

## Vernacular Architecture Towards A Sustainable Future

This book discusses applying vernacular strategies to modern architectural design to adhere to basic green principles of energy efficiency and materials utilization. Written from an international perspective, chapters present the perspectives and experiences of architects and engineers from across the globe. Historically successful approaches are integrated with modern design concepts to create novel, sustainable, and resource conscious solutions. The scope of topics covered include natural ventilation, cooling and heating, daylight and shading devices, and green micro-climate and functional facades, making this a useful reference for a wide range of researchers and workers in the built environment. Covers the most up-to-date research developments, best practices, and innovations from countries all over the globe; Presents the latest research in vernacular architecture and sustainable building; Contains case studies and examples to enhance practical application of the technologies presented.

Sustainability is a concept that has monopolised a large number of the scientific debates in a wide range of spheres connected not only with architecture, urban planning and construction, but also with the product market, tourism, culture, etc. However, sustainability is indissolubly linked to vernacular architecture and the lessons this architecture

This book provides an overview of the environmental problems that arise from construction activity, focusing on refurbishment as an alternative to the current crisis in the construction sector, as well as on measures designed to minimize the effects on the environment. Furthermore, it offers professionals insights into alternative eco-efficient solutions using new materials to minimize environmental impacts and offers solutions that they can incorporate into their own designs and buildings. It also demonstrates best practices in the cooperation between various universities in Andalusia in Spain and Latin America and many public and private companies and organizations. This book serves as a valuable reference resource for professionals and researchers and provides an overview on the status of investigations to find solutions to improve sustainable development in terms of materials, systems, facilities, neighborhoods, buildings, and awareness of the society involved.

Nonconventional and Vernacular Construction Materials: Characterisation, Properties and Applications, Second Edition covers the topic by taking into account sustainability, the conservation movement, and current interests in cultural identity and its preservation. This updated edition presents case studies, information on relevant codes and regulations, and how they apply (or do not apply) to nonconventional materials. Leading international experts contribute chapters on current applications and the engineering of these construction materials. Sections review vernacular construction, provide future directions for nonconventional and vernacular materials research, focus on natural fibers, and cover the use of industrial byproducts and natural ashes in cement mortar and concrete. Takes a scientifically rigorous approach to vernacular and non-conventional building materials and their applications. Includes a series of case studies and new material on codes and regulations, thus providing an invaluable compendium of practical knowhow. Presents the wider context of materials science and its applications in the sustainability agenda.

Urban Disasters and Resilience in Asia presents the latest information on the intensity and frequency of disasters. Specifically, the

fact that, in urban areas, more than 50% of the world's population is living on just 2% of the land surface, with most of these cities located in Asia and developing countries that have high vulnerability and intensification. The book offers an in-depth and multidisciplinary approach to reducing the impact of disasters by examining specific evidence from events in these areas that can be used to develop best practices and increase urban resilience worldwide. As urban resilience is largely a function of resilient and resourceful citizens, building cities which are more resilient internally and externally can lead to more productive economic returns. In an era of rapid urbanization and increasing disaster risks and vulnerabilities in Asian cities, *Urban Disasters and Resilience in Asia* is an invaluable tool for policy makers, researchers, and practitioners working in both public and private sectors. Explores a broad range of aspects of disaster and urban resiliency, including environmental, economic, architectural, and engineering factors Bridges the gap between urban resilience and rural areas and community building Provides evidence-based data that can lead to improved disaster resiliency in urban Asia Focuses on Asian cities, some of the most densely populated areas on the planet, where disasters are particularly devastating

Earthen architecture is widespread all over the world and demonstrates a significant richness of varieties both in application and in materials used. This book discusses and debates the lessons that can be learned from earthen architecture to create sustainable architecture today, both for the conservation of traditional existing buildings and the design and construction of new ones. It deals with the study of earthen architecture around the world in order to preserve our earthen built heritage and proposes these building techniques as a sustainable option for building a new architecture of the future. *Earthen Architecture: Past, Present and Future* will be a valuable source of information for academics and professionals in the fields of Civil Engineering, Construction and Building Engineering and Architecture.

The architectural community has had a strong and continuing interest in traditional and vernacular architecture. *Lessons from Vernacular Architecture* takes lessons directly from traditional and vernacular architecture and offers them to the reader as guidance and inspiration for new buildings. The appropriate technical and social solutions provided by vernacular and traditional architecture are analysed in detail. International case studies focus on environmental design aspects of traditional architecture in a broad range of climatic conditions and building types.

The issues surrounding the function and meaning of vernacular architecture in the twenty-first century are complex and extensive. Taking a distinctively rigorous theoretical approach, this book considers these issues from a number of perspectives, broadening current debate to a wider multidisciplinary audience. These collected essays from the leading experts in the field focus on theory, education and practice in this essential sector of architecture, and help to formulate solutions to the environmental, disaster management and housing challenges facing the global community today.

This book deals with human factors research directed towards realizing and assessing sustainability in the built environment. It reports on advanced engineering methods for sustainable infrastructure design, as well as on assessments of the efficient methods and the social, environmental, and economic impact of various designs and projects. The book covers a range of topics, including the use of recycled

materials in architecture, ergonomics in buildings and public design, sustainable design for smart cities, design for the aging population, industrial design, human scale in architecture, and many more. Based on the AHFE 2016 International Conference on Human Factors and Sustainable Infrastructure, held on July 27-31, 2016, in Walt Disney World®, Florida, USA, this book, by showing different perspectives on sustainability and ergonomics, represents a useful source of information for designers in general, urban engineers, architects, infrastructure professionals, practitioners, public infrastructure owners, policy makers, government engineers and planners, as well as operations managers, and academics active in applied research.

A governing principle of sustainable architecture is that buildings need to reflect upon and respond to the environment they are placed in. Through a series of international case studies, Vernacular Architecture and Regional Design re-examines vernacular architectural theory and looks at what gives buildings a sense of place. The book equips the professional architect with the tools to realise socially responsible principles as part of the design process. The case studies of contemporary architects' work provide real examples of how the study of vernacular architecture can contribute directly to practice in sustainable design. It considers architecture and design as integrated social processes, not just technical or aesthetic exercises, thus showing how local building traditions can become part of a wider architectural and social fabric. Vernacular Architecture and Regional Design will appeal to professionals around the world in the fields of architecture, architectural heritage and urban design. \* A series of international case studies demonstrates the place of vernacular architecture in the design process for a wide selection of contemporary architects' work. \* Offers a clear analysis of the vernacular building tradition, placing architecture in its social context. \* Introduces a new, socially and environmentally inspired approach to sustainable design.

This book presents human factors research focused on achieving and assessing sustainability in the built environment and architecture. It reports on advanced engineering methods for architecture and design, and on assessments of the social, environmental, and economic impacts of various designs and projects. The book covers a broad range of practical studies relating to ergonomic design and assessment of public and private places, urban ecological constructions, and urban planning for smart city. Further topics include green area planning, environmentally-responsive architecture, and conservation and adaptation of vernacular architectures in modern design. Based on the AHFE 2020 Virtual Conference on Human Factors in Architecture, Sustainable Urban Planning and Infrastructure, held on July 16–20, 2020, this book offers a wealth of perspectives on sustainability and ergonomics in architecture and urban planning. As such, it represents a timely source of inspiration for designers, architects, urban planners, as well as civil and environmental engineers, and other professionals, including policy-makers, seeking for developing sustainable buildings and infrastructure.

Local communities have adapted for centuries to challenging surroundings, resulting from unforeseen natural hazards. Vernacular architecture often reveals very intelligent responses attuned to the environment. Therefore, the question that emerged was: how did local populations prepare their dwellings to face frequent earthquakes? It was to respond to this gap in knowledge, that the SEISMIC-V research project was instigated, and this interdisciplinary international publication was prepared. The research revealed the existence of a local seismic culture, in terms of reactive or preventive seismic resistant measures, able to survive, if properly maintained, in areas with frequent earthquakes. The fundamental contribution and aims of the publication were to enhance: -The disciplinary interest in vernacular architecture; -Its contribution to risk mitigation in responding to natural hazards; -To encourage academic and scientific research collaboration among different disciplines; -To contribute to the improvement of vernacular dwellings, which half of the world's population still inhabits nowadays. Fifty international researchers and experts presented case studies from Latin America, the Mediterranean, Eastern and Central Asia and the

Himalayas region, with reference to 20 countries, i.e. Algeria, Bolivia, Bhutan, Chile, China, Egypt, El Salvador, Greece, Haiti, Italy, Japan, Mexico, Morocco, Nepal, Nicaragua, Peru, Romania, Taiwan, Turkey and a closer detailed analysis of Portugal. This publication brings together 43 contributions, with new perspectives on seismic retrofitting techniques and relevant data, addressing vernacular architecture; an amazing source of knowledge, and to this day, home to 4 billion people.

This book presents 25 international housing schemes that draw on traditional vernacular principles whilst taking into account modern day materials, methods and financial or energy requirements. The aim is to show how, despite mass housing needs, we can design quality modern schemes that 'fit' their surroundings and generate a sense of place, community and regional identity – rather than the poor quality, identikit housing currently seen wherever you are in the UK.

This book is a comprehensive document visualizing the future of built environment from a multidisciplinary dimension, with special emphasis on the Indian scenario. The multidisciplinary focus would be helpful for the readers to cross-refer and understand others' perspectives. The text also includes case studies substantiating theoretical research. This method of composition helps the book to maintain rational balance among theory, research and its contextual application. The book comprises selected papers from the National Conference on Sustainable Built Environment. The chapters provide varied viewpoints on the core issues of urbanization and planning. This compilation would be of interest to students, researchers, professionals and policy makers.

The study of vernacular architecture explores the characteristics of domestic buildings in particular regions or localities, and the many social and cultural factors that have contributed to their evolution. In this book, vernacular architecture specialist Paul Oliver brings together a wealth of information that spans over two decades, and the whole globe. Some previously unpublished papers, as well as those only available in hard to find conference proceedings, are brought together in one volume to form a fascinating reference for students and professional architects, as well as all those involved with planning housing schemes in their home countries and overseas.

This accessible and engaging text is the first to offer a comprehensive critical history and analysis of the greening of architecture through accumulative reduction of negative environmental effects caused by buildings, urban designs and settlements. Describing the progressive development of green architecture from 1960 to 2010, it illustrates how it is ever evolving and ameliorated through alterations in form, technology, materials and use and it examines different places worldwide that represent a diversity of cultural and climatic contexts.

Filling a gap in existing literature on sustainable design, this new guide introduces and illustrates sustainable design principles through detailed case studies of sustainable buildings in Europe, North America and Australia. The guide will provide the reader with a deeper understanding of the design issues involved in delivering sustainable buildings, and giving detailed description of the process of integrating principles into practice. Approximately one hundred case studies of sixty buildings, ranging from small dwellings to large commercial buildings, and drawn from a range of countries, demonstrate best current practice. The sections of the book are divided into design issues relating to sustainable development, including site and ecology, community and culture, health, materials, energy and water. With over 400 illustrations, this highly visual guide will be an invaluable reference to all those concerned with architecture and sustainability issues.

Our built environments can affect us in many subtle ways. Simply sensing fresh air and natural light or seeing greenery and open space can uplift our mood and improve our wellbeing. But these healthy environments are increasingly difficult to achieve in

practice. The vital collaboration between the many people involved in designing and producing buildings is often not achieved. Then there is the pressing need to reduce waste and pollution. Managing these demands is a challenge, especially in a traditional climate of short-term thinking. *Designing Buildings for People* explores how we can learn from buildings of the past, vernacular architecture and the natural world around us, while still harnessing the opportunities presented by technology, to think creatively, work collaboratively and exercise a transdisciplinary approach. The book features over 200 images, exhibiting the acclaimed work of internationally recognized and research-led designers from the fields of architecture, engineering and management. It is a prime reference work for professionals and students who want to build the sustainable buildings of the future.

Vernacular architecture in general and earthen architecture in particular, with their rich variety of forms worldwide, are custodians of the material culture and identity of the peoples who built them. In addition, they are widely recognized as ancestral examples of sustainability in all their variants and interpretations, and the architecture of the present ought to learn from these when designing the sustainable architecture of the future. The conservation of these architectures – seemingly simple yet full of wisdom – is to be undertaken now given their intrinsic value and their status as genuine examples of sustainability to be learnt from and interpreted in contemporary architecture. *Vernacular and earthen architecture: Conservation and Sustainability* will be a valuable source of information for academics and professionals in the fields of Environmental Science, Civil Engineering, Construction and Building Engineering and Architecture.

The aim of this book is to reflect on "vernacularity" and culture. It concentrates on two major domains: first it attempts to reframe our understanding of vernacularity by addressing the subject in the context of globalisation, cross-disciplinarity, and development, and second, it discusses the phenomenon of how vernacularity has been treated, used, employed, manipulated, practiced, maintained, learned, reconstructed, preserved and conserved, at the level of individual and community experience. Scholars from a wide variety of knowledge fields have participated in enriching and engaging discussions, as to how both domains can be addressed. To expedite these aims, this book adopts the theme "Reframing the Vernacular: Politics, Semiotics, and Representation", organised around the following major sub-themes:

- Transformation in the vernacular built environment
- Vernacular architecture and representation
- The meaning of home
- Symbolic intervention and interpretation of vernacularity
- The semiotics of place
- The politics of ethnicity and settlement
- Global tourism and its impacts on vernacular settlement
- Vernacular built form and aesthetics
- Technology and construction in vernacular built forms
- Vernacular language - writing and oral traditions

Urban and Architectural Heritage within Sustainability is interested in the cities of the future, which must tie together the past, present, and future through an advanced connective chain that meets all humans' requirements in any era. This book attempts to answer many questions, such as what is urban conservation? How do cities of historical depth deal with modern planning policies and our conservation policies, rehabilitation, restoration, and preservation of historical cities and heritage buildings? How can we explain sustainable heritage and sustainability? Comprised of four sections, this book includes six chapters by noted experts and

researchers. Section 1 covers heritage conservation and rehabilitation of architectural and urban heritage. Section 2 investigates current retrofitting strategies and interventions in heritage buildings through the viewpoint of energy efficiency. Section 3 redefines what identity is and explores how new places and spaces offer an eyrie of cultural values. And Section 4 establishes heritage significant values and assesses sustainable heritage conservation options.

?This Handbook provides the first comprehensive international overview of significant contemporary Indigenous architecture, practice, and discourse, showcasing established and emerging Indigenous authors and practitioners from Australia, Aotearoa New Zealand, the Pacific Islands, Canada, USA and other countries. It captures the breadth and depth of contemporary work in the field, establishes the historical and present context of the work, and highlights important future directions for research and practice. The topics covered include Indigenous placemaking, identity, cultural regeneration and Indigenous knowledges. The book brings together eminent and emerging scholars and practitioners to discuss and compare major projects and design approaches, to reflect on the main issues and debates, while enhancing theoretical understandings of contemporary Indigenous architecture. The book is an indispensable resource for scholars, students, policy makers, and other professionals seeking to understand the ways in which Indigenous people have a built tradition or aspire to translate their cultures into the built environment. It is also an essential reference for academics and practitioners working in the field of the built environment, who need up-to-date knowledge of current practices and discourse on Indigenous peoples and their architecture.

Sustainability is a concept that has monopolised a large number of the scientific debates in a wide range of spheres connected not only with architecture, urban planning and construction, but also with the product market, tourism, culture, etc. However, sustainability is indissolubly linked to vernacular architecture and the lessons this architecture of the past can teach us for the future. The concept of sustainability as it is presented is wide-reaching and encompasses not only environmental issues but also sociocultural and socioeconomic questions. The lessons we can learn from studying vernacular architecture in these three broad spheres are manifold, and can help us not only to further the conservation and retrieval of this architecture already in existence but to rethink new architecture in the light of what we have learned. Vernacular Architecture: Towards a Sustainable Future will be a valuable source of information for academics and professionals in the fields of Environmental Science, Civil Engineering, Construction and Building Engineering and Architecture.

Every city has its unique and valuable identity, this identity is revealed through its physical and visual form, it is seen through the eyes of its residents and users. The city develops over time, and its identity evolves with it. Reflecting the rapid and constant changes the city is subjected to, Architecture and Arts, is the embodiment of the cultural, historical, and economical characteristics of the city. This conference was dedicated to the investigation of the different new approaches developed in Architecture and Contemporary arts. It has focused on the basis of urban life and identities. This volume provides discussions on the examples and tendencies in dealing with urban identities as well as the transformation of cities and urban cultures mentioned in terms of their form, identity, and their current art. Contemporary art, when subjected to experiments, continues to be produced in various

directions, to be consumed and to put forward new ideas. Art continuously renews itself, from new materials to different means of communication, from interactive works to computer games, from new approaches to perceptual paradigms and problems of city and nature of the millennium. This is an Open Access ebook, and can be found on [www.taylorfrancis.com](http://www.taylorfrancis.com).

In a continuously changing world, there has been a growing interest in the protection of vernacular heritage and earthen architecture. The need to protect and enhance this fragile heritage via intelligent responses to threats from nature and the environment has become evident. Historically, vernacular heritage research focussed on philosophical aspects.

This book emphasizes the important message that architects and structural engineers must strive to ensure that the buildings they design and construct should not be major contributors to climate change. Rather, they should be exploring the use of green materials and building methods – such as timber, wood, and associated materials – in order to safeguard the environment. These sustainable materials are not only environmentally friendly, but they have the added benefit of being easy to manufacture, cost effective, often locally available, and easily replenished. Moreover, it has been demonstrated that wood and timber are viable materials in the construction of a wide variety of building types, including medium and high-rise buildings. *The Importance of Wood and Timber in Sustainable Buildings* brings together a distinguished group of contributors from different cultures and building traditions to address why now is the time to rethink our construction methods and explore replacing many of the carbon intensive materials that are currently being used with wood and timber.

This volume contains research from the 10th International Conference on Sustainable Development and Planning. The papers included in this volume form a collection of research from academics, policy makers, practitioners and other stakeholders from across the globe who discuss the latest advances in the field. Problems related to development and planning, which affect rural and urban areas, are present in all regions of the world. Accelerated urbanisation has resulted in deterioration of the environment and loss of quality of life. Urban development can also aggravate problems faced by rural areas such as forests, mountain regions and coastal areas, amongst many others. Taking into consideration the interaction between different regions and developing new methodologies for monitoring, planning and implementation of novel strategies can offer solutions for mitigating environmental pollution and non-sustainable use of available resources. Energy saving and eco-friendly building approaches have become an important part of modern development, which places special emphasis on resource optimisation. Planning has a key role to play in ensuring that these solutions as well as new materials and processes are incorporated in the most efficient manner. The application of new academic findings to planning and development strategies, assessment tools and decision making processes are all covered in this book.

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This book has been written to represent the efficient applications of sustainability upon building designs. The book intends to

illustrate various techniques of action of sustainability on building conceptions. The book is divided into four parts and eight chapters. Part I "Introduction into Target Theme" includes a chapter with title "Introductory Chapter." It makes an overview of the meaning and the target of sustainable building and sustainable building material. Part II "Sustainable Building Design, Process, and Management" discusses many forms and concepts of sustainable building and includes three chapters. Part III "Sustainable Building by Using Energy Efficiency in Building Design" includes one chapter. Part IV "Sustainability in Building Materials: Study Cases" includes three chapters.

This book envisions the most appropriate design strategies that guarantee the adequate environmental performance of buildings during phases of design and construction as well as use. It focuses on relevant issues related to the production of sustainable buildings and the socio-cultural integration aspects of new architectural designs in urban settings. The book also addresses the design features of historic buildings.

Niger is sand, light, and heat. Starting from the necessity of the Mission Catholique du Dosso, which has worked in Niger for several years, this book speaks about the Nigerien situation which is characterized by a countrywide spread of poverty. Along with studying the country's environmental, geographical conditions, the book discusses raw earth architecture in both vernacular and contemporary contexts. A number of the most common techniques are described. The possibilities for these methods to adapt to the contemporary language of architecture without losing the technical and physical benefits inherent in them are illustrated. The book embraces some topics that are not common but highly relevant in the Developing World, such as identity through the evolution of architecture and the value of transmitting knowledge related to the vernacular building process. Nowadays, Niger's condition is characterized by a lack of resources, both physical and cultural. Earthen technology appears to be a valid solution in this situation for the creation of an environmentally sustainable approach. The book aims to provide an overview of the possibility of constructing new buildings related to the climate and traditional context, applying vernacular technology and solutions in a contemporary application. Providing a balance between teaching vernacular knowledge and the contemporary architectural language could help face this out-of-resource situation, aiming to get comfortable and affordable living spaces.

With increasing population and its associated demand on our limited resources, we need to rethink our current strategies for construction of multifamily buildings in urban areas. Reinventing an Urban Vernacular addresses these new demands for smaller and more efficient housing units adapted to local climate. In order to find solutions and to promote better urban communities with an overall environmentally responsible lifestyle, this book examines a wide variety of vernacular building precedents, as they relate to the unique characteristics and demands of six distinctly different regions of the United States. Terry Moor addresses the unique landscape, climate, physical, and social development by analyzing vernacular precedents, and proposing new suggestions for modern needs and expectations. Written for students and architects, planners, and urban designers, Reinventing an Urban Vernacular marries the urban vernacular with ongoing sustainability efforts to produce a unique solution to the housing needs of the changing urban environment.

Vernacular Architecture: Towards a Sustainable Future CRC Press

Vernacular architecture is architecture without architects; designed based on local needs, these buildings make use of natural resources and demonstrate diverse architectural forms, design elements unique to their culture, and ingenious construction techniques. From bamboo garden pavilions in China to homes made from reeds in southern Iraq, and mud dwellings in Mali to pine huts in Siberia, Habitat showcases the diverse and indigenous materials that can be used to build innovative, sustainable structures. The core of Habitat is arranged by climate zone, from desert to tropical, temperate to arctic. Within each section, buildings are presented regionally, showing how local climatic conditions and vegetation affect the evolution of building styles. Complete with a range of essays exploring the economic and anthropological aspects, as well as a reference section with information on materials science and engineering, Habitat offers real-world insights into sustainable buildings and stresses the importance of preserving disappearing craftsmanship and local knowledge.

Since the spread of classical design and construction amongst the upper echelons of British society in the late seventeenth century, traditional construction methods have largely fallen by the wayside. Centuries later, as the construction industry faces up to its environmental responsibilities, this book explores its rich and ancient tradition to provide tried and trusted solutions to modern day construction problems. By way of introduction, the ancient and historical lifestyles that dictated the nature of traditional construction are explored, before focussing on its health and ecological benefits. As well as cultural background, this book includes a detailed scientific description of traditional building materials and their constituents which draws a sharp contrast with modern petrochemical-based materials. The studies of traditional buildings included reveal the sustainability of features such as natural ventilation and breathing walls, and comparisons with modern construction methods show how they could prevent 'sick building syndrome'. The author argues that maintenance for long life, by contrast with the modern concept of life-cycle costing, is at the nub of sustainability and underlies the contribution traditional building construction can make to tackling climate change. Over 250 original photos, and over fifty bespoke diagrams illustrate the features, techniques, and characteristics of traditional construction that could make such a valuable contribution to the industry today. The inclusion of a close study of how these methods relate to British building regulations makes this book a practical guide for construction professionals, as well as an authoritative resource for students and policy-makers.

The book is an attempt to bridge the gap between the past and the future the vernacular and the contemporary. It questions the relevance of the vernacular in contemporary times and illustrates the inherent sustainability in vernacular built form. Emphasizing on the fact that apart from the preservation of vernacular architecture it is more important to carry forward the valuable lessons of the past into the future, the book presents myriad examples of contemporary architectural works and showcases how vernacular traditions can be reinterpreted to form contemporary buildings. It encourages young designers to look within India for models of sustainable design rather than importing international designs which may or may not be relevant to the Indian context.

Vernacular architecture represents a great resource that has considerable potential to define principles for sustainable design and

contemporary architecture. This publication is the result of an overall aim to produce a valuable tool for analysis regarding vernacular heritage through different assessments, in order to define principles to consider for sustainable development. This was possible through a comprehensive reflection on the principles established and the strategies to recognise in different world contexts. The present publication was the result of an in-depth approach by 46 authors from 12 countries, concerned with the analysis and critical assessment of vernacular heritage and its sustainable perspective. The book presents 8 chapters addressing operational definitions and synopses advances, regarding the main areas of vernacular heritage contribution to sustainable architecture. It also presents 15 chapters and 53 case studies of vernacular and contemporary approaches in all the 5 continents, regarding urban, architectural, technical and constructive strategies and solutions. **VERSUS, HERITAGE FOR TOMORROW: Vernacular Knowledge for Sustainable Architecture** is the result of a common effort undertaken by the partners ESG | Escola Superior Gallaecia, Portugal, as Project leader; CRAterre | École Nationale Supérieure d'Architecture de Grenoble, France; DIDA | Università degli Studi di Firenze, Italy; DICAAR | Università degli Studi di Cagliari, Italy; and UPV | Universitat Politècnica de València, Spain. This is the final outcome of VerSus, an European project developed from 2012 to 2014, in the framework of the Culture 2007-2013 programme.

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