

Project challenges: sustainable development and urban resilience

edited by
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Project challenges: sustainable development and urban resilience fosters a multidisciplinary discussion on the role of the architectural project for implementing the Sustainable Development Goals of the 2030 UN Agenda. The collected contributions of researchers and important stakeholders reflect on the necessity to operate in the perspective of finding sustainable development alternatives and resilient responses to changes, offering a wide range of keys for reading and interpreting phenomena and challenges that connote the contemporaneity at different scales, from global policies to local interventions. Complex challenges in which environmental, cultural, social, and economic aspects seamlessly intertwine.

The environmental technological project becomes an element of synthesis of the needs and resources of the territories and the local communities. Since the environmental, landscape, and cultural resources are largely non-renewable, they have to be used with awareness and responsibility, going beyond the concept of protection in itself and moving in the direction of the safeguard and transformation, in close continuity with the context of reference and in line with the limits imposed by the fragility of the assets themselves.

The result is a systemic approach to the issues of sustainable development and urban resilience, realised through the implementation of innovative processes for the enhancement, integration, regeneration, and inclusion of the environmental, cultural, social, and economic heritage.

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FOREWORD

The contributions collected in this book constitute a broad and articulated reflection on the issues of sustainability and resilience related to the project of enhancement of the environmental and cultural heritage. Within the framework of seminars organised in occasion of the second edition of the Sustainable Development Festival¹, the volume involves a group of students of the PhD course in “Cultural Heritage Conservation and Valorisation” of Politecnico di Milano², which, under the guidance of professors and expert researchers, have conducted a specific study on the theme of resilience and sustainability with reference to their research activity.

A rather heterogeneous picture of contents emerges, but undoubtedly coherent with the values that substantiate approaches and points of view. A coherence due both to the conviction that cultural heritage represents a resource for development, that can be considered in terms of design, and to the awareness that, since it is a non-renewable resource, this potential can only be expressed in continuity with the environmental context and within the limits imposed by the fragility of goods. This double awareness constitutes the central point in the relationship between cultural value and sustainability, in accordance with the interpretations expressed by the authors in the chapters of the book, recalling systemic approaches to the territorial and complex relationships and multi-scale methods of analysis and design.

¹ The Festival is an initiative of the Italian Alliance for the Sustainable Development aimed at raising awareness, involving citizens, young generations, businesses, associations and institutions on the issues of economic, social and environmental sustainability, spreading the culture of sustainability and fostering a cultural and political change that allows Italy to implement the United Nations 2030 Agenda and to achieve the 17 Sustainable Development Goals.

² “Cultural Heritage Conservation and Valorisation” is a PhD course of the Department of Architecture, Built environment and Construction engineering, held by the professors Stefano Della Torre and Daniele Fanzini. The course deals with the relationship between protection, conservation and valorisation of a territory and will provide the fundamentals for the effective and efficient management of a cultural asset. The main aim of the course is to provide to students the primary critical skills useful to promote and to design initiatives that enhance a cultural heritage as development factor for a region.

The interest addressed to the continuity of the existing context, and not only to the single object, defines a model for the conservation itself. It is conceived no longer as an impediment to any transformation, but as a premise for a balanced and correct expression of the potential of the goods, recognising that the real preservation can be performed only through the co-evolution of the cultural goods with the contexts.

The tools of this approach to the protection and conservation, more sophisticated and complex than the traditional ones, have an impact on the territorial government, through systemic projects that involve the behavioural attitudes of the same citizens towards preservation as well as use and enhancement. In these terms, use and enhancement get a central role in the design action, also with respect to the need to find the necessary resources for the interventions.

The complex definition of proper tools for a sustainable conservation/enhancement of the cultural and environmental heritage represents an exciting challenge, but it still requires a lot of work also at the theoretical level. My gratitude goes to the authors of the volume, and above all to Daniele Fanzini for the coordination, for having lavished so much effort in seeking contents, values and objectives of the activities of conservation and enhancement, focusing on possible convergences with a modern ecology conceived as «a science and an ethic of diversity»³, which is not based only on the conservation but on the values of sharing and co-belonging that can be projected in the interest of the society.

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³ Bocchi, G. & Ceruti, M. (2004), *Educazione e globalizzazione*, Cortina, Milano, p. 171 (translated by the author).

INTRODUCTION

Project challenges: sustainable development and urban resilience offers an opportunity for a multidisciplinary discussion on the role of the architectural project for implementing the Sustainable Development Goals of the 2030 UN Agenda.

The collected texts, including the contributions of important stakeholders, reflect on the necessity to operate in the perspective of finding sustainable development alternatives and resilient responses to changes, offering a wide range of keys for reading and interpreting phenomena and challenges that connote the contemporaneity at different scales, from global policies to local interventions. These are complex challenges in which environmental, cultural, social, and economic aspects seamlessly intertwine.

In this logic, the environmental technological project becomes an element of synthesis of the needs and resources of the territories and the local communities. Since the environmental, landscape, and cultural resources are largely non-renewable, they have to be used with awareness and responsibility, going beyond the concept of protection in itself and moving in the direction of the safeguard and transformation in close continuity with the context of reference and in line with the limits imposed by the fragility of the assets themselves. The result is a systemic approach to the issues of sustainable development and resilience, that is realised through the initiation and implementation of innovative processes for the enhancement, integration, regeneration, and inclusion of the environmental, cultural, social, and economic heritage.

In order to support this thesis, the text proposes four focuses.

The first part, “Architecture, city and territory”, deals with the issue of sustainable development and resilience on the scale of urban policies and with respect to the production chains. In particular, the texts deepen the issues of circular economy and green economy applied to metropolitan contexts and minor urban centres, with the creation of eco-efficient neighbourhoods, up to products for the building industry.

The second focus is on “Peri-urban and rural territories”. These transitional contexts between the city and the rural areas have in themselves great potentials in terms of resources and eco-sustainable services. At the same time, these are

particularly sensitive areas because subjected to heavy anthropic pressures, whose valorisation and transformation requires the implementation of large-area strategies, in a district logic.

The third section of the book, “Cultural landscapes”, is focused on the strategic role of culture for sustainable development. In particular, by directing the transformation of the territory in an ecomuseum key, also by giving centrality to the landscape project, it is possible to increase the identity of the places and strengthen the sense of belonging and re-appropriation of the communities.

The fourth part, “Research experiences”, proposes an apparatus of applicative insights and case studies on the following topics: governance and participation required by local development projects; urban regeneration through widespread interventions on built heritage and the redevelopment of public spaces; adaptive reuse; the enhancement of environmental and cultural heritage, also for tourism; technologies to increase the accessibility and resilience of cultural heritage.

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