

Adaptive Reuse for a Children's City

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Abstract

The aim of the design research presented is to contribute to the debate on some very topical issues concerning the regeneration of the contemporary city: what adaptive reuse strategies can be used to adapt urban spaces to vulnerable user groups such as children, promoting a child-friendly city and the right to the city for all? How can public structures lacking special architectural qualities, but representing a powerful opportunity for urban regeneration due to their widespread presence in the territory, be reactivated? The project to transform the spaces attached to a school provides an opportunity to experiment with intervention strategies on these two issues. The project is part of an urban regeneration program approved by the Puglia Region that involves a large portion of the municipal territory of the small coastal town of Polignano a Mare. The conversion of the former school caretaker's house into a C.A.S.A. dei bambini (Centre for Scholastic and Artistic Activities) is consistent with the overall strategy of this intervention program, which aims to create a child-friendly city, welcoming towards future generations. The intervention also includes the transformation of the former school sports field, previously used as a parking lot reserved for teachers, into a new public square integrated into the system of urban spaces, with the aim of reconnecting and enhancing this place with great potential. The conversion of the small building and the adjacent public space therefore implies the opening of these structures to the city and their promotion as a point of reference for the school and citizen community.

Keywords: School Space, Urban Regeneration, Urban Reference

Introduction

The intervention for the recovery and transformation of several ancillary spaces within a school complex in Puglia offers an opportunity to articulate a reflection on adaptive reuse strategies for public buildings of limited architectural distinction. Such structures, though often devoid of formal or historical value, may nonetheless become catalysts for urban regeneration and arenas for design experimentation across spatial, figurative, and technological dimensions¹. This represents a critical challenge for contemporary architectural practice, bearing a dual significance. On one level, given the vast corpus of post-war public buildings—frequently marked by neglect and decay in the peripheral or even semi-central areas of our cities—intervening in these contexts entails a sustainable approach to the requalification of urban fabric. On another level, drawing on Bernardo Secchi's assertion, already in 1984, that “the city in which we will live is already entirely

built,” the principle of re-adapting the existing built environment emerges as a central concern for spatial disciplines. It delineates a new design paradigm that transcends the mere formal or functional reconfiguration of the existing, positing instead an interpretive and projective engagement with the city as a living palimpsest.

Context and Urban Regeneration Strategy

The building is located within the urban area of Polignano a Mare, a medium-sized town on the Adriatic coast of Puglia. Specifically, the intervention area lies within a part of the city made up of residential districts developed to the south-east of both the historic and the more recent settlements, in the strip of land between the coastline and the 16 State Road. The transformation of this urban sector began in the 1970s, in the absence of clear planning guidelines, resulting in a context undersized in terms of urban standards.

The intervention area is situated within the lot of the “Sarnelli – De Donato – Rodari” Comprehensive Institute and extends to some of the contiguous public areas. From the perspective of urban planning regulations, the site falls within Zone S2 of the current *Piano Regolatore Generale*² (Master Plan), corresponding to the areas designated, according to the Ministerial Decree of 2 April 1968, no. 1444, as “urban standards.” There are no particular sectoral constraints on the site (landscape or hydrogeological), but it is included within an area classified as “Urban Regeneration,” as identified in 2016 by the *Documento Programmatico di Rigenerazione Urbana* (DPRU – Urban Regeneration Programmatic Document) of the Municipality³.

The general regeneration objectives set out in the DPRU include urban renewal, social inclusion and economic development, the integration of sectoral policies and interdisciplinary knowledge, the enhancement of cultural and environmental resources, and the rethinking of public spaces.

The regeneration area to which the site belongs (1.b – *North-Eastern Coastal Urban Area*) comprises the open spaces that unfold along the *Lungomare Cristoforo Colombo* and the areas immediately behind it. These unresolved spaces represent the residual areas between two settlement systems: the first, to the east, formed by a contemporary expansion stratified over the past fifty years, whose settlement patterns result from the overlapping of various urban plans since the 1960s and are now exhausted in their development potential; the second, to the west, consisting of the orthogonal grid of the eighteenth–nineteenth-century expansion, highly compact, homogeneous, and fully saturated.

The regeneration of Area 1.b is primarily focused on the public spaces within the “Parco del Lauro” zone of the eastern settlement, partially coinciding and merging with the seafront promenade built over the past fifteen years—from the large parking area near the Pino Pascali Museum to the wide open space of Largo Ardito, which marks the threshold of the historic center. The regeneration strategy aims to reconnect the open and coastal spaces with the more internal voids enclosed within the urban fabric, with the dual objective of promoting the recovery of the existing built environment while simultaneously enhancing and reclaiming the latent value of this distinctive coastal urban fringe.

Our project is part of a broader urban regeneration strategy aligned with the general objectives of the DPRU: the *SISUS – Integrated Sustainable Urban Development Strategy*, approved in 2017 and financed by the Apulia Region. This program envisages a series of interventions across a wide portion of the municipal territory.

In 2017, the Municipality of Polignano proposed a territorial strategy—integrated with the neighboring municipalities of Conversano and Rutigliano—thus sharing the overarching vision and core principles of regeneration. The cornerstones jointly adopted by the three administrations are based on the integration of different types of action: 1) Spatial actions, through the requalification of the urban territory, enhancing and securing open spaces while promoting sustainable mobility systems; 2) Social actions, by increasing urban services in favor of the most disadvantaged groups, particularly youth; 3) Economic actions, by encouraging the diversification of local activities.

Following participatory processes involving local citizens, the selected area for funding was identified as Area 1.b, and specifically the school complex “Istituto Sarnelli – De Donato, IPSSAR”, conceived as a central node for the interventions planned in the surrounding areas (Starsa Vecchia – Sant’Antonio, Parco del Lauro, up to the boundary with the State Road). All these spaces share phenomena of architectural decay, social and economic hardship, and the degradation of public areas.

Overall, the types of interventions planned within the Polignano area include: i) Energy efficiency upgrades of the structures annexed to the school complex Redevelopment and extension of the network of pedestrian and cycling paths connecting public cultural buildings with the system of equipped green spaces, enhancing the spatial polarities of the area; ii) measures to increase the permeability of public ground surfaces through the introduction of tree species and permeable pavements at hydrogeologically sensitive points; iii) mitigation of the visual and olfactory impact of the Apulian Aqueduct wastewater treatment plant; iv) renovation of the former caretaker’s house and its reuse for social purposes, such as workshops and community spaces for disadvantaged adolescents, together with the restitution of the adjacent area - currently a parking lot - to public use.

The general objectives pursued by this strategy, in line with the regional funding guidelines, include soil consumption reduction, water conservation, energy efficiency, and the improvement of residents’ living conditions.

The strategy proposed by the Municipality, entitled “*The City of Children*”, thus aims to create a child-friendly city—an urban environment conceived to welcome present and future generations, particularly targeting the age group between 8 and 16 years.

The Project Area

The project discussed in this paper concerns the school complex of the “Sarnelli – De Donato – Rodari” Comprehensive Institute. The complex includes, in addition to the buildings devoted to teaching activities, an auditorium, a covered gymnasium with a volleyball court, and a large external area. The latter derives from the decommissioning of the former outdoor sports field—non-regulatory and with a non-permeable surface—currently used as a parking area for teaching staff and for users of the complex’s facilities. The site also includes a former single-family dwelling, once inhabited by the school’s caretaker.

The school is the subject of two main interventions: the conversion of the former caretaker’s house into the C.A.S.A. dei Bambini (Center for Scholastic and Artistic Activities), and the transformation of the former sports field into a new public square. Both actions are conceived within a broader vision of opening the school’s grounds to the city and fostering integration between educational spaces and the urban environment.

The house, in particular, occupies an exceptional position within the urban context: a

detached villa of approximately 100 square meters, free on all sides, slightly elevated from ground level, and surrounded by a small garden dominated by a mature fig tree (*Ficus*). Built between the late 1980s and early 1990s⁴, concurrently with the school building, the villa has been abandoned for about fifteen years and has repeatedly suffered acts of vandalism,



Fig. 1. The former school caretaker's house (Mariella Annese, 2018)

prompting the municipal administration to seal it completely. Constructed with a reinforced concrete frame structure, the building shows evident cracking due to both physical deterioration and structural weaknesses, posing a serious safety risk for the numerous students attending the complex. Today, the property represents an unsafe and degraded space, around which adolescent discomfort manifests through inappropriate and, at times, borderline illegal behaviors. The adjacent open area, also included in the project, corresponds to the school courtyard. It currently serves as a parking lot for teachers and, at the same time—often in coexistence with vehicles—as an outdoor space for students' gymnastic activities. Outside school hours, the site is largely uninhabited, except for users of the gymnasium, who likewise employ it for parking. Unlike the school building itself, which has undergone various maintenance works, this outdoor area has never been renovated and is in a very poor state of conservation. Insufficient public lighting during evening and nighttime hours contributes to a widespread perception of insecurity. The lack of pedestrian and vehicular traffic control, particularly during school entry and exit times, represents an additional critical issue. The presence of fencing further isolates and marginalizes the site from the surrounding urban context. Overall, the spaces described above represent underused resources which, through the process of urban regeneration, are reactivated as public spaces and community services—particularly dedicated to children. In general, the site possesses significant potential to become a point of reference for both the student community and local citizens, as the project envisions integrating this facility with a broader network of public spaces.

The Design Vision

The first action of the project was to remove the fences by enclosing the school grounds, allowing the community to freely access and use these spaces. At the same time, the open areas were enhanced, most notably the large *Ficus* tree, which becomes a key element and a defining presence within the new public space layout. The site plan highlights the new system of public spaces through which the existing caretaker's house is reconnected with the urban fabric, thereby assuming the role of a new local focal point. The area surrounding the former caretaker's house—opened to the city and redesigned as a public space—will also benefit from the proximity of the newly created square. More specifically: to the south, at the main entrance of the new center, a large raised pedestrian parterre ensures safe crossing of the main street, simultaneously calming vehicular traffic and signaling the presence of the new facility; to the north, a new pedestrian path connects the site to the parallel street; to the west, the existing sidewalk is redesigned and improved; to the east, the project introduces a large public square to replace the long-abandoned sports field. As for the existing building, it is transformed into a cultural and recreational center for children and teenagers — the *C.A.S.A. dei Bambini* (Center for Scholastic and Artistic Activities). The project envisions a flexible and adaptable interior space, capable of being reorganized according to educational needs and the initiative of the children themselves, who become active agents in shaping their own environment. Service spaces and offices are strategically concentrated in two closed peripheral zones, thus creating one large open area for educational and recreational activities. This main space can be divided by movable panels into two separate zones of different sizes, located at opposite corners, to accommodate different functions. Each area receives abundant natural light through large glazed openings

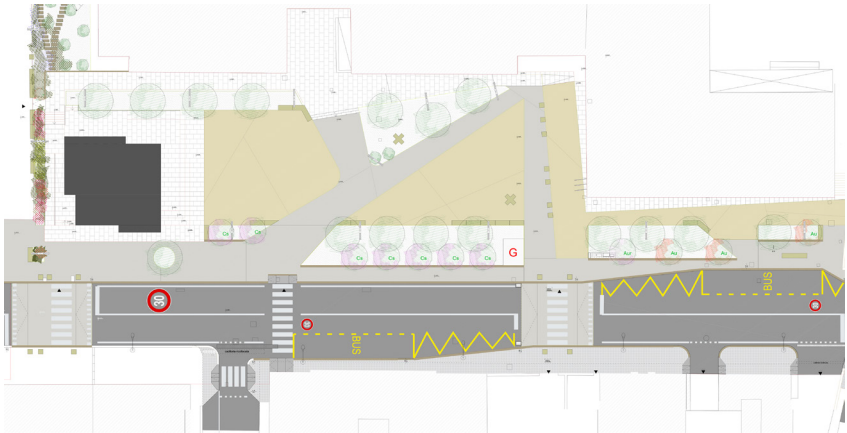


Fig. 2. The floor plan with the general layout (Factory Architettura, 2021)

and is equipped with storage systems for teaching materials and furniture. Furniture plays a key role in defining this flexible spatial configuration. The project uses modular triangular tables that can be combined to form large communal tables or separated into small group settings. These elements can also be stacked to create small bleachers for performances or theatrical activities. Tables and seats can be stored within built-in cabinets or under

benches, allowing the complete clearing of the space for unstructured activities. The space is therefore non-prescriptive, designed to accommodate a variety of uses — workshops, theater, music, dance, and other artistic activities. These are conceived as complementary spaces to the school, expanding the range of educational and cultural opportunities for children and adolescents in smaller towns, where such facilities are often lacking. On the architectural level, the main façade facing the street has been reinterpreted through a careful design operation that transforms the existing building into a piece of contemporary architecture within the logic of *adaptive reuse*. The intervention introduces a limited but decisive set of elements, intended on one hand to give the building a domestic and familiar tone (appropriate to its small scale and its new social function), and on the other hand to introduce a degree of abstraction: the use of white plaster and Trani stone for the base, evoking the local residential tradition; the opening of two large glazed windows on opposite façades; the addition of two projecting canopies that protect these openings; the abstraction

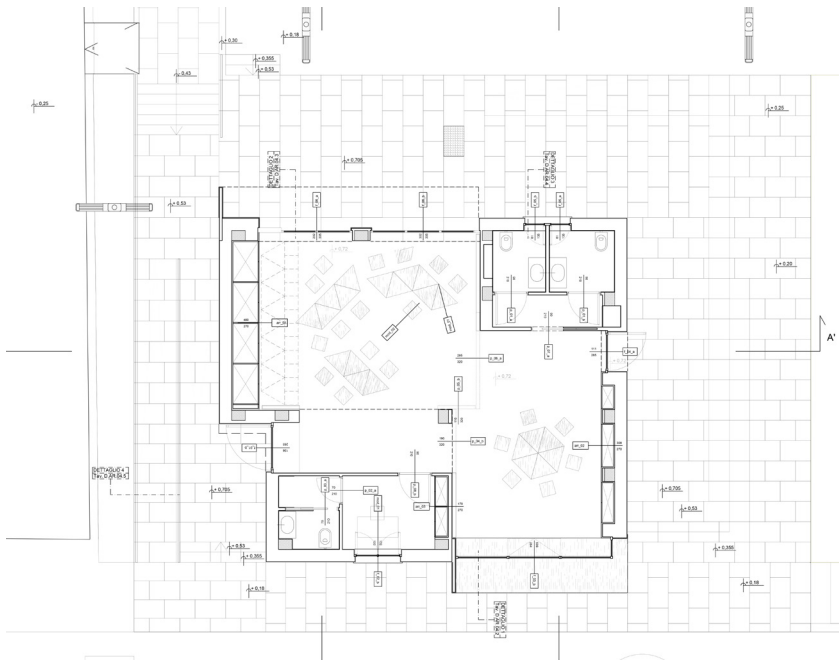


Fig. 3. Project plan with furnishings (Factory Architettura, 2021)

of the overall volume through the white plaster finish; a cantilevered canopy in the shape of a “C”, painted in a vivid color, acting as a recognizable sign for the new community center. The outdoor space is also conceived as a flexible, obstacle-free environment, accessible to all and suitable for a variety of uses—both school-related and open to the wider community. Architecturally characterized yet functionally open-ended, the exterior acts as a true extension of the didactic space, with furniture designed to be easily moved outdoors for open-air activities. These activities may extend into the planted garden to the west of the

building, or into the new square to the east, which serves as a gathering place for students, a play area, or a public stage adjacent to the stepped podium on which the building stands, resolving the initial difference in height between the site and the street level. Seating areas and planted zones are concentrated along the edges and pathways, enhancing continuity and maximizing the usable open space.

Conclusions

In conclusion, this project demonstrates how abandoned and decaying public structures can become productive fields for experimentation—spaces in which new modes of use and social practices reimagine, in contemporary terms, the collective dimension of inhabiting and being together. At the same time, working with buildings and spaces of limited architectural quality opens up opportunities for a form of design research on architectural language itself: a process that requires engaging with the existing fabric through subtle operations of cladding and grafting. In doing so, the project not only rehabilitates a fragment of the built environment but also redefines the act of reuse as a critical and creative tool for the regeneration of the city.



Fig. 4. The square under construction with the school in the background (Mariella Annese, 2025)



Fig. 5. The square under construction with the C.A.S.A. dei bambini in the background (Mariella Annese, 2025)

Notes

The design experience was carried out by the research group *Factory Architettura*, which is particularly active in the fields of public space and urban regeneration. According to the General Regulatory Plan (PRG), Article 18 – *Areas for Standard Secondary Urbanization*, secondary urbanization works are those defined in Article 3 of Ministerial Decree No. 1444 of April 2, 1968. These works can be understood as facilities indispensable to neighborhood life and directly serving it, such as schools, churches, markets, clinics, and community centers. The designated areas are therefore intended for the development of neighborhood services and green spaces associated with residential areas. Pursuant to Regional Law No. 21/2008, Norms on Urban Regeneration, the project falls within the framework of interventions aimed at the revitalization and reuse of existing urban fabrics. It was not possible to retrieve historical information on the buildings involved in the intervention, which appear to have been constructed contemporaneously with the surrounding residential neighborhood.

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