

a cura di
LETIZIA DIPASQUALE
SAVERIO MECCA
LUCIA MONTONI

**Heritage for
people**

*Sharing vernacular
knowledge to build
the future*





This publication is the result of the project **VerSus+ / Heritage for People** [Grant Agreement Ref. 607593-CREA-1-2019-1-ES-CULT-COOP1], co-funded by the European Union (2019-2023), under the Creative Europe Culture Programme.

The European Commission support for the production of this publication does not constitute endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

This collective work gathers five European university institutions and integrates contributions from the project leader and the project partners. In addition to the Editors, the main contributors are:

Project leader



**UNIVERSITAT
POLITÈCNICA
DE VALÈNCIA**

Universitat Politècnica de València, Escuela Técnica Superior de Arquitectura, Spain

Camilla Mileto, Fernando Vegas (*Project leaders and Principal investigators*), Valentina Cristini, Lidia García-Soriano, Guillermo Guimaraens, Marina Elia, María Lidón de Miguel, Juan María Songel, Juan Bravo Bravo, Jose Luis Baró Zarzo, Alicia Hueto Escobar, Sergio Manzano Fernández

Partners



DICAAR
DIPARTIMENTO DI INGEGNERIA CIVILE,
AMBIENTALE E ARCHITETTURA
UNIVERSITÀ DI CAGLIARI

Università degli Studi di Cagliari, Italy

Maddalena Achenza, Ivan Blecic, Amanda Rivera Vidal, Alice Agus



CRATERRE
NS/AG
ÉCOLE NATIONALE SUPÉRIEURE
D'ARCHITECTURE DE GRENOBLE

École Nationale Supérieure d'Architecture de Grenoble, France

Bakonirina Rakotomamonjy (*Principal investigator*), Sebastien Moriset, Nuria Sánchez Muñoz, Manon Mabile, Audrey Carboneille



**UNIVERSITÀ
DEGLI STUDI
FIRENZE**
DIDA
DIPARTIMENTO DI
ARCHITETTURA

Università degli Studi di Firenze, DIDA Dipartimento di Architettura, Italy

Letizia Dipasquale (*Principal investigator*), Alessandro Merlo, Saverio Mecca, Lucia Montoni, Edoardo Paolo Ferrari, Gaia Lavoratti, Giulia Lazzari, Matteo Zambelli



UPT
**UNIVERSIDADE
PORTUCALENSE**

Universidade Portucalense, Portugal

Mariana Correia (*Principal investigator*), Gilberto Duarte Carlos, Goreti Sousa, Mónica Alcindor, Rui Florentino, Emília Simão, Ana Lima, Telma Ribeiro, Bruno Andrade

With the Support of



ICOMOS - CIAV
International Committee
of Vernacular Architecture
International Council on
Monuments and Sites

International Committee of
Vernacular Architecture
ICOMOS-CIAV



ICOMOS - ISCEAH
International Scientific Committee
on Earthen Architectural Heritage

International Scientific Committee
on Earthen Architectural Heritage
ICOMOS-ISCEAH



UNESCO CHAIR
earthen architecture,
building cultures and
sustainable development
CRATERRE | AE&CC | ENSAG | UGA

Unesco Chaire *Earthen architecture,*
building cultures and sustainable development
CRATERRE | AE&CC | ENSAG | UGA

Acknowledgments: Municipality of Formentera and Municipality of Calasetta for the hospitality, European Heritage Volunteers for the photos provided, all the authors for their cooperation and effort.

English proofreading: Luis Gatt

LogoVersus + graphic design: Teresa Correia, UPT

Cover: Kids playing with building materials at the “Grains d’Isère” festival. Photo: PatriceDoat

Website: www.versus-people.webs.upv.es | **Instagram:** VerSus Heritage for PEOPLE | **App:** www.heritageforpeople.unifi.it

a cura di
LETIZIA DIPASQUALE
SAVERIO MECCA
LUCIA MONTONI

**Heritage for
people**
*Sharing vernacular
knowledge to build
the future*

authors

Maddalena Achenza, Mónica Alcindor, Bruno Andrade, José Baganha, Stefan Balici, Julieta Barada, Sara Bartolini, José Luis Baró, Juan Bravo, Gisella Calcagno, Gilberto Duarte Carlos, Alicia Casals, Carlos Castillo Levicoy, Valentina Cristini, Mariana Correia, Edoardo Paolo Ferrari, Teresa Cunha Ferreira, Soraya Genin, Carmen Gómez Maestro, Borut Juvanac, Marwa Dabaieh, Letizia Dipasquale, Marina Elia, Rui Florentino, Lidia García-Soriano, Alejandro García Hermida, Debora Giorgi, Leticia Grappi, Kin Guerra, Hubert Guillaud, Gaia Lavoratti, Davide Leone, Ana Lima, Saverio Mecca, Alessandro Merlo, Camilla Mileto, Magda Minguzzi, Lucia Montoni, Sebastien Moriset, David Morocho, Cristian Muñoz Catalán, Alina Negru, Amalia Nuevo-Delaunay, Karl Nyqvist, Constanza Pérez Lira, Giacomo Pierucci, Bakonirina Rakotomamonjy, Telma Ribeiro, Amanda Rivera Vidal, Alba Rivero Olmos, Elena Rigano, Nathalie Sabatier, Nuria Sánchez Muñoz, Emilia Simão, Juan María Songel, Goreti Sousa, Angela Squassina, François Streiff, Birgitte Tanderup Eybye, Jorge Tomasi, Antonella Trombadore, Francesco Trovò, Fernando Vegas, Marzia Varaldo, Montserrat Villaverde, Matteo Zambelli.



UNIVERSITÀ
DEGLI STUDI
FIRENZE

DIDA
DIPARTIMENTO DI
ARCHITETTURA

Heritage for people. Sharing vernacular knowledge to build the future / eds. Letizia Dipasquale, Saverio Mecca, Lucia Montoni
— Firenze - DIDA Press, 2023.

ISBN: 978-88-3338-200-5

All publications are submitted to an external double refereeing process under the responsibility of the DIDA Scientific Editorial Board.

Content license: the present work is released under Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0: <https://creativecommons.org/licenses/by-nc-sa/4.0/legalcode>).

© 2023 Author(s)

Published by



didapress

Dipartimento di Architettura
Università degli Studi di Firenze
via della Mattonaia, 8 Firenze 50121
<https://didapress.it/>

progetto grafico

didacommunicationlab

Dipartimento di Architettura
Università degli Studi di Firenze

Stampato su carta di pura cellulosa *Fedrigoni Arcoset*

ELEMENTAL
CHLORINE
FREE
GUARANTEED



CONTENTS

INTRODUCTION

Foreword Hubert Guillaud	12
Foreword Marwa Dabaieh	14
Heritage for People. A project for connecting people with their tangible and intangible heritage Camilla Mileto, Fernando Vegas	16

LESSONS FROM VERNACULAR ARCHITECTURE TO SUSTAINABILITY 30

VerSus Methodology: development and application Gilberto Duarte Carlos, Mariana Correia	32
Transmission of the VerSus method to architecture students and lecturers Sebastien Moriset	38
From intangible heritage to circular knowledge Letizia Dipasquale, Saverio Mecca, Lucia Montoni	44
Indigenous & traditional knowledge systems and the circular paradigm Debora Giorgi	50
Diversity and sustainability of traditional architecture in global warming and ecological and digital transitions Saverio Mecca	56
Lessons on conservation from vernacular architecture Fernando Vegas, Camilla Mileto, Valentina Cristini, Lidia García-Soriano	62
Vernacular parameters of sustainability in 21st century architecture Juan María Songel, Fernando Vegas, Camilla Mileto, Juan Bravo	68

STRATEGIES FOR THE MANAGEMENT AND DISSEMINATION OF TRADITIONAL KNOWLEDGE FOR A SUSTAINABLE FUTURE 74

Conservation and design Fernando Vegas, Camilla Mileto	76
Conservation and restoration of traditional architecture Camilla Mileto, Fernando Vegas	80

<i>Restoration of a vernacular house in Sesga, Valencia (ES) Camilla Mileto, Fernando Vegas</i>	86
<i>Urban building on calle Maldonado 33, Valencia (ES) Fernando Vegas, Camilla Mileto</i>	87
<i>Conservation of a Valencian barraca (ES) Fernando Vegas, Camilla Mileto</i>	88
<i>The sun temple (IN) Edoardo Paolo Ferrari</i>	89
Renovation and adaptive reuse of vernacular architecture	90
Letizia Dipasquale	
<i>Alcino Cardoso house renovation by Álvaro Siza (PT) Teresa Cunha Ferreira, Soraya Genin, Mariana Correia</i>	97
<i>Toolkit for innovative and eco-sustainable renovation process Lucia Montoni, Gisella Calcagno, Giacomo Pierucci, Antonella Trombadore</i>	98
<i>Renovation of a stone and rammed earth house in Tuscany (IT) Elena Rigano</i>	99
<i>Memory garden in Vinaroz, Castellón (ES) Fernando Vegas, Camilla Mileto</i>	100
<i>Renovation, seismic and energy retrofit of a farmhouse in Val di Chiana, Tuscany (IT) Sara Bartolini</i>	101
Designing with tradition: old techniques for modern architecture	102
José Luis Baró, Fernando Vegas, Camilla Mileto	
<i>Tile vaulting in 21st century Fernando Vegas, Camilla Mileto, Lidia García-Soriano</i>	108
<i>House of Nature, Silkeborg Højskole by Reværk Birgitte Tanderup Eybye</i>	109
<i>Ses Menorquines Alicia Casals, Karl Nyqvist</i>	110
<i>Fan Forest Houses by Bergmeisterwolf Studio (IT) Matteo Zambelli</i>	111
Education strategies	112
Sebastien Moriset	
Teaching architecture and heritage to kids	118
Sebastien Moriset	
<i>Educational trunk in support of traditional architecture Camilla Mileto, Fernando Vegas, Lidia García-Soriano, Valentina Cristini</i>	124
<i>Rehabimed kids: workshop on traditional architecture Letizia Dipasquale, Montserrat Villaverde</i>	125
<i>Practical tools for teaching architecture and heritage to children Borut Juvanac</i>	126
<i>Elémenterre Nathalie Sabatier, Alba Rivero Olmos</i>	127

An overview of university and post-university education in vernacular architecture	128
Bruno Andrade, Telma Ribeiro, Mariana Correia, Goreti Sousa, Ana Lima	
<i>DSA: earthen architecture, building cultures and sustainable development</i> Bakonirina Rakotomamonjy	136
<i>Workshops on traditional trades and preservation of traditional techniques</i> Camilla Mileto, Fernando Vegas, Valentina Cristini, Lidia García-Soriano	137
<i>The first Traditional Architecture Summer School in Portugal</i> Rui Florentino, José Baganha, Alejandro García Hermida	138
<i>Teaching vernacular architecture: different pedagogical approaches in higher education</i> Telma Ribeiro	139
Training with craftspeople and maintenance of traditional knowledge	140
Sebastien Moriset	
<i>The artisans of Venice</i> Angela Squassina	145
<i>Italian Dry Stone Walling School</i> Edoardo Paolo Ferrari	146
<i>Restoration of heritage assets programme at Duoc UC professional institute</i> Carmen Gómez Maestro	147
Community engagement	148
Mónica Alcindor, Emilia Simão	
Traditional heritage preservation and enhancement through community participation	152
Sebastien Moriset	
<i>Terraccogliente experience</i> Walter Secci	158
<i>El Cabanyal: neighbourhood participation against urban expropriation</i> Camilla Mileto, Fernando Vegas, David Morocho	159
<i>Adopt a house in Rosia Montana, Romania</i> Stefan Balici	160
<i>Andean architecture and earthen construction Lab</i> Julieta Barada, Jorge Tomasi	161
Participating in building and restoring vernacular heritage	162
Fernando Vegas, Camilla Mileto	
<i>Rempart</i> Fernando Vegas, Camilla Mileto	167

<i>European Heritage Volunteers</i> Valentina Cristini	168
<i>Cob in Lower Normandy, France</i> François Streiff	169
Gamification for community engagement in heritage and sustainability Alessandro Merlo, Letizia Dipasquale	170
<i>Calasetta heritage games</i> Amanda Rivera Vidal, Maddalena Achenza	176
<i>Artisans to the rescue</i> Davide Leone	177
<i>The Seven Families of Formentera</i> Nuria Sánchez Muñoz	178
<i>Contahistoria</i> Camilla Mileto, Fernando Vegas, Marina Elia	179
Knowledge management and dissemination Letizia Dipasquale, Saverio Mecca	180
Documenting and safeguarding intangible heritage Letizia Dipasquale, Edoardo Paolo Ferrari	184
<i>Ràixe: Digital Spaces for Tabarkan Culture</i> Marzia Varaldo	190
<i>Practices of Cultural Re-appropriation: projects in co-authorship with the First Indigenous Peoples of South Africa</i> Magda Minguzzi	191
<i>The village of Esfahak: knowledge transmission on vernacular construction techniques in the Iranian desert</i> Edoardo Paolo Ferrari	192
<i>Red de maestros - network of master builders</i> Camilla Mileto, Fernando Vegas, Valentina Cristini	193
Documentation and digital survey of tangible heritage Alessandro Merlo, Gaia Lavoratti	194
<i>International workshops on traditional architecture in Rincón de Ademuz, Valencia (Spain)</i> Fernando Vegas, Camilla Mileto	200
<i>Documenting and virtual visiting World Heritage in 3DPAST</i> Mariana Correia, Gilberto Carlos	201
<i>3D survey of the vernacular architecture of the Aysén region</i> Carlos Castillo Levicoy, Constanza Pérez Lira, Amalia Nuevo-Delaunay	202
<i>Modelling traditional knowledge on earthen domes of Syria</i> Letizia Dipasquale, Saverio Mecca	203

Managing constructive and architectural knowledge for builders and designers	204
Letizia Dipasquale, Telma Ribeiro, Rui Florentino, Mariana Correia	
<i>Heritage for people: a collaborative app</i> Letizia Dipasquale, Lucia Montoni, Edoardo Paolo Ferrari	210
<i>Learning to conserve</i> Fernando Vegas, Camilla Mileto	211
<i>Cartoterra</i> Sebastien Moriset	212
<i>Mapadaterra platform</i> Leticia Grappi, Kin Guerra	213
Sharing knowledge with a wide public	214
Sebastien Moriset	
<i>Full Immersion nella Terra</i> Maddalena Achenza	219
<i>Grains d'Isère Festival</i> Bakonirina Rakotomamonjy	220
<i>Homo faber Exhibition</i> Francesco Trovò	221
<i>Regio heart</i> Alina Negru, Alessandro Serra	222
<i>El Adobe educational video</i> Amanda Rivera Vidal, Cristian Muñoz Catalán	223
CASE STUDIES: FORMENTERA AND SANT'ANTIOCO ISLANDS	224
Formentera: cultural heritage and sustainability	226
Fernando Vegas, Camilla Mileto, Lidia García-Soriano, Valentina Cristini	
Sant'Antioco: cultural heritage and sustainability	240
Letizia Dipasquale, Alessandro Merlo, Gaia Lavoratti, Lucia Montoni, Maddalena Achenza	

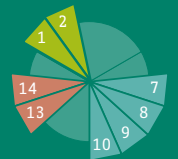
EL CABANYAL: NEIGHBOURHOOD PARTICIPATION AGAINST URBAN EXPROPRIATION

Camilla Mileto, Fernando Vegas, David Morocho
 Universitat Politècnica de València, Valencia, Spain

The maritime villages of Valencia, namely Banyamalar, Cabanyal and Cap de França, known collectively as El Cabanyal, were originally an old fishing settlement traditionally linked to the city of Valencia which, at the moment of its foundation by the Republic of Rome, was located 5 km inland, in a meander of the Turia River. These settlements, originally composed of huts with earthen walls and steep thatched gable roofs, were transformed during the late 19th and early 20th centuries into an urban fabric of row houses in the Art Nouveau style, which reflects in the geometry of its plots the previous existence of those old huts. The city of Valencia expanded from its historic centre, reaching the district of El Cabanyal in the 1980s. In 1998, the Municipality of Valencia initiated a process of expropriation of an important section of the district in order to demolish it and to create a large avenue of access to the sea, following a project which had been drafted in the 19th century. In response to this threat, the neighbourhood's population mobilised and fought for almost two decades to prevent the destruction of the district, appealing to regional, national and international legal and judicial instances and giving visibility to this battle for the survival of the neighbourhood, which was finally saved from demolition, and is an extraordinary example of resilience and of grassroots defense of the built heritage. The neighbourhood which was thus saved will be remembered by future generations for the resistance it put up against the destruction that had been planned by the Valencia City Council. Today, despite the urban wounds from that period which still need to heal, it has become one of the most charming neighbourhoods in Europe.

VERSUS SUSTAINABILITY PRINCIPLES

- 1. Respecting nature and landscape
- 2. Reducing pollution
- 7. Transmitting and sharing building cultures
- 8. Encouraging creativity
- 9. Recognising intangible values
- 10. Encouraging social cohesion
- 13. Optimising construction efforts
- 14. Extending lifetime



← Perspective of the quartier with a colorful row of houses Art Nouveau tile façade typical of the area (credits: D. Morocho)

The publication presents the results of the project 'Versus-Heritage for People', funded by the Creative Europe EU programme. The main aim of the project was to actively involve a broad audience and raise awareness among it concerning the value of vernacular knowledge in shaping more sustainable and resilient models of development. The material and immaterial elements constituting a vernacular heritage (encompassing local materials, construction methods, models for living and social interaction, technical and environmental knowledge for the management of territories, natural resources, settlements, etc.) have enormous potential for generating forward-thinking models that can improve the environmental and social quality of our habitats, foster a sense of identity and belonging, and relate in a balanced way to the capacities of our planet. The book explores strategies and tools for managing and transmitting knowledge and the values associated with vernacular heritage. It includes concrete examples and good practices for engaging people in processes of knowledge and the enhancement of vernacular heritage values for sustainability. The outcome is the result of the collaborative efforts between the five academic institutions involved in the project – Universitat Politècnica de València as coordinator (ES), University of Florence (IT), University of Cagliari (IT), CRAterre-ENSAG (FR) and Escola Superior Gallaecia at Universidade Portucalense (PT). A total of 63 authors, comprising both external scholars and professionals, contributed to the book.

Letizia Dipasquale Architect, PhD in Technology of Architecture and Design, Associate Professor in Production and Management of the Built Environment at DIDA, Department of Architecture, University of Florence. Her academic research is focused on the topics of vernacular architecture, cultural heritage management and sustainable transition.

Saverio Mecca. Architect, Professor Emeritus of Production and Management of the Built Environment at the University of Florence, he was Dean of Faculty and then Director of the Department of Architecture of the University of Florence, 2009-2020. He works in the research field of construction management and sustainable innovation of architectural heritage in the Mediterranean region.

Lucia Montoni. Architect, obtained a postgraduate degree in Documentation and Management of Cultural Heritage. She is a PhD student in Technology of Architecture at the DIDA - University of Florence and collaborates with ETA-Florence company, which deals with communication and dissemination of scientific content on renewable energy.

ISBN 978-88-3338-200-5



9 788833 382005