POLITECNICO DI TORINO
Repository ISTITUZIONALE

FAR.Enough. Housing moments of uncertainty. Adaptive reuse

Original
FAR.Enough. Housing moments of uncertainty. Adaptive reuse / Garzino, G., Bocconcino, M.M., Vozzola, M., Prataviera, E.. - ELETTRONICO. - (2024), pp. 543-554. (Le Vie dei Mercanti XXII International Forum Napoli - Capri (Ita) 14 | 15 Giugno 2024).

Availability:
This version is available at: 11583/2994274 since: 2024-11-08T14:00:14Z

Publisher:
Gangemi

Published
DOI:

Terms of use:

This article is made available under terms and conditions as specified in the corresponding bibliographic description in the repository

Publisher copyright

(Article begins on next page)

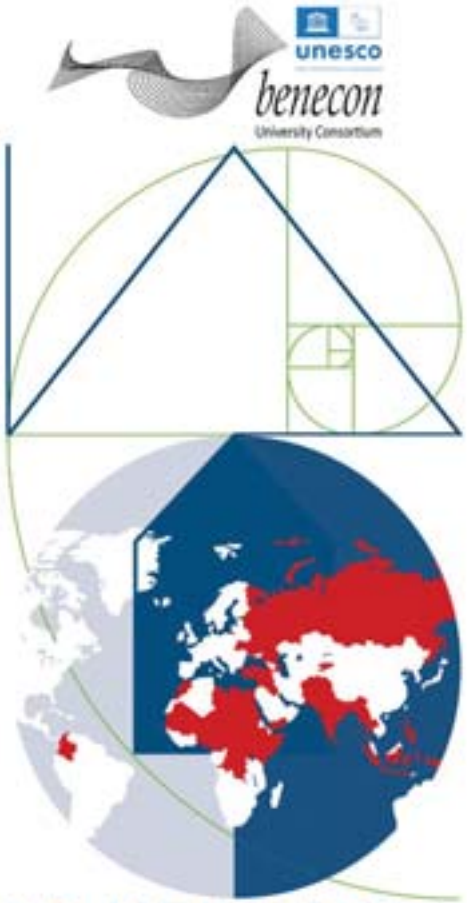
26 November 2026

ARCHITECTURE HERITAGE and DESIGN

Carmine Gambardella

XXII INTERNATIONAL FORUM

Le Vie dei Mercanti



WORLD HERITAGE and CITIES IN EMERGENCIES

XXII INTERNATIONAL FORUM

NAPLES 14 - CAPRI 15 June 2024

GANGEMI EDITORE
INTERNATIONAL

Carmine Gambardella

World Heritage and Dwelling on Space
Word Hertitage and Cities in Emergencies
Le Vie dei Mercanti
XXII International Forum

© copyright 2024

© 2024
Proprietà letteraria riservata
Gangemi Editore spa
Via Giulia 142, Roma
www.gangemieditore.it

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

Le nostre edizioni sono disponibili in Italia e all'estero anche in versione ebook.
Our publications, both as books and ebooks, are available in Italy and abroad.

ISBN 978-88-492-5128-9

WORLD HERITAGE and DWELLING ON SPACE |
WORLD HERITAGE and CITIES IN EMERGENCIES

Serie founded and directed by Carmine Gambardella

ARCHITECTURE HERITAGE and DESIGN | 15
Serie founded and directed by Carmine Gambardella

Scientific Committee:

Carmine Gambardella
UNESCO Chair on Landscape, Cultural Heritage and Territorial Governance
President and CEO of Benecon University Consortium

Federico Casalegno
Professor, Massachusetts Institute of Technology, Boston

Alessandro Ciambrone
Ph.D., UNESCO and FULBRIGHT former fellow

Massimo Giovannini
Professor, Università “Mediterranea”, Reggio Calabria

Bernard Haumont
Professor, Ecole Nationale Supérieure d’Architecture, Paris-Val de Seine

Danila Jacazzi
Professor, University of Campania “Luigi Vanvitelli”

Alaattin Kanoglu
Professor, Department of Architecture, İstanbul Technical University

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

Sabina Martusciello
Professor, University of Campania “Luigi Vanvitelli”

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

Elena Shlienkova
Professor, Samara State Technical University

Rosaria Parente
Ph.D. in “Architecture, Industrial Design and Cultural Heritage”
University of Campania “Luigi Vanvitelli”

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

Riccardo Serraglio
Professor, University of Campania “Luigi Vanvitelli”

Editorial Committee:

Alessandro Ciambrone
Rosaria Parente

Carmine Gambardella

Word Heritage and Dwelling on Space | WORLD HERITAGE and CITIES IN EMERGENCIES

Le Vie dei Mercanti_XXII International Forum

Topics:

Heritage
Tangible and intangible dimensions
History
Culture
Collective Identity
Memory
Documentation
Management
Communication for Cultural Heritage
Architecture
Surveying
Representation
Modelling
Data Integration
Technology Platforms
Analysis
Diagnosis and Monitoring Techniques
Conservation
Restoration
Protection
Safety
Resilience
Transformation Projects
Technologies
Materials
Cultural landscapes
Territorial Surveying
Landscape Projects
Environmental Monitoring
Government of the Territory
Sustainable Development

WORLD HERITAGE and CITIES IN EMERGENCIES

Le Vie dei Mercanti

XXII International Forum

Naples | Capri
14 Giugno 2024 | 15 Giugno 2024

President of the Forum

Carmine Gambardella,
President and CEO Benecon University Consortium
UNESCO Chair on Landscape, Cultural Heritage and Territorial Governance

International Scientific Committee

Alpay Arıbaş,
Professor and Rector of the Aksaray University, Turkije

Franco Bernabè,
President of the Italian National Commission for UNESCO

Massimiliano Campi,
Professor, University of Naples 'Federico II'

Fabian Capitanio,
Professor, University of Naples 'Federico II'

Orazio Carpenzano,
Dean of Faculty of Architecture, Sapienza Rome University

Maurizio Carta,
Professor, University of Palermo

Giuseppe Ciaburro,
PhD in "Enviromental technical phisics", University of Campania 'Luigi Vanvitelli'

Gianluca Cioffi,
Professor, University of Campania 'Luigi Vanvitelli'

Annamaria Colao,
Professor, UNESCO Chair on Education to Health and Sustainable Development

Giuseppe Faella,
Professor, University of Campania 'Luigi Vanvitelli'

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

Cherubino Gambardella,
Professor, University of Campania 'Luigi Vanvitelli'

Stefania Gigli Quilici,
Professor, Università della Campania 'Luigi Vanvitelli'

Pedro António Janeiro,
Professor, Faculdade de Arquitectura da Universidade de Lisboa

Elif Hasret Kumcu,
Assistant Professor, Aksaray University, Turkije

Antonio Lampis,
Director Museums, Italian Ministry for Cultural Activities

Dominik Lengyel,
Professor, Chair for Architecture and Visualisation, Brandenburg University of Technology Cottbus-Senftenberg, Germany

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

Natasa Zivaljevic Luxor,
Director of National Heritage Foundation, Belgrade, Serbia

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

Sabina Martusciello,
Professor, University of Campania 'Luigi Vanvitelli'

Francesca Muzzillo,
Professor, University of Campania 'Luigi Vanvitelli'

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

Takeyuki Okubo,
Professor, College of Science and Engineering – Ritsumeikan University

Luis Palmero Iglesias,
Professor, Director of the Forum UNESCO – University and Heritage (FUUH) Programme Universitat Politècnica de València UPV, Spain

Rosaria Parente,
Assistant Professor, Universitas Mercatorum; Benecon University Consortium

Hartmut Pasternak,
Professor, Brandenburg University of Technology, Cottbus, Germany

Maria Rita Pinto,
Professor, University of Naples 'Federico II'

Nicola Pisacane,
Professor, University of Campania 'Luigi Vanvitelli'

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

Laura Ricci,
Professor and Director Department of Planning, Design and Technology of Architecture, Sapienza, University of Rome, Italy

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

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

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

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

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

Andrey V. Vasilyev,
Professor, Head of Chemical Technology and Industrial Ecology Chair Samara State Technical University

Enrico Vicenti,
General Secretary of the Italian National Commission for UNESCO

Victoria Vivancos Ramón,
Director of the Forum UNESCO – University and Heritage (FUUH) Universitat Politècnica de València UPV, Spain

Yaliang Xiang,
Professor, China Academy of Art

Yang XiuJing,
Professor and Director, China Academy of Art

Peer review

Scholars has been invited to submit researches on theoretical and methodological aspects related to the impact of natural ecological disasters and armed conflicts on Cultural Heritage, and show real applications and experiences carried out on this themes. Based on blind peer review, abstracts has been accepted,conditionally accepted, or rejected. Authors of accepted and conditionally accepted papers has been invited to submit full papers. These has been again peer-reviewed and selected for the oral session and publication, or only for the publication in the conference proceedings.

Conference report

300 abstracts and 550 authors from 20 countries:

Albania, Algeria, Austraia, Belgio, China, France, Germany, Greece, Hungary, Iran, Italy, Japan, Mexico, New York, Portugal, Romani, Serbia, Spain, Turkey, United Kingdom.

From the XXI FORUM WORLD HERITAGE and DWELLING ON EARTH
to the XXII FORUM WORLD HERITAGE and CITIES IN EMERGENCIES.

World Heritage and Dwelling on Space – World Heritage and Cities in Emergencies: this is the title of the International Forum "Le Vie dei Mercanti" which reached its XXII Edition in 2024. A story of love for the Earth, its Inhabitants, Landscapes, Architecture, Cultural and Archaeological Heritage told by more than 7000 Scholars and Lecturers from all over the World to with the aim of integrating expertise, sharing and disseminating scientific knowledge and implementing best practices to protect and safeguard our planet.

The focus of the Forum is no longer be only Inhabiting the Earth but is stretched and extended to Inhabiting Space, in a broader sense, to reflect on the impact of natural ecological disasters and armed conflicts on Cultural Heritage. Now more than ever, with the war in Ukraine, geographically closer than others, and with the latest events in the Middle East, the theme of wars and conflicts has become even more present in our lives.

Armed conflicts, synonymous with death and destruction, as well as weakening the social and economic fabric, put at risk the cultural heritage of besieged countries whose destruction has a strong symbolic as well as strategic significance because of the enormous identity value that resides in cultural heritage which stimulates a sense of belonging and social cohesion.

And it is precisely in order to deal with the tragic devastation of entire cities and territories and the terrible wound inflicted on the cultural heritage of peoples that the scientific community must create starting points to implement important and immediate actions aimed at safeguarding monuments, architectural works, archaeological sites, works of art, manuscripts, books and other objects of artistic, historical or archaeological interest, as well as scientific collections of all kinds. If the future is an eternal now, as I remind every year, it is good for the Academy, Scientific Institutions, civil society, and stakeholders involved to make their knowledge and expertise available to promote a more widespread and in-depth knowledge on the issues regarding the safeguarding cultural heritage during armed conflicts.

Dal XXI FORUM WORLD HERITAGE and INHABIT THE EARTH
Al XXII FORUM WORLD HERITAGE and CITIES IN EMERGENCIES

World Heritage and Dwelling on Space – World Heritage and Cities in Emergencies: è questo il titolo del Forum Internazionale "Le Vie dei Mercanti", che nel 2024 ha raggiunto la sua XXII Edizione. Una storia d'amore per la Terra, per i suoi Abitanti, i Paesaggi, l'Architettura, i Beni Culturali e Archeologici raccontata da oltre 7000 Studiosi e Docenti da tutto il Mondo per integrare competenze, condividere e diffondere conoscenze scientifiche e mettere in atto best practices volte alla protezione e salvaguardia del nostro pianeta.

L'obiettivo del Forum non è più solo quello di Abitare la Terra ma è proteso e si estende verso l'Abitare lo Spazio, in senso più ampio, per riflettere sull'impatto dei disastri ecologici naturali e dei conflitti armati sul Patrimonio Culturale. Oggi più che mai, con la guerra in Ucraina, geograficamente più vicina di altre, e con gli ultimi avvenimenti in Medio Oriente, il tema delle guerre e dei conflitti si è fatto ancor più presente nelle nostre vite.

I conflitti armati, sinonimo di morte e distruzioni, oltre che di indebolimento del tessuto sociale ed economico, mettono a rischio il patrimonio culturale dei paesi assediati la cui distruzione ha un forte significato simbolico oltre che strategico per l'enorme valore identitario che risiede nel patrimonio culturale che stimola senso di appartenenza e coesione sociale.

Ed è proprio per far fronte alla tragica devastazione di intere città e territori e alla terribile ferita inflitta al patrimonio culturale dei popoli, che la comunità scientifica deve creare spunti per mettere in atto azioni importanti ed immediate volte alla salvaguardia di monumenti, opere architettoniche, siti archeologici, opere d'arte, manoscritti, libri e altri oggetti di interesse artistico, storico o archeologico, nonché collezioni scientifiche di qualsiasi tipo. Se il futuro è un eterno presente, come ricordo ogni anno, è bene che l'Accademia, le Istituzioni Scientifiche, la società civile, gli stakeholders coinvolti, mettano a disposizione le loro conoscenze e competenze per promuovere una più diffusa e approfondita conoscenza sui temi della salvaguardia del patrimonio culturale durante i conflitti armati.

Prof. Carmine Gambardella
General Chair XXII Forum 'World Heritage and Cities in Emergencies'
President and CEO of the Benecon University Consortium
UNESCO Chair on Landscape, Cultural Heritage
and Territorial Governance



UNESCO Chairholder on Landscape, Cultural Heritage, and Territorial Governance; President and CEO of the Benecon University Consortium - Research Centre on Cultural Heritage, Ecology, Economy (Pegaso University, University of Campania “Luigi Vanvitelli”, University Federico II of Naples, University of Salerno, University of Sannio). Full Professor of Drawing at the Pegaso University and at the University of Campania. President of the International Forum ‘Le Vie dei Mercanti’ since its first edition in 2003 to the XIX edition in 2022. Editor and Founder of the series “Surveying is/or Project”, “Knowledge Factory” and “Architecture, Heritage and Design”. Component of the Scientific Committee of International A Class Magazine ‘Abitare la Terra’/‘Dwelling on Earth‘ (Gangemi Editor International Publishing). He covered various roles for the University of Campania, including the Pro Rector of Institutions, Academic Senator, Director of the Department of Architecture and Industrial Design Luigi Vanvitelli, Dean of the Faculty of Architecture Luigi Vanvitelli, Director of the Department of Culture of Design, Director of Doctoral School in the Discipline of Architecture, Coordinator of the PhD in Protection, Safety and Representation of the Environment and Structures and Territorial Governance, Coordinator of the PhD Program in Surveying and Representation of Architecture and the Environment. He is author of numerous scientific international papers, publications and proceedings on surveying and representation of the built and natural heritage.

TABLE OF CONTENTS

ID 002 - Violeta BAKALCEV, Sasha TASIC, Marija PETROVA, Minas BAKALCEV
Brutalism as a Post-war Syndrome, The Case of City Archives by Georgy Konstantinovski 16

ID 005 - Maria Paola GATTI, Giorgio CACCIAGUERRA
Bolzano's war damage and urban reconstruction 24

ID 006 - Luca ZECCHIN
Toxic Heritage. Orphan sites 35

ID 007 - Simona OTTIERI, Concetta TAVOLETTA
Motus sine fine 45

ID 008 - Laura RICCI, Carmela MARIANO, Marsia MARINO
Cities in Emergency: Practices of Sustainable Urban Regeneration in Spain and the United Kingdom 53

ID 009 - Francesco CRUPI
Climate-proof urban regeneration and cultural heritage. The case of the "Saxa Rubra" Urban and Metropolitan Centrality in the Municipality of Rome 59

ID 010 - Andrea MARCUCCETTI
The urban religious archaeology. A sustainable socio-cultural vision 68

ID 011 - María Victoria VIVANCOS RAMÓN, Francisco GARCÍA GARCÍA, Valeria NAVARRO MORENO
Marine Cultural Heritage as a Bridge of Concord: Portolan Cartographies 74

ID 013 - Tiziana FIRRONE
The "Tires School" in Khan al-Ahmar, a symbol of resilience, hope and redemption of a marginalized community80

ID 014 - Natasa ZIVALJEVIC LUXOR, Hartmut PASTERNAK
About Steinort Castle Intervention 87

ID 015 - Claudia BATTAINO, Maria Paola GATTI
A land factory for preserving, developing and innovating: the Arco terraces 96

ID 016 - Ina MACAIONE, Enrica Gaia CONSIGLIO
Agri-tecture: towards a collaborative architecture. Public spaces and urban agriculture for ecological and resilient transitions 102

ID 017 - Antonio BIXIO, Ina MACAIONE, Francesco P.R. MARINO, Giuseppe D'ANGIULLI. Community connections. Project hypothesis for cable car connections in the municipalities of the Lucanian Dolomites 112

ID 019 - Alessandro RAFFA, Angela COLONNA
Climate Heritage between threats ad opportunities. Matera and its Sassi as a Design-oriented Prototype for Nature-based Climate-Adaptive Regeneration 120

ID 020 - Caterina GATTUSO, Domenico GATTUSO, Meriem SEGHIRI
The hilly historic centres in the Ionian settlement system of Calabria. Between conservation and tourist accessibility 130

ID 022 - Erfan ALIMORADI, Mehdi SAVARY, Soheyl SAZEDJ, Solmaz ASADPOUR
A review of urban development plans in Iran and the existing weaknesses in preservation and sustainable development 140

ID 023 - Fabio LANFRANCHI, Piero BARLOZZINI, Luca MARTELLI
From SfM acquisition of the current state to the as-built model state. The Village of Pietrapizzuta in Francavilla di Sicilia 146

ID 025 - Laura CALCAGNINI, Marina TONOLO
Human centered approaches: flexibility as a design strategy for dwellings 156

ID 026 - Pierfrancesco CELANI, Massimo ZUPI
HIA methodology for safeguarding the minor historical and cultural heritage from the impacts of natural disasters 165

ID 027 - Takeyuki OKUBO, Miyu NAKAHIRA, dowon KIM
Possibility of Countermeasures for Visitors' Evacuation by Utilization of Tourist Resources - For Emergency Evacuation Spaces in Tourist Attraction Areas of Historic City Kyoto 170

ID 028 - Caterina MELE
Cultural and environmental heritage amid conflicts, climate change and overexploitation: an unsustainable and often underestimated cost for the future 181

ID 029 - Francesca MUZZILLO, Fosca TORTORELLI
Agricultural and environmental recovery between archeology and viticulture in Alta Val d'Agri 186

ID 030 - Wafaa Anwar Sulaiman GORIEL, Zoltán ERZSÉBET, Molnár TAMÁS.
The Mutations of Time: Erbil Citadel's Heritage Dwellings Between Architectural Preservation and Transformation 190

ID 034 - Barbara GALLI, Flora BERIZZI
A dip in the pool in Milan: Cozzi and Caimi swimming pools 198

ID 037 - Carmela MARIANO, Maria RACIOPPI
Regeneration of City-Port Interaction - Areas: A New Method for managing a contested space 207

ID 038 - Riccardo RENZI
Learning from the Ruins. Pelayos Monastry, B.i.c. heritage site. Reorganization of the cistercensian ruins as Cultural Center and new Museum 214

ID 039 - Bruna CANONACO, Giuseppe FORTUNATO
The earthquake of 1783 in Calabria: reconstruction, transformation, forgetting 221

ID 040 - Lourdes Royo NARANJO, Gonzalo Díaz-Recasens MONTERO DE ESPINOSA, Sebastián Fierro RAYA.
World heritage declarations and tourism. Risks and opportunities as future strategies 228

ID 041 - Alessandro BARCA, Maria Concetta CARRUBA, Valentina Paola CESARANO
Digital Connections between educational contexts for a Sustainable Cultural Heritage: Protection, Innovation, Training 237

ID 042 - Rosaria SAVASTANO
Aeroponics/soilless crops 242

ID 043 - Piero BARLOZZINI, Fabio LANFRANCHI
The fresco in the inner loggia of palazzo Petrucci at Carinola: survey of a lost work of art 248

ID 044 - Laura RICCI, Maurizio ERRIGO, Paola Nicoletta IMBESI
Combining Missions and enhancing Tourism. Cultural Heritage between sperimentation and innovations . . .258

ID 045 - Francesca BILOTTA, Federica CASTIGLIONE
The Rendano theater in Cosenza (Calabria). Notes on post-war restoration 267

ID 046 - Antonio Maria NESE
Preserving a disused tobacco factory (Tabacchificio Salvati in Eboli). 274

ID 047 - Fernanda CANTONE
A Rehabilitation Project for Peace Education. The Recovery of the War Wounded House of Catania 281

ID 048 - Irene POLI, Tommaso BERRETTA, Federico DESIDERI
Contemporary City and Archaeological Areas: towards an integrated urban regeneration project 291

ID 050 - Gianfranco PERTOT
Preservation of the identity of an exiled population and architecture: the "Borghi Giuliani" built for the Italian exiles from Istria, Fiume and Dalmatia after the Second World War 298

ID 051 - Stefano CECAMORE
Farmsteads, suburban manor houses and country houses, itineraries of conservation of a damaged heritage of the Adriatic coast 308

ID 052 - Buşra GÜRDAĞ
Rosettes (Gülbezek) on the Tombstones in Muradiye Complex 318

ID 053 - Anna Rita VILLANO, Francesca CIAMPA, Maria Rita PINTO
Rebuilding settlement culture: playground as a tool to reactivate the social cohesion in fragile communities . .326

ID 054 - Laura RICCI, Francesca PERRONE, Alessandra ADDESSI
Urbanisation in Protected Areas and Beyond Their Boundaries. An Analysis of National Parks in Italy for an Integrated Planning 335

ID 055 - Lilas ABDULMAWLA, Adalberto DEL BO, Claudio CHESI, Enrica BRUSA
Protection of Cultural Heritage from War Damage in Aleppo During the Time of War 344

ID 056 - Stefania DE MEDICI, Giulia MARCHIANO, Maria Rita PINTO
Strategies for reusing Albanian bunkers 355

ID 059 - Loreno ARBORITANZA, Iana BOITSOVA, Fedir BOITSOV, Marco MEDICI, Andrea STERPIN
Re-build identity. Ukraine War and digital preservation 367

ID 060 - Roberto PEDONE, Rossella LAERA, Emanuela BORSCI
The culture of protection between Architecture and Archaeology: the case of the “Parco Archeologico di Metaponto”, Matera 374

ID 061 - Teresa CILONA
Cities and cultural heritages: resilient policies and safeguard measures 383

ID 063 - Gianmauro ROMAGNA, Angelo ODDI, Marta SANZARI, Teresa VILLANI
Evaluating safety in museums during pandemic emergencies: an integrated approach between Space Syntax and an AI-based analysis of visitors’ flows 389

ID 065 - Diana CIUFO
Urban resilience: facing catastrophe, rebuilding community. 396

ID 066 - Antonio CONTE, Marianna CALIA, Ali Yaser JAFARI
Knowledge and project for the protection of cultural heritage affected by calamities and conflicts: some case studies from Afghanistan. 402

ID 068 - Solmaz ASADPOUR, Momen FOADMARASHI, Soran SHANGAPOUR, Francisco SERDOURA
Revitalizing Joybareh: A Case Study of Endogenous Development & Contextual Design for a Historic Neighborhood 412

ID 069 - Giovanni MONGIELLO, Riccardo TAVOLARE
The spatial articulation of the Valley d’Itria pignon buildings, a UNESCO protected architectural asset 425

ID 070 - Dominik LENGYEL, Catherine TOULOUSE
The new physical model about the ancient city of Pergamon for the Pergamon Museum Berlin 430

ID 071 - Nicola ORLACCHIO
Digital twin cities: Helsinki case study 438

ID 072 - Mariacarla PANARIELLO
The eighth day 446

ID 073 - Antonella SALUCCI, Francesca LIBERATORE
Surveying visual-spatial Relations between Bisentina Island and its Environment. The Atlas of the Coastal Villages of Lake Bolsena, Italy 452

ID 075 - Marichela SEPE
Multirisks and multiresilience planning 460

ID 076 - Maria MARTONE
Cultural heritage in danger. Fragments of the Appia Antica from Sinuessa to Mondragone 467

ID 077 - Francesco MAGLIOCCOLA
An italian place to discover in Shaoguan 475

ID 078 - Greta MONTANARI, Andrea GIORDANO, Federica MAIETTI
The social value of living historical space 482

ID 079 - Celeste D’ERCOLI
From the UN Agenda 2030 to the organisation of a mega sustainable event: the case study of Paris 2024 Olympics 490

ID 080 - Antonio PUOCCI
Archetypes of resilient architectures. Primary forms for the protection of the community. 497

ID 082 - Mariagrazia CINELLI
The absence of colors 510

ID 083 - Claudia DE BIASE, Giuseppe Guida, Chiara BOCCHINO, Antonietta NAPOLITANO
In search of a new urban livability. The case study of Parco Verde 517

ID 084 - Pedro António JANEIRO
The notion of “Drawing” as a contribution to the notion of “Existential Space”. Architectural graphic representation: user, space and landscape 523

ID 085 - Gigliola AUSIELLO, Vincenzo LANDI
The memory of the protection of the Italian historical-artistic heritage among the wounds of the last war 529

ID 086 - Massimiliano CAMPI, Valeria CERA, Marika FALCONE
Relationships between the Tangible and the Intangible in the insula of Monteoliveto in Naples 535

ID 087 - Giorgio GARZINO, Enrica PRATAVIERA, Mariapaola VOZZOLA, Maurizio Marco BOCCONCINO
FAR.Enough. Housing moments of uncertainty.Adaptive reuse 543

ID 090 - Marina DE FRANCESCHINI, Maria Rosaria CUNDARI, Giovanni Maria BAGORDO, Gian Carlo CUNDARI
About Hadrian's Mausoleum 555

ID 091 - Martina CASTALDI
Degenerate Art Posters 563

ID 092 - Francesca SALVETTI, Michela SCAGLIONE
Architecture on the Net: from Analogical Drawing to Social Communication 570

ID 093 - Raffaele POTRANDOLFI, Antonio BIXIO
Protection and valorization of the modern rural heritage: ICT methodologies, rehabilitation projects and reuse of agrarian land reform villages in Basilicata. 576

ID 095 - Donatella CAMPANILE, Valentina CASTAGNOLO, Francesca STRIPPOLI.
Heritage digitalisation to preserve memory. Studying the archaeological evidence of Herdonia through the measure and the sign 586

ID 097 - Pedro Marques ABREU
What is Architectural Heritage? - After the "affective turn". 595

ID 098 - ,Salvatore LOSCO, Claudia DE BIASE
Seismic vulnerability: the case study of new Conza della Campania (AV) rebuilt on a different site after the 1980 Irpinia earthquake 610

ID 099 - Eleonora NAPOLANO, Vincenzo CARRATURO
Cultural Heritage Governance in the aftermath of a crisis: How policies are supporting the revitalisation of the Rione Terra in Pozzuoli 618

ID 101 - Angela Alessandra BADAMI
Dynamic Climate Adaptation Strategies to Tackle Sea Level Rise Bådparken Project for Coastal and Port Areas of Aalborg Vestby (DK) 623

ID 103 - Antonella GIARRA, Marco TRIFUOGGI, Cristina SPANO
From bombs to cities: the silent spread of particulate matter and metals 633

ID 104 - Carmine GAMBARDELLA, Rosaria PARENTE, Giuseppe CIABURRO
Changing Agriculture: Enhancing Crop Quality and Production Through Remote Sensing and Artificial Intelligence 638

ID105 - Silvia BUONOMANO
Aerial Remote Sensing for Land Monitoring 643

ID106 - Bora AKSU, Elif Hasret KUMCU, Merve Vuslat AKSU, Giuseppe CIABURRO, Rosaria PARENTE
Integrating Facility Management, Machine Learning, and Building Information Modeling for Cultural Heritage Management 649

ID107 - Luciana ABATE, Rosaria PARENTE
Precision agriculture: Big Data for crop control 654

ID110 - Maria NATALE
Beyond the devastation of war. The reconstruction of Montecassino Abbey between regulatory measures and symbolic impulses 658

ID111 - Elif Hasret KUMCU
Innovative Policies for Sustainable Development: Learning from Organic Farming Leaders 663

ID112 - Rosaria PARENTE
3D survey and drawing of an architectural artifact: methodologies, studies, and innovative applications. 668

ID113 - Marin MARINOV, Maria KOKORSKA
Internet of things and Artificial Intelligence Technologies Preserve Cultural Heritage 679

ID114 - Maria KOKORSKA ,Marin MARINOV
Influence of the Smart Home Technologies On The Interior Design Principals 687

ID115 - Stefano CHIARENZA, Barbara MESSINA
The Role of Images in the Safeguarding of Cultural Heritage in Times of Conflict 692

ID116 - Antonio BRUNO
The Use of WebGIS in Emergency Planning for Seismic, Volcanic, and Geochemical Risks: the Experience of the Health Sector Plan of the Campania Region for the Campi Flegrei Area 702



FAR.Enough
Housing moments of uncertainty.Adaptive reuse_

Giorgio Garzino
Politecnico di Torino, Dipartimento di Ingegneria Strutturale Edile e Geotecnica
Torino, Italy
giorgio.garzino@polito.it

Enrica Prataviera
Politecnico di Torino, Dipartimento di Ingegneria Strutturale Edile e Geotecnica
Torino, Italy
info.archprataviera@gmail.com

Mariapaola Vozzola
Politecnico di Torino, Dipartimento di Ingegneria Strutturale Edile e Geotecnica
Torino, Italy
mariapaola.vozzola@polito.it

Maurizio Marco Bocconcino
Politecnico di Torino, Dipartimento di Ingegneria Strutturale Edile e Geotecnica
Torino, Italy
maurizio.bocconcino@polito.it

Abstract
This article investigates adaptive reuse as a solution to the complex challenges associated with abandoned public buildings, focusing specifically on the Fascist-era Houses and, in particular, the "Nicola Bonservizi" Regional Fascist House located in Sturla, Genoa. Initiated in 2021, the research aims to develop a replicable model, offering an innovative strategy for managing and enhancing these architectural assets, currently left unused. Through a detailed analysis, intricate connections emerge between physical measures, human needs, and urban context, highlighting the importance of both measurable and immeasurable values.

The examined work proposes an innovative approach to the refunctionalization of abandoned buildings, emphasizing spatial flexibility and adaptability as crucial tools for addressing periods of fluctuation and emergency situations. Founded on a strategic vision and a replicable model, the project aspires to transform these buildings into attractive centers, contributing to urban growth, territorial reorganization, and socio-economic development. The proposed methodology aims to reconcile concepts and techniques, providing an adaptable solution to future circumstances and events, intending to offer an innovative response to contemporary living challenges.

Keywords: Representative model of social and architectural valorization, Design for dynamic

reconfiguration, Representation of rationalist architecture, Schematized decision process, Scalability of modular systems

1. Introduction

This research aims to examine the presence of Fascist-era Houses in Italy in the first half of the 20th century, providing an in-depth overview of this significant architectural typology. Focusing on a vast construction production distributed over a short period, the analysis of these structures constitutes a significant chapter in Italian history. With over eleven thousand Fascist Combatant buildings scattered throughout the country, their central role in the regime's ideology is evident, akin to ancient basilicas for political, religious, and social affairs. Despite the 1932 competition attempting to standardize these buildings by promoting rationalist solutions, architectural fragmentation persisted, highlighting the complexity of defining a unique typology. (fig.1)

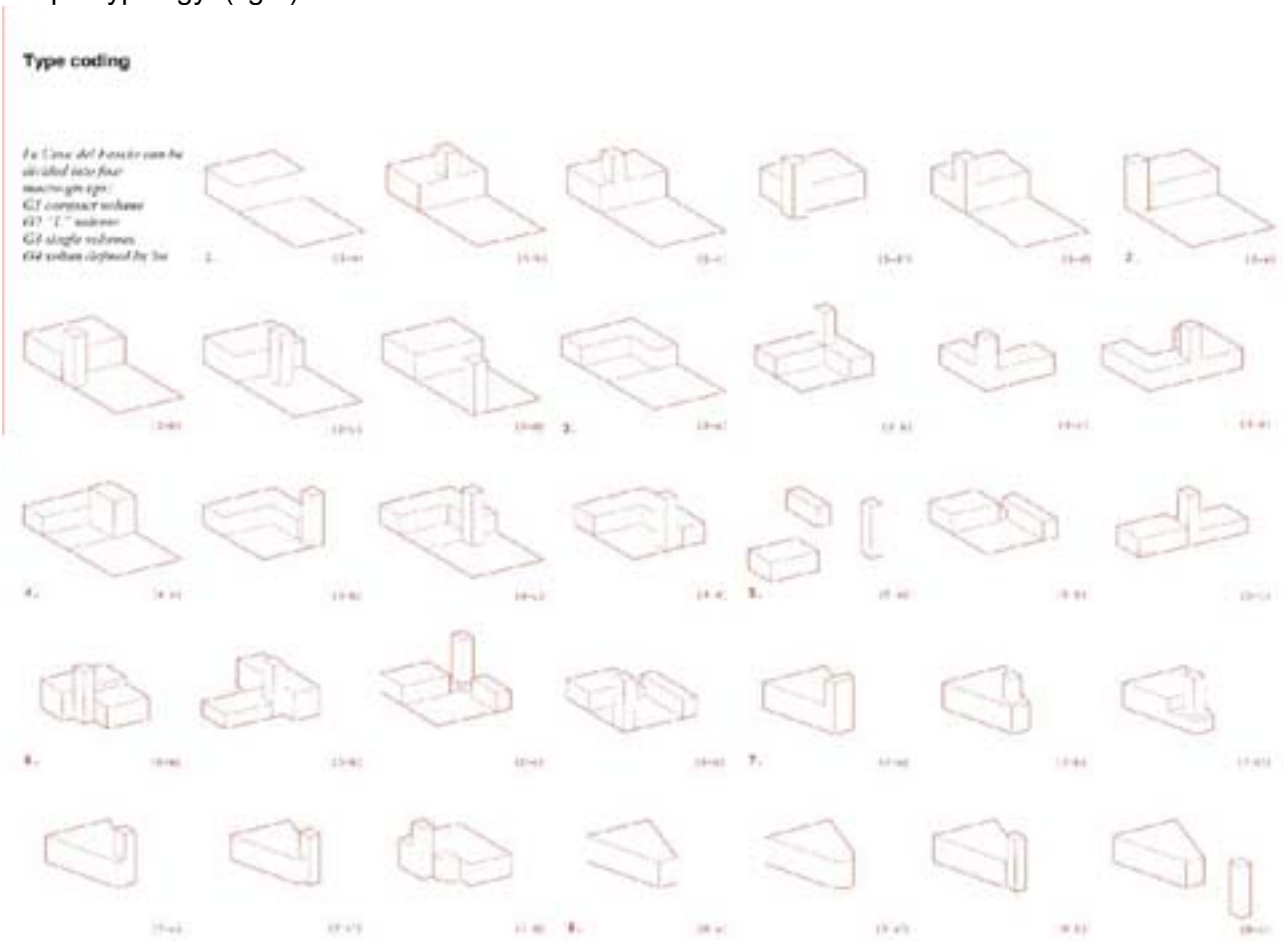


Fig. 1: Typological representation of the Case del Fascio houses.
Each building was to bear pivotal punctual elements of the political party itself. The piazza-agora, facing the building, which was to serve as a place for gatherings, the arengario from which to harangue the crowd during rallies, and finally, the Torre Littoria containing the war memorial, which was usually represented as a punctual monolith towering over the city skyline. (Image produced by the author)

The attention then shifts to the recovery of the Fascist Regional Houses, aiming to confer economic and social value to currently abandoned public structures. The crucial challenge manifests in the dichotomy between the stringent architectural measures of the past and the various scenic possibilities of the future. (fig. 2) The crucial question naturally emerges:

why preserve these structures without giving them a meaningful purpose?



Fig. 2: Press report and image related to the Installation for the Performing Arts Festival "Short Theatre". Image taken from Dire_National Press Agency on Sept. 10, 2019, © Annalisa Ramundo (Collage produced by the author)

Therefore, through a detailed analysis of the context and the development of architectural principles during the Fascist era, specific attention is given to the Littoria House in Genoa. The goal is to promote the reiteration of the analyzed module, contributing to the future evolution and adaptation of similar buildings.

2. Methodological Proposal – Casa Littoria Rionale di Genova

The Nicola Bonservizi Regional House, once a symbol of political power, now stands as a testament to the ongoing challenge of rehabilitating historical buildings. The narrative unfolds with the presentation of a visionary project called "far.e = far enough_ distant enough." The project seeks to study which idea can best adapt to the building, considering its strong architectural and historical value that one wishes to preserve, avoiding radical changes to the existing structure.

Firstly, a case study analysis was conducted on the former Fascist Regional House located in Genoa, Sturla. Originally known as the "Nicola Bonservizi Littoria House" designed by architect Luigi Carlo Daneri between 1936 and 1938, the building represents an intriguing example of regime architecture. From a Soldier's House post-war, the building has been abandoned since 2009. Situated in the main square of Sturla, in the residential district of Genoese Levante, the building played a prominent role as an organ of the fascist party. Its strategic position made it an attraction point, providing assistance and associative services to the community. (fig.3)

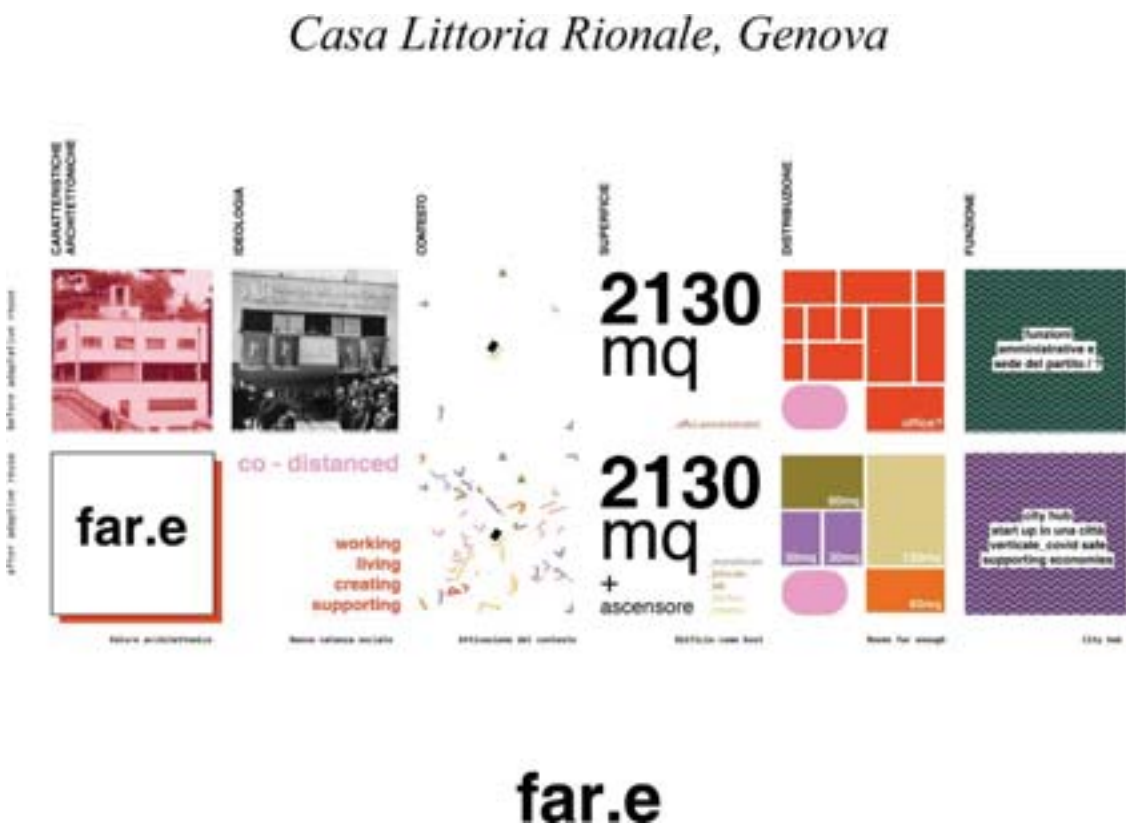


Fig. 3: Graphic restitution of the major differences reported before and after the inclusion of the Far.e start-up within the building analyzed, both in terms of architectural values and in terms of added social values. (Image produced by the author)

The architect's original approach was based on innovative rationalist forms, with solid lines alternating with sinuous elements, especially in the interiors, characterized by the absence of heavy partitions between spaces. The skillful use of natural light from ribbon windows dominated the spaces. This construction, located on a plot with significant slopes, spans multiple levels, most of which are below the street level of Piazza Sturla. The suspended floor on pilotis emphasizes the surrounding landscape, emerging as a reference to Le Corbusier's "Villa Savoye."

The main features of the House are identified in both the square footage, marked by almost residential expansiveness due to social and administrative activities within, and the aesthetic attention of the Littoria House. Architectural properties are mainly linked to Italian rationalism.

The concept was then developed for the building to become a kind of vertical city, addressing the situation when the project was conceived, in a pandemic and post-emergency period. This counters the abandonment of historically and architecturally significant buildings in favor of new construction, increasing the use of land for concrete and against the natural expansion of nature on it.

This is accomplished by envisioning a start-up called "far.e," functioning as a city hub that collects all actions typical of a city -work, relationships, culture- while maintaining enough distance. The concept of codistance, coworking, coliving, cocreating, and cosupporting identified the users of this building: collaborators, supporters, and customers.
The first are citizens or small local businesses that decide to provide a service but no longer have a place to do so. The second are small, medium, or large enterprises that can also be

local businesses providing a product or considered as sponsor companies. Finally, the last category is represented by citizens themselves living in the vertical city. (fig.4)



Fig. 4: Spatial diagrams of project uses.
Graphic analysis reported through the use of indeformed plan axonometry in which the colored levels identify the floors located above street level and the orange parallelepiped represents the new elevator insertion to ensure an uniform in favor of compliance with architectural barriers. In the center are shown the graphic diagrams that in the thesis work were, conducted from archival floor plans at a scale of 1:100, in which the different interior distribution types are summarized. Lastly, at the far right are shown the analysis data and legends useful for understanding spatial operation. (Image produced by the author)

The building thus becomes a container hosting housing units conceived, given the existing distribution, of small dimensions conceptualizing four types of standard and replicable areas that can respond to the required needs. They have been divided in size into 30, 60, 90 and 120 square meters.

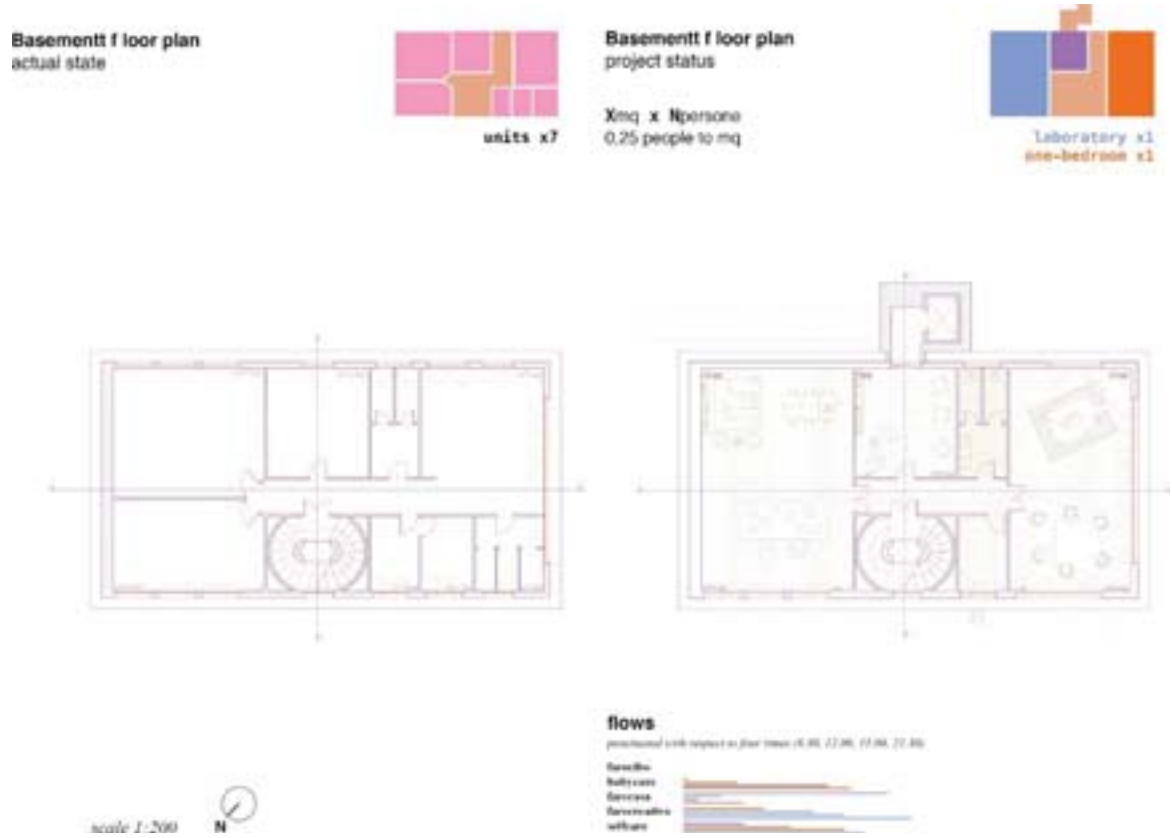


Fig. 5: Comparison structure of spatial solutions, on a scale of 1:200, of a typical plan before and after the adaptive reuse project. (Image produced by the author)

This research also used an analysis of national and international trends functionally to study possible internal distributions, identified in six main functions. These functions shape through different dynamics of this application through space and the building's places.

Regarding trends, the most requested values revolving around four macro-themes were analyzed: cinema, food, childcare, and self-care. This takes into account the post-pandemic emergency and also considers future perspectives, where the continued use of smart working is foreseeable. This study aims to design and idealize a place where professionals and students can coexist while working, and children can be cared for without disturbing the parents' work schedule.

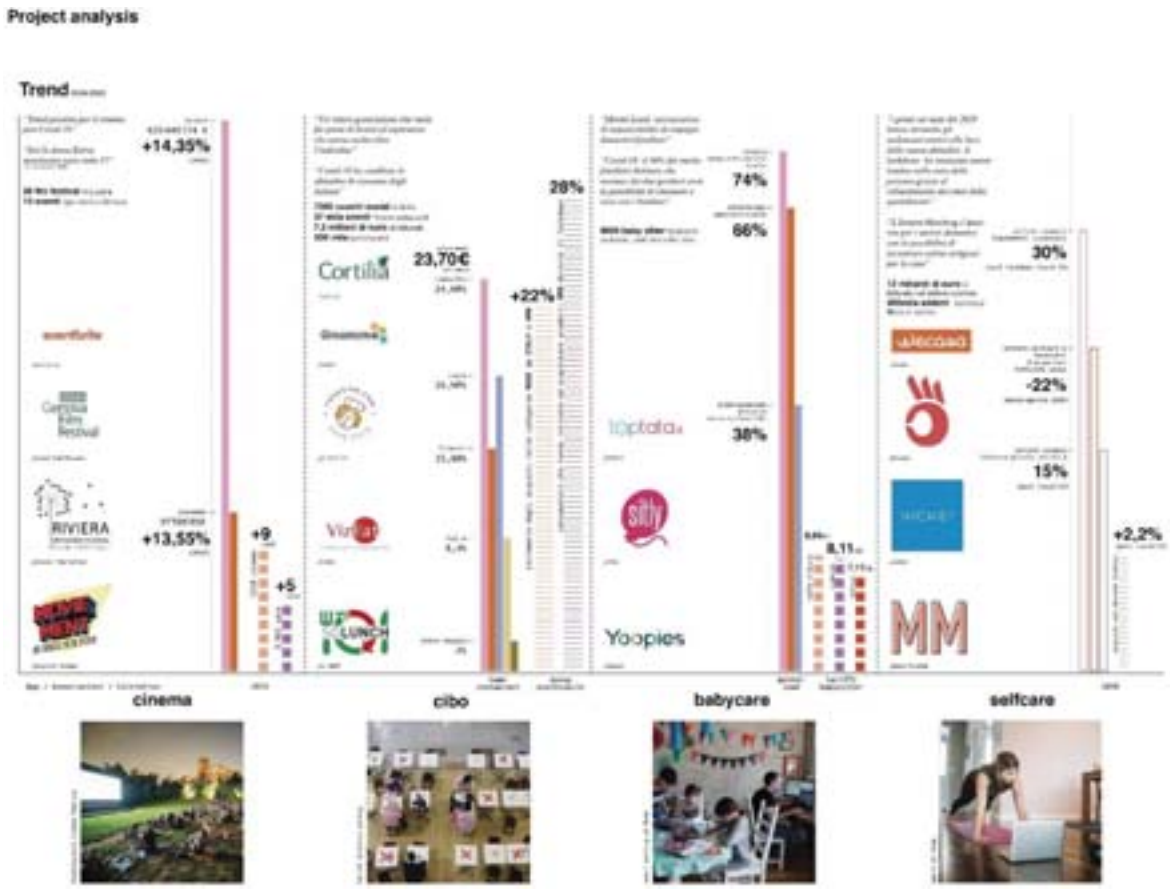


Fig. 6: Bold graphical representation of a useful bar chart outlining the analysis conducted on national and international trends for defining prices and costs that cannot be traced to specific architectural domains. The chart groups modules into four macro-categories: cinema, food, babycare, selfcare. Each category is examined through specific commercial reference sites (see the logos on the left of each group), which are critical to understanding annual statistics and the, dominance or otherwise of their products/services. The goal is to define values and dimensions responsive to citizen demand, creating a base solid to adapt the offer to the needs of the population. (Image produced by the author)

The conception of the vertical city emerges as a bonus, designed to support people and activities in difficulty, both during pandemic emergencies and normal periods. The management plan emphasizes collaboration between the State, the City, and the far.e startup, highlighting adaptability over time as a fundamental element. The ultimate goal of the project is to serve as a replicable model for future initiatives, demonstrating how a single idea can adapt to different abandoned buildings with similar characteristics.

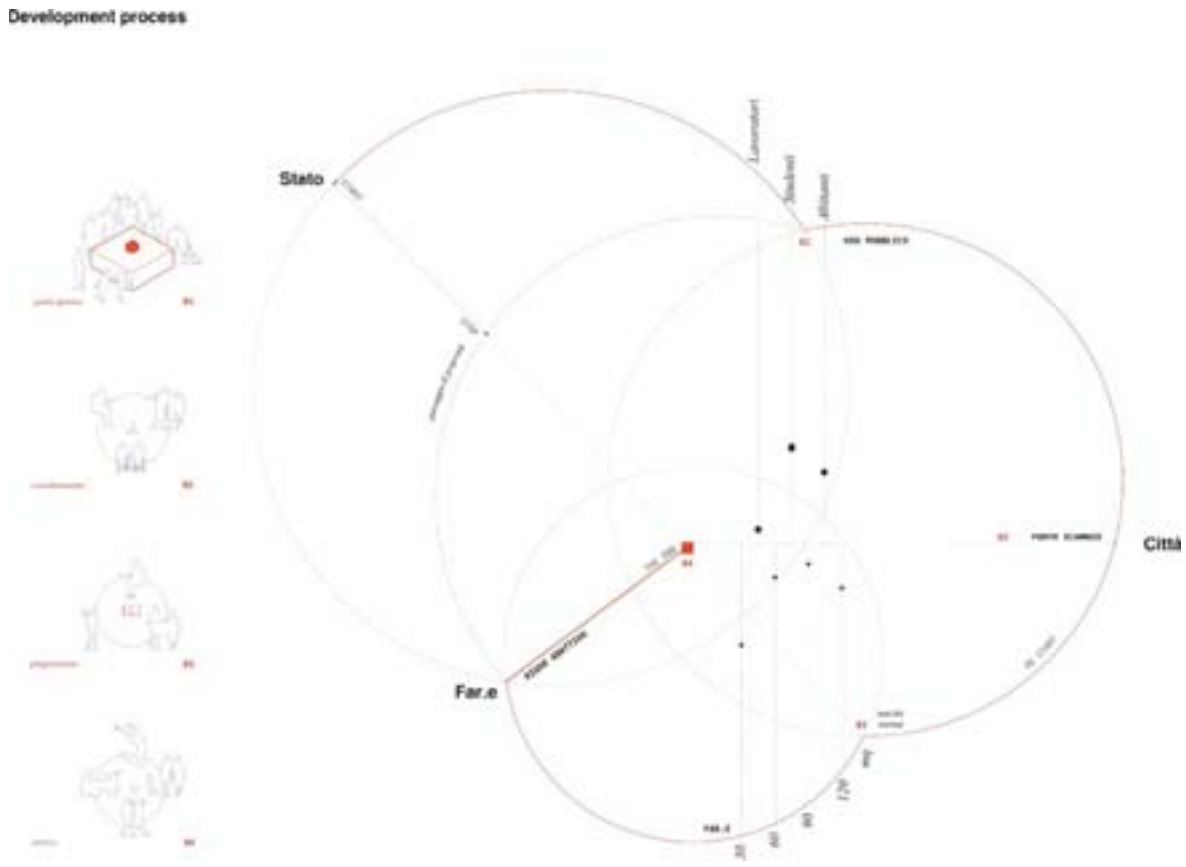


Fig. 7: Analysis of the development model for the management of the building under examination.
From the assumption that the building has already passed from the state property to the ownership of the municipality. The latter decides to launch a competition for the management of the building, which is won by the start-up Far.e with the absorption of the costs of its maintenance and refunctionalization. The City also enters the adaptive reuse decision-making process, outlining useful elements for participatory planning. (This is a personal hypothesis of the building's development). (Image produced by the author)

In facing this architectural rebirth journey, the Littoria House is not just a historical relic but also an beacon of innovation, connecting the measured past with the boundless possibilities of the future. A repeatable and applicable project is the key to overcoming the challenges of abandoned buildings, offering them a new culturally, socially, and economically meaningful life. The initiative aims to provide a strategic vision, equipping the urban fabric with the necessary tools to flexibly embrace periods of change.

At the heart of this proposal is the creation of a spatial model that can adapt agilely to changing needs, presenting an easily replicable solution. The project develops through the conception of a dynamic organism capable of adapting to the rhythms and needs of the city. The adopted approach focuses on the internal flexibility of spaces and uses, promoting transformation as a key element to remain competitive nationally and internationally.

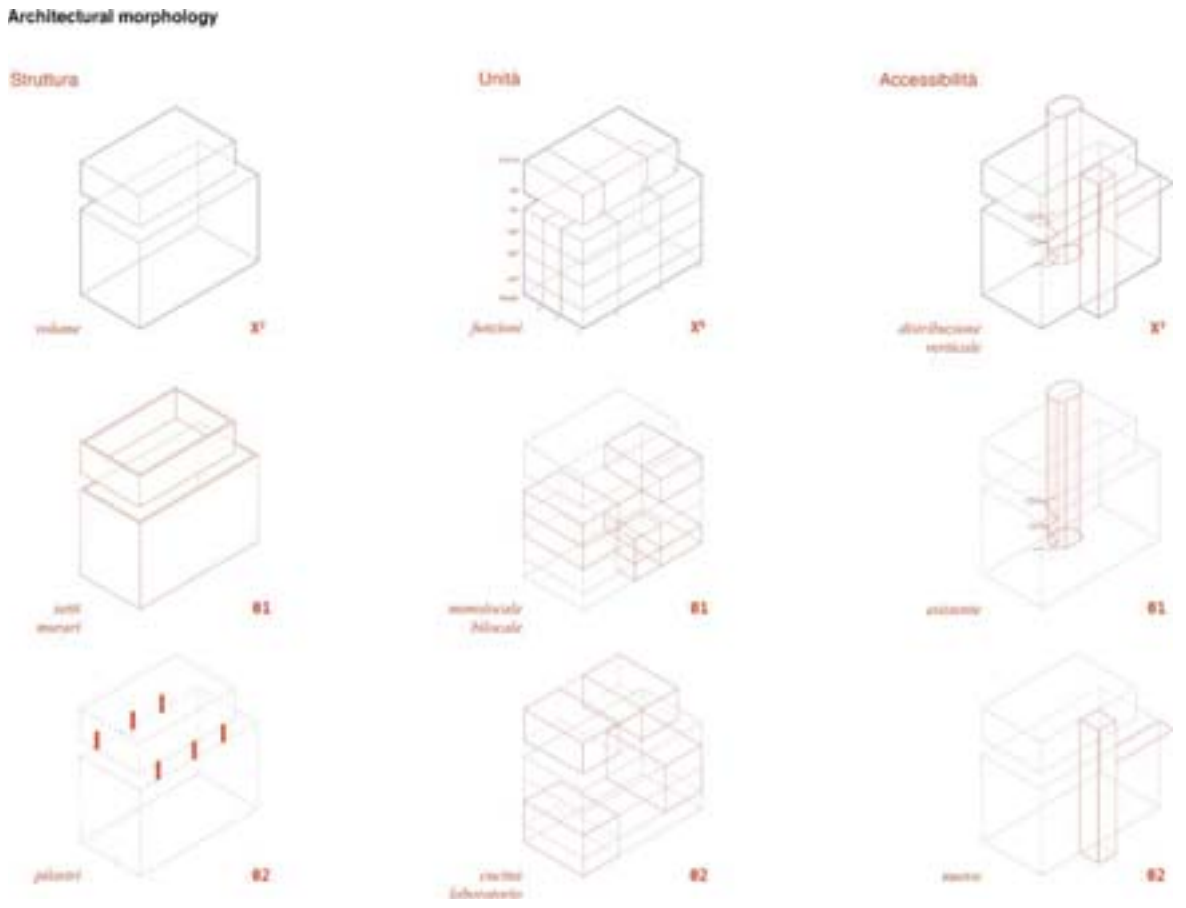


Fig. 8: 1:500 scale axonometric diagrams of Structure, Housing Units, Project Accessibility. (Image produced by the author)

3. Application – Modular Interaction

However, uncertainties about the complex's final destiny and the replicability of the model for other similar buildings present concrete challenges. In fact, at the beginning of drafting this work, two crucial questions were posed:

What will be the fate of the complex?
Can the idea become a reusable model for other similar buildings?

Answering these questions is complex, as the future is inherently unpredictable and uncontrollable. The scholar Lauria argues that, faced with the indeterminacy of the future, attempts are made to respond with configurations capable of change, seeking to reconcile the conflict between the dynamism of user demand and the rigidity of spatial supply.

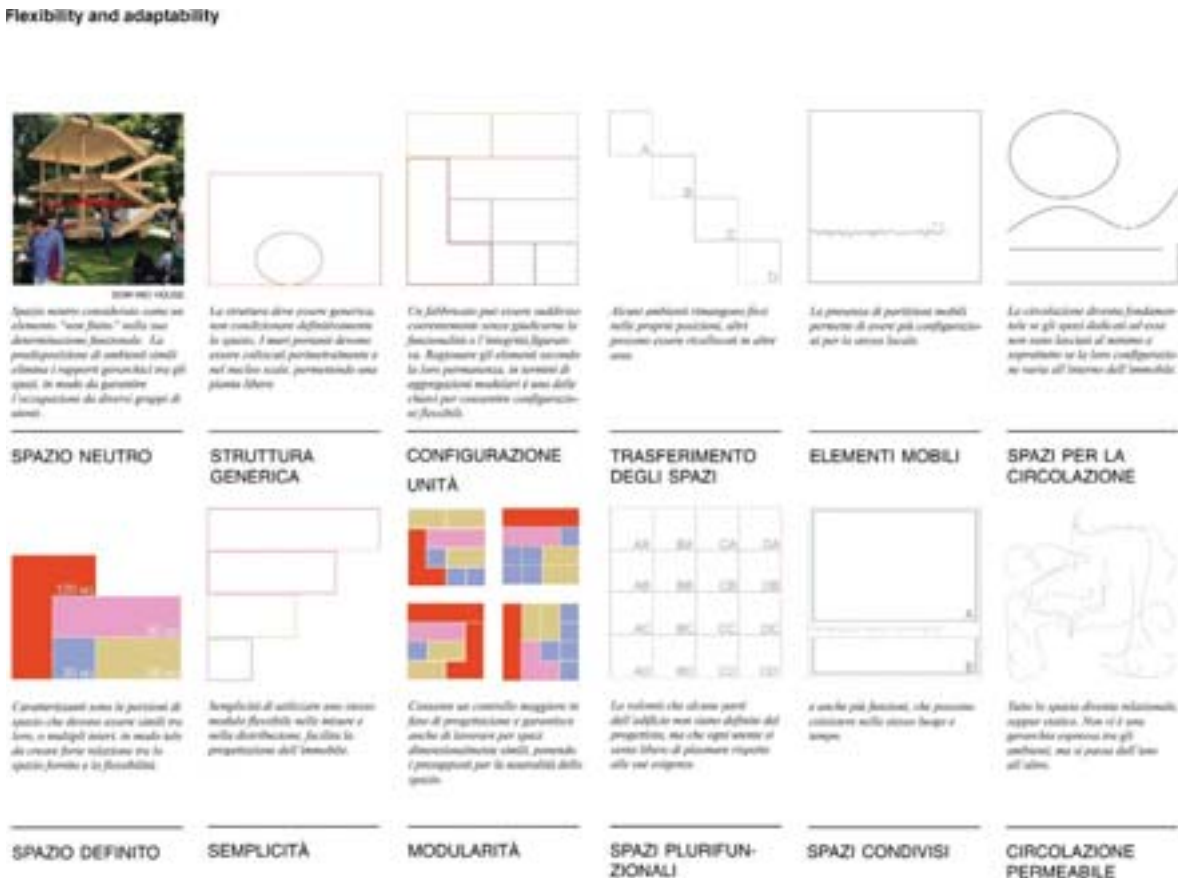


Fig. 9: Parameters for defining the free plan and an adaptive design. (Image produced by the author)

Designing for uncertainty means immersing oneself in a changing society, seeking new ways of living by accommodating in architectural space all intentions and stimuli contributing in this direction. Regarding the second question, the answer seems affirmative: the idea can be considered a reusable model for similar contexts. Reusability emerges as a solution designed to mitigate uncertainties related to the project's success, leading to the enhancement and new functionality of buildings and contributing to a broader vision of urban regeneration.

The origin of this research, emerging within an academic context, initially did not seem oriented towards such concrete and pragmatic decisions. Initially, the lack of in-depth preparation on the subject generated uncertainty about the project's real purpose. However, it is now possible to assert that the main purpose was, and perhaps still is, the search for a pilot project. A project characterized by implementation and distribution modalities that could transform into incremental work in different contexts.



Fig. 10: Schemes of reiteration of the project on other plans of abandoned Case del Fascio houses on the national territory. (It should be noted that attached to the thesis project are historical plans, with their drawing scales, of the buildings under examination and their respective area fills for defining possible ideas for adaptive reuse of them). (Image produced by the author)

4. Conclusion

The intriguing relationship between "reuse and emergency" emerges as a common thread running through various facets of human life, from architecture to social behavior. Reuse, with its adaptability and regeneration capacity, presents itself as the pursuit of innovative and sustainable solutions in times of emergency, encouraging the requalification of disused spaces to face contemporary challenges. On the other hand, emergency represents the need for rapid and flexible responses, emphasizing the importance of adaptive strategies in managing critical situations. The confluence of reuse and emergency thus becomes fertile ground for innovation and creativity, where the tension between these two dimensions generates resilient solutions capable of facing sudden changes. This ongoing dialogue offers new perspectives and stimulates critical reflection, paving the way for extraordinary results and the evolution of approaches and practices in managing and enhancing public real estate heritage in times of uncertainty. Ultimately, in the delicate balance between reuse and emergency, the possibility of significant progress and enrichment of our understanding of how to address emerging challenges becomes apparent.

Bibliographical References

[1] Il giornale dell'Architettura. 2021. BIANCHETTI Cristina, BOANO Camillo, DI CAMPLI Antonio. *Quarantine Urbanism, la mutazione che viviamo e pensiamo in ritardo.*

[2] Journals Open Edition. 2014. ANGNOT Marc. *La retorica della qualificazione e le controversie sull'etichettatura".*

[3] MINUTOLI Fabio. *ReUso 2018. L'intreccio dei saperi per rispettare il passato interpretare il presente salvaguardare il futuro.* 6º International conference. Roma: Gangemi Editore, 2019. ISBN 88-492-36-59-X

[4] VITRANO Rosa. *La partecipazione costruttiva. Il recupero come strumento di conoscenza, azione sociale e strategia responsabile.* Napoli: Luciano Editore, 2007. ISBN 88-6026-047-7 (2007)

[5] BOERI Elisa, BUCCI Flavio. *Cantiere Nervi. La costruzione di un'identità. - Luigi Carlo Daneri. La vera architettura non è che tecnica espressa con sentimento d'arte.* Milano-Ginevra: Skira, 2012. ISBN 978-88-572-1700-0

[6] EISENMAN Peter, TERRAGNI Giuseppe. *Giuseppe Terragni: transformation, decompositions, critique.* New York: Monacelli Press, ISBN 2003. 1885254962

[7] Stile. 1943. PONTI Gio. *Lo stile di Daneri. p.10-20*

[8] Cronache di architettura, col. VIII, n.941, Laterzia, Bari, 1970-73. ZEVI Bruno. *Luigi Carlo Daneri – Unico italiano fedele a Le Corbusier.*

[9] BOTTERO Marta, LAMI Isabella Maria, LOMBARDI Patrizia. *Analytic Network Process. La valutazione di scenari di trasformazione urbana e territoriale.* Firenze: Alinea, 2008. ISBN 8860553156

[10] Macrame, n.2, 2008. IACOMONI Andrea. *Abitare lo spazio flessibile.* p. 53-61.

[11] BOLICI Roberto, GAMBARO Matteo, TARTAGLIA Andrea. *La ricerca tra innovazione, creatività e progetto - La progettazione esigenziale nella dimensione culturale dell'abitare.* Firenze: University Press Firenze, 2012. p. 409-438

[12] Prospettive Settanta, Guida, Napoli, 1980. VITTORIA E. *La progettazione dell'incertezza.*

GANGEMI EDITORE
INTERNATIONAL

PUBBLICATO NEL MESE DI GIUGNO 2024
www.gangemieditore.it