been hidden by false ceilings), the major reinforcement of some parts of the structures, the replacement of elements that had collapsed, and static restoration.

The works and the decisions made regarding the renovation of the material elements (mix and pigmentation of the plasters for the facades, decorative mouldings and friezes, colouring, colour choices etc.) were carried out under the supervision of the Architectural Heritage and Landscape Authority of Lombardy. The restoration work also uncovered a number of archaeological finds (whose discovery was carried out under the direction of the Archaeological Authority of Lombardy), which, through appropriate forms of conservation and viewing (transparent floors in structural crystal and adequate lighting) have remained visible.

ID 134 *Reinterpreting urban open spaces as hub with high technological performance*

Rossella FRANCHINO

**Caterina
FRETTOLOSO**

Francesca MUZZILLO

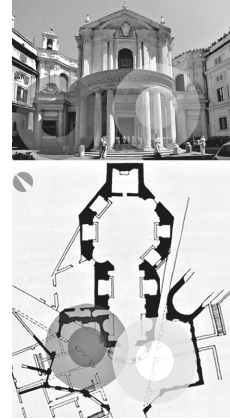
University of Campania
Italy

The complex balance among quality of the built environment, living of the urban open spaces and the renovation of ecological conditions, represents an important challenge within the urban regeneration that finds in the technological experimentation an instrument to improve the performance of the built environment.

According to a multiscale approach, the authors will propose an interpretation of urban open spaces as generating of “best practices” from an eco-technologic point of view, not forgetting the aspects related to social interaction.

We promote, therefore, a reflection on the role of the open spaces as urban technological hub in comparison with the stimulant possibility to make them places of a high-tech content carrying out totally or partly off-grid systems. In this respect, the structure of technological hub is obviously characterized by the use of low energy consumption, minimal environmental impact and low surface area consumption infrastructures. It is proposed, in fact, the adoption of passive green+blue technologies that use the principles of nature as a management model stimulating the natural potential present in the site.

Finally, the selected case studies are intended to highlight the relationship between the natural and built environment, usability and well-being, infrastructure and innovation.



ID 135 *A new baroque for the environmental quality of the city*

**Roberta COCCI
GRIFONI**

**Maria Federica
OTTONE**

University of Camerino
Italy

In a book dedicated Rome of the eighteenth-century (Gross, 1990) Hanns Gross writes about the project of St. Peter's Square and the Borrominian colonnade by saying that if on the one hand the plans of Roma were intended to increase the splendour of Rome and its sovereign, on the other hand they weren't only aimed at the glory of faith but at the comfort and satisfaction of tourists. The authors highlight a point of view that has seemed very topical to who writes, here it's depicted as a research hypothesis that investigates the satisfaction (i.e comfort) of the people that live the city. The point is: how do some precise and significant examples of the Baroque architecture demonstrate, with data in hand, the ability of a monumental building to offer all those advantages "quality of being" for which it was designed?

The aim is to develop the idea that the shape and articulation of the façade is not only an aspect of formal beauty but also a prelude to a new vision of adaptation to climate change.

The study investigates some examples of baroque architecture with regard to the indoor-outdoor mass/space ratio using a parametric methodology TENS (Tomographic ENVironmental Section), generally applied in urban and bioclimatic studies. What emerges from this work is the actuality of a project designed to provide urban places dedicated to people (in the past pilgrims) and their full comfort satisfaction.

ID 136 *Contamination between architecture and contemporary art: good practices of temporary use of spaces in the historic city*

Daniele DABBENE

Politecnico di Torino
Italy

Since the 2000s, the mixing and contamination of different artistic forms has led to original examples of temporary use of spaces in the context of the assets registered on the World Heritage List. Specifically, the experiments between architecture and contemporary art represented an opportunity for dialogue between different values and reflection on the role of public art.

This research aims to study some cases of temporary insertions of contemporary works of art in the Turin system of Savoy Residences. This heritage was the protagonist of an aware use of contemporary art which represented the premise for an extension to other urban spaces with interesting enhancement effects. Among the most significant examples, the Turin event "Arte alle Corti. Passaggi nel contemporaneo a corti aperte" (2015-2016) which involved numerous urban courtyards including the spaces of Palazzo Reale and Palazzo Carignano.

In addition to constituting good practices of the encounter between ancient and new expressive languages, these examples can also represent an attempt to rethink the traditional ways of enhancing the cultural heritage in favor of a more innovative model for the use of public spaces.



ID 137 *“Sapienza” University District, between management and enhancement*

Williams TROIANO
Giuseppe PAGANELLI
Giovanna CRESCIANI

Sapienza University of
 Rome, Italy

“Sapienza” University of Rome is a complex and heterogeneous architectural organism, spreading beyond the boundaries of the city of Rome and providing a didactic offer embracing multiple disciplines. University District is its crux, being its original core, result of a unitary project, and being location not only of many faculties and departments, but also of the Rectorate and of many offices necessary for its governance. It should also be remembered that Sapienza homes many museums, which preserve a huge heritage including art, scientific instruments, archaeological finds, naturalistic finds, fossil and ethnographic findings. An important task in order to manage the buildings is performed by AGE (Building Management Area), which is responsible, through four technical offices, for the maintenance of existing buildings, for the construction of new building and the modernization of acquisitions, for plant engineering and energy efficiency. It is clear that the needs of the largest university in Europe are numerous and complex in every respect and that each of them intersects with the others, making every intervention multidisciplinary (let’s think, for instance, about making the respect of the architectural identity of the buildings dialogue with the needs of safety and the constant use of the structure). By means of three interventions, carried out or being completed, we intend to describe how this complexity becomes a project.

ID140 *Restoration and Ruins. Achievements and Theoretical Issues*

Clara VERAZZO
Mariangela BITONTI
University of
Chieti-Pescara, Italy

The culture of restoration seems to have no spokesperson today. Supporters of reconstructions in the logic of the monument – as in the case of the Coliseum – aim to widen public participation and the involvement of increasingly large sections of citizens to heritage themes. However, this attempt is serving the connivance with strong economic and political interests, which exploit cultural heritage for other purposes, not easy relatable to conservative needs.

Analogously, the trends of absolute respect for authenticity have opened up to the issue of preventive and planned conservation, claiming in fact a role in the decision-making processes that govern cities and territory.

This contribution does not provide definitive solutions or models that can be exported to other contexts. It rather tries to offer a perspective on the diverse cultural landscape of today, through a set of examined cases.

The different approaches to which the case studies refer are all coexistent within a path that is as present as it is uncertain.

The diverse modalities are shaded by the distance between present and past that is not only of a temporal nature but rather involves the quality of the “substance” that has come down to us: often such a residual and fragmented matter as to question the very possibility and usefulness of being preserved.

ID 141 *The incorporation of vernacular traditions in 20th century
erudite architecture and music*

**Clara Germana
GONÇALVES**

Universidade Lusíada
Lisbon, Portugal

In a parallel course, the incorporation of the vernacular tradition into architecture and music of erudite tradition takes place, in the 20th century, with greater emphasis on three different moments: on the outbreak of modernism at the beginning of the century, fuelled by the desire for liberation and simplification of the languages inherited from the previous century; before the First World War, associated with the material manifestations of totalitarian regimes; and in the post-war period, associated with the emergence of the social sciences.

In order to be a contribution to the study of the context of the history of architecture, within a multidisciplinary vision, the present paper intends to explore this parallel path of the two disciplines, on the one hand, in the international context and, on the other hand, in the Portuguese case, where the various authors follow international trends.

In accordance with the assumption and scope presented, it is proposed to analyze three fundamental aspects: how this incorporation takes place against a backdrop of discussion based on the universal vs. particular dichotomy; how it is associated with movements of change, identification or exaltation, or more than one of these reasons simultaneously; how the ideas of vernacular, more specific, and popular, broader but associated with it, interconnect and adapt more or less precisely to different contexts.

ID 143 *Retrofitting practices: an opportunity to “re-design” the urban built heritage*

Antonio BIXIO
Giuseppe D’ANGIULLI
University of Basilicata
Italy

The contemporary city, heritage of modern architecture and its theories, compared to the historical and consolidated city, is the product of urban areas that are like “islands” (B. Secchi).

This building heritage is insufficient to the current comforts and architectural standards due to building and design processes that refer to the principles of “industrialization” and architecture standardization.

This condition was caused by the housing “requirements” of the second post-war period. This architectural and urban heritage requires a reinterpretation and updating through the contemporary standards, to reintegrating suburbs within the social and urban system. In this context, the designer, starting from formal aspects of architecture and social problems, define building and urban requalification through architectural retrofitting: recovery with the current standard requirements for safety and comfort.

This theme, highly current and oriented in the professional future, also requires attention in didactic not only to architectural design and building and urban recovery, but also to the disciplines of representation. In fact, through this discipline, the process of retrofitting is as an opportunity for reading, analyzing and reinterpreting the existing poor-quality building through the survey, reading, understanding and re-design of architecture.



ID 145 *Renewed Sicilian Urban Landscapes. Transformation, Regeneration and Reuse of degraded areas*

Teresa CILONA

University of Palermo
Italy

The cities of the future must aim at improving the quality of living through processes of transformation and reuse of degraded, abandoned or underused urban areas. The cities of the future must generate renewed urban landscapes through recovery actions, creative reuse of abandonment, urban re-cycling, as new and powerful revitalizing forces in urban centers. The cities of the future must be more sustainable, more responsible but also more innovative capable of rethinking, reinventing, redesigning the forms of the settlement, mending relations with the environment and the landscape, reacting to scenarios "contaminated" by human hands. The cities of the future must act responsibly towards reuse, re-cycling, applying best practices of ecological sustainability, land use planning, land use management, energy efficiency. In this study, through a multidisciplinary approach, some degraded Sicilian urban landscapes, today renewed thanks to urban regeneration interventions, will be analyzed. Cities that look to the future and that react positively to the current ecological and economic crisis. Urban centers that – through collective participation, the support of organizations, cultural associations and the sensitivity of local governments – are investing heavily in the theme of urban regeneration and re-cycling.



ID 146 *Learning from Berlin: The Case for Heritage Contamination
as Mnemonic Device in Post-Yugoslav Space*

Erika LINDSAY

University of Detroit USA

This research posits that the standard practice of “decontamination” to which many heritage sites of the recent past are subject leads to a loss of layered history and meaning. Contemporary heritage conservation practice should not condone erasure of physical traces that have gained cultural significance and potential to act as “historical evidence.” Citing exemplar architectural moments such as the re-use of battered columns of the Neues Museum and the preservation of Russian graffiti on the walls of the Reichstag, the author believes that “contamination” can read as a form of “bearing witness to history” which enriches sites of memory through the patina of age-value. This research uses the above postulation as a lens to examine the now infamous modernist memorials erected as part of the Yugoslav nation-building project. In their contemporary post-socialist context, these sites stand witness to reveal the past so we might take them into the future, not as pristine mutes, but as the storied and scarred survivors they are.

ID 149 *Creative-driven firms. When economics and art merge*

**Massimiliano
AGOVINO**

**Maria Carmela
GAROFALO**

**Sabina
MARTUSCIELLO**

Enrica PAGANO

University of Campania
Italy

In recent years, a new idea of culture has become increasingly popular. It is a rather modern proposition, closer to the international sentiment and far from the mainstream Italian notion that conceives culture as a non-economic domain, confined solely to the conservation and enhancement of historic and artistic heritage. Creative-driven firms are all the firms which, although not part of the so-called cultural and creative business system, develop services and create products through cultural and creative processes. In these companies, covering a large and diversified area of the market (from food to furniture, design to construction, fashion to tourism, etc.), culture is considered as an input of the production process. In this new way of doing business, it is possible to combine art and economic growth.

Our research goal is to provide a new idea of business in which art is the main input of the production process. Starting from the artistic endowment of the Campania region, we aim at identifying the presence of a fertile ground for the development of creative-driven firms in Campania. To this aim we use an experimental project (ContaminationLab Uniparthenope) as a potential ground in which interaction between economists and experts of the artistic field, combine the principles of swot analysis with those of art.

ID 150 *The role of creative workers on the Italian regions' growth*

**Massimiliano
CERCIELLO**

Antonio GAROFALO

University of Naples
"Parthenope" Italy

**Maria Carmela
GAROFALO**

University of Campania
Italy

Creative workers play a substantially greater role in innovation. They were a significant driver of product innovations overall and a key driver of learnt process innovations. In other words, employing a worker in a creative occupation is an innovative input in a similar manner to employing a scientist and its effect is to move upward the production frontier, ensuring a greater and more efficient economic growth. Based on the above, this paper investigates the impact of creative class workers on economic prosperity at the regional level in Italy. We couple administrative data with university-level observations on the education-career transition patterns for graduates from creative disciplines, which we drew from the databased of the Alma Laurea consortium. Using a PVAR approach, we aim to assess the short-run effects of the transition patterns on economic prosperity, whereas running a dynamic panel regression we capture the long-run effects. We find a positive and significant impact of the in the long run, but no effect in the short run. An interpretation of this result is the fact that it takes time for graduates to adjust to their professional careers within firms and to produce a significant effect on productivity and local economic growth.

ID 151 *Echoes of the European “paths”: the paths of San Corrado a Noto between history and enhancement of the landscape*

Lucia TRIGILIA

University of Catania
Italy

Alessia CICERO

Architect, Modica, Italy

The religious itineraries established in Europe represent a new concept of travel intended as a discovery of cultural identity, with a view on pilgrimage, nowadays one of the most popular categories of cultural tourism. Based on European itineraries, this study takes us to the south-eastern area of Sicily, a few kilometers from Noto, rebuilt after the 1693 earthquake; in the direction of the original city, you discover a suggestive and uncontaminated stretch of territory, characterized by the presence of votive shrines, shrines and places of remembrance, from the Sicilian, Greek and Byzantine periods. The route, dominated by the Sanctuary of Santa Maria della Scala and the archaeological site of Noto Antica, is outlined by a series of deep valleys immersed in vegetation, as well as by a cobweb of ancient mule tracks. In the first quarry of the route, the Valle dei Pizzoni, known as San Corrado, there is the homonymous hermitage, where the Sanctuary of San Corrado stands, a pilgrimage destination for the temporary exhibition of the Saint's relics. Through the study of historical sources on the life of San Corrado, we want to give body in this contribution to the broader “path” of the hermit, reconstructing the trail that from the cave in which he lived led him to pray every Friday in the Church of the Crucifix in Ancient Noto. The aim is to trace an itinerary of devotion and memory and to be able to enhance the landscape and heritage around Noto Antica.

ID 152 *Low Frequency Noise Estimation and Reduction in
Conditions of Urban Territories (Russian Experience)*

Andrey V. VASILYEV

Samara State
Technical University
Russian Federation

Low frequency noise is spreading for the long distances without significant decay and causes negative noise influence to the population health. The sources of low frequency noise in urban territories are analyzed. The characteristic of sources are discussed.

Russian experience of approaches to estimation of low frequency noise impact is considered. Peculiarities of low frequency noise assessment and measurements in Russia are described. Results of low frequency noise measurements in urban territories on the example of Samara region of Russia are presented. Measurements of low frequency noise in day and night time are showing that for the number of points of urban territory the results of measurements are not fitting to the normative requirements. It was shown that there are exists the zones of urban territories with increased low frequency noise levels, especially in dwelling territories situated near to automobile roads and large industrial enterprises.

Methods and technical solutions of low frequency noise reduction are discussed. Much importance is attached to reduction of low frequency noise of power plants of different kinds (automobile engines, compressors, pumps etc.).

The results of work are allowing to forecast and to reduce negative impact of low frequency noise to the human health more efficiently.

ID 153 *Estimation, Forecasting and Reduction of Vibration
Caused by Transport and Industry*

Andrey V. VASILYEV

Samara State
Technical University
Russian Federation

In condition of urban territories vibration and related with it mechanical noise of transport and of equipment of industrial enterprises may cause significant negative impact to the biosphere, health of population, health of workers, and also to the durability, reliability, productivity and other parameters of transport power plants and industrial equipment.

Main sources of vibration in conditions of urban territories are analyzed. Among of them are automobile internal combustion engines, industrial power plants (compressors, pumps etc.). The characteristic of sources of vibration and the approaches to vibration forecasting are discussed.

Results of transport and industrial vibration measurements and estimation according to the requirements of Russian standards are described. Results of measurements and calculations are showing that normative requirements for the living and industrial areas are exceeded for some points of measurements.

Program provision and technical solutions for power plants and joining mechanical systems vibration reduction and results of it approbation are described. Results of approbation are showing good efficiency of technical solutions.



ID 154 *From private to public to cult site.
The changing architecture of Pagani's Toselli*

Maria MARTONE

**Alessandra Marina
GIUGLIANO**

"Sapienza" University of
Rome, Italy

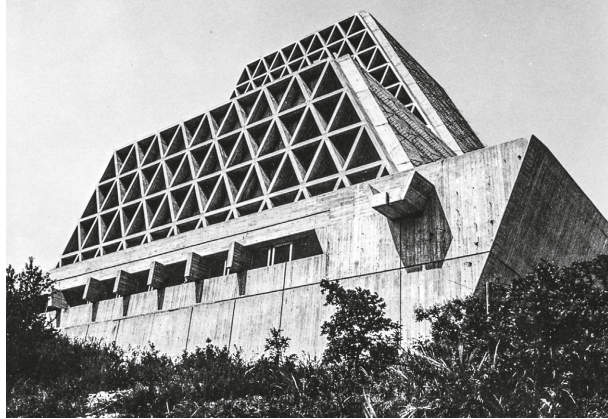
The heritage of intangible assets consisting of spoken traditions, rituals, worships, festivals, and craft activities, expresses a population's culture, defining its identity. Despite the central role it plays in the cultural scene, this heritage is currently at risk to disperse and disappear. Therefore, a critical study and analysis of immaterial assets of a community represent the key to promote the enhancement and the safeguard of the territory, the architecture, and the cities. This is the case of the festival of the Madonna delle Galline, "immaterial asset of Italy" according to the Central Institute for Demoeoanthropology of MIBAC, which takes place in the Octave Day of Easter in the city of Pagani in the Agro Nocerino Sarnese in Campania. During the festival, the procession of the statue of the Madonna stops by courtyards of old farmhouses and the most representative buildings of the city where are the "toselli", special votive altars set up with colored drapes.

The paper investigates through a graphic, photographic and iconographic documentation, the places of the worship of the Madonna del Carmine, called "delle Galline", which during the festival shift from private to public, changing architectural and urban spaces of the city to express devotion to the Virgin. The aim is to offer a different reading of the city to promote the enhancement and the protection of local traditions, which represent an important resource for the sustainable development of the territory, contaminating it with intangible assets.

ID 155 *New tools of strategic management for revitalizing small historical centers: the “Historical Small Smart City” Protocol*

Valentina PICA
School of Arabic
Studies, Granada
Spain

The “Historical Small Smart City” (HISMACITY) Protocol is a certification system for the “smartness” of small historical centres. It is the result of the two-year post-doctoral work financed by the Marie Skłodowska-Curie Programme (IF Fellowship) centre. The research has as main objective to present a dataset dynamic framework that can work as a Decision-Making Support System for local administrators to help them enhance their urban policies. The dataset framework is supported by a Geographic Information System (GIS), useful for monitoring and attributing the scoring criteria, and linkable to ICT Technologies through a WebGIS server. These criteria define the quality standards of various types of interventions aimed not only at the protection and enhancement of urban common goods but also at the territorial sustainable development, as well as at a general technologic improvement (that supports urban security and financial smartness, through the monitoring of the interventions range). The protocol is aimed above all at the integrated redevelopment of the small and peripheral historical centers of inner or rural areas. The main scope of the research project is helping to counteract the increasing phenomenon of depopulation of the inner areas, which threatens the survival of small historical towns (Pica, Cerasoli, 2018), that also face tremendous challenges in terms of security, prosperity, and management (Tosics, 2011).



ID 159 *Landscape and memory of places. The new insert of sacred buildings*

Saverio CARILLO

University of Campania
Italy

The theme of landscape to be of great value for European reflection in the decades following the Second World War. The spiritual value that is recognized in some portions of the territory is considered an element of identity for local realities.

Among the themes most felt in these two decades after at war, the landscape is the value most urgent for to abilited the reconstruction of the portions territories subject to bombing.

In the same years, the communities also intend to fulfill promises of a spiritual nature made during the conflict by honoring the vows addressed to God or to the Virgin Mary for the war to end.

The proposed contribution intends to illustrate some cases of new religious constructions that with their configuration have contributed to the transformation of portions of landscape; these are the cases of the Shrine of the Madonna delle Lacrime in Syracuse and of there is Monte Grisa in Trieste, build in the same years as the hypogean church of San Pio X to Lourdes.

ID 161 *Investigations and considerations on the damages deriving from the infiltration of rainwater: the case of the facades of the Royal Palace of Caserta*

Amalia GIOIA
MIBACT Italy

The Royal Palace of Caserta, Unesco site since 1997, is one of the few factories whose genesis can be known in detail, starting from the conception phase up to the construction of the entire building. However, only recently, following the collapses of decorative elements that occurred in 2012, it has been possible to investigate its architectural surfaces with instrumental and diagnostic investigations. The analyzes, which initially had the aim of verifying the state of conservation of the facades, made it possible to verify the correspondence between the designs of the Declaration, the accounting documents and the construction of the works. And, again, to know in detail the building materials and all the artifices used by Vanvitelli in compositional and decorative solutions. Solutions that are difficult to recognize except through direct observation, exceptionally allowed by the installation of scaffolding on the site of knowledge, first, and restoration, then. The diagnostic investigations carried out on the sample curtains allowed the identification of the potential vulnerability points of the architectural surfaces, if the metal elements, due to the effect of water infiltrations, are subject to the oxidation process. At the same time they made it possible to fully understand the role played by the metal component in the technological and decorative solutions adopted for the four external curtains and the 16 facades of the internal courtyards.



ID 164 *Advanced representation for preservation
and communication of cultural heritage*

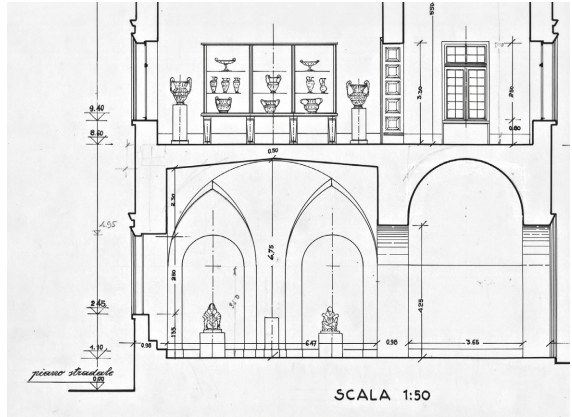
Giulia PELLEGRINI
Francesca SALVETTI
University of Genoa
Italy

This essay explores the level of practice of the instrumental survey connected to the advanced representation methods aimed at the restoration, fruition and safeguarding of the tangible and intangible cultural heritage.

The research exposes and compares the different typologies and experiences of survey, also by drone, in front of the possibility of fruition of the works with very high resolution digitized images on the following themes: the churchyard of the Certosa in Genoa and the painted facades of the historic center of Genoa (drawing-geometry-historical treatises).

From the LIDAR survey by low-altitude in a limited environment, for the drawing representation of the historic flooring (mosaic in two-colored pebbles), to the photogrammetric survey, to the digital infographic processing for the drawing representation of the historical façade design apparatus,

The critical ability to systematize instrumentation and cultural competence on the basis of a vast literary reference case, provides a philological and narrative reading system capable of communicating, at different scales, the value of cultural heritage.



ID165 *The vascular collection of the Museo Campano. Acquisitions and installation*

Gianluca DE ROSA

University of Campania
Italy

The aim of this workpiece is to outline the process which characterised the formation and installation of the vascular collection of the Museo Provinciale Campano. The main focus will shift from the dynamics of 19th century collectionism to the reorganisation arranged by Amedeo Maiuri, alongside the installation, which was overseen by Paulino Mingazzini. As stated in the acts included in the Commissione Conservatrice di Terra di Lavoro, the acquisition of this material was sporadic and patchy; not even the publishing of the Patroni catalogues enabled the development of a dedicated expositive project. In the early years, the most relevant exhibits were made available to the museum through introduction from private collections, such as the Califano collection. In spite of these early acquisitions, it wasn't until the 1920s that the vascular collection would receive the appropriate interest towards its arrangement. The proofs were in the form of identified correspondence, which was obtained thanks to the co-operation of the historical archive of the superintendence of the Museo Nazionale di Napoli; the correspondence described the efforts for the preparation of the vascular collection, up to its unveiling on the 23th of July, in 1933, an event attended by the princes of Piemonte Umberto di Savoia and Maria Josè. Following the traumatic events of World War II, a new and broader exhibition was arranged in the upper floor of the monastery of SS. Concezione, the building itself being an integral part of the museum.



ID 166 *Smart materials and Phase Change Material (PCM): potential applications to architectural design*

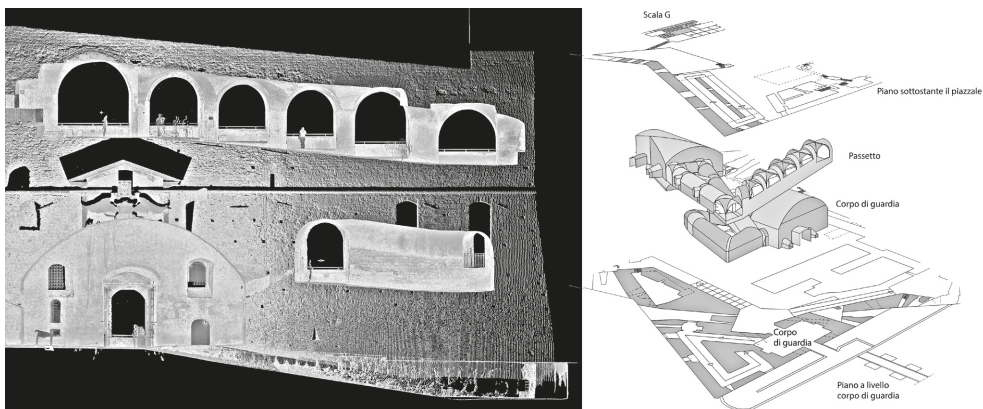
Federico ORSINI

Paola MARRONE

Roma Tre University
Italy

The evidence of climate change and the serious consequences associated with it impose a radical rethinking of urban settlements, buildings and construction materials. The goal to develop buildings more and more sustainable is clear and could be achieved also thanks to the technological evolution of production systems and to the nanotechnologies, that have made it possible to develop innovative smart materials. Among these, Phase Change Materials (PCM) are a recent innovation. Mixed with other material (i.e. concrete) or integrated into the building envelope, PCM could improve the buildings performances, contributing to a reduction in consumption, improving energy performance, favoring processes for reducing climate-related gas emissions.

This work presents the contribution that smart materials – such as PCMs – can give in order to develop sustainable building and their capacity for adaptation. In particular, the paper is structured in two parts. In the first part a general picture characterized by recent PCM case studies will be described, analyzing available products and their applications to architectural design. The second part will focus on an innovative product composed by two different mix of concrete and PCM (3% -8%), describing its mechanical performance and possible innovative applications in the construction field, such as high performance blocks or new smart façade components.



ID 167 *The invention of Castel Sant'Elmo in Naples*

Cesare CUNDARI

Sapienza University
Rome Italy

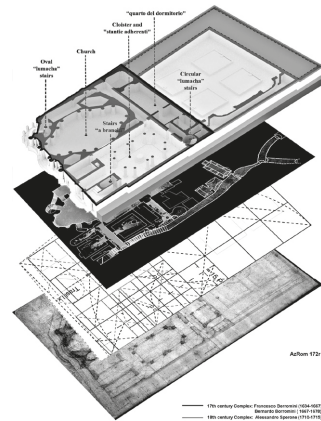
Gian Carlo CUNDARI

Architect, Rome Italy

**Maria Rosaria
CUNDARI**

University of Padua
Italy

The research on the construction process of the mighty fortress, which monitors the Naples from the top of the Vomero Hill, has recently ended with an understanding of the transformations that have taken place with regard to the ancient Belforte and its context. The research used an accurate architectural survey of the current state of the places, the critical analysis of two previous surveys (dated to the early 18th century and the second half of the 19th century, respectively), the meagre documentation of the extensive restoration campaign conducted in the second half of the 20th century and, above all, the careful reading of the Apology. It is the text written – in the form of dialogue – by Luis Pedro Escrivà in response to the numerous objections of the design choices taken for the construction of the new Neapolitan fortress, which were different from those usual for the time, also adopted for the construction of the Castle of L'Aquila, a few years before. The research has allowed to reconstruct the main construction phases of the building and, above all, the initial condition of the places. The analysis carried out allowed, among other things, both to define the geometric genesis of the mighty building and the transformations made with respect to the initial project, considering that the beginning of the work of the new Fortress took place in 1537, which in the year the Apology was also drawn up (1538), and the commemorative plaque above the main entrance to the Castle was also etched, and that Escrivà continued his activity as director of the works until 1542.



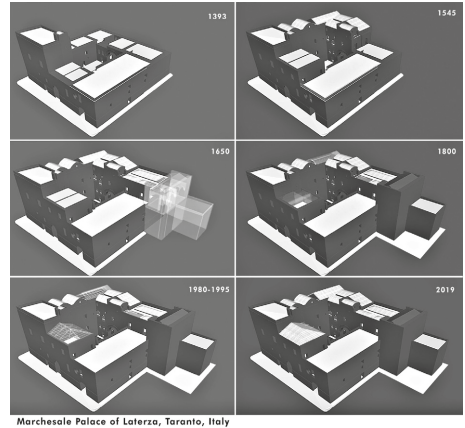
ID 168 *The “measurements” of the Complex of San Carlo alle Quattro Fontane*

Giuseppe ANTUONO

University of Naples
Federico II, Italy

The Complex of San Carlo alle Quattro Fontane has been the seat of the Spanish Trinitarian Order from the first half of the seventeenth century onwards. It is undoubtedly Francesco Borromini's most studied work above all due to its architectural and artistic excellence and the “density” created by its small size, further enhancing the geometric “invention” behind the plan. While many authoritative studies have been performed, especially on the Church, Borromini's building deserves further in-depth research regarding the unitary design of its parts (Church, “quarto del dormitorio” and Cloister). This study surveyed and tested Borromini's design using modern modelling techniques to verify whether it reflects the metric, geometric, proportional, organisational and functional criteria specified in the *Le Costituciones de la Descalcez* of the Order of the Most Holy Trinity promulgated in 1614.

The results of the study are currently going to print in a comprehensive volume so this contribution will focus primarily on the geniality of the architect from the Ticino canton. Although the Order imposed the “measurements” required for different parts of the Complex, he succeeded in instilling a dynamic, vibrant force on the materials by combining the structure and decorative details, thereby dilating space based on a calculated proportional ratio between plan and elevation, while respecting contemporary building principles and criteria.



ID 169 *4D-HBIM for the conservation and valorization of cultural heritage*

Cesare VERDOSCIA

Antonella MUSICCO

Giovanni MONGIELLO

Riccardo TAVOLARE

Alessia SALOMONE

Polytechnic University of
Bari, Italy

Historic Building Information Modeling (HBIM) approach is emerging as the most efficient methodology for the conservation of artefacts, thanks to the combination of volumetric and physical characteristics of a building, with all its constructive elements and the data management and analysis via relational databases, with customizable parameters and connections between elements. Indeed, HBIM enables the inclusion of several aspects of a heritage building in a BIM model, like information about materials or geometrical shapes, construction systems of various historic periods, with the aim of increasing the effectiveness of the preservation process. In this paper is proposed of the operative method for managing the historical buildings' knowledge system by using relational databases, time parameter creating a 4D-HBIM simulation and web-based platforms in order to improve the interoperability among information/data in different types and formats for cultural heritage. The information, as BIM parameters, refers to historical and constructive evolution, previous interventions of Marchesale Palace of Laterza, Taranto, Italy as a sample of an agglomeration of buildings. The advantage is the rapid data consultation and the possibility of comparison between geometric-topological and historic information in order to understand the actual causes of condition assessment.

ID 170 *Cultural Capital vs. Technological Capital: A Critique of Online Learning Commodity Fetishism*

Rachel Suet Kay CHAN

National University of
Malaysia

In the era of online learning, institutions, instructors, and students are pampered with an array of technological advancements, to the point of commodity fetishism and technological dependency. This is especially so given the coronavirus pandemic surrounding the globe. Technology of course, helps to facilitate online learning at its optimum best. However, there are some setbacks to this phenomenon, such as the lack of access to technology on either the students' or the instructor's side, the lack of technological ability, as well as the lack of cultural competency in a super-diverse environment. Contrary to Bourdieu's proposition of cultural capital being the cause of students' academic success, I propose that in this online learning climate, it is technological capital that overrides cultural competency, in affecting students' academic performance. Drawing from first-hand experience as a lecturer, I augment Bourdieu's framework within the theory of practice, to accommodate this technological dependency as a form of capital. I introduce the concept of "anti-capital" to illustrate how a student might become left out from the practice of online learning, or learning at all, due to the lack of access to technology, technological savvy, and cultural competency mentioned above. In conclusion, this paper outlines and aims to understand the perspective of learners who are disadvantaged due to a lack of technological capital.

ID 171 *Sana-school project*

Giuseppe D'ANGELO

Rosaria SAVASTANO

University of Campania
Italy

We are exposed daily to ultraviolet (UV) radiation, largely derived from the Sun, but also from artificial sources in industrial, commercial or leisure. UV radiation is a portion of the electromagnetic spectrum with a wavelength between 100 and 400 nanometres (nm).

The need to limit the presence of pathogenic germs in the air of the environments leads to consider with increasing interest the use of UV radiation with short wavelength UV-C. Ultraviolet UV-C rays are physical bactericides: they produce the denaturation of the bacterial proteins or the rupture of the cell wall by mechanical stress and thus cause the death of the micro-organism (destruction of DNA). The design of classrooms cannot disregard the healthy appearance of the environment. A good environmental level of sanitation in schools, contributes not only to make healthy the environment where a great number of people stay daily, but, considering the specific context, it has an educational aspect, too.

In this article we consider the introduction inside a classroom of a device for sanitizing air through germicidal UV-C lamps.

ID 172 *Digital cultural heritage: some notes from conservative experience*

Laura BARATIN

University of Urbino
Italy

**Francesca
GASPARETTO**

University Politecnica
delle Marche, Italy

Already in 1999 the UNESCO World Heritage Magazine defined the Virtual Heritage, recognizing a new cultural reality that needed attention and protection.

In the last twenty years, the digital revolution has transformed contemporary society, and today it continues to evolve. In the field of cultural heritage, recent technological discoveries are leading the way for what we can call a fourth Industrial Revolution. Some professions have embraced the innovation, adapting their operating principles (see Seville Principles, Virtual Archaeology). In the same way, the conservation sector should try new approaches. In an evolving cultural landscape, for global tools and needs, the discipline that protects our heritage should design new methodologies. It should therefore increase interest in documentation practices, which, regulated according to correct protocols, would allow for multi-level transmission.

The contribution proposes a definition of digital cultural heritage in a conservative context, in which the way understanding the value of preservation is changing, shaping the use of technologies to achieve new goals and to reach a wider audience.

ID 173 *The industrial area of Crotone: from problem to opportunity for development*

**Domenico
PASSARELLI**

Mediterranean
University, Italy

Pasquale CITRIGNO

Ferdinando VERARDI

Pegaso University
Italy

In line with what has been addressed by the urban and environmental regeneration of the “Ancient Kroton”, within which this research is part of the redevelopment of the former industrial site (Eni), focuses in particular on the tools that can be used to mobilize and involve the properties of the soils, for the consultation of the Subjects concerned and the sharing of the objectives in the conversion project. This research aims to deepen policies and processes aimed at the urban and environmental development and regeneration of the former ENI area, and parts of the city connected to it. The city of Crotone has initiated and developed a policy of conversion-related interventions, regeneration and enhancement of its cultural, environmental and landscape heritage, in order to start a “cultural revolution”, on which to base processes of social and economic development. It is the project to enhance “Old Kroton” and the environmental, tourist and cultural system of Crotone and Capo Colonna. The case study will be structured through a careful comparative evaluation, supported by a more in-depth analysis of good practices, in the Italian and community. The general objective arises above all in relation to a need, of a new search for cultural and collective identity, which in this project must be a “journey of knowledge” based on the exploration of visible and invisible places.

ID 174 *Fascist summer camps. Space, hygiene and distance*

Antonella MARCIANO

Campania Regional
board for Culture and
Tourism, Italy

The fascist summer sea camps (*colonie*) belong to the history of health, children's institutions, propaganda, and fascist education together with the history of architecture. They were developed by the National Fascist Party for the care and education of young people and children. Designers were required to respect both therapeutic and pedagogical requirements. The result was a form of architecture organized with simple and rational paths, with the benefits of daylight and natural ventilation, aimed at preventing and curing contagious diseases by controlling the hygiene and separation of guests from strangers and the surrounding environment, and experiencing the beneficial effects of the marine or mountain climate. The buildings like sanatoriums and the camps have been the field of Italian experimentation of the Modern Movement, contributing to innovate architecture with completely new technological and typological solutions. After the Second World War, the new social and economic context determined the slow decline of the camps, with the consequent abandonment of dozens of structures throughout Italy. This paper aims to highlight the modernity of some organizational and typological aspects of the camps and the current potential for reuse, linked to the attractiveness of the environmental contexts and the typological and constructive characteristics.

ID 175 *Experimental preservation: art, air-pollution, preservation and Jorge Otero-Pailos*

Marina D'APRILE
University of Campania
Italy

Experimental preservation questions the conventional approaches to heritage by working with objects and through disciplines that are usually reputed to be extrinsic to the field. It opts for cultural objects that are canonically reckoned as ugly or aesthetically undistinguished, but that in a way incarnate material, social, and environmental costs of our time. Choosing as cultural objects what philosopher Michel Serres calls the quasi-objects, these works interpret heritage as an ongoing process of human interactions, highlighting the social implications those objects determine. Thus, they work on a sort of “surface” between people and objects, a “surface methodology” that “documents, understands, and intervenes upon objects, [...] expanding across a spectrum of the tangible and intangible”. Jorge Otero-Pailos (1971-) plays a key role in this scenario. His work and his ongoing art-series *The Ethics of Dust* (2008-) is here delved into the light of his research and contemporary aesthetics, also thanks to a short interview that he recently gave me for this purpose. Resulting from cleaning selected heritage buildings by a latex pastry where dust and deposits get trapped in, *The Ethics of Dust* forms an intentional monument to the atmosphere and the interactions with buildings that it generated over time. Working at the intersection of art, architecture, and preservation, on objects that are beyond the official nature of heritage, Otero-Pailos tests and pushes forward the boundaries between the disciplines.

ID 176 *The conservation of the living religious heritage site of Bagan*

Davide MEZZINO

International
Telematic University
UNINETTUNO Italy

Tatiana K. KIROVA

Pegaso University Italy

The paper analyses the living religious site of Bagan as an outstanding example of the richness of intangible aspects associated with the tangible dimensions of built heritage that need to be preserved. The built heritage of Bagan is fully integrated within its historical, cultural and socio-economic context. The presence and variety of historical monuments in Bagan and the limited availability of recorded archives make even more evident the need for specific conservation actions. This contribution stresses the relevance of the 'living' features of built heritage as an important condition for the mobilization of local traditional expertise for conservation activities. The case of Bagan is particularly representative since the lack of, and gaps in, such information and documentation represent a serious challenge to the preservation of built heritage. Furthermore, the vulnerability to natural disasters provides additional challenges to effective conservation strategies. Moreover, the incidence of important macro-level threats that jeopardize the preservation of built heritage, like the impact of globalization and its challenges in terms of sustainability of the social and economic development of the site. Such threats are increasingly affecting Bagan which is facing different challenges, such as its increasing globalization. Therefore, this contribution provides a solid body of analysis and evidence useful for conservation purposes in Bagan.

ID 177 *Urban archaeology and digital applications: the Amba Aradam station of the underground line C in Rome*

**Emanuel
DEMETRESCU**

National Research
Council of Italy

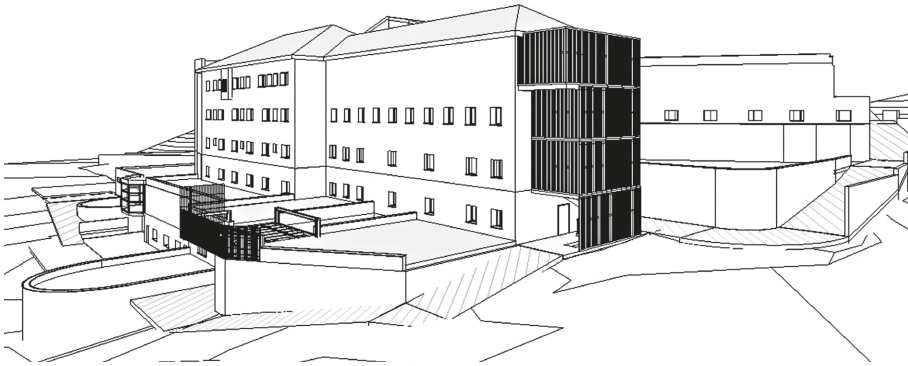
Simona MORRETTA

Soprintendenza Speciale di Roma Archeologia Belle Arti Paesaggio,
Rome, Italy

Rossella REA

Soprintendenza Speciale per il Colosseo, il Museo Nazionale Romano e l'Area Archeologica di Roma, Italy

This paper presents digital applications used in the urban archaeology project related to the construction of the underground line C in Rome (2015-2018). This great excavation has made it possible to study and relate the urban topography of the ancient Rome with the urban fabric of the current city. The archaeological investigations were carried out in an area of about 3000 square meters resulting in an exceptional discovery, from a depth of 9 m., of part of a military complex dating from the first half of the second century A.D. The enormous extension of the excavation area has required to integrate the archaeological excavation process with the workplan of the underground station. Rethinking the steps of excavation and restoration and as well adapting the standards of documentation and computer management of archaeological record have been considered. This methodological reflection involved all the activities carried out, from the archaeological excavation to the documentation, restoration and the creation of reconstructive hypotheses and led to the development of ad hoc methodology that can also be reused in other contexts. Through the adoption of 3D technologies and the Extended Matrix (EM) approach, analysis, synthesis and reconstruction hypotheses were facilitated. Not only the physical remains but also the sources involved within the reconstructive process were semantically recorded in a GraphDB.



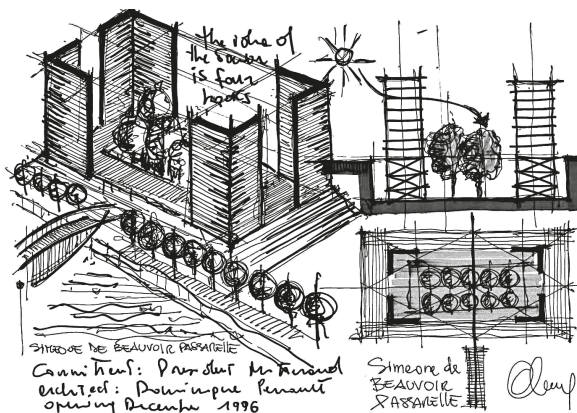
ID 180 *Design and Bim for the management of hospitals and nursing homes: proposals at the time of Covid-19*

Rosaria PARENTE

Benecon University
Consortium, Pegaso
University, Italy

In this historical moment, we have witnessed the continuous globalization that makes geographic boundaries effective and increases the ease of contamination necessary for the dissemination of news, people and viruses, prevention with the application of multidisciplinary scientific research becomes of fundamental importance. In the field of design and planning, a valid tool for the management of hospitals and nursing homes is the Building Information Modeling in which numerous skills are used to create works that respect the environment and human health, with a control looking to the future.

With this in mind, the paper be inspired by research carried out in the context of the tutoring activity for the drafting of some theses and, in particular, of the thesis concerning the "Città di Bra" nursing home and is shown to be very current given the circumstances in which the whole world finds itself living due to the spread of the pandemic from Covid-19. In the thesis, discussed last summer by the student Emanuela Bertello, particular attention had been dedicated to ventilation and air conditioning systems inside hospitals which are very complex and dynamic environments in which indoor air plays a fundamental role, precisely for the possible correlation with any pathological changes generated by the stay of both patients and health professionals.



ID 187 *Design of contemporary architectures and urban spaces in Paris*

**Alessandro
CIAMBRONE**

Benecon University
Consortium, Pegaso
University, Italy

The paper aims to represent some contemporary architectures and public spaces, built in recent decades in Paris, which had the capacity to relate to the historical urban context, with an innovative architectural language often criticized, but always linked to the historical identity of the site. The choice of architectures and public spaces is not accidental but linked to the author's academic profile with research visits in the last ten years, started between 2010 and 2013 through a PhD in international co-supervision ("Design and Representation" – University of Campania and "Territorial Governance" – Paris X University): a) the study of the Seine, World Heritage Property, is connected to the plans to make the main transport and infrastructure axis of the city a place of economic and sustainable development, through cultural, entertainment, and social activities; b) La Defense, a major urban expansion project for the development of cultural, social and economic activities near the city, is characterized by the capacity to connect a large territorial scale design including the suburbs and the historic center; c) the plans for the new entrance of the Louvre Museum (Pyramid of Ieoh Ming Pei); d) and the new National Library of France (Dominique Perrault), commissioned by President Mitterand; e) finally, the project for the recovery of an abandoned factory and the construction of the School of Architecture Paris Val de Seine by Frédéric Borel; e) and the Centre Pompidou by Richard Foster and Renzo Piano.

Table of content

- 15 ID 002. *Structures and infrastructures of the central Adriatic. Topics for new environmental policies*
Ottavia ARISTONE, Lucia SERAFINI
- 16 ID 005. *Çilehane as A Place for Thinking*
Melih KURNALI, Duygu KOCA
- 17 ID 006. *Processes behind regional planning in Lebanon's Hinterland: The Cases of the Unions of Municipalities of Jezzine and Tyr*
Balsam MADI
- 18 ID 007. *The "Terzo Paradiso": the meeting point between Man, Art, Agriculture*
Francesca MUZZILLO, Fosca TORTORELLI
- 19 ID 008. *The role of art for the regeneration of the public city. The experiences of the Metropolitan Cities of Palermo and Naples*
Chiara AMATO, Giulia BEVILACQUA
- 20 ID 009. *Abandoned for good? Peenemünde as an example for dealing with a cultural landscape facing multifaceted contamination issues*
Peter I. SCHNEIDER, Constanze RÖHL
- 21 ID 013. *Preliminary approach to conservative actions on artefacts of historical and monumental value. Application to 4 old bridges crossing the Savuto river in Calabria*
Caterina GATTUSO, Domenico GATTUSO
- 22 ID 014. *Urban regeneration policies to enhance touristic mobility and economy*
Domenico GATTUSO, GianCarla CASSONE, Margherita MALARA
- 23 ID 015. *Advanced knowledge techniques and proposals for a compatible reuse and enhancement of a disjointed urban area: Villa Bossi in Busto Arsizio and its surroundings*
Daniela ORENI, Gianfranco PERTOT, Erika BAGLIO
- 24 ID 016. *Structure/external envelope relationship in the Monte dei Paschi di Siena headquarters in Colle Val d'Elsa (SI) by Giovanni Michelucci*
Frida BAZZOCCHI, Cecilia CIACCI, Vincenzo DI NASO
- 25 ID 018. *Eleusis, European Capital of Culture 2021, Greece: Landscape contamination, from weak point to urban redemption element*
Costantino PATESTOS, Neratzia TZORTZI
- 26 ID 019. *Management Plans for cultural heritage sites, as tools for inclusive approach in the developing countries: Case study of Prizren Historic Center Management Plan*
Nora ARAPI KRASNQI
- 27 ID 020. *Lucanian Landscape of the VI and VII century through travel sketches and land surveyor's notebooks*
Enza TOLLA, Giuseppe DAMONE
- 28 ID 021. *The Mendia-Maione's office and the female professionalism in the Neapolitan post-war*
Chiara INGROSSO
- 29 ID 022. *Dynamic Atlas: production of a geographic information system for the knowledge of the historic city of Rome*
Asia BARNOCCHI, Luca MENEGATTI
- 30 ID 023. *The Role of Evaluation and Participation in developing Cultural Heritage Enhancement Projects. A Participatory Multicriteria Analysis applied to the "Certosa di Pisa" in Calci (Tuscany, IT) case study.*
Agnese AMATO, Massimo ROVAI, Maria ANDREOLI
- 31 ID 025. *Numerical evaluation of environmental performance of a renaissance building to address a comprehensive retrofit strategy: the case of Palazzo Tassoni Estense in Ferrara (Italy)*
Marta CALZOLARI, Barbara GHERRI, Victor MARANHÃO, Davide POLETTI
- 32 ID 026. *Alternative museum in Rome. Industrial architecture heritage colonized by XXI century's art*
Miriam CONFETTO
- 33 ID 027. *The Experience of Parametric modeling design GIS: An Abruzzo hamlet case study*
Domenico D'UVA, Federico EUGENI
- 34 ID 028. *The representation for the knowledge and development of the city and its territory*
Massimo MALAGUGINI
- 35 ID 029. *Elements of seismic aspects to architectural design*
Marsida TUXHARI, Markel BABALLÉKU
- 36 ID 030. *Water as architecture*
Enrica PIERAGOSTINI, Salvatore SANTUCCIO
- 37 ID 031. *Notes on the material communication of design intentions: a case study in Molise of particular collective value*
Piero BARLOZZINI

- 38 ID 032. *Enhancing the Defensive System of the City of Sagunto*
Giulia PETTOELLO
- 39 ID 033. *Conserving the Chromatic Value of Plaza Doctor Collado in Valencia*
Giulia PETTOELLO
- 40 ID 034. *A perfect example of a Vitruvian atrium: the main atrium of the Casa del Centenario in Pompeii*
Alberto CUSTODI
- 41 ID 035. *The UN2030 Sustainable Development Goals and the Parrhasian Heritage Park*
Giuseppe BIAGINI
- 42 ID 040. *A Study on Distribution Planning for Citizens' Hydrants with the User Experimental Drill of Extra Connectable Hoses in Kiyomizu WCH Zone, Kyoto JAPAN*
Takeyuki OKUBO, Dowon KIM, Tomohiko OWADA, Michiko HAYASHI
- 43 ID 041. *The right to pursue happiness: the overseas contamination of Gaetano Filangieri's thought*
Maria NATALE
- 44 ID 042. *Drawings and Utopias: A Never Built House by the Sea; A Project by Noronha da Costa to Magoito, Sintra, Portugal, 1971-...*
Pedro António JANEIRO, José FERREIRA CRESPO
- 45 ID 043. *The Drawing and the Painting as a Possible or an "Impossible" (?) Architectural Project(s) or Hypothetical House(s) in Luis Noronha da Costa*
José FERREIRA CRESPO, Pedro António JANEIRO
- 46 ID 044. *Overcoming the risks of building for the universal values of UNESCO heritage in the Cultural-Historical Area of Kotor*
Goran RADOVIĆ, David RADOVIC
- 47 ID 045. *Small construction sites for the regeneration of public space*
Francesca CASTAGNETO, Fernanda CANTONE
- 48 ID 046. *Fès and its Medina: a key-case study of architectural contamination*
Elena DE SANTIS, Tiziano INNOCENZI
- 49 ID 048. *Revitalization the integrated values of the Darius I the Great inscription, as the cultural property belonging to humanity. Bisitun, Iran*
Sara POURYOUSEFZADEH
- 50 ID 050. *A network of slow routes between Italian UNESCO sites. A territorial strategy to enhance the in-between territories and the inner areas*
Andrea ROLANDO, Alessandro SCANDIFFIO
- 51 ID 051. *Interventions on Cultural Heritage: Architecture and Neuroscience for Mindful Projects*
Valeria MINUCCIANI, Nilufer SAGLAR ONAY
- 52 ID 052. *From sunrise to sunset. Market as space contamination*
Salvatore SANTUCCIO, Marta MAGAGNINI
- 53 ID 053. *An intervention on an emerging industrial architectural heritage: the transformation of a chemical plant in Tarragona*
Josep M.TOLDRA DOMINGO, Joan Manuel ZAGUIRRE FERNÁNDEZ, Jesus M. ÀLVAREZ ESCOLANO, Àngels CAÑELLES GENIUS
- 54 ID 054. *From Italy to Montenegro: cultural contaminations and disciplines exchanges for the enhancement of the Roman town of Doclea*
Lucia ALBERTI, Bruna DI PALMA
- 55 ID 055. *A new Renaissance for the ancient villages: between field valorisation and guidelines*
Gigliola AUSIELLO, Manuela COMPAGNONE, Francesco SOMMESE
- 56 ID 057. *Discovering, conserving and communicating the past. Synergies and antagonies between archaeology, restoration and museography in order to make accessible the past legacy*
Michela BENENTE, Valeria MINUCCIANI, Melania SEMERARO
- 57 ID 059. *Without Borders. I don't see any enemies in my neighborhood*
Efisio PITZALIS, Caterina BELARDO, Barbara BONANNO
- 58 ID 060. *Drawing as a Legacy: the drawn landscapes of the city and its reading in the thickness of the present*
Pedro António JANEIRO
- 59 ID 061. *For an intercultural approach to knowledge of cultural heritage*
Rossana GABAGLIO
- 60 ID 063. *Industrial heritage regeneration in Beijing: a sustainable case study*
Marichela SEPE
- 61 ID 066. *Art and public space. Between history and nature*
Francesco CRUPI, Laura RICCI
- 62 ID 067. *Famous architectures in urban contexts: the impact of colours and materials*
Gigliola D'ANGELO, Marina FUMO, Claudia LOMBARDI, Pia LOPEZ IZQUIERDO BOTÍN

- 63 ID 068. *Survey, Modeling, and Documentation for Preservation: Digitization Challenges towards Cultural Heritage Enhancement and Conservation*
Federica MAIETTI, Federico FERRARI, Marco MEDICI, Marinos IOANNIDES
- 64 ID 070. Italy and China. Historic Infrastructures and Ecological Networks for an Integrated Urban Regeneration Strategy
Laura RICCI, Chiara RAVAGNAN, Hui YANG, Yezheng TANG
- 65 ID 071. Early-Medieval Benedictine settlements and monastic landscape in Italy. A shared path and a case study
Ruggero LONGO, Enrico MONCALVO
- 66 ID 072. *Dynamic Atlas (DynASK): University Spin-offs and Digital Technologies for preservation and promotion of Cultural Heritage. Tivoli and the Sanctuary of Hercules Victor*
Giorgia CECCONI, Giulia LOPES FERREIRA
- 67 ID 075. *Is the conservation of Lombard Industrial Heritage a potential cultural/economic trigger at small/medium urban scale? The study case of Carugo - CO*
Alessia SILVETTI, Chiara BONAITI, Marco STELLATO
- 68 ID 076. *The threat of religious terrorism on cultural heritage: summarizing international intervention and future perspectives*
Colomba LA RAGIONE, Giuliano LUONGO
- 69 ID 078. *Strada Nuova: as an example of a resilient cultural landscape*
Patrizia BURLANDO
- 70 ID 079. *Contaminated Architecture*
Luca ZECCHIN
- 71 ID 082. *Aversa towards a new instrument of territorial governance: a proposal*
Claudia DE BIASE, Irene D'AGOSTINO
- 72 ID 083. *Capri and modern architecture in Plinio Marconi's drawings*
Simona TALENTI
- 73 ID 085. *Surveying the material and immaterial qualities of a shared urban landscape. Flows of users in transit in a contemporary Adriatic city*
Antonella SALUCCI, Giovanni MATALONI, Francesca LIBERATORE
- 74 ID 087. *Rethinking the building envelope. Rehabilitation project and maintenance strategies for the RAI Auditorium in Naples*
Pasquale MIANO, Maria Rita PINTO, Stefania DE MEDICI
- 75 ID 088. *Ancient Noto. Reading the "absence" as a strategy in the conservation and enhancement of the archaeological ruins*
Emanuela SORBO, Sofia TONELLO
- 76 ID 091. *From historical railways to cycleways. Re-functioning the heritage of linear monuments*
Andrea Alberto DUTTO, Stefano DIGHERO, Erika Josefina FRANCO GONZALEZ
- 77 ID 092. *From the project drawing to the survey model: the Enrico Fermi school in Celano 1932-1934*
Alessandra TATA
- 78 ID 093. *The power of collective imagination: a methodological opportunity for reading the presence of architecture's hidden explanatory potential*
Francesca SIBILIO
- 79 ID 094. *Crisis and Conflict in Agriculture*
Maria Gabriella ERRICO, Anna ATTADAMO
- 80 ID 095. *Cultural and Agri-Cultural Heritage "contamination" at the Milan south periphery*
Nerantzia TZORTZI, Laura GUAITA, Aspasia KOUZOUP
- 81 ID 096. *Coast-amination. Regeneration paths between water and land along the Lazio southern coast*
Francesca ROSSI, Antonella CANTARO
- 82 ID 097. *Towards principles of Eco-Planning A regeneration masterplan for Torre Annunziata centrale-Cancello scalo decommissioned railway*
Salvatore LOSCO, Claudia de BIASE
- 83 ID 099. *Surveying and Actioning the Tangible and Intangible dimensions of Rural Heritage in Ruritage H2020 Project*
Rosa TAMBORRINO
- 84 ID 100. *3D data modeling toward social innovation. The documentation of the minor cultural heritage damaged by the earthquake*
Fabiana RACO
- 85 ID 101. *KHAN EL ECHLE SAIDA: a case study for stratigraphic analysis supporting the structural strengthening and conservation design*
Laura NICOLINI
- 86 ID 102. *Built heritage contamination: the case of João Pessoa, Paraíba, Brazil*
Ivan CAVALCANTI FILHO, Jessica SOARES DE ARAÚJO RABELLO, Emanuel Víctor PATRÍCIO DE LUCENA

- 87 ID 104. *Liberty winter gardens in Palermo: contamination from solar design*
Simona COLAJANNI
- 88 ID 106. *Acireale Living Lab Culture and Technology. Small towns, internal areas and new landscapes: strategies to protect heritage*
Mariagrazia LEONARDI
- 89 ID 107. *Under modernity sky. Pierre Bossan's industriousness in 19th century European sacred architecture*
Maria Carolina CAMPONE
- 90 ID 109. *Umbria, not only the Middle Ages. The project as a recomposition of the antinomy of tradition/innovation*
Paolo BELARDI
- 91 ID 111. *History and project. Reuse of historical tracks*
Efisio PITZALIS, Marco RUSSO, Annarita ZARRILLO
- 92 ID 112. *The creation of values through Art and Design thinking*
Mariacarla PANARIELLO
- 93 ID 114. *E-learning: design, school, educate/produce*
Enrica PAGANO
- 94 ID 115. *Waterfront regeneration in front of heritage protection: challenges and opportunities in Catania waterfront*
Daniele RONSIVALLE
- 95 ID 116. *Contamination Through a Second Skin on Contemporaneity Architectonics*
Alexandra AL QUINTAS, Mário SALEIRO FILHO
- 96 ID 117. *The fortress city of Palmanova. Act on the driver of cultural values and new development of derelict borders to enhancement the overall landscape quality and its identity*
Claudia BATTAINO
- 97 ID 119. *The analyses of the settlement strategies of the minor historic centres. The case study of Pledicastello in Trento*
Valerio DA CANAL
- 98 ID 120. *Intimate/etymological design contamination-confines Mediterranean*
Maria Dolores MORELLI
- 99 ID 121. *Urban Revitalization: "Domus in via degli Orti" Area, in Santa Maria Capua Vetere*
Francesco Pio ARCELLA
- 100 ID 124. *The intangible landscape: between heritage protection and territory development*
Giorgia DE PASQUALE, Serena SAVELLI
- 101 ID 126. *Historical Vessels as Cultural Heritage. An Italian heritage nowadays underrated by law and community*
Maria Carola MOROZZO DELLA ROCCA, Giulia ZAPPIA
- 102 ID 128. *Abstract architectural design for the contamination by cultural ideas*
Dominik LENGYEL, Catherine TOULOUSE
- 103 ID 129. *Cultural and Natural Landscapes at risks: Challenges and Opportunities in the Campania Region*
Adriana GALDERISI, Giuseppe GUIDA
- 104 ID 130. *Villa La Gallietta on Lake Como: an example of best practice in the design, restoration, management and development of cultural heritage*
Roberto DE PAOLIS
- 105 ID 134. *Reinterpreting urban open spaces as hub with high technological performance*
Rossella FRANCHINO, Caterina FRETTOLOSO, Francesca MUZZILLO
- 106 ID 135. *A new baroque for the environmental quality of the city*
Roberta COCCI GRIFONI, Maria Federica OTTONE
- 107 ID 136. *Contamination between architecture and contemporary art: good practices of temporary use of spaces in the historic city*
Daniele DABBENE
- 108 ID 137. *"Sapienza" University District, between management and enhancement*
Williams TROIANO, Giuseppe PAGANELLI, Giovanna CRESCIANI
- 109 ID 140. *Restoration and Ruins. Achievements and Theoretical Issues*
Clara VERAZZO, Mariangela BITONTI
- 110 ID 141. *The incorporation of vernacular traditions in 20th century erudite architecture and music*
Clara Germana GONÇALVES
- 111 ID 143. *Retrofitting practices: an opportunity to "re-design" the urban built heritage*
Antonio BIXIO, Giuseppe D'ANGIULLI
- 112 ID 145. *Renewed Sicilian Urban Landscapes. Transformation, Regeneration and Reuse of degraded areas*
Teresa CILONA

- 113 ID 146. *Learning from Berlin: The Case for Heritage Contamination as Mnemonic Device in Post-Yugoslav Space*
Erika LINDSAY
- 114 ID 149. *Creative-driven firms. When economics and art merge*
Massimiliano AGOVINO, Maria Carmela GAROFALO,
Sabina MARTUSCIELLO, Enrica PAGANO
- 115 ID 150. *The role of creative workers on the Italian regions' growth*
Massimiliano CERCIELLO, Antonio GAROFALO, Maria Carmela GAROFALO
- 116 ID 151. *Echoes of the European "paths": the paths of San Corrado a Noto between history and enhancement of the landscape*
Lucia TRIGILIA, Alessia CICERO
- 117 ID 152. *Low Frequency Noise Estimation and Reduction in Conditions of Urban Territories (Russian Experience)*
Andrey V. VASILYEV
- 118 ID 153. *Estimation, Forecasting and Reduction of Vibration Caused by Transport and Industry*
Andrey V. VASILYEV
- 119 ID 154. *From private to public to cult site. The changing architecture of Pagani's Toselli*
Maria MARTONE, Alessandra Marina GIUGLIANO
- 120 ID 155. *New tools of strategic management for revitalizing small historical centers: the "Historical Small Smart City" Protocol*
Valentina PICA
- 121 ID 159. *Landscape and memory of places. The new insert of sacred buildings*
Saverio CARILLO
- 122 ID 161. *Investigations and considerations on the damages deriving from the infiltration of rainwater: the case of the facades of the Royal Palace of Caserta*
Amalia GIOIA
- 123 ID 164. *Advanced representation for preservation and communication of cultural heritage*
Giulia PELLEGRINI, Francesca SALVETTI
- 124 ID 165. *The vascular collection of the Museo Campano. Acquisitions and installation*
Gianluca DE ROSA
- 125 ID 166. *Smart materials and Phase Change Material (PCM): potential applications to architectural design*
Federico ORSINI, Paola MARRONE
- 126 ID 167. *The invention of Castel Sant'Elmo in Naples*
Cesare CUNDARI, Gian Carlo CUNDARI, Maria Rosaria CUNDARI
- 127 ID 168. *The "measurements" of the Complex of San Carlo alle Quattro Fontane*
Giuseppe ANTUONO
- 128 ID 169. *4D-HBIM for the conservation and valorization of cultural heritage*
Cesare VERDOSCIA, Antonella MUSICCO, Giovanni MONGIELLO, Riccardo TAVOLARE,
Alessia SALOMONE
- 129 ID 170. *Cultural Capital vs. Technological Capital: A Critique of Online Learning Commodity Fetishism*
Rachel Suet Kay CHAN
- 130 ID 171. *Sana-school project*
Giuseppe D'ANGELO, Rosaria SAVASTANO
- 131 ID 172. *Digital cultural heritage: some notes from conservative experience*
Laura BARATIN, Francesca GASPARETTO
- 132 ID 173. *The industrial area of Crotone: from problem to opportunity for development*
Domenico PASSARELLI, Pasquale CITRIGNO, Ferdinando VERARDI
- 133 ID 174. *Fascist summer camps. Space, hygiene and distance*
Antonella MARCIANO
- 134 ID 175. *Experimental preservation: art, air-pollution, preservation and Jorge Otero-Pailos*
Marina D'APRILE
- 135 ID 176. *The conservation of the living religious heritage site of Bagan*
Davide MEZZINO, Tatiana K. KIROVA
- 136 ID 177. *Urban archaeology and digital applications: the Amba Aradam station of the underground line C in Rome*
Emanuel DEMETRESCU, Simona MORRETTA, Rossella REA
- 137 ID 180. *Design and Bim for the management of hospitals and nursing homes: proposals at the time of Covid-19*
Rosaria PARENTE
- 138 ID 187. *Design of contemporary architectures and urban spaces in Paris*
Alessandro CIAMBRONE

GANGEMI EDITORE[®]
INTERNATIONAL

FINITO DI STAMPARE NEL MESE DI GIUGNO 2020
www.gangemieditore.it



CARMINE GAMBARDELLA

UNESCO Chairholder on Landscape, Cultural Heritage, and Territorial Governance; President and CEO of Benecon SCaRL University Consortium - Research Centre on Cultural Heritage, Ecology, Economy (University of Campania “Luigi Vanvitelli”, Pegaso University, University Federico II of Naples, University of Salerno, University of Sannio). Full Professor of Drawing at the Pegaso University and at the University of Campania. President of the International Forum “Le Vie dei Mercanti” since its first edition in 2003 to the XVIII edition in 2020. Editor and Founder of the series “Surveying is/or Project”, “Knowledge Factory” and “Architecture, Heritage and Design”. Component of the Scientific Committee of International Class A Magazine *Abitare la Terra/Dwelling on Earth* (Gangemi Editor International Publishing). He covered various roles for the University of Campania, including the Pro Rector of Institutions, Academic Senator, Director of the Department of Architecture and Industrial Design Luigi Vanvitelli, Dean of the Faculty of Architecture Luigi Vanvitelli, Director of the Department of Culture of Design, Director of Doctoral School in the Discipline of Architecture, Coordinator of the PhD in Protection, Safety and Representation of the Environment and Structures and Territorial Governance, Coordinator of the PhD Program in Surveying and Representation of Architecture and the Environment. He is author of numerous scientific international papers, publications and proceedings on surveying and representation of the built and natural heritage.

Cover: drawing by Le Corbusier 1931. Courtesy Carmine Gambardella



- UNESCO Chair on Landscape, Cultural Heritage and Territorial Governance
- BENECON Research Centre of Competence of the Campania Region for Cultural Heritage, Ecology and Economy, Naples, Italy



supported by



With the support of
**Regional Bureau
for Science and Culture
in Europe**



Ministero
per i beni e le
attività culturali
e per il turismo



**UNIVERSITÀ DEGLI STUDI DELLA CAMPANIA
LUIGI VANVITELLI**
SCUOLA POLITECNICA E DELLE SCIENZE DI BASE
DIPARTIMENTO DI ARCHITETTURA
E DISEGNO INDUSTRIALE



PEGASO
Università Telematica



Organizzazione
delle Nazioni Unite
per l'Educazione,
la Scienza e la Cultura



Commissione Nazionale
Italiana per l'UNESCO



THE US - ITALY FULBRIGHT COMMISSION
Linking Minds Across Cultures



forum UNESCO
UNIVERSITY AND HERITAGE



**UNIVERSITAT
POLITÈCNICA
DE VALÈNCIA**



Organizzazione
delle Nazioni Unite
per l'Educazione,
la Scienza e la Cultura



Cattedra UNESCO "Educazione alla
salute e allo sviluppo sostenibile",
Università degli Studi di Napoli Federico II,
Napoli (Italia)



GANGEMI EDITORE®
S.p.A.
INTERNATIONAL