

An aerial photograph of a vibrant urban plaza. The ground is painted with large, overlapping geometric shapes in a rainbow of colors: red, orange, yellow, green, cyan, magenta, and pink. A network of thin black lines crisscrosses the plaza, creating a grid-like pattern. Numerous people are seen walking and standing throughout the space, providing a sense of scale and activity. The overall atmosphere is bright and modern.

CPC
SERIES

Editors

**Giovanni Leoni
Andrea Boeri
Danila Longo
Valentina Gianfrate
Saveria O.M. Boulanger
Martina Massari
Rossella Roversi**

CULTURAL HERITAGE LEADING URBAN FUTURES

Actions and Innovations from ROCK PROJECT



CULTURAL HERITAGE LEADING URBAN FUTURES

Actions and Innovations from ROCK PROJECT

ISBN 978-94-6366-417-2

Copyright © 2020 CULTURAL HERITAGE LEADING URBAN FUTURES ACTIONS AND INNOVATIONS FROM ROCK PROJECT

This book is published by TU Delft Open Faculty of Architecture and the Built Environment, Delft University of Technology, 2020



EDITORS-IN-CHIEF

Giovanni Leoni, University of Bologna, Italy

Carola Hein, Delft University of Technology, Netherlands

EDITORS

Giovanni Leoni, University of Bologna, Italy

Andrea Boeri, University of Bologna, Italy

Danila Longo, University of Bologna, Italy

Valentina Gianfrate, University of Bologna, Italy

Saveria O.M. Boulanger, University of Bologna, Italy

Martina Massari, University of Bologna, Italy

Rossella Roversi, University of Bologna, Italy

SCIENTIFIC COMMITTEE

Manola Antonioli, ENSA Paris La Villette, France

Pier Vittorio Aureli, Architectural Association, United Kingdom

Alessandro Balducci, Milan Polytechnic, Italy

Claudio Calvaresi, Milan Polytechnic, Italy

Andrea Cavalletti, University of Bologna, Italy

Neera Chandhoke, Delhi University, India

Gregor Fitzl, Potsdam University, Germany

Kalliopi Fouseki, UCL London, United Kingdom

Elisa Giaccardi, Technical University Delft, Netherlands

David Gissen, California College of the Arts, United States

Torgrim Guttormsen, Norwegian Institute for Cultural Heritage, Norway

Noriko Inoue, Otomon Gakuin University, Osaka, Japan

Bernadette Nadya Jaworsky, Masaryk University, Brno, Czech Republic

Antonio Lucci, Humboldt University, Germany

Thomas Macho, Linz University of Art, Austria

Sébastien Marot, EAVT Paris-Est, France

Achille Mbembe, University of the Witwatersrand, South Africa

Alain Milon, University Paris Nanterre, France

Sarah Nuttall, University of the Witwatersrand, South Africa

Vincent Nadin, Technical University Delft, Netherlands

Joan Ockman, University of Pennsylvania, United States

Agostino Petrillo, Milan Polytechnic, Italy

Sofia Psarra, University College London, United Kingdom

Federico Rahola, Genova University, Italy

Henrik Reeh, Copenhagen University, Denmark

Hilde Remoy, Technical University Delft, Netherlands

Kun Song, Tianjin University, China

Teresa Stoppani, London South Bank University, United Kingdom

Pieter Uyttenhove, University of Gent, Belgium

Rashmi Varma, Warwick University, United Kingdom

GRAPHIC DESIGN

Stefano Ascari, University of Bologna, Italy

Maria Chiara Mazzoni, University of Bologna, Italy

PARTNERS



PROJECT FULL TITLE

Regeneration and Optimization of Cultural heritage in creative and Knowledge cities

PROJECT ACRONYM

ROCK

GRANT AGREEMENT NO.

730280

COORDINATOR

Comune di Bologna

PROJECT START DATE AND DURATION

1st May 2017 – 44 Months

PROJECT WEBSITE

www.rockproject.eu

RÖCK



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 730280.



INTRODUCTION 9

by Andrea Boeri, Saveria Olga Murielle Boulanger, Valentina Gianfrate, Giovanni Leoni, Danila Longo, Martina Massari, Rossella Roversi

ROCK PROJECT

Presentation of the Project 15

by Francesca Bruni, Osvaldo Panaro

A Great Team-Play for a Great Challenge: the ROCK Project from the Management Perspective 19

by Silvia Bartoloni, Pamela Lama, Giuliana Mazzocca.

Cultural Heritage as a Common 23

by Giovanni Leoni

ACTING IN THE CITIES

Potential City and Concrete Utopia. Figures of Thought for an Action Research 29

by Andrea Borsari

Culture in the City. Infrastructures and Concrete Utopias, in Six Steps 35

by Vando Borghi

Contribution of Co-Creation in Urban Regeneration Processes 41

by Danila Longo, Andrea Boeri

A Pathway from Research-Action-Research to Integrated Management Plan 51

by Valentina Orioli, Martina Massari, Rossella Roversi

Introduction to Cities from Role-Replicator Exchange to Mutual Learning 60

by Cécile Houpert, Miruna Draghia, Martina Massari

A Shared Framework for ROCK Cities	73
by AA.VV	
Accessibility to Cultural Heritage: ROCK Design Approach	77
by Valentina Gianfrate, Jacopo Gaspari, Giovanni Ginocchini	
Sustainability and Cultural Heritage	82
by Roberto Falanga, Alessandra Bonoli	
Collaborations and Cultural Heritage	91
by Saveria O.M. Boulanger, Raffaella Gueze, Rossella Roversi, Alessandra Vaccari	
A Catalogue of ROCK Cities Actions	98
by Miruna Draghia, Cecile Houpert (edt)	

FUELLING THE FUTURE OF CITIES' INNOVATION

ROCK Innovation: a Brief Overview	154
by Iwona Maciejewska, Alexandru Roja	
ROCK Innovation Portfolio	158
by AA.VV	
Fast-Forward to the Future. ROCK Innovations in Perspective	216
by Antonella Fresa	
Technologies in the Research-Action-Research Perspective	221
by Ernesto Antonini, Saveria O.M. Boulanger, Jacopo Gaspari	
Shifting from a Physical Event to a Virtual Conference: the ROCK Open Knowledge Week	225
by Cristina Garzillo, Stephania Xydia, Ane Izulain Alejos	

CONCLUSIONS

The Role of Cultural Heritage in Urban Sustainability	237
by Catherine Cullen, Cristina Sabbioni	

BIOGRAPHIES

240

The ROCK project sees historic city centres as laboratories to demonstrate how Cultural Heritage can be an engine of regeneration, sustainable development and economic growth. ROCK approach foresees the systemic and flexible application of a series of role-model practices in the testing sites of three Replicator cities, to turn historic city centres afflicted by physical decay, social conflicts and poor life quality into Creative and Sustainable Districts.

This book provides an overview of the project, extracting themes, material and final remarks from the Open Knowledge Week “Cultural Heritage Leading Urban Futures”, held on 27-30 October 2020. Over the past three years, ten ROCK cities – Athens, Bologna, Cluj-Napoca, Eindhoven, Lisbon, Liverpool, Lyon, Skopje, Turin, and Vilnius – together with service providers and knowledge brokers have tested and advanced numerous soft and hard tools, collaborative approaches aimed at shaping sustainable, heritage-led urban futures. This book shows their shared results, best practices and lessons learnt from interdisciplinary research, innovative action, dissemination of knowledge and creation of new synergies at European level.

DISCLAIMER

The sole responsibility for the content of this publication lies with the ROCK project and in no way reflects the views of the European Union.



Piazza Rossini, Bologna photo by Margherita Capelli

Introduction

Giovanni Leoni, University of Bologna
Andrea Boeri, University of Bologna
Danila Longo, University of Bologna
Saveria Olga Murielle Boulanger, University of Bologna
Valentina Gianfrate, University of Bologna
Martina Massari, University of Bologna
Rossella Roversi, University of Bologna

10

ROCK– Regeneration and Optimisation of Cultural heritage in creative and Knowledge cities”–(grant agreement n° 730280) is a Horizon 2020 project, funded under the Work Programme 2016-2017 Climate action, environments, resource efficiency and raw materials, topic Cultural Heritage as a driver for sustainable growth (SC5-21) as part of the call Greening the Economy, third Horizon thematic pillar on Societal Challenge. Within its almost four years of activities, the ROCK project engaged 33 partners across 13 different European countries, ranging from institutions such as municipalities and universities, research centers, local associations, cities networks and technology providers. Bologna started the process, being the Municipality the project coordinator and the University the scientific guidance, thus strengthening an already proven collaboration.

Within this framework, the project’s field of investigation foresaw the release of CH from purely financial logics (e.g., support for heritage in terms of patronage on the one hand, the subordination of any action on heritage to an immediate economic advantage on the other) in order to insert it in broader economic and development processes: both social economy and increase in knowledge, creativity and overall quality of life.

ROCK project focused on historic city centres, intended as living laboratories where demonstrating how Cultural Heritage (CH) can become an engine of regeneration, sustainable development and economic growth, in line with the necessary climatic transition. ROCK project aimed at overcoming the idea of CH as an asset subject to accessory and isolated interventions and policies, only treated in its functional dimension with the objective to regain an investment with its reuse, but it can be the engine of an “adapting” reuse in which values are brought back to the entire community in its tangible and intangible dimensions. As part of

the complexity of cities, CH is dynamic and its inclusion in urban policies must consider its evolution in time and in parallel with the community producing and using it.

The ROCK project chose the city as a field of action and research, mainly because of the density of problems it poses in relation to the CH valorisation and conservation. More specifically, it has focused on historic European cities considered as a viable model and an alternative to the processes of metropolisation and gentrification of any urban reality. A model for a city of social inclusion, knowledge and creativity.

The project envisioned an innovative, collaborative and systemic approach to promote the effective regeneration and adaptive reuse in historic city centres by implementing a repertoire of successful CH-led regeneration initiatives, already tested in the Role-Model cities and inserted in the Replicator cities environment not as a mere reproduction but with a guided mentoring approach. A series of role-model practices were implemented in three testing sites in the cities of Bologna, Lisbon and Skopje, supporting the transformation of historic city centres afflicted by physical decay, social conflicts and poor life quality, into Creative and Sustainable Districts.

ROCK proposed a change of perspective in the development and reading of CH-led regeneration processes implying a new attitude in re-building community of practices and cultural ties.

The most important aspect of the transformation processes triggered by the ROCK project, is the ability to activate collective actions aimed at capturing in every act of urban modification a dynamic construction of CH for all. To be effective, the process implies that each action is based on social inclusiveness, universal accessibility and open knowledge. Indeed, the undertaken actions do not affect specific cultural realities, but they intercept and cross a large number of citizens, among specialists and non-specialists.

In this sense, the public spaces of the historical city centres represent a temporary instrument contributing to the mediation of differences, the creation of arenas of intercultural negotiation and dialogic co-creation, and the generation of a sense of belonging and care for the cities' common goods. At the same time, underused buildings became new cultural epicenters for the renewal of the local community memories. Neglected resources are renovated, and new services are developed in a collaborative effort among the local ecosystem of stakeholders, the institutions, the Universities and citizens themselves.

The main result of ROCK consisted in the development both of a methodology and of an operational framework (cultural, technological, managerial), valuable and effective in different urban realities. The

application of these two shared elements has started and will continue to facilitate the comparison and collaboration between the 10 ROCK cities without inhibiting the site-specificity of places and communities, and without imposing a unique and standardized interpretative and operational model. A balance has been sought on the one hand between the sharing of methods and values in a European perspective and, on the other, between the respect and enhancement of the specificities of places, attributing to the term “place” a broad interpretation that includes its physical, social, political, cultural and memorial structure.

This result was achieved thanks to the implementation of pilot actions, supported by specialized and innovative skills, which are not only able to intercept all the cultures of the city but also to redefine themselves by supporting processes of empowerment in a circular process. This generates a constant, mutual transfer of knowledge between specialized knowledge and ordinary “skills” of the “citizens”, i.e. every actor operating in the city, whether his presence is stable or temporary.

The implementation followed an action-research approach, tackling the daily and ordinary life of the city, strongly neglected by the design cultures in the recent decades in favor of more striking themes and of greater communicative effect.

12 The project activities started in January 2017 and ended in December 2020. The present book comes at the end of the project and intends to provide final reflections and an overview of the activities carried out over the years, without representing a detailed scientific or documentary account.

The first section of the book is aimed at the general presentation of the project. In the first part, the organizational and management efforts that allowed the development of a fruitful cooperation among all the involved partners and the opportunity to share knowledge, competences, skills and experiences are highlighted. The second part introduces the main theoretical and scientific premises of the research as well as the developed scientific and disciplinary results, described further in the volume, but mainly focuses on the innovative research-action-research methodology, that subverts the consequential logic typical of the modern design process. The research-action-research in ROCK, represents a dynamic way to create new paths of knowledge to rethink the evolution of historical centers and prepare them for future challenges. In this perspective, the upgrade achieved by the ROCK project involves bringing the theme of CH back to the heart of primary political choices, placing the issue of memories and cultural identities of communities at the foundation of every economic and social program. Therefore, ROCK is putting on the spot the cascading role of identifying key piloting actions having impacts on the entire society.

The second section is dedicated to the storytelling of the implementation of cities actions: a repertoire of successful heritage-led regeneration initiatives related to the 7 Role-Model cities (Lyon, Turin, Liverpool, Vilnius, Cluj, Athens, Eindhoven) that tested the replicability of their strategies in 3 Replicators cities (Lisbon, Skopje, Bologna). After the description of the methodological framework and the project strategy, a catalogue of ROCK Cities Actions resumes the most significant interventions to identify the enabling conditions, technologies and communication measures able to maximize the impacts. The project has involved more than a thousand people across knowledge creation, co-designing, co-construction and co-developing the future of CH in the cities. The impacts of this process include socio-economic outcomes in the rediscovering and reactivation of urban areas and their urban cultural heritage in previously neglected spaces, setting an important precedent in the new practices of citizen involvement and heritage valorization. In this perspective, the demonstration areas of the Replicator cities are transformed into experimental labs where a systemic transformation process is implemented and monitored to be eventually synthesized into three site-specific Integrated Management Plans (IMPs), aggregating shared principles, local strategies with site-specific CH-led regeneration tactics.

The third section deals with the outputs related to the three main domains of innovation: organizational innovation, technological innovation, social innovation. Thanks to ROCK, cities had the opportunity to adopt technological tools and to develop unique capabilities to harness their distinctive potential through an innovative mix of technology, citizens and community engagement, physical transformations, new uses and activities. The flexible implementation methodology, the variety of solutions and the multiple scenarios co-developed and tested within the project offer other cities in Europe replication possibilities to capitalize on local cultural potential through innovation, communities, entrepreneurship and digital technologies, all brought together in the open innovation ecosystem.

The third section includes an Innovation Portfolio displayed in tables, aimed at presenting ROCK tools and their added value for stakeholders and potential users.

During the ROCK Open Knowledge Week “Cultural Heritage Leading Urban Futures”, the final ROCK conference, a special room for displaying innovations was available: it was possible to visit the virtual booths of ROCK partners presenting technological solutions and discover relevant EU projects focusing on cultural heritage.

The conference, to whom the last contribution of section 3 is addressed, marked the closure of the ROCK project. It was held online on 27-30 October 2020, due to the pandemic Covid emergency that prevented

the possibility to organize events in presence. The conference was transformed into a virtual journey in which participants delved into innovative solutions that demonstrate how cultural heritage can be the driving force behind urban sustainability.

The book conclusions point out the role of CH in urban sustainability and the related topics, considered essential by ROCK to its fulfillment, such as Access, Sustainability and Innovative Partnerships. The contribution closes addressing climate change issues that are impacting on communities and their environment and impose future challenges on CH: another example on how societal and urban transformations require a global and interdisciplinary approach for facing future threats and CH may play a leading role in urban futures.