

RR

*Report delle attività
di ricerca*

BEYOND
ALL LIMITS

INTERNATIONAL CONFERENCE
ON SUSTAINABILITY IN ARCHITECTURE,
PLANNING, AND DESIGN
11-12, 13 May_2022

*edited by
Claudio Gambardella*

V: Università
degli Studi
della Campania
Luigi Vanvitelli

*Dipartimento di Architettura e
Disegno Industriale*
DADI _ PRESS

Proceedings Book of Extended Abstracts

BEYOND ALL LIMITS

International Conference
on Sustainability in Architecture,
Planning, and Design

edited by Claudio Gambardella

DADI_PRESS

Università degli Studi della Campania "Luigi Vanvitelli"
Department of Architecture and Industrial Design (DADI)

11-12, 13 May 2022

Monumental Complex of the Real Belvedere of San Leucio, Caserta – Italy

<https://beyondallimits22.com>



Università
degli Studi
della Campania
Luigi Vanvitelli

*Dipartimento di Architettura e
Disegno Industriale*

RR

Research activity report

BEYOND ALL LIMITS

Proceedings of International Conference on Sustainability in Architecture, Planning, and Design

11-12, 13 May_2022

edited by Claudio Gambardella

Double-blind peer review is used in the conference (Authors' identity is concealed from the reviewers and vice-versa throughout the review process).

The authors are responsible for the contents of the submitted contributions (texts, images, tables, etc.) and for compliance with the BAL 2022 format.

Dean of DADI_Ornella Zerlenga

Responsible of DADI_PRESS_Marino Borrelli

Scientific coordination of DADI_PRESS

Marina D'Aprile (Didactics)

Antonio Rosato (Research)

Danila Jacazzi (Third Mission)

Graphic coordination of DADI_PRESS

Vincenzo Cirillo

Editorial Team of Beyond All Limits_2022 proceedings

Maria D'Uonno - Enrico Mirra (coordination)

Domenico Crispino

Rosina Iaderosa

Michela Musto

Anton Giulio Pietrosanti

Adriana Trematerra

Vincenzo Cirillo (cover graphic design)

Daniela Piscitelli with Rosanna Cianniello (cover image and Beyond All Limits_2022 logo)



© copyright DADI_PRESS 2022

Editorial line of the Department of Architecture and Industrial Design

ISBN 978-88-85556-23-2 (electronic version of the PDF format)

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in some form or by some means (electronic, mechanical, photocopying, recording or otherwise) except for permission by DADI_PRESS. By regarding the extended abstract/manuscript, the publisher/DADI_PRESS will not be responsible, in any case, for handling any claims relating to authorship. The author(s) will have full responsibility for the contents and graphic editing of their extended abstract.

This volume is present in electronic version at

www.architettura.unicampania.it

CONTENTS

BAL 22 INTRODUCTIONS

- 17 *Foreword. Presentation of NEB - BEYOND ALL LIMITS*
Massimiliano Smeriglio_ Member of the European Parliament
- 19 *Introduction*
Ornella Zerlenga_ Italian President of the conference
- 21 *Preface*
Claudio Gambardella_ Italian Chair of the conference
- 23 *Design in/for complexity. Engendering a care-oriented society*
Ezio Manzini_ Keynote Speaker
- 27 *Perpetuum mobile. Identity and value landscapes of contemporary design*
Patrizia Ranzo_ Keynote Speaker

BAL 22 CONTRIBUTIONS

01 Survey and Representation as system of monitoring and action on the risk factors and conditions of the context

- 35 *Digital images for the knowledge of bell towers and their ornamental signs*
Ornella Zerlenga, Rosina Iaderosa, Margherita Cicala
- 40 *Naples, Leopardi, and the Artist/Inhabitant Project. Practices of aesthetic resistance*
Alessandra Cirafici, Caterina Cristina Fiorentino
- 46 *Representation of territorial identities of Panagia Paraportiani in Mykonos*
Gennaro Pio Lento, Rosa De Caro, Fabiana Guerriero
- 51 *Digital narratives for cultural heritage: new perspectives for accessibility and inclusion*
Alice Palmieri
- 56 *The identity drawing of places. Bell towers in sixteenth-century Naples by Antoine Lafréry*
Vincenzo Cirillo, Riccardo Miele
- 61 *New technologies for the city and the landscape. A versatile application example*
Valeria Marzocchella
- 66 *Knowledge and representation of the civic tower of Tora and Piccilli*
Rosa De Caro, Fabiana Guerriero, Gennaro Pio Lento

- 71 *The photogrammetric survey of the Tvrdalj Fortress in Hvar*
Luigi Corniello, Angelo De Cicco

02 History, resilience, and green transition

- 79 *The enhancement of Biocultural landscapes: history, heritage, and environment driving sustainable mobility in internal areas*
Elena Manzo, Marina D'Aprile, Antonella Violano
- 84 *Conceptual framework for adaptive reuse of cisterns to cope with climate change and global warming: case of Safranbolu*
Irem Kahyaoğlu, Timuçin Harputlugil
- 89 *Patrick Geddes in Naples. The beginning of his ecological thinking*
Chiara Ingrosso
- 93 *Klampenborg: between local identity and territorial development. An example for Campania's spas*
Monica Esposito
- 98 *Vlorë, the ancient city of Albania and its history in Giuseppe Rosaccio's travel diary*
Felicia Di Girolamo
- 103 *New culture of mobility between flow of people and flow of ideas. Two examples of Metro's transformation: Naples and Copenhagen*
Federica Fiorillo

03 Restoration: a sustainable answer to uncontrolled urbanization

- 111 *Restoration of the architectural heritage. The cemetery hill of Poggioreale in Naples*
Paolo Giordano
- 116 *Restoration as a sustainable resource for urban regeneration. The case of the Forte di Vigliena*
Corrado Castagnaro
- 121 *Recovery of the abandoned heritage towards new fruitive horizons: the case of S. Maria della Pace*
Domenico Crispino
- 126 *Harbour heritage protection: sustainable practices for the enhancement of the Balkan Coast*
Enrico Mirra, Adriana Trematerra
- 132 *Abandoned heritage between restoration and valorisation: Mirine Early Christian Basilica in Croatia*
Adriana Trematerra, Florian Nepravishta, Enrico Mirra

04 Urban transformations: projects, strategies, actions

- 141 *Learning from Covid 19. Sustainable strategies for the regeneration of peripheral areas*
Paolo Belardi, Valeria Menchetelli, Giovanna Ramaccini, Monica Battistoni, Camilla Sorignani

- 146 *Historical city and urban voids as elements of cultural heritage: theory and projects for Aversa discontinuous city*
Francesco Costanzo, Gaspare Oliva, Michele Pellino
- 152 *Architecture from rubble. To "rebuild the imaginary"*
Raffaele Marone
- 158 *Sustainable Recovery and Urban Public Transformation of a Former Military Park*
Luisa Collina, Laura Galluzzo, Claudia Mastrantoni, Elisa Cinelli
- 164 *The man who designed his city. The Matteotti village in Terni by Giancarlo De Carlo as a socially sustainable method.*
Barbara Bonanno
- 169 *Rereading of the Process of an Idea Competition for Obtaining a Sustainable Urban Environment*
Rabia Çiğdem Çavdar
- 173 *Urban environments regeneration. Technological issues for adaptive re-use*
Caterina Frettoloso, Rossella Franchino, Paola Gallo
- 178 *A Scattered Courtyard: rediscovering the Historical Palimpsest of Xi'an for regenerating the urban texture along the City Wall*
Maria Giulia Atzeni
- 184 *Second-hand Architecture. For a new theory of reuse. The case of the EX IDAC FOOD*
Concetta Tavoletta
- 188 *Resonant void. Play and interaction in architecture*
Marco Russo

05 Circular Technological Design for a carbon neutral approach

- 197 *How to pursue the Whole Life Carbon vision: a method to assess buildings' Embodied Carbon*
Jacopo Andreotti, Roberto Giordano
- 203 *C2C as a reference framework for circular buildings. Implementation on an existing settlement in Rome*
Serena Baiani, Paola Altamura
- 211 *Digital-green transition of knowledge buildings*
Antonella Violano, Nicola Barbato, Monica Cannaviello, Souha Ferchichi, Imad Ibrik, Ines Khalifa, Jose Luis Molina, Antonella Trombadore
- 216 *University communities for the green/digital renovation of buildings*
Antonella Trombadore, Gisella Calcagno, Giacomo Pierucci, Lucia Montoni, Juan Camilo Olano
- 222 *Metamorphosis_{vs} Transformation: innovating the process in the regeneration technological design of heritage-built environment*
Antonella Violano, Antonio Maio
- 228 *Slow tourism and sustainable mobility: infrastructures for a smart use*
Marica Merola, Chiara Tosato

06 Structural engineering

- 235 *Seismic vulnerability assessment of ten bell towers in Naples*
Corrado Chisari, Mattia Zizi, Daniela Cacace, Gianfranco De Matteis
- 241 *The role of the epistyle on the dynamic behavior of multi-drum columns*
Androniki Christodoulou, Olympia Panagouli, Athanasios Kozanitis
- 246 *Seismic Retrofit of Masonry Structures: the Lancellotti Palace in Casalnuovo di Napoli*
Claudia Cennamo, Concetta Cusano, Luigi Guerriero
- 250 *The CLT panels: a sustainable response for existing buildings*
Giorgio Frunzio, Mariateresa Guadagnuolo, Luigi Massaro, Luciana Di Gennaro
- 255 *Conservation state and structural issues of existing infrastructures: the case of stataal road bridges in Campania*
Gianfranco De Matteis, Pasquale Bencivenga, Angelo Lavino, Francesco Rosselli, Mattia Zizi
- 260 *Use of structural steel in cultural heritage and for the strengthening of existing structures*
Euripidis Mistakidis, Olympia Panagouli

07 Occupants and their interaction with the built environment related to Multisensorial and Indoor Environmental Quality

- 267 *Inclusive design and the multisensory interactions in public spaces for well-being of visually impaired people*
Samiha Boucherit, Luigi Maffei, Massimiliano Masullo
- 271 *Natural Ventilation Strategies in Buildings as Part of Indoor Air Quality and Healthy Environment*
Merve Coşar Güzel, Gülsu Ulukavak Harputlugil
- 276 *Compared spatial interpretations in the Edoardo Chiossone Museum of Oriental Art*
Alessandro Meloni
- 282 *Head Mounted Displays for lighting in Virtual Reality: Review on Measurements, Advances, and Limitations*
Ainoor Teimoorzadeh, Michelangelo Scorpio, Giovanni Ciampi, Sergio Sibilio
- 286 *The role of the subjective assessment in lighting research using virtual reality*
Michelangelo Scorpio, Davide Carleo, Martina Gargiulo, Pilar Chias Navarro, Yorgos Spanodimitriou, Parinaz Sabet, Giovanni Ciampi
- 292 *On the use of low-cost thermohygrometers for wearable application in the built environment*
Francesco Salamone, Giorgia Chinazzo, Ludovico Danza, Clayton Miller, Sergio Sibilio, Massimiliano Masullo

08 High Performance Components & Buildings

- 301 *Prefabricated movable modular building solutions exploiting renewable sources: energy systems review*
Luigi Maffei, Antonio Ciervo, Dorian Diodato, Antonio Rosato

- 307 *Second-skin façades and usage of textile materials in the building envelope: literature review, limitations, and future opportunities*
Niloufar Mokhtari, Giovanni Ciampi, Yorgos Spanodimitriou, Sergio Sibilio
- 314 *A research on thermal defects in building envelopes for mid-rise houses to develop retrofit strategies: a case study in Sivas/Turkey*
Ahmet Ethem Çulcuoğlu, Timuçin Harputlugil
- 320 *Review of 3D Printing in Architecture: applications, limitations, and future developments*
Giovanni Ciampi, Yorgos Spanodimitriou, Michelangelo Scorpio
- 329 *From climate change to the development of adaptive building envelope*
Evelyn Grillo
- 335 *Advanced manufacturing processes for emergent architectural systems*
Michela Musto

09 Public policies for inclusive and sustainable cities

- 343 *The environment: from limit to economic opportunity*
Scilla Vernile
- 346 *The role of sustainable disclosure and reporting in the public administration: the AdSP case of the western Ligurian sea*
Floriana Pollio
- 350 *The impact of COVID-19 on Piedmont Circular Economy policy roadmap*
Cecilia Padula, Silvia Barbero
- 355 *Urban regeneration through an integrated urban planning approach: towards a new paradigm. The Italian experience*
Laura Pergolizzi
- 359 *Brand urbanism and future scenario to promote sustainable buses public transport. A case study*
Benedetta Terenzi
- 366 *Common goods: an instrument for citizen inclusion and urban regeneration*
Marco Francesco Errico

10 Re-shaping planning approaches, tools and processes for a sustainable, inclusive, and resilient future

- 373 *Museum and the Community: a case of Participatory Intervention of an Old Community in Shanghai*
Penghan Wu, Yedian Cheng
- 378 *Improving learning capacity to enhance resilience: the community engagement process in the RI.P.RO.VA.RE. Project*
Adriana Galderisi, Giuseppe Guida, Giovanni Bello, Giada Limongi, Valentina Vittiglio
- 382 *To a sustainable redevelopment of illegal settlements*
Claudia de Biase, Salvatore Losco

- 387 *Spatial Planning and Energy Transition: The role of public participation*
Elisavet Thoidou, Miltiadis Toskas-Tasios
- 392 *Risk-connect: a secure and ecological path in the east side of the Vesuvius National Park*
Claudia Sorbo
- 397 *Cultural Heritage in Resilience Planning: Evidence from 100 Resilient Cities Database*
Deniz Altay-Kaya, Damla Yeşilbağ
- 401 *A framework for socio-ecological urban co-design: Lessons from two urban parks in the Atacama Desert*
Macarena Gaete Cruz, Aksel Ersoy, Darinka Czischke, Ellen Van Bueren
- 409 *Spas, new possible scenarios for human and city's well-being*
Adriana Figurato

11 Beautiful, sustainable, and inclusive places: the role of appraisal and evaluation

- 415 *Nomad Management of Urban Development: the complex value of temporary communities*
Maria Cerreta, Chiara Mazzarella, Hilde Remoy
- 419 *The value of change: towards social impact assessment in Scampia*
Luciano Lauda, Fabiana Forte
- 424 *Pays Aimables: visual storytelling and landscape values*
Adriana Ghersi, Silvia Pericu, Federica Delprino, Stefano Melli
- 429 *Evaluation issues of cultural heritage impact-led regeneration processes. The case of Italian inner areas*
Federica Cadamuro Morgante, Alessandra Oppio, Chiara Sumiraschi
- 433 *Con(temporary) urban regeneration processes and real estate market: evidence from the case of Milan*
Leopoldo Sdino, Francesca Torrieri, Marta Dell'Ovo, Marco Rossitti
- 438 *Turkey is the Leading Housing Producer in Europe with Dominating Equity Finance in Housing Transactions*
Ali Turel
- 442 *A Decision Aid and Social Impact Co-Assessment Approach for Urban Regeneration Processes*
Maria Cerreta, Ludovica La Rocca, Ezio Micelli
- 448 *Beauty as value: evaluation issues in the NEB perspective*
Fabiana Forte, Alessandra Oppio
- 451 *Creation of a Pseudo-Vernacular Architecture and the Unintentional Attainment of Sustainability: The Case of Akyaka Town Development*
Zeynep Çiğdem Uysal Ürey
- 457 *Using evaluation tools in urban regeneration processes*
Fabrizio Battisti, Giovanna Acampa, Mariolina Grasso

- 462 *Unesco heritage and spatial analysis in a GIS environment*
Fabiana Guerriero, Rosa De Caro, Gennaro Pio Lento

12 Design for Sustainable & Safe Communities

- 469 *Slowork, room with view. Behaviors, Heritage, Design for new lifestyles*
Francesca Castanò, Luigi Maffei, Raffaella Marzocchi, Maria Dolores Morelli
- 475 *Living Hub: setting up a living lab for Simulation based Design activities*
Niccolò Casiddu, Claudia Porfirione, Annapaola Vacanti, Francesco Burlando, Isabella Nevoso
- 481 *S.I.A.R.C. Sustainable Improvement for Aerial Rescue and Control*
Patrizia Ranzo, Nicola Corsetto, Francesco Fittipaldi
- 486 *Sustainable design in urban renewal: a case study of waterfront landscape shared infrastructure of Shanghai, China*
Xiaowen Wu, Claudio Gambardella
- 491 *Beyond current limits: building occupants and climate change*
Timuçin Harputlugil, Pieter De Wilde
- 496 *Design for sustainable behavior: strategies for understanding behavior change*
Wellington Minoru Kihara, Aguinaldo dos Santos, Ana Lucia Zandomeneghi, Alexandre de Oliveira
- 500 *Analyzing sustainability of green product certification systems using indicators of sustainable product*
Gülser Çelebi, Meron Belay
- 504 *Building Trust to Level 4 Autonomous Trucks for Environmental Sustainability and Road Safety*
Ayça Odabaşı Uyanık

13 For Nature / With Nature: new sustainable design scenarios

- 511 *Game Experience: A Fun Form of Cultural Sustainability*
Güniz Sağocak, Gülru Mutlu Tunca
- 518 *ADHEREND - Research and teaching design on the integration of old and new urban spaces*
Feifei Song
- 524 *Sustainability in the 3D printing of housing and settlements codesign processes*
Fabio Naselli, Anna Yunitsyna, Claudio Gambardella, Valentina Sapio
- 531 *A renewed poetic practice. Rethinking the role of packaging design to boost New Normality*
Chiara Lorenza Remondino
- 536 *Collaborative services as trigger for a sustainable culture: two case studies*
Claudia Morea, Sofia Collacchioni, Francesca Falli, Chiara Rutigliano
- 543 *Revived Vintage objects: Designing and Recycling as a bridge connecting Period Products to contemporary functions*
Giulio Giordano

- 548 *Nature-based design methods and practices for bathing activities sustainability*
Ivo Caruso, Vincenzo Cristallo
- 554 *Design for social innovation: a proposal for an holistic design approach*
Mario Bisson, Stefania Palmieri, Alessandro Ianniello, Luca Botta, Riccardo Palomba
- 558 *Beyond the XX century's object: 12 keywords from the international design scenery*
Francesca La Rocca
- 564 *Design for and with visual impairments through 3D printing: a case study from the covid-19 pandemic*
Alessia Romani, Federica Mattiuzzo, Marinella Levi
- 571 *Design and craftsmanship for urban regeneration*
Simona Ottieri

14 Next Consciousness. Fashion innovative scenarios, processes, and products

- 579 *Metamorphosis with(in) fashion: futuring through a new fashion design framework*
Elisabetta Cianfanelli, Margherita Tufarelli, Maria Claudia Coppola
- 584 *DENIM_DECONSTRUCTION. Industrial garments/random garments. Up-cycling processes*
Carlos Campos, Alessandra Cirafici
- 590 *New bio-based textiles productions increasing new circular economy models*
Maria Antonietta Sbordone, Carmela Ilenia Amato, Alessandra De Luca, Venere Merola
- 598 *Alginate Materials for Circular Fashion: from Consumptive to Regenerative Systems*
Sabrina Lucibello, Lorena Trebbi
- 603 *Smart jewels for inclusive fashion*
Patrizia Marti, Annamaria Recupero
- 609 *Platforms, algorithms, and new media in the prosumer era. The evolution of tailored production in Fashion and Cosmetic field*
Rosanna Veneziano, Michela Carlomagno
- 614 *Seven Bodies. Parametric design dialogues around the body*
Chiara Scarpitti, Flavio Galdi
- 621 *Linen Storylines in Procida. From memory to con“temporary” project, between diffusion of knowledge and sharing of practices*
Ornella Cirillo, Andrea Chiara Bonanno, Caterina Cristina Fiorentino, Roberto Liberti, Giulia Scalera
- 626 *New scenarios of conscious fashion system*
Valentina Alfieri
- 632 *Designing a Conscious Fashion Experiences: strategies for Generation Z*
Cristina Marino, Sara Bellini
- 638 *Futurable fashion state of mind. Sustainable projects and theories for new fashion system scenarios*
Maria D'Uonno

642 *Responsible Italian Fashion. An open brand for sustainability in fashion*
Giulia Scalera

648 *Collaborative sustainable innovation improving inclusiveness and value adding capabilities*
Dalia Gallico



BAL 22
ROUNDTABLE

659 *Introduction. The Future of Sustainable Fashion*
Aguinaldo dos Santos

660 *Positive impact of fashion: value system beyond consumption and improving design processes*
Anikò Gàl

662 *The future of Sustainable Fashion. Interview with Anna Pellizzari, Materially*
Emma Gambardella

664 *The future of work in fashion from the perspective of technologies: a prospective study*
Janice Accioly Ramos Rodrigues

666 *Fast to Slow. New visions for the future of conscious fashion system*
Valentina Alfieri, Silvestro Di Sarno



BAL 22
CONFERENCE

671 Universities

672 Patronages

673 Presidents, Conference Chairs

674 Sessions Chairs

675 Honorary Committee

676 Scientific Committee

680 DADI Organizing Committee

681 Venue

684 Services Companies

685 Program

BAL 22

INTRODUCTIONS

Massimiliano Smeriglio*

The second edition of the *BEYOND ALL LIMITS* conference aims to address the issue of sustainability within the current international debate marked by the multifaceted response to the pandemic situation. So, the objectives of this scientific and multidisciplinary conference, spanning the fields of architecture, planning and design, were declined according to the principles of the New European Bauhaus (NEB).

Therefore, I would like to elaborate on one of the new initiatives that the Union is betting on for the coming years: the New European Bauhaus. That is an initiative will allow us not only to imagine, but also to build a "Beautiful, Sustainable, Together" future that is, an ambitious project capable of incorporating beauty, sustainability and participation in re-thinking public space, buildings and our cities.

The New Bauhaus prefigured from the historical Bauhaus, the Weimer Bauhaus of the 1920s, which transformed bourgeois society and culture through the improvement and enhancement of objects, spaces, buildings and cities. The initiative retained the interdisciplinary and transversal soul of its inspiring art movement, the only one capable of providing effective and creative responses to the challenges before us.

Three are the "fundamental and inseparable" values based on it:

1. sustainability, i.e., climate and Paris agreements, pollution and emissions, energy efficiency, biodiversity;
2. aesthetics, that means quality of experience, quality of life for everyone;
3. inclusion, but also valuing diversity, and accessibility, first of all in order to economy.

We are now in the implementation phase of the initiative, where the ideas and suggestions gathered so far are taking shape in a more concrete way with the launch of the first calls for specific and dedicated actions.

We have seen, among other things, an important increase in the budget, which, thanks to synergies between existing policies and programs, has risen from the initial 25 to 85 million euros about. An issue, that of the need to expand funding, on which the European Parliament and the friendship group in support of the initiative, of which I am very happy to be a member, have been working on from the very beginning, ever since the announcement of the launch of the NEB by President von der Leyen in her September 2020 State of the Union address.

There are many calls for proposals included in the Commission's September 15 Communication that closely affect school, university and educational realities, first of all, calls specifically dedicated to funding projects related to the New Bauhaus:

- support for pilot projects, which will act as "flagship demonstrators" by addressing NEB initiatives in an incisive, measurable and targeted way;
- support for coordination efforts that increase the adoption of innovative solutions for a sustainable, human-centered, inclusive, quality-built environment, intensify peer learning, and incentivize networking;
- the promotion of greener and more equitable lifestyles in creative and inclusive societies through architecture, design and the arts, by including with a view to so-called "hybrid environments", too;
- LIFE projects, which will directly engage the scientific, governmental, civic and business communities in order to devise and re-think ways of living and working in line with the initiative: from urban and recreational environments, to buildings, mobility programs, recycling ...

A series of actions are also planned that will contribute to the achievement of the goals of the New Bauhaus, which becomes its priority or contextual element in this way:

- the promotion of technically and socially innovative, sustainable and efficient

solutions for the improvement and preservation of an open, accessible, inclusive, resilient and low-emission cultural heritage;

- the innovation alliances under Erasmus+, targeting the higher education sectors as well as vocational education and training;
- the CoVE initiative targeted to IFP and higher education institutions, but also research institutes, science parks, innovation agencies, businesses and social partners, with the aim of promoting a bottom-up approach to vocational excellence to rapidly adapt the supply of skills to changing economic and social needs, including digital and green transitions.

In short, a lot of opportunities that outline the way to the end of 2022 and which we expect will increase, also thanks to the parallel monitoring action, in 2023, before moving to the dissemination phase, where we will have a chance to observe the concrete results of the actions taken till today.

It is also relevant to put in evidence that we are dealing with an initiative that promotes the fundamental values of the Union: human rights, freedom, democracy, equality and legally constituted state. Therefore, even in this context, in the difficult period that we are living through, with an ongoing conflict on European soil, it is our task to find ways that will allow us a concrete closeness to the Ukrainian people.

This is why in April 2022 meeting of the Culture Committee of the European Parliament I proposed the competent Commissioner Mariya Gabriel an inclusive reasoning that can extend the potentialities and opportunities of the New Bauhaus to the war-affected territories, by envisaging a strengthening of the budget, obviously. This argument, which is just beginning, concerns the possibility of using mobility and goals of the initiative to re-build public buildings in Ukraine, such as the 400 schools were destroyed by the bombing.

Currently, together with colleagues from the CULT and ITRE Committees, we are working on a draft report that we will vote next summer and that we trust will be approved by Parliament as early as September, in which we emphasize, among other things:

- our ambition to make the New Bauhaus more concrete and integrated into European policies;
- our call for the establishment of a proper program, thus endowed with its own budget commensurate with its ambitions;
- in general, the need for greater visibility and participation of citizens in the initiative and related activities, such as the festival to be held in June 9-12 2022, and the annual awards.

I'm really very confident in the abilities and potential for creation and innovation of the new generation and so I remain in the front row to support this ambitious project with curiosity and passion.

(Written introduction for the opening plenary session of the BEYOND ALL LIMITS Conference).

Ornella Zerlenga*

The first edition of *BEYOND ALL LIMITS, International Conference on Sustainability in Architecture, Planning, and Design*, took place from 17 to 19 October 2018 at the Çankaya University campus in Ankara (TR), in partnership with the University of Campania 'Luigi Vanvitelli'. After a long interval due to the COVID-19 pandemic event, the second edition of the International Conference was held in Italy from 11 to 13 May 2022 at the University of Campania 'Luigi Vanvitelli'. Organized by the Department of Architecture and Industrial Design, the conference was held at the Belvedere di San Leucio (Caserta) in the *Officina Vanvitelli* spaces in partnership with the Faculty of Architecture of Cankaya University (Ankara, TR) and the University of Strathclyde, Faculty of Engineering, Department of Architecture (Glasgow, UK).

The second edition of *BEYOND ALL LIMITS* aimed to tackle the sustainability matter placing it in the current international debate also in the light of the theories of the New European Bauhaus. The term 'sustainability' has been treated in all forms of the architecture, planning, and design, to extend the boundaries and encourage cooperation between different disciplines at an international level. The issues of environmental, economic, and socio-cultural sustainability were placed at the center of discussions to go beyond the limits of sustainability, which today also must deal with the pandemic and/or post-pandemic state. To summarize the aim of this second edition, a thought by the Italian philosopher Antonio Gramsci (1891-1937) is quoted on the website of the *International Conference BEYOND ALL LIMITS 2022*: «He who is aware of himself and of everything, who feels the relationship with all other beings, has culture» [Gramsci, A. (1929-1935). *Quaderni del Carcere*].

Having awareness of Life in relation to all other beings is, today, the real turning point of sustainable thought and action. On January 12, 2011, in a speech given in Tucson (Arizona, USA) in memory of the victims of the Tucson attack (January 8, 2011), President Obama invited Americans to «hone our instincts for empathy» [<https://www.fanpage.it/politica/strage-di-tucson-il-discorso-di-barack-obama/>]. In the opinion of Jeremy Rifkin, who reflects on Obama's thinking, being empathic means being open to the plight of others [Rifkin (2011). *Will We Heed President Obama's Call for a More Empathic Society?* In: *HUFFPOST*. Jan 13, 2011; updated May 25, 2011. URL: http://www.huffingtonpost.com/jeremy-rifkin/post_1570_b_808549.html]. For Rifkin, empathy is the emotional and cognitive means by which we express intimacy and sociability. To empathize is to experience another's condition as if it were our own. It is to recognize their vulnerabilities and struggle to flourish and be. Empathy is the real 'invisible hand' of history. Today, empathy is beginning to stretch beyond national boundaries to include the whole of humanity. We are coming to see the biosphere as our indivisible community, and our fellow human beings and creatures as our extended evolutionary family [Rifkin (2009). *The Empathic Civilization. The Race to Global Consciousness in a World in Crisis*; Rifkin (2022). *The Age of Resilience. Reimagining Existence on a Rewilding Earth*]. In this sense, empathy is «a user-centered design approach that pays attention to the user's feelings toward a product» [McDonagh-Philp, D., Lebbon, C. (2000). *The Emotional Domain in Product Design*. In: *The Design Journal*, 3:1, 31-43].

Today the global issues of ecology and consumerism impose a call to the consciousness of Architecture, Planning, and Design to assume its responsibility with respect to the sustainability of a contemporary lifestyle. A sustainable process must use natural resources at a rate so that they can be regenerated naturally. Today, humanity is living in an unsustainable manner, consuming the limited natural resources of the Earth faster than it can regenerate them. The collective social effort to adapt the human consumption of these resources within a level of sustainable development is a matter of paramount importance for both the present and future of mankind. While raising the living standards of the developing world, the challenge for sustainability is to limit and manage consumption without increasing its use of the resources as well as its

environmental impact. This must be done by using strategies and technology that break the bond between economic growth and environmental damage.

A major hurdle to achieving sustainability is the alleviation of poverty. It has been widely acknowledged that poverty is one of the main sources of environmental degradation: «Poverty is a major cause and effect of global environmental problems. It is therefore futile to attempt to deal with environmental problems without a broader perspective that encompasses the factors underlying world poverty and international inequality» [Report of the World Commission on Environment and Development: Our Common Future; Brundtland Commission of the United Nations, March 20, 1987]. In this sense, empathic sustainability is the «philosophy of designing physical objects, the built environment, and services to comply with the principles of social, economic and ecological sustainability» with the intention to «eliminate negative environmental impact completely through skillful, sensitive design» [McLennan, J. F. (2004). *The Philosophy of Sustainable Design*].

Sustainable design requires renewable resources, minimizes the environmental impact, and connects people with the natural environment. Beyond the elimination of negative environmental impact, the new concept of sustainability must create projects that are meaningful innovations capable of shifting human behaviors. A dynamic balance between economy and society, with the intent of generating long-term relationships between user and object/service (tangible and intangible) as well as be respectful and aware of both the environmental, social, economic, and gender differences.

In conclusion, in thanking those who attended the *BEYOND ALL LIMITS 2022 International Conference* and the partnership universities, I cannot fail to say that I am pleased with the results of this second edition both for the current and important issues addressed and for having taken place at the 'Vanvitelli' University, which commits many actions in favor of the culture of sustainability.

Claudio Gambardella*

The second edition of *BEYOND ALL LIMITS* is from the commitment made in 2018 with colleagues of Cankaya University to host the conference at the University of Campania "Luigi Vanvitelli" and is from the need to investigate the theme of sustainability, if possible with new ways or at least to contribute to its deepening trying to follow new paths linked to opportunities and themes suggested by current events. Nowadays the sustainability is a watchword, an unavoidable principle to be taken into account in all areas of our live and overall in those that concern the project. "Sustainability is culture and the culture of the third millennium can only be sustainable" is correctly written in the research *Io sono Cultura 2021* of the SYMBOLA Foundation. However, the risk is that, 35 years after its adoption in the report "Our Common Future", the concept of sustainability turns into a hollow slogan, also exploited by marketing and media that speak of "Alliances for sustainability", between brands or banks and dioceses, "Sustainable municipalities", sustainable cars, etc. Sustainability, like every good idea of our time, the more it enters the sphere of a voracious neoliberal economy the more it moves away from its ethical aims through which it was generated. The world itself is probably becoming progressively less sustainable. "[...] sustainability is no longer only understood as the effort to preserve what existed in the past, but as a series of proposals that can prepare humanity to face an unpredictable future through support for diversity in each of its forms", is indicated in the explanation of the theme of the conference "Ripensare la sostenibilità attraverso antropologia applicata" (10th Conference of the Italian Society of Applied Anthropology, Verona, December 14-17, 2022). The shift from an exclusively "technical" idea of sustainability raised from rational and scientific thinking to an idea deeply rooted in human relationships capable of creating a new future could be a decisive factor. "The world is one only family, we are one humanity. We are united by our diversity, intelligence, creativity and compassion", evocatively the environmental scientist Vandana Shiva writes at the beginning of the first chapter of her book (2018/2020). The second edition of *BEYOND ALL LIMITS* was initially expected in 2020, but it was postponed to May 2022 due to the pandemic. In September 2021, in accordance with the Pro-rector for Information and Technology Innovation of the University, Prof. Luigi Maffei, with the Director of the Department of Architecture and Industrial Design, Prof. Ornella Zerlenga, and with Prof. Pieter De Wilde of Strathclyde University and Prof. Timuçin Harputlugil of Cankaya University who shared the role of chairs with me, it was courageously decided to hold the conference in presence in May even if COVID variants would have create a very big uncertainty. It is said *Audentes fortuna iuvat*, so we managed to carry out the conference in presence by introducing the hybrid mode for reasons of prudence. The Italian edition of *BEYOND ALL LIMITS* which had the aim to address the issue of sustainability by placing it in the current international debate, was inserted in the more general program of *OFFICINA VANVITELLI* written by its Scientific Coordinator, Prof. Patrizia Ranzo, and presented to the Vanvitelli University Rector, Prof. Giovanni Francesco Nicoletti. That is why the conference, which embraced the fields of architecture, planning and design, was conceived with reference to the New European Bauhaus initiative. If we had planned the conference at the end of February, we would certainly have put the relationship between sustainability and war at the centre of our reflections because of the tragedy in Eastern Europe, including every side effect over the planet, the New European Bauhaus seems to lose its importance. Nevertheless, this creative and interdisciplinary initiative proceeds without interruption as MEP Massimiliano Smeriglio has 29 put in evidence in his paper at the opening of this book; moreover, it responds to the objectives of the European Green Deal with a

human-centered design and promotes a new lifestyle in which sustainability coincides with style, thus accelerating the green transition in various sectors of our economy, such as construction, furniture, fashion, as well as in our societies and other areas of our daily lives. The three inseparable fundamental values that guide the New European Bauhaus (Sustainability, Aesthetics and Inclusion) and that the European Commission intends to project towards every country in the world, were also the guidelines of the conference. The two days of *BEYOND ALL LIMITS*, inaugurated by institutional greetings and the reports of the two Keynote Speakers, Prof. Ezio Manzini and Prof. Patrizia Ranzo, were attended by speakers from Albania, Brazil, China, Greece, Italy, Lithuania, the Netherlands, Turkey and the United Kingdom with 110 presentations divided into 18 parallel sessions and 4 young videomakers who were admitted to the round table "The Future of Sustainable Fashion" coordinated by Prof. Aguinaldo dos Santos of the Universidade Federal do Paraná of Curitiba and Prof. Roberto Liberti of Vanvitelli University. It occurs to thank all the organizations that have granted the patronage, firstly the Italian Representation of the European Commission, in particular the European Parliamentarian Massimiliano Smeriglio and his staff, then the Ministry of Ecological Transition, the Campania Region, the Municipality of Caserta, the Italian University Conference of Design, the Cumulus Association, the PhD in Architecture, Industrial Design and Cultural Heritage of Vanvitelli University, the Learning Network on Sustainability, the Order of Architects of Caserta, the SYMBOLA Foundation and the following Italian scientific societies: PROARCH, SID, SIEV, SITDA, SIU and UID. Finally, it needs to thank the entire staff of Vanvitelli University - the Rector, the Pro-rectors, the Department Director, the Directorate General, the Press Office, the Network Centre, Computer Systems and Services and the Maintenance Office – then, to the partner universities, the 87 members of the International Scientific Committee, the presidents of the sessions, all the authors and, above all, the 37 colleagues of the DADI/ Vanvitelli organizing committee who worked hard for a long time without interruption.

References

SYMBOLA. Fondazione per le qualità italiane. (Ed.). (2021). *Io sono Cultura 2021 - L'Italia della qualità e della bellezza sfida la crisi*. In <https://www.symbola.net/ricerca/io-sono-cultura-2021/> (No. 2021).

Shiva, V., & Shiva, K. (2020). *Il pianeta di tutti: Come il capitalismo ha colonizzato la Terra* (G. Pannofino, trans.). Feltrinelli Editore. (Originally published in 2018).

Ezio Manzini*

Design, intended here as “expert design” (Manzini, 2015), was born as an agent of modernization and has historically mainly evolved by placing itself on the Local-Global axis. The working hypothesis I will discuss in this presentation says that it is possible to modify this picture, and to consider it as an agent for, using Bruno Latour expression, returning down to Earth (Latour, 2018).

In my opinion, designing down to Earth is a very concrete itinerary: a radical, yet constructive self-critique, acknowledging we designers have often overseen the radical interdependences interweaving us with other terrestrials and contributing each day to shape us, and yet find the courage to think and act otherwise. This process of acknowledgement in which design recognizes its anthropocentric pitfalls and looks humbly for other paths, is not only an intellectual exercise but one that leads to action. But with which kinds of action does this engage? Bruno Latour proposes to address this question by redefining our idea of action, from “production” to “engendering” (Latour, 2020). By production, we traditionally meant a system in which nature was considered “a mere ‘factor in production’, a resource that was precisely external, indifferent to our actions” (Latour, 2018). In this view, Earth ought not be considered an agent of the system but rather a tool for the production of products. Yet, “there are not organisms on one side and an environment on the other, but a coproduction by both” (Ibidem). Instead, Latour proposes to use the word engendering to indicate a process aiming for a result which takes into account the complex net of interdependencies from which this result might depend in other words, to acknowledge that no result really just depends solely on us. To embrace this perspective, means to think and to act by considering that our actions are always just one force in a larger co-productive activity, in which also other actors play a role. To design from this perspective, stepping out of the idea of production and embracing the idea of engendering, represents to us a very concrete step to re-orient design down to Earth. In my opinion, this can help to address our question about which kinds of actions this process of acknowledgment in designing engages with: to consider our designs as an engendering practice. If design ought to be considered also a form of meaning making, then post-anthropocentric meaning making might envision actions which are meaningful in a terrestrial way: in other words, which are able to generate values which dare to look beyond the human perspective, To consider design actions from an engendering perspective – envisioning them not as reactions against nature but rather inter-actions with other terrestrial agents - helps to question the terrestrial values they generate, included their political agencies. In this spirit Latour suggests to re-orient the idea of politics, de-anthropocentrizing it. He proposes the idea of a terrestrial politics (Latour, 2018): a construction of a common world which is really “common” to all terrestrials. This means that both institutional politics and bottom-up forms of everyday politics need to undergo a process of re-orientation towards the Terrestrial attractor, becoming the construction of a more-than-human common world. The discovery of the Terrestrial attractor profoundly questions who we are and what we do, what should interest us, what we should care about, which are the matters that should really “concern” us. In times in which we no longer know how to act, we need to find again a meaning to our choices and actions. If we look at design and its ability to “make” meanings, a real challenge for the discipline lies right in front of us: to design meaningful choices and actions, framing them in this itinerary down to Earth. An itinerary in which the key word is care as it has been defined by Maria Puig de la Bellacasa in her book *Matters of Care* (Puig de la Bellacasa, 2017). The notion of care is not a novelty in the philosophical landscape. What is a novelty is to reposition this notion – i.e. human care directed towards other humans, as developed by philosophers such as Tronto and Fischer (Fisher & Tronto 1990; Tronto, 1993) changing it in the perspective of the care of terrestrials for other

terrestrials: “Care is everything that is done (rather than everything that ‘we’ do) to maintain, continue and re-pair ‘the world’ so that all (rather than ‘we’) can live in it as well as possible. That world includes... all that we seek to interweave in a complex, life-sustaining web (modified from Tronto, 1993, 103)” (Puig de la Bellacasa, 2017). With this modification of the original definition, Puig De la Bellacasa rids political philosophy’s idea of care from its anthropocentrism, by considering it a relational modality, going beyond the human and being an expression of the radical interdependence in which everything is reactive towards everything else. To better explain this, Puig De la Bellacasa uses the metaphor of “touch” (Ibidem) to express this caring sense of reciprocity: while one touches, one is also touched. When we care for what is around us, acknowledging our interdependence, we actually start to adhere to the deeper structure of the terrestrial ecosystem. With this redefinition of care, Puig de la Bellacasa helps us to identify a possible concrete strategy to react to the consequence of the current substantial disacknowledgment of radical interdependence: the idea of reweaving that which has become disentangled. Latour’s matters of concerns between all terrestrials become to her “matters of care” (Ibidem): we should not just be concerned, but actively care for what links us together, what is in-between us. This operation of healing is a deeply ethical task that needs to be thought of and acted upon. Designers can work to disconnect this web of life and place the anthropos above all, or to decenter it and reweave back those relationships instead and thus work in a regenerative way. What I propose here is the healing, regenerative practice of care as a concrete guideline for designers today to re-think their own work from the perspective of engendering, thus considering themselves and other humans as just one of the many other terrestrials interacting and forming together the Earth of which we are all part. If we designers can create anthropocentric visions disrupting the web of life, we can also work to make some significant steps forward on the itinerary down to Earth and contribute to re-weaving the web of life. This means that we can re-frame our own design actions as engendering practices aiming to continue, maintain and repair our (more-than-human) common world, envisioning where there is need for care and what we can do concretely to care. If in the last two decades in design some meaningful steps have been undertaken in this direction, one of the territories where more has happened in this sense is the one of social innovation, social innovation (Murray, Grice, and Mulgan, 2010), and more precisely of transformative social innovation (Haxeltine et al., 2013). We have social innovation (intended from here on as transformative social innovation) when creative people, faced with a problem or an opportunity, reframe the systems in which they operate, coming up with radically new solutions and putting them into practice. In the past 20 years we have witnessed a wave of this kind of social innovations. That is, bottom-up initiatives endowed with the capacity to change the socio-technical system in which they operate and attain results which are, simultaneously, solutions to individual and social problems while also working to (re)generate physical and social values. Examples of this kind of social innovations can be found in all domains of everyday life, from collaborative ways of living and working, to relational social and health services, to collaborative city making processes. Many of them are at initially driven by small groups of enthusiasts, but some progressively have the chance to grow, evolve and enter in conversation with civil servants and policy makers. When this happened, political and institutional innovations have been also produced (Manzini, 2018, Manzini, 2022). By looking at how this kind of social innovation works and by considering the quality of the interactions it comprises and the motivations driving it, we can recognize a common trait: all participants aspire to address a very practical common issue (e.g. to have access to cheap and fresh food). Nevertheless, in doing so they also tend to pay attention and often re-discover other aspects which are not necessarily related to this practical issue, such as the qualities of relationships involved, of the time spent there, of the place in which they happen to take place and of the work involved (Manzini and Tassinari, 2012). A retrospective reading of those behaviours and their results achieved, leads us to acknowledge that in social innovation motivations and results are actually multiple; hence we need to acknowledge the value of their irreducible complexity. The quality of complexity emerging from them needs to be appreciated for its intrinsic ability to adhere to the complexity of the radical interdependence

that weaves us together with all other terrestrials in profound ways. This togetherness shapes who we are today as well as the form of the common (more-than-human) world to which they contribute. In other words: the acknowledgment of complexity is the concrete way in which radical interdependency is practiced. The acknowledgment of complexity is what makes of the ways of looking at and acting in the world of those social innovation practices something radically different compared to the ones based on the over-simplifying, unifying, mechanistic models which have been predominant in the last century. If the results of our actions do not exclusively depend upon us alone, but also upon the other entities with which we inter-depend, we are also necessarily forced to come to terms with the fact that we can no longer consider ourselves at the center. This implies the need to acknowledge that we can no longer think we can really control productive processes, but rather consider ourselves and our own actions as just one of the many other agents/actions of engendering processes which are bigger than us and beyond our control. This means that transformative social innovation ought to be considered a concrete way in which people are (re)discovering that we inter-depend on one another, and that our actions are only really meaningful when they are framed within this inter-play. By engaging with very concrete issues, social innovation also engages with social values in terms of empathy, trust, and the ability and willingness to collaborate. This happens because those who participate both seek to produce relationships based on proximity, attention and care: care for people, places and all other agencies. By caring, they tend to regenerate, re-weave the web of life which has been neglected or damaged. So, social innovation not only prototypes a way out of anthropocentrism, but also strives to regenerate that which has been damaged by it. To really care however, one first needs to acknowledge the quality of complexity of the system(s) within which one operates. This is in my opinion an important lesson for designing down to Earth. This qualitative dimension of complexity (as a prerequisite for care) emerging from the observations of social innovation practices can serve also beyond the field of social innovation, as it can help to form a guideline for design practices willing to step out of anthropocentrism. Designing down to Earth might then mean caring, regenerative design practices deeply embracing the complexity of the world we all contribute to shape. If Puig De la Bellacasa's idea of care helped us to make Latour's idea of engendering more concrete, the (re)discovery of complexity we draw from social innovation helps us to make the idea of engendering, practices of care more concrete. To care and re-direct our own design practices beyond anthropocentrism, we first of all need to acknowledge and embrace complexity, to engage in systems reframing. In this process, we also need to re-frame our own design practice as engendering practice, thus also re-frame our own role as designer, acknowledging we do not have the design processes in our own hands. We are just one of the many actors inter-acting. What we can do is not so much to find solutions, easy fixes for societal issues, but rather to help to re-frame the systems from which such issues might arise. We should re-connect what has become separated (its relational perspective overlooked), acknowledge the radical interdependence connecting systems to systems, humans to humans, but also people to the planet. We ought to help further articulate the entanglements between the natural and the social. To design from the perspective of a terrestrial amongst other terrestrials, and seriously address the questions where to care, who cares and how to care, one needs to first acknowledge complexity and re-think one own design practice as a way to re-frame/question the systems in which we design (re)discovering how they actually inter-depend. In conclusion, we have seen that, looking carefully into the complexity of contemporary reality we can find examples of practices, and behind them of cultural approaches, countering the dominant anthropocentric mindset. In this presentation I referred to them as social innovations. So far, the discussion on social innovations has focused on the results that they have allowed, and will allow, to obtain: the opening of new practical possibilities (direct results) and the production of social values (indirect results). But we have seen that they can also be considered from another point of view. That is, they can also give ideas on what it might mean to move away from the anthropocentric approach that, until now, in Western and Westernized societies, has dominated design initiatives, and get closer to embrace a more-than-human approach. Clearly, none of the social innovations we can

refer to are perfect examples of what a more-than-human approach could and should be. Nevertheless, they can be read and discussed as steps towards this direction: practical experiences with which to feed a reflection on what it means to design recognizing that we are part of the web of life, that is, to design down to earth. Of course, the social innovation we are referring to here is a widespread activity, implemented by a plurality of actors. But, among them, there are also those who, due to their skills and abilities, are design experts. That is, the designers. Given that, what design experts should do is to be part of these social innovations, to adopt this same approach and, as their specific contribution, to feed the processes with ideas and to support them with appropriate design tools. A way of operating which, until now, we have referred to as “design for social innovation”, but which perhaps, in the light of what has been said, could be better defined as “design in social innovation”.

References

Haxeltine, A., Avelino, F., Wittmayer, J., Kemp, R., Weaver, P., Backhaus, J. and Tim O’Riordan. (2013). Transformative social innovations : a sustainability transition perspective on social innovation. *Social Frontiers: The next edge of social innovation research*.

Fisher, B. and Joan C. Tronto. (1990). Toward a Feminist Theory of Caring. In *Circles of Care*. ed. Abel, Emily and Nelson, Margaret. Albany: Suny Press.

Latour, B. (2020). Production or Engendering? *Isolarii*.

Latour, B. (2018). *Down to Earth. Politics in the New Climate Regime*. Cambridge: Polity Press.

Manzini, E. (2022). *Livable proximity*, Milano, Egea, 2022

Manzini, E. (2019). *Politics of the Everyday*. New York: Bloomsbury.

Manzini, E. (2015). *Design when Everybody Designs*. Cambridge, Massachusetts: MIT Press. 2015

Manzini, E. and Tassinari, V. (2022). *Designing Down to Earth* Lessons learnt from transformative social innovation, To be published in *Design and Culture*, Autumn 2022

Manzini, E. and Tassinari, V. (2022). *Motivating Change: Sustainable Design and Behaviour in the Built Environment*. In Crocker, R and Steffen Lehmann. *Motivating Change*. Taylor and Francis.

Murray, R., Caulier Grice, J. and Geoff Mulgan. (2010). *Open Book of Social Innovation*. London: Nesta & the Young Foundation.

Puig de la Bellacasa, M. (2017). *Matters of care: Speculative ethics in more than human worlds*. Minneapolis, London: University of Minnesota Press.

Tronto, Joan C. (1993). *Moral boundaries: a political argument for an ethic of care*. New York: Routledge.

Patrizia Ranzo*

The condition in which design operates on a global level, due to the phenomena caused by the digital revolution, determines the need to recover possible margins of action especially with respect to the primary function of design, as mediator of the material and immaterial aspects of production systems with respect to society. From this point of view, having overcome the idea of design oriented towards the exclusive consumption of the formal value of objects, design today is a planetary laboratory of thought, capable of researching and developing new ways for the inclusion of technology in human life, also alternatives to existing ones.

Digital revolution as a seismic event

The digital condition, also defined as “contemporary plankton”, due to its set of fluctuating differences, determines a context, for design, in which it is not easy to identify the margins of possibility and collective meaning. We find ourselves acting in a state of continuous present, crushed by the speed of happening and the simultaneity of phenomena; design follows countless cultural, socio-technical and productive paths: that of knowledge, of hybridized knowledge, of social and cultural emergencies.

Today we can say that digital, even with not exactly positive phenomena, has been completed. Already at the end of the '90s Negroponte was announcing the end of the digital revolution, when we would have noticed the digital for its absence and not for its presence; but at that moment he did not foresee the long wave and the generative effects on the innovations that would follow. Innovations that would have also involved the sphere of bio-technological research. Today we talk about post-digital especially in reference to critical thinking, a new ‘asterism’ as opposed to the pervasiveness of digital, “an attitude that is more concerned with being human, that with being digital.” (Bartholl, 2015)

The need to bring man back to the center of the world’s transformation processes is related to the need to design visions within which the project can assume meaning and transformative capacity in relation to emerging needs.

The digital revolution has had the effects of a seismic event, transforming the world from within and profoundly, affecting interpersonal and working relationships, the material world as well as the immaterial one; finally, the nature of things: “we are faced with a universe dominated by other ‘things’, not abstract and immaterial phenomena, but lumps of structured matter, solid presences called to interact not only with the body, but also with the mind, not only with the senses, but also with the thought.” (Vitta, 2015)

Digital colonizes technological systems by continually creating new species and instantly extinguishing pre-existing products, in an energetically and technologically self-powered process perfectly described by Bauman: “Perpetuum mobile: a self-sustained and self-sufficient contraption, containing everything needed to remain in continuous, uninterrupted movement, to be eternally on the move, needing no further outside boost to stay in motion-no stimulus, push or pull, no intervention of an external outside force, no input of new energy.” (Bauman, 2012)

We are in a mature phase of the digital revolution in which, from the *dematerialization of objects*, we have arrived at the *dematerialization of actions*: we open the front door and pay for what we buy with the same smartphone that performs other functions.

At the same time we are wedged in a dimension of human action *between immateriality and materiality*, in a continuous reference; as Olga Goriunova states: «there is no point in designing a system, be a data system or a house, if it cannot practically and actively affect things, outside of its immediate materiality.” (Goriunova, 2016)

For Goriunova we produce intangible technologies to generate materiality which, in turn, will generate a new humanity and a new action.

For Byung-Chul Han: "Through this medium (digital, editor's note) we are re-programmed, without fully understanding this radical paradigm shift. We struggle behind the digital medium which, acting under the level of conscious decision, decisively modifies our behavior, our perception, our sensitivity, our thinking, our living together. Today we are intoxicated by the digital medium, without being able to fully evaluate the consequences of such an inebriation. This blindness and simultaneous numbness represent the crisis of our day." (Byung-Chul Han, 2015)

The blindness to which Byung-Chul Han mentions is undoubtedly due to the technological condition in which we are immersed, but also to the compression of time that characterizes contemporary action. There is also a technological determinism that gives the design a very strong and, in some ways, pervasive aesthetic matrix. A very case in point was offered by the exhibition *Out of hand. Materializing the Postdigital* (MAD, Museum of Arts and Design, 2014); all the installations and objects visible in the exhibition demonstrate a strong aesthetic and structural, as well as conceptual, link caused by digital technologies. This demonstrates the non-neutrality of the digital environment, which can draw our thoughts and actions through a predetermined architecture, a structure of meaning. As Floridi states: "ICTs are not just rebuilding our world: they are re-ontologizing it." (Floridi, 2012)

If digital, in its resemantization of the world, has reached the skin of objects, post-digital, through its own critical dimension, brings new meanings and open, collective and intelligent design visions, capable of involving people, territories and companies, starting from listening the needs expressed.

Design as intention

Within the horizon of the scenario described, the project requires a close connection of all knowledge and a strong critical dimension to orient possible futures, to curve development paths that seem predetermined by technological trajectories.

In a universe dominated by mathematical metaphor, in which everything can be solved through a numerical container and its corresponding form, the return to the creation of value through meaning (the meaning that creates form) brings us closer to what has always characterized the various human civilizations and the system of objects that characterized them.

Putting the values you believe in at the center of the project is automatically an act of human sharing and also an intention to give a real shape and direction to the future.

The contemporary context forces us into a form of 'continuous present', which draws on contextual possibilities without building a divergent and intentional future.

Vilém Flusser, retracing the meaning of the word design in its various aspects, identifies it precisely with the meaning of intention: "the term design has managed to carve out a key position in everyday language because we begin (perhaps rightfully) to no longer believe that art and technique are sources of value, and to realize the intention (design) that supports them (...). The answer is precisely this: it all depends on the intention."

(Flusser, 2003)

To respond to the need for a 'political' vision, in the highest possible and intentional sense of the project, the real innovation to be sought is an innovation of meanings, which requires a critical and dialogical mind and attitude capable of producing visions within which it is really possible to return to inhabit the world.

"We need to dream new dreams", Anthony Dunne and Fiona Raby say (2013); questioning the role that design can play in the creation of a possible future, they propose design as a speculative place, producer of dialogues, debates and scenarios. With reference to the provocative and alternative charge of radical design and in the awareness of the historical impossibility of re-proposing the same contents, Dunne and Raby believe that, by proposing truly alternative projects, capable of producing discussion and dialogue, reality can become more malleable, also stimulating the search for innovation towards

horizons different from those we now regard as acquired.

“We are more interested in designing for how things could be” (Dunne & Raby, 2013): identifying design as a space of real possibility of change - beyond what the technological and factual context configures as our present and future - is a logic consequence of a speculative and critical design.

Many designers of the new generations find themselves operating in this sense, often touching the paths of art; this is because their projects refer to a conceptual and synthetic type of action. Moving away from the necessity of the function or enriching it with possibilities and new meanings, they propose a truly human centered design, in which design is more reality than reality itself, because it starts from the identification of real human needs and values.

Critically introducing into the project what is normally left out - discomfort, symbol, death, passion - returns the world of things to humanity in a profound and valued way. The radical thinking to which Dunne and Raby refer, already at the end of the 90s, reviewed the role of design in a way that is more in keeping with the needs of society.

Andrea Branzi states: “Contemporary Italian design is a phenomenon comparable to the same energy of inversion, capable of elaborating innovation as a political response to negative operational and cultural conditions. A capacity, that is, to invert or at least interrupt the path of cause and effect, whereby the aesthetic production becomes an inverse or deviant effect, with respect to the contextual causes from which it moves. Limits often become new opportunities for a different factual model.” (Branzi, 1999)

It is precisely this capacity for inversion of the generative flow of technology that can give intentionality to the project and contribute to bending the present through the capacity for criticism and imagination: “If the imaginary did not exist, one would have to invent it. And in so many ways, we have: the imaginary functions as a sort of a reality-producing device.” (Parikka, 2016)

The vision of design as a device for the production of reality would be merely reductive without starting from a speculative and critical capacity. Starting from this approach, design is increasingly configured as an experimental and open laboratory. Labs, a suffix increasingly recurrent in private or public institutions, become places to narrate technology in accessible forms, in which each object becomes the start-up of the next; design labs are also places to explore the territories of the possible with respect to social evolutions, ‘beyond’ technology.

An example of this research attitude can be referred to Anthony Dunne and Fiona Raby and to the work of Elio Caccavale, or to movements such as the Massive Change Network, promoted by Bruce Mau, aimed at proposing the development of design as a discipline capable of educating society to identify creative solutions that affect the future development of consumption.

The discourse is different for the laboratories financed by large private groups to explore technological possibilities; here the narrative of the project acts within real currents of knowledge, supported by predominant ideas.

Bishop, Gansing and Parikka, pointing out the post-digital phenomena in design and research, affirm: “Concurrent with the emergence of the digital and post-digital, as well as the solidification of neoliberal political economies, has been the rapid increase in programs and labs committed to collaborative experimentation in art and technology. The current prominence of art and technology labs in the context of the resurgence of collaborative practice involves also a wide range of cross-disciplinary groupings of designers, scientists, engineers (...) At the same time, the massive growth of the tech sector has given rise to a new generation of speculative research enterprises, from Google to SpaceX.” (Bishop, Gansing, Parikka, 2016)

It is precisely within this context that design must fit politically; design, understood in the sense of mediator of the material and immaterial aspects of production systems that are no longer autonomous, satellites within contemporary industrial dynamics, can favor shared processes of value creation.

Having abandoned the idea of design oriented towards the exclusive consumption of

the formal value of objects, design today is a planetary laboratory of thought, capable of researching and developing new ways for the inclusion of technology in human life, even alternatives to existing ones.

References

Bartholl, A. (2015). *Postdigital Aesthetics: Art, Computation and Design*. Palgrave Macmillan.

Bishop R., Gansing K., Parikka J., Wilk E. (2016). *Across and beyond. A Transmediale Reader on Post-digital Practces, Concepts, and Institutions*. Stenberg Press.

Branzi, A. (1999). *Introduzione al design italiano*. Baldini e Castoldi.

Byung-Chul, H. (2015). *Nello sciame. Visioni del digitale*. Nottetempo.

Dunne, A., Raby, F. (2013). *Speculative Everything. Design, Fiction, and social dreaming*. The MIT Press.

Floridi, L. (2012). *La rivoluzione dell'informazione*. Codice.

Flusser, V. (2003). *Filosofia del design*. Mondadori.

Goriunova, O. (2016). *Technological Macrobioime*, in Bishop R., Gansing K., Parikka J., Wilk E., *Across and beyond. A Transmediale Reader on Post-digital Practces, Concepts, and Institutions*. Stenberg Press.

Parikka, J. (2016). *The Lab Imaginary: Speculative Practices in Situ*. In Bishop et al. (2016). *Across and beyond. A Transmediale Reader on Post-digital Practces, Concepts, and Institutions*. Stenberg Press.

Vitta, M. (2015). *Dall'oggetto all'oggetto. Le radici profonde dell'estetica*. In Matteucci, G. (A cura di) *Estetica e pratica del quotidiano*. Mimesis.

BAL 22

CONTRIBUTIONS

01 Survey and Representation as system of monitoring and action on the risk factors and conditions of the context



Urban environments regeneration. Technological issues for adaptive re-use

FRETTOLOSO* Caterina¹, FRANCHINO Rossella², GALLO Paola³

¹Università degli Studi della Campania “Luigi Vanvitelli”, (Italy) –
*caterina.frettoloso@unicampania.it

²Università degli Studi della Campania “Luigi Vanvitelli”, (Italy)

³Università degli Studi di Firenze, (Italy)

Abstract

The technological approach to the regeneration project of urban contexts is strongly oriented to the quality of living and implies approaches that pursue, on the one hand, environmental and energy objectives, and on the other, conservation and enhancement of the existing heritage according to the inseparable combination of "environment and innovation".

In this transformative scenario the public space and, in general, the open spaces, play a strategic role, already covered traditionally within the city system as nodal elements not only in relation to usability and comfort but also to cultural identity, thus giving an added value to the urban fabric itself.

In relation to the different functions attributed to the urban open space, an application case study is presented that focuses attention on climate-adaptive design approach, based on microclimate simulation for urban modelling.

Keywords

Urban ecosystem, urban open spaces, ecosystem services, urban heat island.

1. Introduction

Demographic, economic, and cultural changes are increasingly inducing territorial policies to privilege the recovery of the existing in a qualitative way, leading institutions to concentrate resources on the regeneration of the urban environment.

To intervene in urban development to find an alternative to the traditional linear model, regeneration must be approached from the perspective of sustainability, pursuing quality of living, and imagining new roles that not only the built environment but also the connective tissue can assume.

2. Adaptive urban transformations [RF]

The improvement of the environmental conditions of the urban habitat is currently at the center of attention of both local and larger-scale policies, for example it is also one of the central themes of the “National Recovery and Resilience Plan” that is part of the “Next Generation EU programme”.

The objectives of the 2030 AGENDA for sustainable development have already constituted an important reference for thinking about the actions to be taken for the development and transformation of our cities which are increasingly configured as agglomerations with great complexity (Borsacchi, 2020).

The challenge is precisely this: can cities become capable of environmental self-regulation in order to ensure the control of transformation and the achievement of the Goal 2030: "11-Sustainable Cities and Communities"?



Fig 1. Urban analysis and project concept (Federico Bocchini, Luca Della Rosa, Marco Salvatore Santone, 2019)

Furthermore, the period of pandemic crisis has highlighted the need to equip cities with open spaces as one of the key points of contrasting the contagion was precisely that of privileging the use of outdoor spaces over indoor ones and of implementing the social distancing which is much easier to achieve in open areas.

It is clear that there is an emerging need for a reconfiguration of urban areas that pays attention to the adaptive capacity of places (Gianfrate & Longo, 2017) in order to calibrate appropriately interventions with the maximum capacity for environmental sustainability.

In this regard, starting from the qualitative and quantitative analysis of flows, that is, how people move, how they relate, how energy uses are supported, how supplies and services are organized, it is possible to characterize the urban environment and hypothesize regeneration interventions that have the aim of making the flows compatible with the sustainable transformations of the environment in which they are located.

Subsequently, in order to structure the intervention of regeneration of the urban environment, the aspects, often interrelated, that need to be controlled are primarily: the proper management of the urban water cycle, the creation of permeable surfaces, the provision of green areas both functional and equipped, the treatment of waste as management of the disposal system, the limitation of vehicular traffic flows and the encouragement of alternative transport systems, the limitation of emissions that cause noise pollution and those that generate air pollution.

In addition to the control of all these aspects, it is also important that the intervention establishes relationships both with its surroundings both natural and anthropized. The regeneration intervention thus understood has the objective of qualifying life, protecting health, increasing safety, promoting the interrelation of the inhabitants. Structured in this way, it contributes to increasing the carrying capacity

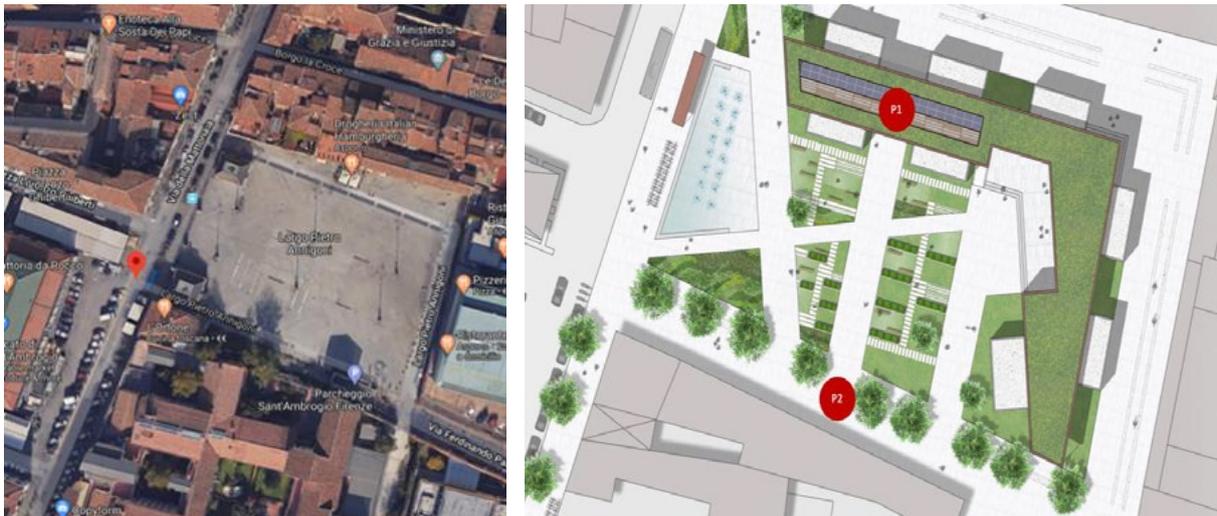


Fig 2. The square before and after renovation (Federico Bocchini, Luca Della Rosa, Marco Salvatore Santone, 2019)

of the city which can be defined as the ability to absorb and control urbanization phenomena with a sustainable impact on the ecosystem.

3. Open spaces as urban “infrastructure” [CF]

The progressive loss of *environmental knowledge* and the abandonment of care by settled communities have contributed to increasing various forms of degradation (Magnaghi, 2010), including social degradation induced by the deterioration of living conditions, which contribute to undermining the balance of urban eco-systems. In order to respond in a tangible way to such forms of degradation, it is necessary to introduce actions to adapt urban systems so that they increase their adaptive capacity in situations of anthropogenic and environmental criticality attributable to the well-known technological, socioeconomic and environmental aspects (Gianfrate & Longo, 2017).

Considering our cities as organisms and, therefore, not as linear but as circular systems, should be the common denominator of such transformative actions. Sharing, among other things, the idea suggested by McDonough (2017) of the city as a “positive force”, a scenario is configured in which working on urban environments means adopting strategies oriented not only to reducing negative impacts but, above all, to activating mechanisms to improve the quality of living.

The organisational system of open spaces, as an expression of the quality of living in a specific context, should therefore respond to precise functional needs dictated by modes of collective life increasingly oriented to a growing flexibility by putting into system many aspects (from the recognizability of surfaces to the comfort of spatial elements) according to an integrated approach to the project in which the technological and environmental dimension necessarily intertwines with the social one (Mareggi, 2020). Applying the concept of “positive force” to the dynamics of urban regeneration according to a technological approach to design, it is possible to identify in the redevelopment of urban open spaces an opportunity not only to increase the quality of individual spatial elements but also to activate processes of revitalisation of the city itself, both from an architectural-environmental and expressly social point of view, especially in contexts where these balances are compromised.

Interpreting urban open spaces as a systemic network in which connections play a key role in influencing modes of use and promoting new forms of urban cohesion (UN-Habitat, 2016) is an increasingly pressing need, especially if we focus not only on “acquired” functions (from accessibility to safety) but on so-called “ecosystem services” (Waldheim, 2006; Sun & Chen, 2017). Issues such as the stormwater management, the combination of innovative technologies for mitigation and adaptation to climate change (as showed in the case study proposal) and the identification of habitats for wild plants and animals, assume in this scenario a key role to increase the accessibility and usability of open spaces,

accentuating their role as urban infrastructure able to contribute to the improvement of microclimatic conditions in terms of mitigation and adaptation (Gianfrate & Longo, 2017).

4. A case study proposal [PG]

Based on these considerations, a design methodologies and technological solutions was developed to support a design proposal for the deep regeneration of an Italian urban area located in Tuscany, as case study, both in terms of reducing exposure to climate risks (Urban Heat Island and heatwaves, water and flooding deficiencies,) and in terms of economic sustainability and social inclusion.

A climate-adaptive design approach, based on microclimate simulation for urban modelling, was developed as a tool to stimulate the urban regeneration of urban neighbourhoods, with a particular focus on the effects due to the combination of innovative technologies for mitigation and adaptation to climate change of the Italian historical districts.

As a case study a square in Florence was chosen to practical experience in the frame of a post graduated Master Course in Architecture Bio-ecologic and Innovation Technological for Environment, to analyse with the students the outdoor comfort of a specific urban space. The design proposal was inspired by a holistic approach finalized to improve the resilience of the Florentine square, starting from a first analysis carried out on the identification of its social and environmental features. Attention was paid to preserve its historical urban configuration and its relations with the surrounding areas, enhancing the square's ability to react to the phenomena of climate change [fig. 1].

The scientific work was articulated with a preliminary analysis of urban geometry factors urban fabrics and climatic, following by analysis of urban open space uses, based on different patterns of spatial occupancy and considering specific users profile depending on the season and on the different time of the day.

Some representative microclimatic indicators were thus identified for pedestrian and urban characteristics together with the urban and building characteristics that most influence the local microclimate, such as physical properties of materials, morphology of the urban fabric, mitigation.

With this data, a pre-processing of the geometric and physical model of space and simulation of microclimate conditions (using a software ENVI-met for urban modelling comparing indexes of environmental comfort), was elaborated together with UHI simulations of the square urban climate, before and after the previous renovation. Thus, in order elaborate a design of a suitable project with identification of the most effective technological strategies, in terms of mitigation of the urban heat island, overall improvement of thermal comfort and urban microclimate [fig. 2].

Design proposal was focused on the definition of new urban spaces, where a new antique market and other social infrastructures were located to improve the outdoor comfort and the environmental performances of the urban district and to increase its social potential as aggregative space [fig. 3].

In detail the square was repaving using local materials with a high albedo and a low Solar Reflectance Index (SRI) and a new market building was constructed covered with a wooden solar shading structure where integrating technologies to produce renewable energy and to collect rainwater. The retraining of the nearby streets, transformed in green corridors with addition of design of water elements, like fountains, to increase the outdoor comfort especially in the summer months; a rain garden concludes the project to decrease the overall amount of water entering local storm sewers or surface waters to reduce flooding related impacts. The vegetative species integrated into the green areas of the new square were selected from native species according to the phytoclimatic and bioclimatic characteristics of the study area considering mild and no allergenic species; a balanced use of evergreen and deciduous trees to enhance seasonal water regulation; permeability of foliage for radiation control; seasonal adaptability and maintenance.



Fig 3. The view of new playground area (Federico Bocchini, Luca Della Rosa, Marco Salvatore Santone, 2019)

References

Borsacchi, L. (ed.) (2020). *Riuso circolare e sostenibile di spazi e edifici HANDBOOK*. <https://ec.europa.eu/futurium/en/system/files/ged/handbook-online.pdf>

Gianfrate, V., Longo, L. (2017). *Urban micro-design. Tecnologie integrate, adattabilità e qualità degli spazi pubblici*. FrancoAngeli.

Magnaghi, A. (2010). *Il progetto locale. Verso la coscienza di luogo*. Bollati Boringhieri.

Mareggi, M. (ed.) (2020). *Spazi Aperti. Ragioni, progetti e piani urbanistici*. Planum Publisher.

McDonough, W. (2017). How cities could save us. *Scientific American*, 317(1), 44-48. <https://doi.org/10.1038/scientificamerican0717-44>

Ranhao, S., Chen, L., (2016). Effects of green space dynamics on urban heat islands: Mitigation and diversification, *Ecosystem Services*, 23, 38-46. <https://doi.org/10.1016/j.ecoser.2016.11.011>.

UN-Habitat (2016), *Global Public Space Toolkit: From Global Principles to Local Policies and Practice*, UN-Habitat.

Waldheim, C., (2006). *The landscape reader*. Princeton Architectural Press.

BAL 22

CONFERENCE

UNIVERSITIES

LEAD



Via S. Lorenzo - San Lorenzo ad Septimum Abbey
Aversa (Italy)
<https://www.architettura.unicampania.it>

PARTNERS



Yukarıyurtçu Neighborhood Mimar Sinan Street
Ankara (Turkey)
<https://architecture.cankaya.edu>



75 Montrose Street
Glasgow (Scotland - UK)
<https://www.strath.ac.uk/engineering/>

PATRONAGES



Dottorato di Ricerca in
“Architettura, Disegno Industriale
e Beni Culturali” | *Vanvitelli University*



SID Società Italiana di Design
Italian Design Society



PRESIDENTS

Ornella ZERLENGA

Director of the Architecture and Industrial Design Department (DADI)
Università degli Studi della Campania “Luigi Vanvitelli”
(Italy)

Gediz URAK

Dean of the Faculty of Architecture
Cankaya University
(Turkey)

Stephen MCARTHUR

Executive Dean and Associate Principal of the Faculty of Engineering
University of Strathclyde
(UK)

CONFERENCE CHAIRS

Claudio GAMBARDELLA

Università degli Studi della Campania “Luigi Vanvitelli”

Timuçin HARPUTLUGIL

Çankaya University

Pieter DE WILDE

University of Strathclyde

SESSIONS CHAIRS

Mercedes Isabel AVELDAÑO
Universidad de Buenos Aires
(Argentina)

Carla LANGELLA
Università degli Studi della Campania "Luigi Vanvitelli"
(Italy)

Marco CALABRÒ
Università degli Studi della Campania "Luigi Vanvitelli"
(Italy)

Mario LOSASSO
Università degli Studi di Napoli Federico II
(Italy)

Renato CAPOZZI
Università degli Studi di Napoli Federico II
(Italy)

Alberto MANDARA
Università degli Studi della Campania "Luigi Vanvitelli"
(Italy)

Pasquale DE TORO
Università degli Studi di Napoli Federico II
(Italy)

Gabriele MONTI
Università IUAV di Venezia
(Italy)

Pieter DE WILDE
University of Strathclyde
(UK)

Andrea PANE
Università degli Studi di Napoli Federico II
(Italy)

Claudio GAMBARDELLA
Università degli Studi della Campania "Luigi Vanvitelli"
(Italy)

Maria Ines PASCARIELLO
Università degli Studi di Napoli Federico II
(Italy)

Anna GIANNETTI
Università degli Studi della Campania "Luigi Vanvitelli"
(Italy)

Ferdinando TRAPANI
Università degli Studi di Palermo
(Italy)

Timuçin HARPUTLUGIL
Çankaya University
(Turkey)

Lorenzo IMBESI
Sapienza Università di Roma
(Italy)

HONORARY COMMITTEE

Giovanni Francesco NICOLETTI
Rector at Università degli Studi della Campania “Luigi Vanvitelli”
(Italy)

Can ÇOĞUN
Rector at Çankaya University
(Turkey)

Italo Francesco ANGELILLO
Vice Rector at Università degli Studi della Campania “Luigi Vanvitelli”
(Italy)

Luigi MAFFEI
Vice Rector of Informatics and Technological Innovation
at Università degli Studi della Campania “Luigi Vanvitelli”
(Italy)

Hüseyin Selçuk GEÇİM
Vice Rector at Çankaya University
(Turkey)

Müfit GÜLGEÇ
Vice Rector at Çankaya University
(Turkey)

SCIENTIFIC COMMITTEE

Omar AL-HAFITH
Nottingham Trent University
(UK)

Aylin AKÇABOZAN-TAŞKIRAN
Yıldız Technical University
(Turkey)

Deniz ALTAY KAYA
Çankaya University
(Turkey)

Cláudia Naves David AMORIM
Universidade de Brasília – UnB
(Brazil)

Shady ATTIA
University of Liege
(Belgium)

Mercedes Isabel AVELDAÑO
Universidad de Buenos Aires
(Argentina)

Charalampos BANIOTOPOULOS
University of Birmingham
(UK)

Satish BASAVAPATNA KUMARASWAMY
University of Plymouth
(UK)

Chiheb BOUDEN
University of Tunisi El Manar
(Tunisia)

Marco CALABRÒ
Università degli Studi della Campania “Luigi Vanvitelli”
(Italy)

Sílvia CANALDA I LLOBET
Universidad de Barcelona
(Spain)

Cristina CÀNDITO
Università degli Studi di Genova
(Italy)

Rivera Maria Teresa CARBALLEIRA
Universidad de Santiago de Compostela
(Spain)

Orazio CARPENZANO
Sapienza Università di Roma
(Italy)

Niccolò CASIDDU
Università degli Studi di Genova
(Italy)

Alessandro CECE
Xi'an Jiaotong University-Liverpool University
(China)

Gülser ÇELEBI
Çankaya University
(Turkey)

Elisabetta CIANFANELLI
Università degli Studi di Firenze
(Italy)

Alessandra CIRAFICI
Università degli Studi della Campania “Luigi Vanvitelli”
(Italy)

Francesco COSTANZO
Università degli Studi della Campania “Luigi Vanvitelli”
(Italy)

Michele D'AMATO
Università della Basilicata
(Italy)

Fernando Moreira DA SILVA
Universidade de Lisboa
(Portugal)

Elisa DAINESE
Georgia Institute of Technology
(USA)

Johan Adam (Hans) DE BRUIJN
Delft University of Technology
(Netherlands)

Gianfranco DE MATTEIS
Università degli Studi della Campania “Luigi Vanvitelli”
(Italy)

Pieter DE WILDE
University of Strathclyde
(UK)

Ufuk DEMİRBAŞ
Çankaya University
(Turkey)

Papatya DÖKMECI
Çankaya University
(Turkey)

Aguinaldo DOS SANTOS
Universidade Federal do Paraná UFPR
(Brazil)

Aslı ER AKAN
Çankaya University
(Turkey)

Alpay ER
Özyeğin University
(Turkey)

Leyla ETYEMEZ-ÇIPLAK
Çankaya University
(Turkey)

Maria Linda FALCIDIENO
Università degli Studi di Genova
(Italy)

Fabiana FORTE
Università degli Studi della Campania “Luigi Vanvitelli”
(Italy)

Rossella FRANCHINO
Università degli Studi della Campania “Luigi Vanvitelli”
(Italy)

Adriana GALDERISI
Università degli Studi della Campania “Luigi Vanvitelli”
(Italy)

Claudio GAMBARDELLA
Università degli Studi della Campania “Luigi Vanvitelli”
(Italy)

Claudio GERMAK
Politecnico di Torino
(Italy)

Paolo GIORDANO
Università degli Studi della Campania “Luigi Vanvitelli”
(Italy)

Annalisa GIUSTI
Università degli Studi di Perugia
(Italy)

Timuçin HARPUTLUGIL
Çankaya University
(Turkey)

Lorenzo IMBESI
Sapienza Università di Roma
(Italy)

Danila JACAZZI
Università degli Studi della Campania “Luigi Vanvitelli”
(Italy)

Pedro Antonio JANEIRO
Universidade de Lisboa
(Portugal)

Cassidy JOHNSON
University College London
(UCL) (UK)

Ezgi KAHRAMAN
çankaya University
(Turkey)

Emre KİSHALI
Kocaeli University
(Turkey)

Desmond LAUBSCHER
Greenside Design Center, Johannesburg
(South Africa)

Roberto LIBERTI
Università degli Studi della Campania “Luigi Vanvitelli”
(Italy)

Jingjing LIN
East China Normal University
(China)

Mario LOSASSO
Università degli Studi di Napoli Federico II
(Italy)

Ardeshir MAHDAVI
Technical University of Vienna TU Wien
(Austria)

Fabio MANGONE
Università degli Studi di Napoli Federico II
(Italy)

Elena MANZO
Università degli Studi della Campania "Luigi Vanvitelli"
(Italy)

Massimiliano MASULLO
Università degli Studi della Campania "Luigi Vanvitelli"
(Italy)

Maria MILANO
Escola Superior de Artes e Design - ESAD, Mato-
sinhos-Porto (Portugal)

Euripidis MISTAKIDIS
University of Thessaly
(Greece)

Gülru MUTLU TUNCA
Çankaya University
(Turkey)

Pilar Chias NAVARRO
University of Alcalá
(Spain)

Florian NEPRAVISHTA
Polytechnic University of Tirana
(Albania)

Alessandra OPPIO
Politecnico di Milano
(Italy)

Jorge OTERO-PAILOS
Columbia University
(U.S.A.)

Ayça ÖZMEN
Çankaya University
(Turkey)

Fatma Gül ÖZTÜRK BÜKE
Çankaya University
(Turkey)

Luis Manuel PALMERO IGLESIAS
Universitat Politècnica de València
(Spain)

Saumya PANDE
Indian Institute of Art & Design IIAA
(India)

Renata PICONE
Università degli Studi di Napoli Federico II
(Italy)

Jorge Cruz PINTO
Universit   di Lisbona
(Portugal)

Daniela PISCITELLI
Universit   degli Studi della Campania "Luigi Vanvitelli"
(Italy)

Efisio PITZALIS
Universit   degli Studi della Campania "Luigi Vanvitelli"
(Italy)

Patrizia RANZO
Universit   degli Studi della Campania "Luigi Vanvitelli"
(Italy)

Michelangelo RUSSO
Universit   degli Studi di Napoli Federico II
(Italy)

Maria Antonietta SBORDONE
Universit   degli Studi della Campania "Luigi Vanvitelli"
(Italy)

Sergio SIBILIO
Universit   degli Studi della Campania "Luigi Vanvitelli"
(Italy)

Gianni SINNI
Universit   IUAV di Venezia
(Italy)

  zge S  ZER
Çankaya University
(Turkey)

Paolo Marco TAMBORRINI
Universit   degli Studi di Parma
(Italy)

Elisaveth THOÏDOU
Aristotle University of Thessaloniki
(Greece)

Ferdinando TRAPANI
Universit   degli Studi di Palermo
(Italy)

Alexis TSOUKI  S
Universit   Paris Dauphine
(France)

Mehmet TUNCER
Çankaya University
(Turkey)

Ali TÜREL
Çankaya University
(Turkey)

Gülsu ULUKAVAK HARPUTLUGIL
Çankaya University
(Turkey)

Nur UMAR
Adana Alparslan Türkeş University of Science
and Technology (Turkey)

Antonella VIOLANO
Università degli Studi della Campania “Luigi Vanvitelli”
(Italy)

Ornella ZERLENGA
Università degli Studi della Campania “Luigi Vanvitelli”
(Italy)

DADI ORGANIZING COMMITTEE

Person in charge	Claudio GAMBARDELLA	Michela MUSTO
Scientific secretariat	Monica CANNAVIELLO	Simona OTTIERI
Scientific secretariat	Maria Dolores MORELLI	Alice PALMIERI
Scientific secretariat	Antonella VIOLANO	Anton Giulio PIETROSANTI
	Valentina ALFIERI	Barbara PIZZICATO
	Barbara BONANNO	Marco RUSSO
	Corrado CASTAGNARO	Valentina SAPIO
	Corrado CHISARI	Giulia SCALERA
	Giovanni CIAMPI	Chiara SCARPITTI
	Rosanna CIANNIELLO	Michelangelo SCORPIO
	Margherita CICALA	Yorgos SPANODIMITRIOU
	Luigi CORNIELLO	Chiara TOSATO
	Domenico CRISPINO	Adriana TREMATERRA
	Maria D'UONNO	Mattia ZIZI
	Rosa DE CARO	
	Federica FIORILLO	
	Mariateresa GUADAGNUOLO	
	Fabiana GUERRIERO	
	Giuseppe GUIDA	
	Rosina IADEROSA	
	Gennaro Pio LENTO	
	Marica MEROLA	
	Riccardo MIELE	
	Enrico MIRRA	

City information – San Leucio is a fraction of the municipality of Caserta known for its historical and artistic history located 3.5 km northwest of the city. The royal site has been recognized as a World Heritage Site by UNESCO and in it covers an area of 16.871 m². In 1773 Ferdinand IV wanted to build a solitary retreat where to spend his free time and he chose exactly the hills that flanked the Caserta Park where there was a chapel dedicated to San Leucio, the martyr bishop of Brindisi, from whom the site took its name. On the death of the king's eldest son, Carlo Tito, he decided to erect a hospice for the poor where he assigned a factory so as not to keep them idle. The colony grew rapidly so it was decided to build more buildings to improve its functionality. The silk factory workers were assigned a house inside, and free education was also provided for their children, being able to benefit from the first compulsory school in Italy. King Ferdinand IV of Bourbon planned to enlarge the colony also for the new industrial needs due to the introduction of the “reeling” of silk and the manufacture of veils, therefore to build a new city, to be called Ferdinandopoli, conceived on a completely circular plan. He did not succeed, but in the neighborhoods annexed to the Belvedere the silk orders even today, they still come from all over Europe: nowadays, the productions of San Leucio can be found in the Vatican, at the Quirinale, in the Oval Office of the White House: even the flags of Buckingham Palace are made with this material.

Site information – Officina Vanvitelli, born within the activities of the Department of Architecture and Industrial Design, is a light district for fashion and design in Campania. It is both a space for experimentation and innovation, a meeting place for minds, cultures and different skills. It is the space where ideas fall into solid matter, becoming visible and active. It is also the place where the new floating factory takes shape, capable of incorporating knowledge into material products and services and launching them into the world. It is the place of confrontation with companies, productive realities, institutions and bodies that represent the complex reality of the territory and its geographies, not only physical, but cultural and social, with the aim of continuously identifying new scenarios, knowledge and relationships for one development based on an “industry of cultures”.

Officina Vanvitelli encourages the scouting and realization of the projects of creative talents, experimenting with new paths to offer tangible and intangible opportunities, as well as public / private investments.

Officina aims to bridge the gap that still exists between academic training and the world of fashion and design companies in its various connotations: consolidated, emerging companies, start-ups, spin-offs, and will collaborate closely with the production reality for the development of new professions and the business of the future.

The headquarters was inaugurated on 23 January 2019, on that occasion the Department of Architecture and Industrial Design conferred an honorary degree on Rosita Missoni, founder of the famous brand.



OFFICINAV:

V : Università
degli Studi
della Campania
Luigi Vanvitelli





SERVICES COMPANIES



Digital platform



Technical secretariat

PROGRAM

11 May / morning_Hall 1

8.00–8.30 | Registration of participants

8.30–9.30 | **INSTITUTIONAL GREETINGS**

Honorary Committee

Giovanni Francesco Nicoletti – Rector of Università degli Studi della Campania “Luigi Vanvitelli”

Selçuk Geçim – Pro-Rector Cankaya University (remotly)

Pieter De Wilde – In representation of the University of Strathclyde Principal

Italo Francesco Angelillo – Pro-Rector of Università degli Studi della Campania “Luigi Vanvitelli”

Luigi Maffei – Pro-Rector for Technological and Computer Science Innovation of Università degli Studi della Campania “Luigi Vanvitelli”

Ilaria Fontana – Italian Parliament Member, Undersecretary of State at the Ministry of Ecological Transition

Massimiliano Smeriglio – European Parliament member (remotly)

Carlo Marino – Mayor of Caserta

Raffaele Cecoro – President of the Ordine degli Architetti PP&C of Caserta province

9.30–11.00 | **INTRODUCTIONS**

Ermete Realacci – President of SYMBOLA. Fondazione per le qualità italiane (remotly)

Maurizio Tira – President of Società degli Urbanisti Italiani (SIU)

Mario Losasso – President of Società Italiana della Tecnologia dell’Architettura (SITdA)

Andrea Sciascia – President of Società Scientifica Nazionale di Progettazione Architettonica (ProArch) (remotly)

Francesca Fatta – President of Unione Italiana Disegno (UID)

Francesca Tosi – President of Conferenza Universitaria Italiana del Design (CUID)

Raimonda Riccini – President of Società Italiana di Design (SID)

Paolo Rosato – President of Società Italiana di Estimo e Valutazione (SIEV)

Paolo Giordano – Coordinator of PhD Course in Architecture, Industrial Design, and Cultural Heritage – Università degli Studi della Campania “Luigi Vanvitelli”

Lorenzo Imbesi – Member of Cumulus Executive Board

Carlo Vezzoli – Co-founder of Learning Network on Sustainability International (LeNS)

11.00–11.30 | **COFFEE BREAK GARDEN**

11.30–12.30 | **OPENING CONFERENCE**

Conference Presidents

Ornella Zerlenga – Director of the Architecture and Industrial Design Department (DADI), Università degli Studi della Campania “Luigi Vanvitelli”

Gediz Urak – Dean of The Faculty of Architecture, Cankaya University (remotly)

Stephen McArthur – Executive Dean and Associate Principal of The Faculty of Engineering, University of Strathclyde

Conference Chairs

Claudio Gambardella – Università degli Studi della Campania “Luigi Vanvitelli”

Pieter De Wilde – University of Strathclyde

Timuçin Harputlugil – Çankaya University

12.30–13.30 | **Keynote Speakers**

Ezio Manzini – Politecnico di Milano

Patrizia Ranzo – Università degli Studi della Campania “Luigi Vanvitelli”

11 May / afternoon_Hall 1

13.30 – 15.00 | LUNCH

15.00 – 16.30 | **13 For Nature / With Nature: new sustainable design scenarios**
Chair Lorenzo Imbesi

Güniz Sağocak, Gülru Mutlu Tunca

Game Experience: A Fun Form of Cultural Sustainability

Feifei Song

ADHEREND - Research and teaching design on the integration of old and new urban spaces

Fabio Naselli, Anna Yunitsyna, Claudio Gambardella, Valentina Sapio

Sustainability of the 3D printing process and settlements' codesign

Chiara Lorenza Remondino

A renewed poetic practice. Rethinking the role of packaging design to boost New Normality

Claudia Morea, Sofia Collacchioni, Francesca Falli, Chiara Rutigliano

Collaborative services as trigger for a sustainable culture: two case studies

Giulio Giordano

Revived Vintage objects:

Designing and Recycling as a bridge connecting Period Products to contemporary functions

16.30 – 16.45 | COFFEE BREAK GARDEN

16.45 – 18.45 | **12 Design for Sustainable & Safe Communities**
Chair Carla Langella

Luigi Maffei, Francesca Castanò,

Raffaella Marzocchi, Maria Dolores Morelli

Slowwork, room with view. Behaviors, Heritage, Design for new lifestyles

Niccolò Casiddu, Claudia Porfirione, Annapaola Vacanti, Francesco Burlando, Isabella Nevoso

Living Hub: setting up a living for simulation-based design activities

Nicola Corsetto, Patrizia Ranzo, Francesco Fittipaldi

I.S.A.R.C – Innovative System for Aerial and Rescue Controls

Xiaowen Wu, Claudio Gambardella

Sustainable design in urban renewal: A case study of waterfront landscape infrastructure of Shanghai, China

Timuçin Harputlugil, Pieter De Wilde

Beyond current limits: building occupants and climate change

Kihara Wellington Minoru, Aguinaldo dos Santos, Ana Lucia Zandomeneghi, Alexandre De Oliveira

Design For Sustainable Behavior: Strategies for Understanding Behavior Change

Gülser Çelebi, Meron Belay

Analyzing sustainability of green product certification systems using indicators of sustainable product

Ayca Odabasi Uyanik

Building Trust to Level 4 Autonomous Trucks for Environmental Sustainability and Road Safety

11 May / afternoon_Hall 2

13.30 – 15.00 | LUNCH

15.00 – 16.30

05 Circular Technological Design for a carbon neutral approach
Chair Mario Rosario Losasso

Jacopo Andreotti, Roberto Giordano

How to pursue the Whole Life Carbon vision: a method to assess buildings' Embodied Carbon

Serena Baiani, Paola Altamura

C2C as a reference framework for circular buildings. Implementation on an existing settlement in Rome

Antonella Violano, Nicola Barbato, Monica Cannaviello, Souha Ferchichi, Imad Ibrik, Ines Khalifa, Jose Luis Molina, Antonella Trombadore

Digital-green transition of knowledge buildings

Antonella Trombadore, Gisella Calcagno, Giacomo Pierucci, Lucia Montoni, Juan Camilo Olano

University communities for the green/digital renovation of buildings

Antonella Violano, Antonio Maio

Metamorphosi Vs Transformation: innovating the process in the regeneration technological design of heritage-built environment

Marica Merola, Chiara Tosato

Slow tourism and sustainable mobility: infrastructures for a smart use

16.30 – 16.45 | COFFEE BREAK GARDEN

16.45 – 18.45

10 Re-shaping planning approaches, tools and processes for a sustainable, inclusive, and resilient future
Chair Ferdinando Trapani

Penghan Wu, Yedian Cheng

Museum and the Community: A Case of Participatory Intervention of An Old Community in Shanghai

Adriana Galderisi, Giuseppe Guida, Giovanni Bello, Giada Limongi, Valentina Vittiglio

Improving learning capacity to enhance resilience: the community engagement process in the RI.P.RO.VA.RE. Project

Claudia De Biase, Salvatore Losco

To a sustainable redevelopment of illegal settlements

Elisavet Thoidou, Miltiadis Toskas-Tasios

Spatial Planning and Energy Transition: The role of public participation

Claudia Sorbo

Risk-connect: a secure and ecological path in the east side of the Vesuvio National Park

Deniz Altay-Kaya, Damla Yeşilbaş

Cultural Heritage in Resilience Planning: Evidence from 100 Resilient Cities Database

Macarena Gaete Cruz, Aksel Ersoy,

Darinka Czischke, Ellen Van Bueren

A framework for socio-ecological urban co-design: Lessons from two urban parks in the Atacama Desert

Adriana Figurato

Spas, new possible scenarios for human and city's wellbeing

11 May / afternoon_Hall 3

13.30 – 15.00 | LUNCH

15.00 – 16.30 | **02 History, resilience, and green transition**
Chair Anna Giannetti

Elena Manzo, Marina D'Aprile, Antonella Violano

The enhancement of Biocultural landscapes: history, heritage, and environment driving sustainable mobility in internal areas

Irem Kahyaoğlu, Timuçin Harputlugil

Conceptual framework for adaptive reuse of cisterns to cope with climate change and global warming: case of Safranbolu

Chiara Ingrosso

Patrick Geddes in Naples. The beginning of his ecological thinking

Monica Esposito

Klampenborg: between local identity and territorial development. An example for Campania's spas

Felicia Di Girolamo

Vlorë, the ancient city of Albania and its history in Giuseppe Rosaccio's travel diary

Federica Fiorillo

New culture of mobility between flow of people and flow of ideas. Two examples of Metro's transformation: Naples and Copenhagen.

16.30 – 16.45 | COFFEE BREAK GARDEN

16.45 – 18.00 | **13 For Nature / With Nature: new sustainable design scenarios**
Chair Claudio Gambardella

Ivo Caruso, Vincenzo Cristallo

Nature-based design methods and practices for bathing activities sustainability

Mario Bisson, Stefania Palmieri, Alessandro Ianniello, Luca Botta, Riccardo Palomba

Design for social innovation: a proposal for an holistic design approach

Francesca La Rocca

Beyond the XX century's object:12 keywords from the international design scenery

Alessia Romani, Federica Mattiuzzo, Marinella Levi

Design for and with visual impairments through 3D printing: a case study from the covid-19 pandemic

Simona Ottieri

Design and craftsmanship for urban regeneration

12 May / morning_Hall 1

9.30 – 11.00

14 Next Consciousness. Fashion innovative scenarios, processes, and products
Chair Gabriele Monti

Alessandra Cirafici, Carlos Campos
DENIM_DECONSTRUCTION. Industrial garments/random garments. Up-cycling processes

Rosanna Veneziano, Michela Carlomagno

Platforms, algorithms, and new media in the prosumer era. The evolution of tailored production in Fashion and Cosmetic field

Dalia Gallico

Collaborative sustainable innovation improving inclusiveness and value adding capabilities

Chiara Scarpitti, Flavio Galdi

Seven Bodies. Parametric design dialogues around the body

Valentina Alfieri

New scenarios of conscious fashion system

Patrizia Marti, Annamaria Recupero

Smart jewels for inclusive fashion

11.00 – 11.15

COFFEE BREAK GARDEN

11.15 – 13.00

14 Next Consciousness. Fashion innovative scenarios, processes, and products
Chair Gabriele Monti

Sabrina Lucibello, Lorena Trebbi

Alginate Materials for Circular Fashion: from Consumptive to Regenerative Systems

Elisabetta Cianfanelli, Margherita

Tufarelli, Maria Claudia Coppola

Metamorphosis with(in) fashion: futuring through a new fashion design framework

Giulia Scalera

Responsible Italian Fashion. An open brand for sustainability in fashion

Cristina Marino, Sara Bellini

Designing a Conscious Fashion

Experiences: strategies for Generation Z

Maria D'Uonno

Futurable fashion state of mind. Sustainable projects and theories for new fashion system scenarios

Maria Antonietta Sbordone, Carmela

Ilenia Amato, Alessandra De Luca,

Venere Merola

New bio-based textiles productions increasing new circular economy models

Ornella Cirillo, Andrea Chiara Bonanno,

Caterina Cristina Fiorentino, Roberto

Liberti, Giulia Scalera

Linen Storylines in Procida. From memory to con"temporary" project, between diffusion of knowledge and sharing of practices

12 May / morning_Hall 2

9.30 – 11.00

08 High Performance Components & Buildings

Chair Pieter De Wilde

Luigi Maffei, Antonio Ciervo, Dorian Diodato, Antonio Rosato

Prefabricated movable modular building solutions exploiting renewable sources: energy systems review

Niloufar Mokhtari, Giovanni Ciampi, Yorgos Spanodimitriou, Sergio Sibilio

Second-skin façades and usage of textile materials in the building envelope: literature review, limitations, and future opportunities

Ahmet Ethem Çulcuoğlu, Timuçin Harputlugil

A research on thermal defects in building envelopes for mid-rise houses to develop retrofit strategies: implemented with a case study in Sivas/Turkey

Giovanni Ciampi, Yorgos Spanodimitriou, Michelangelo Scorpio

Review of 3D Printing in Architecture: applications, limitations, and future developments

Evelyn Grillo

From climate change to the development of adaptive building envelope

Michela Musto

Advanced manufacturing processes for emergent architectural systems

11.00 – 11.15

COFFEE BREAK GARDEN

11.15 – 12.45

09 Public policies for inclusive and sustainable cities

Chairs Mercedes Isabel Aveldaño - Marco Calabrò

Scilla Vernile

The environment: from limit to economic opportunity

Floriana Pollio

The role of sustainable disclosure and reporting in the public administration: the AdSP case of the western Ligurian sea

Cecilia Padula, Silvia Barbero

The impact of COVID-19 on Piedmont Circular Economy policy roadmap

Laura Pergolizzi

Urban regeneration through an integrated urban planning approach: towards a new paradigm. The Italian experience

Benedetta Terenzi

Brand urbanism and future scenario to promote sustainable buses public transport. A case study

Marco Francesco Errico

Common goods: an instrument for citizen inclusion and urban regeneration

12 May / morning_Hall 3

9.30 – 11.00

06 Structural engineering

Chair Alberto Mandara

Corrado Chisari, Mattia Zizi, Daniela

Cacace, Gianfranco De Matteis

Seismic vulnerability assessment of bell towers in Naples

Androniki Christodoulou, Olympia

Panagouli, Athanasios Kozanitis

The role of the epistyle on the dynamic behavior of multi-drum columns

Claudia Cennamo, Concetta Cusano,

Luigi Guerriero

Seismic Retrofit of Masonry Structures: the Lancellotti Palace in Casalnuovo di Napoli

Giorgio Frunzio, Mariateresa

Guadagnuolo, Luigi Massaro, Luciana Di

Gennaro

The CLT panels: a sustainable response for existing buildings

Gianfranco De Matteis, Pasquale

Bencivenga, Angelo Lavino, Francesco

Rosselli, Mattia Zizi

Conservation state and structural issues of existing infrastructures: the case of stata road bridges in Campania

Euripidis Mistakidis, Olympia Panagouli

Use of structural steel in cultural heritage and for the strengthening of existing structures

11.00 – 11.15

COFFEE BREAK GARDEN

11.15 – 12.30

03 Restoration: a sustainable answer to uncontrolled urbanization

Chair Andrea Pane

Paolo Giordano

Restoration of the architectural heritage. The cemetery hill of Poggioreale in Naples

Corrado Castagnaro

Restoration as a sustainable resource for urban regeneration. The case of the Forte di Vigliena

Domenico Crispino

Recovery of the abandoned heritage towards new fruitive horizons: the case of S. Maria della Pace

Enrico Mirra, Adriana Trematerra

Harbour heritage protection: sustainable practices for the enhancement of the Balkan Coast

Adriana Trematerra, Florian Nepravishta,

Enrico Mirra

Abandoned heritage between restoration and valorisation: Mirine Early Christian Basilica in Croatia

12 May / afternoon_Hall 1

13.00 – 14.30 | LUNCH GARDEN

14.30 – 16.00 | 07 Occupants and their interaction with the built environment related to Multisensorial and Indoor Environmental Quality Chair **Timuçin Harputlugil**

Samiha Boucherit, Luigi Maffei, Massimiliano Masullo

Inclusive design and the multisensory interactions in public spaces for well-being of visually impaired people

Merve Coşar Güzel, Gülsu Ulukavak Harputlugil

Natural Ventilation Strategies in Buildings as Part of Indoor Air Quality and Healthy Environment

Alessandro Meloni

Compared spatial interpretations in the Edoardo Chiossoni Museum of Oriental Art

Ainoor Teimoorzadeh, Michelangelo Scorpio, Giovanni Ciampi, Sergio Sibilio

Head Mounted Displays for lighting in Virtual Reality: Review on Measurements, Advances, and Limitations

Michelangelo Scorpio, Davide Carleo, Martina Gargiulo, Pilar Chias Navarro, Yorgos Spanodimitriou, Parinaz Sabet, Giovanni Ciampi

The role of the subjective assessment in lighting research using virtual reality

Francesco Salamone, Giorgia Chinazzo, Ludovico Danza, Clayton Miller, Sergio Sibilio, Massimiliano Masullo

On the use of low-cost thermohygrometers for wearable application in the built environment

16.00 – 16.15 | COFFEE BREAK

16.15 – 18.15 | 01 Survey and Representation as system of monitoring and action on the risk factors and conditions of the context Chair **Maria Ines Pascariello**

Ornella Zerlenga, Rosina Iaderosa, Margherita Cicala

Digital images for the knowledge of bell towers and their ornamental signs

Alessandra Cirafici, Caterina Cristina Fiorentino

Naples, Leopardi and the Artist/Inhabitant Project. Practices of aesthetic resistance

Gennaro Pio Lento, Rosa De Caro, Fabiana Guerriero

Representation of territorial identities of Panagia Paraportiani in Mykonos

Alice Palmieri

Digital narratives for cultural heritage: new perspectives for accessibility and inclusion

Vincenzo Cirillo, Riccardo Miele

The identity drawing of places. Bell towers in sixteenth-century Naples by Antoine Lafréry

Valeria Marzocchella

New technologies for the city and landscape. A versatile application example

Rosa De Caro, Fabiana Guerriero, Gennaro Pio Lento

Knowledge and representation of the civic tower of Tora and Piccilli

Luigi Corniello, Angelo De Cicco

The photogrammetric survey of the Tvrdalj Fortress in Hvar

18.15 – 18.45 | FINAL PLENARY SESSION

Luigi Maffei – Pro-Rector for Technological and Computer Science Innovation of Università degli Studi della Campania “Luigi Vanvitelli”

Pieter De Wilde – University of Strathclyde

Timuçin Harputlugil – Çankaya University

Claudio Gambardella – Università degli Studi della Campania “Luigi Vanvitelli”

12 May / afternoon_Hall 2

13.00 – 14.30 | LUNCH GARDEN

14.30 – 16.00

11 Beautiful, sustainable, and inclusive places: the role of appraisal and evaluation

Chair Pasquale De Toro

Maria Cerretta, Chiara Mazzarella, Hilde Remoy

Nomad Management of Urban Development: the complex value of temporary communities

Luciano Lauda, Fabiana Forte

The value of change: towards social impact assessment in Scampia

Adriana Gherzi, Silvia Pericu, Federica Delprino, Stefano Melli

Pays Aimables: visual storytelling and landscape values

Federica Cadamuro Morgante,

Alessandra Oppio, Chiara Sumiraschi

Evaluation issues of cultural heritage impact-led regeneration processes. The case of Italian inner areas

Leopoldo Sdino, Francesca Torrieri,

Marta Dell'Ovo, Marco Rossitti

Con(temporary) urban regeneration processes and real estate market: evidence from the case of Milan

Ali Turel

Turkey is the Leading Housing Producer in Europe with Dominating Equity Finance in Housing Transactions

16.00 – 16.15 | COFFEE BREAK

16.15 – 17.30

11 Beautiful, sustainable, and inclusive places: the role of appraisal and evaluation

Chair Pasquale De Toro

Maria Cerretta, Ludovica La Rocca, Ezio Micelli

A Decision Aid and Social Impact Co-Assessment Approach for Urban Regeneration Processes

Fabiana Forte, Alessandra Oppio

Beauty as value: evaluation issues in the NEB perspective

Zeynep Çiğdem Uysal Ürey

Creation of a Pseudo-Vernacular Architecture and the Unintentional Attainment of Sustainability: The Case of Akyaka Town Development

Fabrizio Battisti, Giovanna Acampa,

Mariolina Grasso

Using evaluation tools in urban regeneration processes

Fabiana Guerriero, Rosa De Caro,

Gennaro Pio Lento

Unesco heritage and spatial analysis in a GIS environment

12 May / afternoon_Hall 3

13.00 – 14.30 | LUNCH GARDEN

14.30 – 16.00 | 04 Urban transformations: projects, strategies, actions Chair Renato Capozzi

Paolo Belardi, Valeria Menchetelli, Giovanna Ramaccini, Monica Battistoni, Camilla Sorignani

Learning from Covid 19. Sustainable strategies for the regeneration of peripheral areas

Francesco Costanzo, Gaspare Oliva, Michele Pellino

Historical city and urban voids as elements of cultural heritage: theory and projects for Aversa discontinuous city

Raffaele Marone

Architecture from rubble. To “rebuild the imaginary”

Luisa Collina, Laura Galluzzo, Claudia Mastrantoni, Elisa Cinelli

Sustainable Recovery and Urban Public Transformation of a Former Military Park

Barbara Bonanno

The man who designed his city. The Matteotti village in Terni by Giancarlo De Carlo as a socially sustainable method

Rabia Çiğdem Çavdar

Rereading of the Process of an Idea
Competition for Obtaining a Sustainable Urban Environment

Concetta Tavoletta

Second-hand Architecture. For a new theory of reuse. The case of the EX IDAC
FOOD

Marco Russo

Resonant void. Play and interaction in architecture

14.30 – 16.30 | ROUNDTABLE – THE FUTURE OF SUSTAINABLE FASHION

**Chair Aginaldo dos Santos
Co-chairs Roberto Liberti, Maria Antonietta Sbordone**

VIDEOS

Anikó Gál – Hungary

Positive impact of fashion: value system beyond consumption and improving design process

Emma Gambardella – Italy

Sustainable fashion?

Janice Accioly Ramos Rodrigues – Brazil

The future of work in fashion from the perspective of technologies: a prospective study

Valentina Alfieri, Silvestro Di Sarno – Italy

Fast to slow. New visions for the future of conscious fashion system

16.00 – 16.15 | COFFEE BREAK

16.15 – 17.15 | 04 Urban transformations: projects, strategies, actions Chair Renato Capozzi

Caterina Frettoloso, Rossella Franchino, Paola Gallo

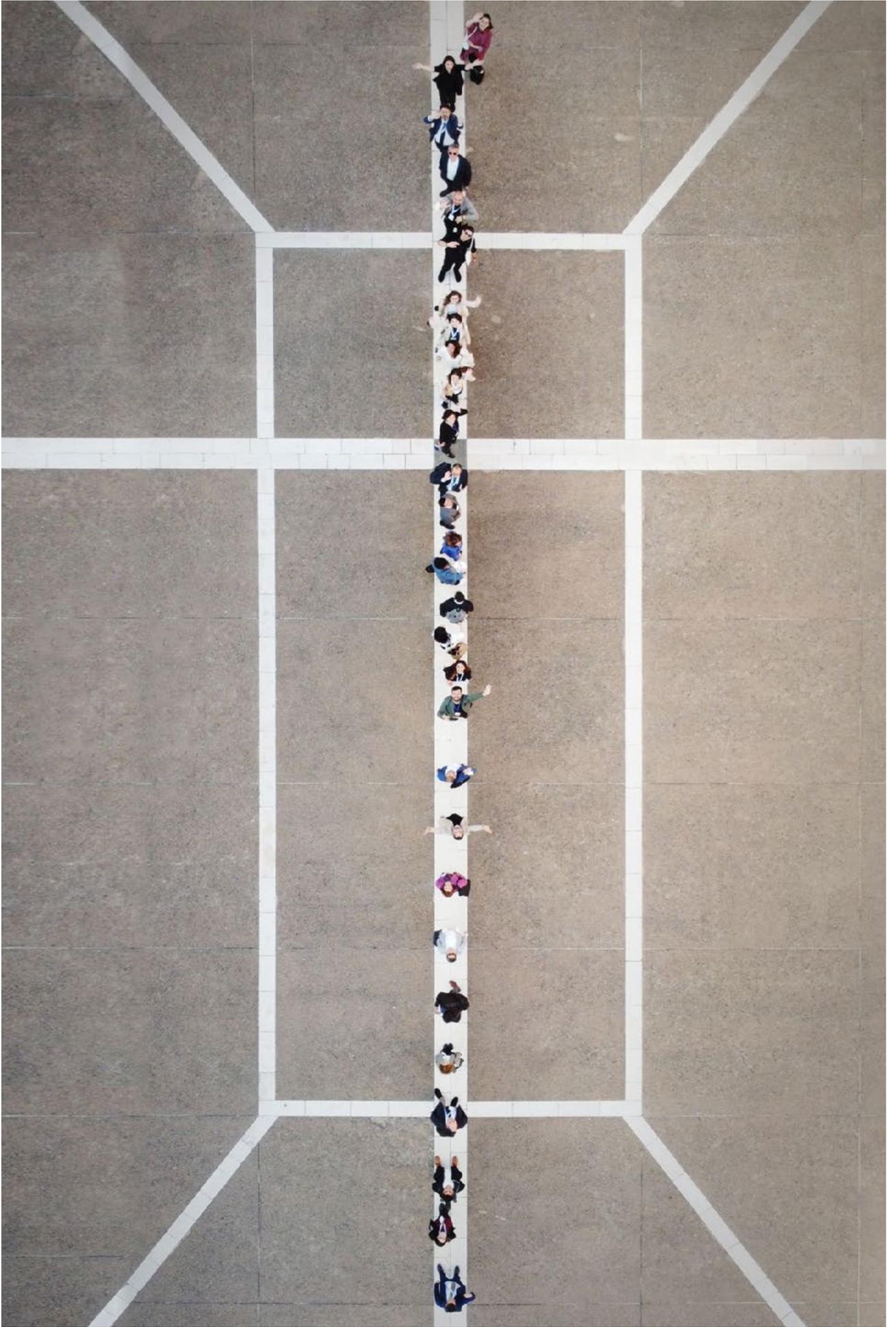
Urban environments regeneration.
Technological issues for adaptive re-use

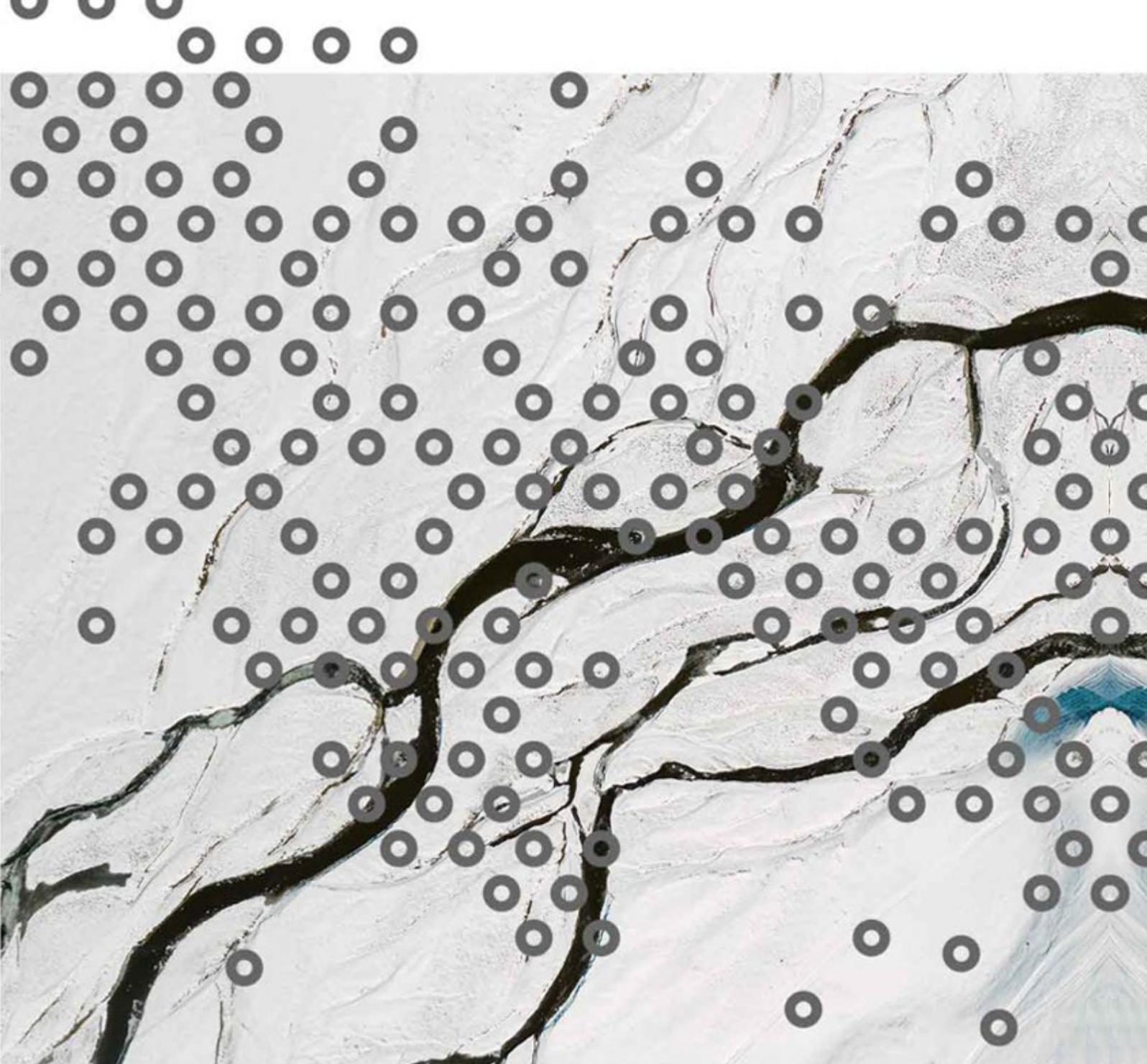
Maria Giulia Atzeni

A Scattered Courtyard: rediscovering the Historical Palimpsest of Xi'an for regenerating the urban texture along the City Wall

13 May / Social program

- 8.30 | Caserta Station
- 9.00 | Real Belvedere Silk Museum
- 11.30 | Royal Palace of Caserta
- 13.30 | **SHORT LUNCH BREAK**
- 16.00 | Royal Site of Carditello Foundation
- 18.00 | Casertavecchia medieval village
- 20.00 | **DINNER**
- 21.30 | Caserta Station





ISBN 978-88-85556-23-2