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*Report delle attività
di ricerca*

**BEYOND
ALL LIMITS**

INTERNATIONAL CONFERENCE
ON SUSTAINABILITY IN ARCHITECTURE,
PLANNING, AND DESIGN
11-12, 13 May_2022

edited by
Claudio Gambardella

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Luigi Vanvitelli

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on Sustainability in Architecture,
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edited by Claudio Gambardella

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Sustainable Recovery and Urban Public Transformation of a Former Military Park

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Abstract

As a result of the pandemic, public places may undergo significant changes, including new spatial planning and major behavioral shifts. Although public space can still be a place for social interaction, it may be more difficult for the unplanned and spontaneous one.

Applied research is described through the project of requalification of an area related to the former military park in Lentate sul Seveso (MB), in Italy. The project proposes the realization of student residences integrated with multifunctional spaces for local communities, emphasizing the importance of structure recovery and sustainable urban transformation. The project's final result is the creation of a space for aggregation as an extension of urban public space, which can enhance the productive resources of the area and its history, looking beyond the local dimension.

Keywords

Participatory actions, disused spaces, regenerative design, sustainable design, public policy.

1. Introduction

Currently, cities are littered with abandoned buildings and disused spaces. This heritage has a lot of potential for sustainable development and it is a viable response to the waste of resources. Understanding cities as a source of sustainability possibilities, promoting active collaboration among diverse stakeholders, integrating different perspectives of knowledge and expertise, and encouraging experimentation with different solutions and approaches are all part of sustainable urban transformation (McCormick et. al. 2013).

“The groundwork for macro-transformations and for great systemic changes is laid by micro-transformations and by local systemic discontinuities” (Manzini, 2006). Design can play a key role in identifying, processing, and applying these micro-transformations. The project of requalification of the area related to the former military park in Lentate sul Seveso (MB) has a significant territorial value both locally and supra-municipally, owing to the strategic location of the structures, which are close to public amenities and connections, such as the Lentate/Camnago railway station and the *Polo Formativo Legno Arredo* school.

The applied research project was conceived by a team of researchers of the Design Department of Politecnico di Milano, in collaboration with the municipality of Lentate sul Seveso, owner of the properties subjected to requalification. The intervention area consists of three parts: Lot A, Lot B, and a complementary area to Lot B [fig. 1].

The project's goal is to allocate Lot B to residential services (for students of the nearby school, teachers, and visiting) using the complementary area for parking, and to address to Lot A the local community-related functions, including a playroom for children, the *house of associations* and a cafe/social club.

The main result of the research was the elaboration of the project proposal at the level of a feasibility study, according to the *National Recovery and Resilience Plan* principles. Building a community is one of the primary outcomes, a challenging goal because of the Covid-19 pandemic, which affected relational behaviour, resulting in significant changes in public space use and design.



Fig 1. Planimetry of the Lots' state of facts in the former military park in Lentate sul Seveso. Lot A includes a building and an outdoor area of 1.258 sqm; Lot B has two buildings and a green area of 3.607 sqm; Complementary area to Lot B measures 4.052 sqm in size with no built structures (Authors' Credits)

2. Participatory actions applied to post-pandemic crisis policy principles

The former military park project takes place in real-world environments, engaging the participation of local administration, the major stakeholder, namely Polo formativo Legno Arredo school, and actors from the corporate sector. These participatory actions matches two primary characteristics of a new methodological approach known as the real-world laboratory (RWL) consisting in a “close relation to the concept of transformation” (commonly connected with sustainability) and the “co-creation of knowledge, which means that the research process includes not only scientific actors but also representatives of politics, the private sector and civil society” (Renn, 2018).

The research included various phases: a preliminary investigation of the site, current state of the buildings, and context of intervention; a field research, also through the interaction with local administration and stakeholders and the definition of potential users profile, determining design solution and developing the most promising project proposal; the validation of it with stakeholders in order to identify a shared structured brief; development of the proposed draft at the level of a feasibility study. The latter phase deals with the services provided and the spatial layout.

The feasibility study is based on a strategy that reflects the fundamental principles introduced by Italy's *National Recovery and Resilience Plan* (PNRR), which encourages the country to become more sustainable, robust, and prepared for the challenges and opportunities that the green and digital transformations will bring (*Italy's Recovery and Resilience Plan*, n.d.). The first of the principles followed is one relating to the Plan's mission 4 (Education and Research), which gives precise measures for enhancing and extending education and training services qualitatively and quantitatively. In particular has been taken into account, concerning the field of design, the student housing adjustment standards, aim to *lighten* the current legal requirements for common spaces per student in favor of better equipped (single) rooms.

According to Honey-Rosés et al. (2020) the year 2020 may define a *before and after* in terms of planning and design. Certainly Covid-19's impact on public space is expected to be transformative, according to a growing consensus (Stevens et. al., 2021).

This also applies to spaces where the boundary between public and private sphere is very blurred,

such as student housing where the pandemic has brought to light the already-existing issues of habitability, both in terms of private and social spaces. Indeed, student housing “can interpret the idea of a cohesive and inclusive city, by interpreting the role of social condenser capable of acting as an attractive force on young and dynamic users, generating a sense of community and belonging, fundamental act for every project of *mending* of the city” (Bellini et al., 2015).

3. Adaptability as a sign of sustainability

Nowadays cities are reshaping their interactions with public spaces, creating new modalities of communication, social engagement, and interaction. The dissolution of some abandoned places, formerly inhabited, leave behind a spatial legacy that must be repurposed. This is the case of the former military park of Lentate, where the strong cultural heritage identity of the buildings and the growing need for repopulation of these uninhabited spaces, are the designing opportunities that drives the research.

According to these premises, the former military park requalification shows a model of sustainable development based on the “concept of regenerative economy” revealing the “high regenerative potential” (Manzini, 2006) of the project itself.

After serving as a military accommodation, the area is now abandoned, with buildings that are partially damaged and uninhabitable, surrounded by shrubs and brambles [fig. 2]. The interventions designed for the buildings contributed to a significant reconfiguration of interior spaces and a radical change of services [fig. 3]. Three levels of hospitality have been defined, each corresponding to a different purpose depending on the type of user and length of stay. A central aspect is the definition of the services, which can be divided into two intersecting macro-categories: residential services, intended for temporary residents, and community services, open to all.

In order to strengthen relationships between the local community and the temporary residents, the green area has been assigned for shared vegetable gardens where people can cultivate together, stay in touch with nature, and organize events. Community gardening promotes civic engagement and neighborhood ownership, which helps to build a constituency for a policy agenda (Twiss et. al., 2011).

The theme of accessibility is given special attention. The intervention, in fact, calls for the implementation of circulation, adequate space's layout and dimension to make all spaces accessible and usable by anyone. This is not only considering the current expectation that the residences will primarily serve students, but also expecting that different services, such as those for elderly people, will be integrated in the future.

Public space's adaptive capacity has proven to be limited, due to pandemic crisis (Stevens et. al. 2021) but extremely important; designing transforming spaces also makes them sustainable. This adaptive strategy allows for the construction of a structure with long-term use potential, even if the current conditions will change.

Integrating historic conservation with environmental concerns has become an essential part of a sustainability agenda (Bullen and Love, 2011), therefore design must respect the place, integrate with it, listen to its *genius loci* (Norberg-Schulz, 1979), it must interpret and be compatible with the place, and increase its sense of belonging, creating meaningful places to help humans to live.



Fig 2. Pictures of the state of the buildings of the former military park in Lentate sul Seveso (Authors' Credits)



Fig 3. Project visualizations: to the left a view of the community vegetable garden, to the right a view of a double room and a shared kitchen (Authors' Credits)

4. Conclusion

The project of requalification of the former military park was designed *in the city for the city*, establishing connections with the territory. A project aimed at enhancing the territory's resources and history, as well as collaborating in the creation of a shared social well-being. "Public space can be understood as a pause in the city's choreography, which must be able to take care of other requirements besides living, in which the individual and the collective dimension must somehow coexist" (Crespi, 2016).

This paper attempts to highlight the strategic role of design in responding to a new way of life in a post-pandemic society. Aiming at enabling educational and economic development, the expected results of the project are to contribute to the definition of new solutions, in terms of service and spatial design, for disused spaces. Moreover, the design strategy nature includes participatory actions, engagement of local authorities, promoting an exchange of actually enforceable solutions.

While this exchange may limit research innovation by clashing with the project's applicability, it also "has the advantage of being much more effective to enable strategic decisions" (Meroni et. al., 2018), identifying realistic features that can be replicated in a variety of similar contexts.

The strength of former military park requalification lies in the possibility of developing new forms of social and entrepreneurial collaboration by enhancing a process that sees innovation *decentralized* from large urban centers to smaller contexts, which should take the lead role in creating a more sustainable future.

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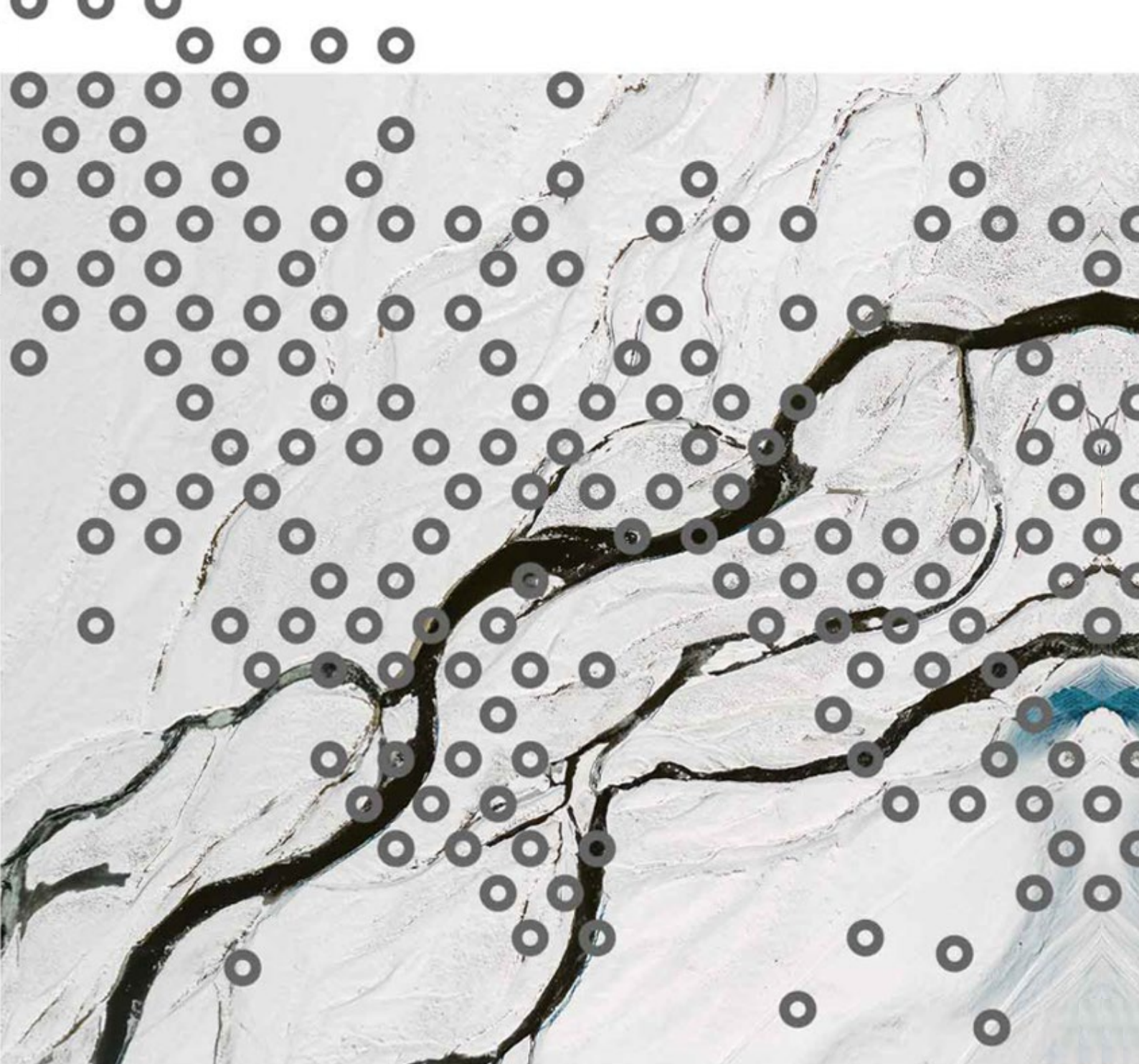
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