

From Lounge Durée to Innovation

Regenerating Alpine Territories through the Adaptive Reuse as a Strategy for Sustainability and the Rediscovery of Everyday Life Heritage

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Abstract

The practice of adaptive reuse in architecture significantly predates its theorization. Indeed, the entire history of architecture is traversed by countless examples of recovery and reuse, involving radical transformations of pre-existing structures and the built environment. These practices have always been so deeply implicit in the very act of building that they did not require explicit definition or theorizations, being profoundly incorporated into the *longue durée* of architecture (after all, as Christopher Wren reminded us, “*architecture aims at eternity*”). It's only recently that a more sensitive and mature understanding of the complex concept of sustainability (environmental, social, and economic) has driven research towards reuse as an alternative to new construction. Furthermore, in alignment with modernity's pervasive trend towards disciplinary "specialization", we have felt the need to assign a precise definition to these practices, appending the adjective 'adaptive' to the noun 'reuse'. This clarifies a methodological approach ambiguously suspended between innovation and conservation, both equally necessary processes. This contribution aims to illustrate a recent 'research by design' experience conducted by the author in the Orobic Alps, one of the many sites of the 'grey heritage' of the widespread everyday life in 'inner and alpine Italy'. Here, the stratified architectural and landscape heritage, marked by the long-standing interaction between communities and the territory, has become a driving force for recovery founded precisely on the practice of adaptive reuse. Recent projects for the regeneration of the mining system and several iconic buildings demonstrate the potential for revitalization based on active community participation and the reactivation of local economies. The case of Dossena prompts a broader reflection on how to rewrite current policies and instruments to include forms of heritage that are currently invisible to major institutional policies but are central to the future of alpine territories.

Keywords: Inner Areas, Orobic Alps, Dossena

Grey Heritage and Architectural Project. From the Margins to the Core

The inner areas and the towns of the Alpine and mountainous regions in general, today represent one of the most significant and critical frontiers in the debate on 'grey heritage'. This category can be seen to include both legally protected areas that have become, or been rendered, marginal through neglect, and the assets, artefacts, or complexes that are not directly protected (or fall outside the boundaries of regulation and preservation) but

nonetheless carry significant potential for cultural and identity values.

Numerically preponderant, these assets struggle to be fully recognized, partly due to their distinguishing characteristics of ordinariness. Among these, we can list many structures of common, everyday use, or specialized sites and complexes which are now fatefully decommissioned but are potentially susceptible to novel or renewed alternative uses that are broader and more inclusive.

In recent years, interest and awareness concerning these contexts have been renewed, owing to numerous studies and research, but above all, thanks to restoration and regeneration projects that have attempted to reverse the trend established during the second half of the twentieth century, when "Inner Italy" underwent a progressive drift towards marginalization with respect to the better-known and more densely populated conurbations.

The demographic decline, the drop in employment, and the reduction of essential services, combined with the ineffectiveness (or sometimes the absence) of adequate protective measures, have subsequently had tangible repercussions on a great many areas, including certainly the territory, the environment and the landscape, the local economy, and the socio-cultural dimension. In many locations across the mountain districts, the decommissioning of the agro-silvo-pastoral sector itself—both in favor of more profitable activities and linked to demographic contraction dynamics or new settlement geographies—has profoundly affected the image and physiognomy of these places. The abandonment of woods and pastures reflects a sense of neglect and is always accompanied, sooner or later, by the risk of hydrogeological instability and potential dangers to the safety of those settlements and inhabitants that persist, on the local and neighborhood economy, and on the cultural tradition at risk of oblivion.

This contribution proposes a reflection on the case of Dossena, a small center between the *Val Brembana* and the *Val Seriana* which, like many municipalities in the Orobian district, preserves a stratified architectural and landscape heritage, marked by the long interaction between the community and its territory. Here, recent projects for the recovery of the decommissioned mining system and of certain identity-rich buildings, or the experiential tourism initiatives realized or currently underway¹, demonstrate the possibility of a recovery founded on the active participation of the community and the re-activation of local economies that were dormant but remain latent and rich in potential.

The integrated analysis of territorial policies and emerging design practices highlights how the valorizations of these assets necessarily require a paradigm shift: no longer merely protection imposed from above, but a widespread care capable of recognizing the value of the ordinary, the everyday, and the fragile.

The example of Dossena, in this sense, prompts a wider reflection on how it is possible to rewrite the tools dedicated to preservation and valorization, to ultimately include precisely these 'grey heritage' assets that are invisible to major institutional policies but are central to the future development of the Alpine and mountainous territories: an example rather than a model, since the principle of a "case-by-case" approach can never be derogated. Ultimately, it is a matter of rediscovering that delicate balance between the act of preservation and the possibility of valorization: actions that are equally necessary and legitimate, the imbalance of which, however, risks imposing different but equally uncompromising visions.

The epistemological foundation of this reflection lies in the assumption that it should be the project that guides the regulatory precept, and not vice versa, as the intrinsic value of

an architectural artefact is attributed by the project itself and is not established a priori by regulatory codification. This is also because regulation is neither a sufficient condition to prevent the gradual decay of a building or complex, nor, let alone to initiate processes of restoration and regeneration. And this is primarily because regulation has its own intrinsic inertia: there is an evident discrepancy between the time of reality, contingency, and contemporaneity, and the time of regulation, which is physiologically unable to keep pace with the concrete issues of everyday life and the challenges of the present. From this perspective, the project exercises the faculty of critical and selective interpretation, redefining the object of observation and the very ways of looking at it, with a necessarily tendential gaze.

Therefore, it is the design act that constitutes the heritage, in an active operation of recognition and attribution of meaning and value: if we agree on this 'heritage theorem' we must also agree on the consequent, implicit affirmation that heritage is always an invention, a rewriting.

Research is/and Project

This contribution illustrates a recent and ongoing long-term research project, conducted in various ways within the context of the Orobian Alps: a truly 'research by design' methodology since, in some cases, the final outcome has also become an architectural work, resulting in concrete actions and consequences regarding the physiognomy of the places and the living conditions of an entire community, however numerically small. After all, the very premise of the research was also to measure the aptitude of the architectural project for transforming heritage sites (grey or otherwise), beyond mere conservation, towards the full recovery of both the physical and material dimension of places newly available for alternative community uses, and the immaterial dimension, connected to the local memory of those same places.

Therefore, this was methodological research, carried out through the architectural project, understood as a scientific product oriented towards practice and didactics that is, towards the possibility of defining a philosophy and its very transmission. This experience was conducted over approximately six years, from 2018 to 2024: a timeframe broad enough for the maturation of an idea and equally sufficient for verifying the aptitude of the working method and its outcomes, beyond the intrinsic formal quality of the proposals elaborated. Revisiting this experience today and re-reading its outcomes, even at a very short critical distance from its execution, allows for a more general reflection on a dual level of investigation. On the one hand, it is directed at the specificity of the context, the occasion, and its final outcome—perhaps the least interesting aspect, particularly in relation to the objectives of this conference—and on the other hand, it is oriented towards the character of generality that this experience can constitute: the recognition of a working method from which a «theory of design as a moment of a theory of architecture»² can also be derived. This is, ultimately, a plausible and legitimate example of how research should (or better yet, could) be conducted through the architectural project, especially at a time when we are noting «the formation of architecture academics who are distant from design practice.»³

Indeed, I am firmly convinced that research in architecture must consist of giving continuity to a concept through the practice of design, which is a more concise way (though certainly less poetic) of stating that «I believe the primary principle of a theory is obstinacy regarding

certain themes, and that it is characteristic of artists, and architects in particular, to focus on a central theme, to make a choice within architecture, and to constantly seek to solve that same problem. This obstinacy is also the most evident sign of the validity and the autobiographical consistency of an artist.»⁴

Without any pretense of arrogance, I therefore believe that the experience gained in the field at Dossena, as an architect, can be considered at least useful for the purposes of this collateral debate on the meaning and role of the project as a product of scientific research.



Fig. 1. The *Roccolo alla Corna Bianca* and the former *Tiro a Volo* in Dossena (photo by F. Tricarico)

The case of Dossena in the Orobic Alps

Assuming, therefore, the architectural project as a tool for socio-cultural reactivation, we experimented with the creation of local value through the recovery of places that had fatally fallen outside the sphere of common consideration, forgotten, abandoned, or dilapidated, yet rich in potential.

In relation to the themes of this conference, the choice fell upon the theory derived from recent experiences carried out in Dossena, which was identified as a notable site for observing best practices, a *pars per toto* of the Orobic Alps and of all those territories inherently characterized by intrinsic fragilities, such as mountainous and Alpine areas in general, that currently suffer from their ontological and existential physical isolation from more structured and attractive urban conurbations.

Dossena is a small municipality located almost at the intersection between the *Val Brembana* and the *Val Seriana*, at the foot of *Monte Vaccaleggio*, which historically represented the mountain pasture for the surrounding belt of numerous rural settlements established along its slopes—a veritable high-altitude ‘square’ for the valleys. Until the recent past, it held a role of absolute importance in the extensive mining and extraction system of this area. Two distinct sites are indeed located on the opposite slopes encompassing the built-up area: the modern *Paglio-Pignolino* complex (with fluorite deposits, extracted until the early 1980s) and

the older *Pedrozzio-Vaccareggio* complex (dedicated to the extraction of calamine and zinc), with evidence certainly dating back to the Middle Ages and perhaps even Roman times. To underscore the historical and economic importance of these places, it should be considered that even Leonardo da Vinci produced a detailed survey of the Orobic district around 1509—perhaps the first scientific representation—commissioned by the French Governor of Milan, Charles d’Amboise, almost certainly instrumental to the exploitation of the resources available here. This survey meticulously focuses on the relationship between the settlements and the hamlets in relation to natural characteristics (the lie and orientation of the land, the hydrographic system) and the resultant anthropic features, most notably roads and pathways. It was precisely the system of territorial routes—of which the *Via Mercatorum* represents a critical axis for long-distance connections with *Valtellina* and Northern Europe—that supported the definition of a commercial and exchange economy, based on the surpluses of agro-silvo-pastoral and extraction activities. These sectors contributed to the prosperity of Dossena over the centuries, and were significantly downscaled (or entirely phased out, at least concerning mining) only during the modern era. Analysis of data relating to population settlement dynamics highlights constant and sustained growth from the post-unification era until the 1920s: almost certainly linked to mining exploitation and production, as a sharp contraction was witnessed precisely during the period of the definitive decommissioning of all extractive activities. This decline was only partially contained by the increase in nascent tourism, which developed and grew partly as a reflection of much better-known and more easily accessible locations, such as nearby *San Pellegrino*. In the early modern era, demographic growth was supported by the development of the built environment which, in a period closer to us, extended far beyond real housing needs, also to meet the growing demand for second homes serving the burgeoning tourism and accommodation sector. This building development also deeply affected the physiognomy of the places, contributing to the dispersion of settlements across the municipal territory, further supported by an aesthetic contaminated by urban construction characteristics and serial building, transferred here from the plains without any mediation.

In the socio-economic sphere, the general demographic decline of the second half of the twentieth century, the decommissioning of the extractive sector, the downscaling of agro-silvo-pastoral activity, and the decline of tourism have decisively contributed to the drop in employment and the reduction of essential services, to the advantage of the more attractive valley floor. This has had tangible repercussions not only on the economy but also on the environment, the landscape, and the socio-cultural dimension.

The Municipal Administration of Dossena—which joined the European network *Alliance in the Alps. The community network* in 2019—is promoting numerous interventions and projects aimed at the recovery of its agricultural, productive, landscape, and architectural heritage. In 2019 the *Gruppo Giovani* developed its own futuristic vision for Dossena, contained within the *Local Territorial Development Plan 2019-2024*, designed to relaunch the micro-fabric of the local economy, guarantee a better quality of life for residents, and promote and develop tourism and attractiveness. Thanks to the support of a multidisciplinary working group⁵ and the contribution of tenders and funding⁶, this vision has become a concrete and coordinated set of actions, subject to a Program Agreement with *Regione Lombardia*, from which numerous projects have derived, all applied at a dual level of depth. While on

the one hand, they immediately address the valorization of environmental, landscape, and architectural qualities, on the other hand, they contribute to the creation of employment, relaunching work and encouraging young people and families to remain in the area, with their genuine inclusion towards a renewed care of the environment.

The Roccolo at the Corna Bianca

The project for *Roccolo alla Corna Bianca* and the former *Tiro a Volo* is integrated within a broad framework of programmatic actions supported in recent years by Dossena Municipality for the regeneration of its territory. The proposal aimed to recover the mnemonic and evocative value of this place, alongside its physical dimension, to restore it to active use for the community.

The project was carried out in full respect of the forms sedimented in the landscape, not through mere conservative spirit but as a genuine opportunity (also according to a high standard of sustainability) already implicitly granted by the foundational characteristics of this site: wood; the clearing; a small structure at the edge of a rampart extending towards the valley. The first action of the project was precisely the recognition of these characteristics: it is around them that the modalities of intervention and the program were defined, investigating the plastic dimension of the ground and its relationship with the natural landscape; liberating the clearing from the small, incoherently built volumes at the edge of the wood and enhancing its void as a place for social interaction; removing the later and incoherent additions that had accumulated around the *Roccolo* over time, linked to superseded functional and usage contingencies; and valorizing the 'theatrical' character of the outlook granted at the confluence of the valleys, transforming the natural slope of the former *Tiro a Volo* into stepped seating that follows the lie of the land.

Although the works to be carried out on the *Roccolo* are subject to prior authorization from the local Superintendency⁷, the entire area—long uninhabited and in a state of abandonment and neglect—is attributable to the category of 'grey heritage', precisely because it is on the verge of oblivion. Despite long-term abandonment, it is a notable location in profound physical and visual relations to the landscape, near the built-up area and, even more so, adjacent to the recently inaugurated *Ponte nel Sole*.⁸

Once connected to an exclusive and elitist use such as hunting and subsequently converted to ballistics activity—practices still particularly widespread and felt in these territories—it is now restored to the memory and use of the community that inhabits it, which can continue to identify with it. It is a 'Mountain Theatre' open onto the valley, a new infrastructure for performances and events strongly characterized by continuous dialectical interaction with the Alpine landscape and environment, perfectly inserted into the natural orography, which enhances the substructure character of the stage projected towards the valley.

In this sense, the experience of *Laboratorio Dossena* represents an open project, a synergistic system of networked interventions and actions, actively aimed at the recovery of long-awaited sites—true "grey heritage"—and which intends to carry out this task with a vision of genuine sustainability, through the full involvement of the community that inhabits these very places.

Notes

1. *Conservative Restoration and Regeneration of the Former Town Hall*, Arch. Lucia Oberti, Eng. Moreno Chiappa; *Design of the MUPA - Landscape Museum*, WERK studio/Arch. Valerio Tolve, Arch. Mirko Noris; *Conservative Renovation and Energy Efficiency Upgrading of the Pro-Loco*, WERK studio/Arch. Mirko Noris/Arch. Valerio Tolve, Eng. Cesare Pezzoli, with consultation from DAD-Polito (Prof. Arch. A. De Rossi, Arch. L. Mascino); *#VisitDossena Multimedia Info Point*, WERK studio/Arch. Valerio Tolve, Arch. Mirko Noris; *Restoration of Roccolo in Corna Bianca and forme Tiro a Volo*, WERK studio/Arch. Valerio Tolve, Arch. Mirko Noris, Eng. Moreno Chiappa, Eng. Cesare Pezzoli, with consultation from DAD-Polito (Prof. Arch. A. De Rossi, Arch. L. Mascino); *'Ponte nel Sole'*, Eng. Alberto Bettini, Francesco Belmondo/BBE s.r.l.; *Creation of Footpaths, Cycle-Pedestrian Routes, and E-Bike Trails; New Forestry Consortium and Designation of the Val Parina Wilderness Area*, Nicola Gallinaro/ForST studio; *Conservation and Reuse of the Outbuildings at the Former Paglio-Pignolino Mines*, Arch. Gualtiero Oberti (Architectural Design), WERK studio/Arch. Mirko Noris, Arch. Valerio Tolve (Construction Management); *Enhancement Interventions for the Mining Park of the Former Paglio-Pignolino Mines*, WERK studio/Arch. Valerio Tolve, Arch. Mirko Noris (Design and Construction Management for the furnishing and fitting-out works of the external buildings and the multipurpose room at the Sandri Level), Nicola Gallinaro/ForST studio (Designer and Construction Management for the forestry works) and Gian Marco Orlandi/Spada Associated Studio (Designer and Construction Management for the geological works and the fitting-out of the Speleological Adventure Park); *New Nature Trail and Inclusive Garden #Well.be.in(g).Nature*, WERK studio/Arch. Valerio Tolve, Arch. Mirko Noris; *Monte Ortighera Information Centre – Agri-District of Ancient Biodiversity*, WERK studio/Arch. Valerio Tolve, Arch. Mirko Noris.
2. Rossi, Aldo. *Architettura per i musei*, in *Teorie della progettazione architettonica*, ed. Aa.Vv., introduction by G. Samonà, Bari: Dedalo Libri, 1968; now in Aldo Rossi, *Scritti scelti sull'architettura e sulla città, 1956-1972*, ed. R. Bonicalzi, Milan: Clup, 1984.
3. Ferlenga, Alberto. *Valutare e promuovere*, in *La ricerca in architettura. Temi di Discussione*, ed. C. Bianchetti, Siracusa: LetteraVentidue, 2018: "But even in this case, a specific Italian characteristic is undermined at its core: that of a cultured lecturer-architect, who was a typical figure in our universities and an object of emulation during the rare moments, in contemporary times, when Italian Architecture held an international role."
4. Rossi, Aldo. *Architettura per i musei*, *op. cit.*
5. The Scientific Technical Committee was chaired by the Mayor Fabio Bonzi and Tourism Councillor Walter Balicco with the participation of the Youth Group – authors of the PSL – as well as Federica Bogni (social services), Lucio Brignoli and Matteo Orian (management consultants), Stefania Cabassi (geology), Nicola Gallinaro (forestry science), Elisabetta Lanfranchi (communication), and Valerio Tolve (architecture and landscape).
6. The implementation of the works was supported by contributions from the *Bellezza@Italia* program, tenders from the *GAL Valle Brembana 2020*, and funds from the *Regione Lombardia*.
7. The *Roccolo*, owned by the Municipality of Dossena, is over seventy years old; therefore, prior to the execution of the works, authorisation from the competent Superintendency must be acquired, pursuant to Art. 21 c. 4 of Legislative Decree 42/2004 "Codice dei beni culturali e del paesaggio".
8. At 505 m long, the *Ponte nel Sole* is the longest discontinuous span Tibetan bridge without lateral tie-rods in the world, suspended over 120 m high above a small valley occupied by an active gypsum quarry.

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