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Learning spaces as urban places: issues and perspectives

Introduction

Cristina Renzoni and Paola Savoldi

- ¹ Community services and facility spaces were largely designed and built over the last century, during the *golden age* of welfare state politics in Europe. They have helped shape and structure everyday spaces within different contexts, including urban and metropolitan areas through extension projects, public and private initiatives, and widespread interventions in small cities and rural areas. These everyday infrastructures¹ are articulated in schools, sports facilities, civic centers, libraries, and playgrounds²: built and open spaces, mainly public (but not only), whose values are strictly entangled with the rights of citizenship and social equality.³
- ² The collective infrastructures are the results of a plurality of public policies, social demands, and design cultures that, today, shape a strategic legacy. They are a variety of local specificities and recurring features (in Europe and elsewhere) in spatial and social organization planning models, in relations with the surroundings, typologies, architectural solutions, and construction techniques.⁴ They represent a material infrastructure of urban welfare and public efforts in responding to collective needs and social rights through time.⁵ Over time, this social infrastructure has become a set of elements to be maintained, renovated, or transformed: the focus concerned mainly the space within schools and their appurtenances. More rarely, schools and educational services have been considered an integrated part of a more comprehensive project within their territory.
- ³ The centrality of these facilities (and their spaces) emerged with renewed evidence in recent years, especially with the health crisis in Europe since 2020s, enhancing their actual and potential roles. In particular, education has been at the core of the public debate, together with the complex processes of adaptations and transformations resulting from limits inflicted by the pandemic. The spotlight shone on school buildings, illuminating their surroundings too⁶.

- ⁴ Spaces such as classrooms, corridors, and schoolyards have been measured and adapted to respond to the pandemic emergency. At the same time, public spaces connected to the school buildings and the proximity of other facilities shared an operative discussion on the role of learning processes inside and outside school, involving the surroundings and the neighborhoods. From this perspective, the pandemic opened (again) the public discourse on the relationship between the school and the city, as far as they both play an educational role as places of collective and environmental learning experiences⁷ The sanitary emergency has made the urban potential of learning spaces even more apparent than in ordinary conditions.
- ⁵ However, the relevance of the relationship between school and neighborhood spaces and everyday life places has already been, through time, ground for design and learning experiences. Beyond school hours, school buildings and courtyards often constitute an essential stock of public space, providing sports and cultural facilities for pupils and the local community. Home-school routes can steer mobility choices and reform public spaces to increase the quality and safety of the urban realm and promote more sustainable lifestyles. Public action can find in schools the places to design measures to reduce inequalities in the most fragile urban areas⁸.
- ⁶ The dossier allows us to recognize some of them. Looking forward, the relevance of schools in urban transformation processes is not just a legacy of the pandemic emergency.

Dealing with school: space as a common ground

- 7 Different competencies and fields of knowledge are engaged in schools and other learning spaces. Moving from pedagogy to architecture, from sociology to urban studies, and from geography to urban planning and design, it is a field of research and action that embraces scales and issues that are strictly interrelated. Projects and programs centered on schools may address sector-oriented approaches and actions, where different administrative areas manage their processes of production, governance, and use. However, the focus on the space could play as a common ground for integrating different perspectives. From this point of view, this thematic dossier collects contributions that allow us to identify and better understand the places, policies, and actors involved in production and transformation processes as well as in the uses of learning spaces.
- ⁸ These processes combine different variables and can therefore be studied starting from different issues. Educational practices, material spaces, and planning at the urban scale are the topics we concretely suggested in the call, aiming to open up to various contributions. Indeed, these three topics recur in the selected essays and are often approached across the board.
- 9 Education and school/extra-school projects involve pupils and teachers during school hours, the neighborhood, and the so-called "educational community" in the entire cycle of the week and the year. These are activities in which students, families, teachers, and associations often participate: they are rooted in schools and often entail the urban context. Through non-traditional educational models, a school can open up to experiences of learning and knowledge, with regards to close thematic and geographical areas: collective discovery and reconstruction of the history and cultural

heritage of a neighborhood or city, forms of generational mutual aid between young students and the elderly, exchanges between schools of different levels and neighborhoods⁹. These initiatives can have a significant impact and involve other uses of space, along with other possible forms of civil coexistence.¹⁰

- ¹⁰ The materiality of learning spaces and the different ways of designing, managing, and maintaining them are essential levers for their development. Throughout the 20th century, in conjunction with an integrated design of new everyday life environments, extensive programs were launched for creating public facilities (educational spaces among them), according to sector-based rationalities or more contextual logics.¹¹ In the last decades, public programs supported various European contexts to carry out the necessary measures for this legacy's adaptation, securitization, and energy efficiency improvement.¹² Because of the urgency of these interventions, they often lead to exclusively technical operations that only relate to the interiors of school spaces or building aspects.
- ¹¹ Further experimentations and programs simultaneously adopted a systemic approach, between specific emergencies and medium or long-term strategies involving an urban and community-based perspective. The number and composition of the population schools, together with their localization contribute to segregation processes (in schools and neighborhoods), shaping a crucial challenge for public administrations and planners. Demographic phenomena and processes of social change invite us to rethink the governance and design of learning spaces and acting upon forms of social, spatial (and educative) inequality.¹³

Places, methods, and roles

- 12 The articles collected in this dossier feed the three tracks themes proposed in the call through the explicit reference to concrete experiences and places.
- Some articles favour historical approaches and long-term perspectives to discuss urban processes, educational experiences, and specific designs. The urban dimension of school buildings and their localization in urban models and design experiences, is explored in the contribution by Geoffrey Grulois, Benoit Moritz and Louise Carlier, assuming "proximity urbanism" as a project concerning the neighbourhood scale in the city of Brussels throughout the XXth century until today. Adélaïde Boelle-Dupouy's contribution, moving from the figure of the radical architect and designer Riccardo Dalisi, focuses on experimental counter-cultures in the 1970s through three innovative educational experiences conducted in Naples, New York and Grenoble, foregrounding the innovative nature and the cultural scope of the approaches in each project. In the same years, the focus proposed in Pauline Collet's contribution, is devoted to Candilis, Josic and Woods' new university project in Toulouse-Le Mirail, a masterpiece with a complex legacy combining architecture, educational and public space.
- 14 The architectural design of schools represents a central topic, raised and explored in two directions by Antonio Carvalho, Szymon Ruszczewski, and Filippo Piscioli and in the contribution by Caterina Barioglio, Daniele Campobenedetto, Lorenzo Murru, and Caterina Quaglio. In the Milanese context, the former discusses school design as a field of research in the academic teaching of architecture. The second, looking more broadly at the Italian context, defines an operational tool (a web app) to support design in the

maintenance and renovation of the school heritage, enabling the participation of a plurality of actors.

- The issue of participatory pathways and forms of co-design emerges as they contribute to the definition of forms of urban awareness and empowerment, as well as city governance instruments. This is the focus of the article by Daniela Ciaffi, Emanuela Saporito, and Ianira Vassallo, dealing with schools in Turin from a community-oriented point of view steered by shared administration of public assets. The contributions by Fabrizia Cannella, Samuel Fattorelli, Maria Chiara Tosi, and Valentina Rossella Zucca and the one by Melissa Bellesi and Maribel Casas propose recent experiences of codesigning and transforming school streets and home-school pathways in Venice, the first one, and Bertrange (Luxembourg), the second.
- ¹⁶ A picture emerges with two main features. The first feature concerns the geography of the contributions, which shows a prevalence of experiences in metropolitan areas, in the European context, with a primary focus on francophone (France, Luxemburg, Belgium) and Italian contexts. The relationship between schools, learning spaces, and their surroundings poses different questions according to their spatial and social conditions: these aspects could further be addressed by exploring and comparing experiences in non-metropolitan settlements and rural areas, as well as in continents other than Europe.
- 17 The second concerns a tendency to discuss the proposed themes starting from describing and interpreting specific cases with a precise operative dimension. This confirms the interest and the need to enrich a debate about learning spaces, first and foremost, through the incremental definition of methodological tools and approaches to broaden the view from the school to the city, discussing results, and collecting "case law".
- 18 Research paths and methods also refer to the roles played by the authors in the contexts they contributed to analyze. Some articles are the outcome of research that combines the trajectories through the time of educational theories and practices, social criticism, and architectural history, as the outcome of archival work combined with a qualitative investigation, mixing different sources and points of observation. In the same way, in contributions dealing with recent and ongoing projects and transformations emerges the relevance of keeping together a plurality of sources at different scales (for instance, institutional sources at the national, regional, and municipal levels) and on-field observation, enhanced by research by design methods.
- ¹⁹ Some articles refer to the active involvement and the civic engagement of the authors who, as academic experts, took part operatively in the processes described. This is the case of the contribution by Cannella *et al.*, discussing the results of a working group based at Iuav University in Venice. Barioglio *et al.* present the mechanisms of a digital tool designed by a consortium of Politecnico di Torino to give some inputs to those local actors who want to set up a project to transform the spaces of a school. Carvalho *et al.* contribution, on the other hand, proposes a point of view that is anchored in the training of a class of students in Architecture at the Polytechnic of Milan, focusing on work phases, issues, and approaches for an architectural design studio devoted to the project of a few schools in Milan.

From school to city: a range of learning spaces

Further reading of the contributions will be articulated along three dimensions concerning the scale of projects, transformation of learning spaces, and some emerging issues. The sequence we suggest defines a movement from the dimension of the school building and its appurtenances (open spaces and equipment such as gyms, libraries, and auditoriums) towards a proximity sphere, at the scale of the neighborhood, up to the urban scale.

School spaces

- 21 The first group of texts reflects on the architectural space of buildings intended for education through historical research (dedicated to the design and the development through time of the University of Toulouse-Le Mirail), operational research on a typological basis (a web app to support the design process of schools), a didactic experience on school design (in a design studio within a degree course in architecture). They deal with timing, methods, and actors of the design production process while raising some crucial issues, such as the distribution of environments and educational models, the relationship between indoor and outdoor spaces, the degree of openness, and shared uses of school spaces with a broader community.
- 22 For the new university in Toulouse-Le Mirail (Collet), the new settlement is designed in close relation to the plan of the ville nouvelle, in which the university can play an important role in integrating new residents, students, faculty and administrative staff. Candilis, Woods and Josic imagined that the new university would represent an alternative model, both to the European historic university sites and to the US campus model. As quoted by Collet in the article: "Pas de campus-ghetto, pas de cité universitaire l'université devait être un quartier de la ville, une université sans clés où les bâtiments sont des carrefours, des lieux de rencontre ouverts à tous, à la vie, à la ville" ("No campus-ghetto, no cité universitarie, the university should be a district of the city, a university without keys where the buildings are crossroads, meeting places open to all, to life, to the city"). The new campus includes several low-density units with open spaces as patios connected by open paths and arcades that are fully accessible to everyone. The university facilities (library, restaurant) are neighborhood facilities. The classrooms are designed according to principles of flexibility that should have allowed for possible adaptations. However, the contribution shows the scope of the design idea and the distance between intentions and outcomes. The urban potential of the university spaces project - and the ville nouvelle, too - faced some critical issues: limited time andeconomic resources at a very strong growth of university students. Shared facilities, open to citizenship, are soon insufficient even for students alone.
- 23 The experience highlights the potential tension between an innovative and integrated design of urban and learning spaces, on the one hand, and the management and implementation process (timing, resources, interactions), on the other hand. By reducing project implementation to the university function alone, the possible urban impacts have become much weaker.
- 24 The contribution by Carvalho *et al.* traces an academic educational experience reflecting on the learning, exploration, and design process, where teachers and

students have been working as a unique team on the design demolition and rebuilding of a few public schools in Milan.

- The system of knowledge, data, and references shared during the work first phase emerges according to an approach that is attentive to context (spatial, at the scale of the neighborhood; institutional, concerning competencies and rules) and yet free to reference models, both to pedagogical approaches and to educational and school space designs. Some guidelines recur and reiterate the relevance (and variety) of flexible solutions that de-specialize spaces within the school: "No longer a 'one size fits all,'but rather adaptable and versatile spaces so that each student can develop a sense of belonging, within a shared communal learning environment, in a daily process of (inner and outer) growth and discovery." The same perspective underlies the design of neighborhood and city, through finding a balance between shared public spaces and protected spaces, taking into consideration the space of the street.
- ²⁶ While having as the main object the design of the school building, the process also focused on public spaces and shared streets, encountering issues that concern policies at the urban scale (such as mobility, public transportation, and regulation of parking spaces).
- 27 The design guidelines for a variety of types and conditions of school buildings is the basis of the tool presented in the contribution by Baroglio *et al.* Beginning with an emphasis on the possible role of agency within local communities, the authors highlight the need for action, in Italy, on the school building stock and the availability of resources in the current contingency, thanks to the National Recovery and Resilience Plan. The hypothesis is that those who, with different roles and in various capacities, are part of a school (management, parents, students, neighborhood associations) can play an active role in the transformation processes of the school building, which can, in turn, become a driver of urban regeneration. The contribution illustrates an operative tool developed by the authors: through guided interaction with potential users and modeling of the characters of the school building based on a typological classification and its relationship with its surroundings, the app proposes spatial solutions and descriptions of potential space transformations. Beyond the functioning and proposed solutions, a significant issue emerges for the architectural project and its potential.
- ²⁸ The access to the design process from a plurality of subjects that can arrange a sample of visions and operational actions, shaping their own spatial choices, poses some relevant issues for the theory of architecture.

School and its neighborhood

²⁹ Outside the school building, the open and public space of the street plays a crucial role as a place of education itself. The second group of contributions focuses mainly on roads, as open spaces where to experience, and as paths that are often difficult to travel independently and safely enough. The school is the point of arrival and departure of numerous individual and daily paths, involving students and their families. From this perspective, the critical mass of citizens who, in various ways and in different moments of their life, deal with home-school routes is substantial. This focus on street space, in turn, allows reflecting on three other essential dimensions: outdoor educational experience in the public space, health and children's rights, mobility choices and street design. Scales, projects, and policies become essential and, starting with the spaces of school approach and access, defer to urban policies (at local, regional, and national levels).

- Boelle's contribution debates around the importance of space in learning experiences 30 within non-institutional spaces, referring to the Neapolitan context during the 1970s: "L'effacement des frontières entre l'école et la rue est un levier pour inventer des nouveaux modes d'apprentissage" ("The blurring of the boundaries between school and the street is a lever for inventing new ways of learning, reconciling knowledge, skills, and attitudes"). The issue here is closely related to the purpose of working outside of school, with those who do not attend, in one of the city's working-class neighborhoods: "Les enfants du sous-prolétariat, sont hors du circuit, ils ne vont pas à l'école, la rue est leur terrain de jeu ou plutôt de survie" ("The children of the sub-proletariat are out of the loop, they do not go to school, the street is their playground or rather their survival"). The street becomes a place of action, through the involvement of students from the Naples School of Architecture who, together with children and adults, design ephemeral inhabitable structures and redefine the streets and squares of the neighborhood. Starting from Riccardo Dalisi's experience in Naples, the paper raises the relationship between the city, the social commitment, and the experimentation of alternative cultural approaches to education. In different contexts, the Gordon Matta-Clark's experiences in New York's Lower East Side and the experimental schools of the La Villeneuve neighborhood in Grenoble are animated by similar intentions.
- ³¹ Beyond the proximity spaces of the school, the learning spaces in the city find in streets a crucial place of education within processes that are self-managed, open, and often, according to the author, ephemeral and temporary.
- 32 Bellesi's article recalls the learning potential related to the experience of space, particularly in children's growth processes that is associated with movement, autonomy, and self-care. However, in what space can children have these kinds of experiences? Not the street, a priori, where prohibitions rather than opportunities to move, play, and practice space prevail and where the presence of cars takes away space and reduces even the possibility of looking elsewhere, if one considers a child's point of view. Beginning with the hypothesis that the street can become a shared space to practice *deplacements actifs*, the article describes transformations of space around some schools to facilitate slow mobility. Through interviews with all those touched in various ways by the changes induced by the project, contradictions, fears, and difficulties for change emerge. However, interesting awareness elements also emerge concerning the benefits, first and foremost for the youngest, in terms of freedom, greater sociability, and curiosity. Ease of access and safety of the paths seem to be the levers to rethink the space that allows them to reach the school.
- ³³ The contribution by Cannella *et al.* approaches, to some extent, similar topics. Active mobility and the street as a privileged public space for practicing it are at the heart of a national initiative project tested in several Italian cities, including Venice. The authors reconstruct the Venetian project and underline two strategic aspects. The first concerns the process. The hypothesis is that the solution to problems of slow mobility, safety, and quality of public space is the outcome of a slow, participatory, experimental, and partial process. This process also occurs by breaking down the elements to be transformed: the street space, the school access points, the bicycle space, and the walking trails. The second strategic aspect concerns the governance tools of the actors involved through some codified instruments: the sustainable school mobility plan and

the educational supply plan of the schools involved. The hypothesis is that it is necessary to associate urban policies, defined by the municipality, with the active engagement of institutions, schools, and local communities.

School and the city

- The third group of articles places the school at the core of the city's observation, from a spatial and social perspective, involving both urban design and planning, participation, and community engagement. The focus is on models of urban space conception that have identified the school and services as one the pivotal elements in the construction of the neighborhood and the urban expansion through time; in addition, the attention is devoted to administrative models of city government and management, with a focus on the role of communities in shared administration.
- 35 Learning spaces and school infrastructure have historically played an urban role as cores and vital units in planning and designing well-commensurate and autonomous parts of the city. From the garden city model to the international circulation of the neighborhood unit, from the functionalist city to the neighborhood notion and rightsizing in the design of new housing districts equipped with essential services, including schools. The contribution by Grulois et al. proposes this long-standing history through the development of the city of Brussels. The widespread network of school spaces and services closely related to the form and organization of the city can play as the framework of an actual program of intervention at the scale of the metropolitan region, such as the contrat école ("school contract") program. In a systemic approach, the school is the barycenter of operations of urban regeneration and social and cultural integration, starting from an overall vision that recognizes fragile areas, as had already happened through the contrat de quartier. This ongoing experience in Brussels represents a possible governance model that combines regional government decisions and the activation of local contexts (schools, neighborhoods, civil society), where a precise physical arrangement goes along with an accurate design of governance and management processes.
- The contribution of Ciaffi *et al.* is focused on observational and accompanying activities in the city of Turin. City institutions and civil society are involved in projects and programs that recognize the important role of schools as a catalyst for initiatives, processes, and urban practices. The impact concerns not only the space and the school itself but becomes "territorial," spreading within wider circles. The authors' focus is specifically on how it is possible to make a set of actors who collectively constitute an educating community, inside and outside the school, cooperate. Through the codification of agreements and pacts linking the school subjects and others partners, there is a gradual extension of responsibility and capacity to undertake projects that can fall outside the spaces of the school and, above all, increasingly proceed in a complementary (sometimes alternative) way to public action.
- 37 Many contributions present ambitious experimentations whose outcomes still need to be fully realized and deserve further support and evaluation. They confirm an interest in projects and initiatives that are never confined within narrow boundaries. Almost all the contributions, moreover, are marked by this tension: from past experiences with partial outcomes or highly concentrated in space (Toulouse, Naples, New York,

Grenoble) to the most current ones, marked by themes such as sustainable mobility, health, the quality of street space and public space (Venice, Luxembourg, Milan).

³⁸ Capturing the signs of change and innovation that all the stories and experiences discussed have shown is crucial. The challenge is to imagine that the domains theoretical and operative research of education, architectural design, urban planning, and public policies are less and less separate fields but the same components of a forward-looking vision.

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