

Claudia Tinazzi
**The time of the school.
The slow path of a new “Educational Architecture”**

Abstract

The idea of ‘school’ has bound *architecture and pedagogy* in a single body and maintained the bond between designing a space for those who inhabit educational places daily and a precise training model reflecting the society of the time. Singularity and generality come together in a balance necessary for understanding differences among everyday needs. For this profound reason, *school architecture* is the most tangible opportunity to desire and imagine forms corresponding to a precise teaching model. It frankly interprets the multiple needs underlying this subject – slight nuances, different characterisations, unique slants, and controversial interpretations of a period in human life that encompasses the greatest changes in a short time. The difficult yet desired relationship between *architecture and pedagogy*, educational environment and thought is not new. Undoubtedly, the last twenty years have taken up with greater determination an issue that has long lain dormant under a convenient scapegoat: a regulation that since 1975 halted any utopian thrust.

Keywords

Space and learning — Pedagogy — School

In 1947, Ernesto Nathan Rogers used the pages of *Domus* (Rogers 1947a) to invoke a need for an “educational architecture” as the «synthesis between the most advanced principles of education and an equally evolved architecture» [sintesi tra i principi più progrediti dell’educazione e un’architettura parimenti evoluta] (Rogers 1947b). It is easy to imagine that he was aware of the possibility and the need to outline in a magazine dedicated to a «general architectural topic which is not related to the home» [a un argomento d’architettura generale fuori da quello specifico della casa] (Idem), i.e. schools, a practical political and social manifesto setting the priorities for restarting Italy during the Reconstruction.

It is no coincidence that his brief but determined editorial leaves room among the pages for the contribution of an educationalist, Ernesto Codignola, «an illustrious and combative Italian educator» (Idem) just as firmly as Rogers, he outlines the reasons for the evident ineffectiveness of the Italian school system, the likelihood of an immediate internal revolution, and the tools for transforming traditional schools into «small social cells» (Codignola 1947).

The *Time of the School*, with its related reflections and hypotheses, is a chronological moment that views schools as a critical aspect in Italy, spanning most of the 20th century. If one tried to deceive contemporary criticism by reintroducing texts from the last century and falsifying their temporal source, one would risk attributing with shameless confidence to the most profound research on the adequacy of learning spaces in our time, reflections by Arrigo Arrighetti (1956), Ciro Cicconcelli (1952) or E.N. Rogers (1947).

Discipline relating to the problems and aspects of today’s education barely

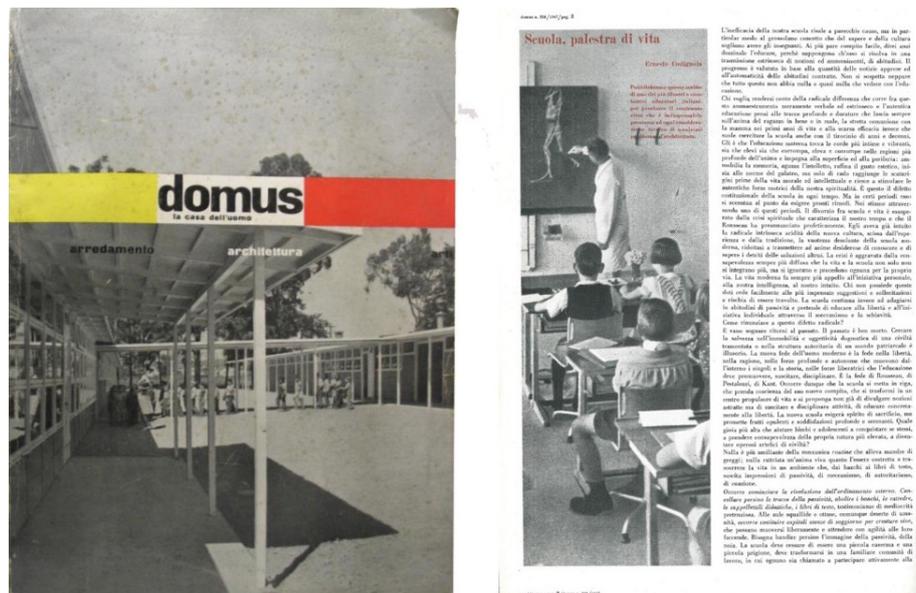


Fig. 1

The cover and editorial of Domus “La Casa dell’uomo”, no. 220, June 1947 dedicated to the theme of the School.

manages to create new projects that are practicable and shared by architecture discipline. It struggles to push forward, rethinking the great intuitions of last century’s educationalists. These promoters of the idea of new schools, were solid Italian educationalists who can speak to architects and the architecture worldwide, directing the deepest choices in imagining new spaces for *all levels* of schools. Already at the beginning of the last century, Maria Montessori wrote the following about places for learning: «Education is a natural process carried out by the child and is not acquired by listening to words but by experiences in the environment». [L’educazione è un processo naturale effettuato dal bambino, e non è acquisita attraverso l’ascolto di parole, ma attraverso le esperienze del bambino nell’ambiente] (Montessori 1991). And as Loris Malaguzzi more recently underlined: «The atelier [...] has produced a subversive intrusion, an additional complication and instrumentation capable of providing a wealth of combinatory and creative possibilities between languages and the non-verbal intelligence of children» [L’atelier [...] ha prodotto un’irruzione eversiva, una complicazione e una strumentazione in più, capaci di fornire ricchezze di possibilità combinatorie e creative tra i linguaggi e le intelligenze non verbali dei bambini] (Malaguzzi 1971). Mario Lodi wrote in the mid-1970s about the need to «create a community in which children feel like equals, companions, brothers and sisters» [realizzare una comunità in cui i bambini si sentano uguali, compagni, fratelli] (Lodi 1977). In architecture, *environment*, *atelier*, and *community* denote just as many figurative possibilities. They quickly anticipate an idea of “school”: physical spaces or metaphorical forms that centrifugally generate complex school buildings as they have often done. And yet, faced with the rich pedagogical thought spanning 20th-century Italy, it is in the Netherlands that the first schools were built as “new buildings” based on the Montessori method by the architect Hermann Hertzberger beginning in the 1960s¹. It is challenging to trace modern architecture for nursery schools in Italy that follow the Reggio Emilia Approach – the American name given to this experience. This educational project originated in the second half of the 1800s. It intensified in the 1960s with the fundamental contribution of Loris Malaguzzi, who is credited with the first municipal nursery schools capable of establishing innovative educational content and organisational structures.



Fig. 2
1960, Journals and publications dedicated to the theme of the school.

Upon closer inspection, there has been pedagogical experimentation in the close relationship with the learning space. Various perceptive experiences – starting with the foundations mentioned above – have begun to innervate Italy from north to south, adhering to a more intimate, less evident revolution. But, under the impulse and apparent albeit inadequate contingency of abundance of a broad heritage of school building, it has been content with a timid internal transformation, and changes in perspective supported more by learning tools than by physical space. Individual experiments, often driven by lofty ideals, hardly ever made it to the level of national debate as a real possibility for a joint rewriting of the school system from a ministerial perspective.

The difficult yet desired relationship between architecture and pedagogy, educational environment and thought is not new. Undoubtedly, the last twenty years have taken up with greater determination an issue that has long lain dormant under a convenient scapegoat: a regulation that since 1975 halted any utopian thrust.

These reflections around the topic of school architecture appear bound by a continuous line, separated in time or so we like to imagine. Today, this occasionally ambiguous path marks the *time of the school* through numerous architectural competitions. Moreover, it is always looking for procedures suited to the desired high expectations, with critical contributions from militant journals committed to collecting exemplary projects worldwide or heated debates at conferences often aimed at translating foreign, especially Nordic models, to synthesise a contemporary recognition of the issue. Finally, school architecture has become an essential part of teaching and research in numerous laboratories in Italian architecture schools. These study and re-imagine the topic's identity where at the beginning of the 20th century Italy was a pioneer in its interpretation.

Echoing the words of E.N. Rogers, it is almost as if today were nothing more than one remarkable point in a long journey composed of discontinuous segments to define a more adequate “educational architecture”. He said: «There is no doubt that progressive pedagogy requires appropriate architecture, that is, flexible, functional organisms suited to the complex needs of an educational method that is not content to consider students as an indiscriminate mass, but aims to encourage the development of each individual» [È fuori di dubbio che una pedagogia progressiva richiede un'architettura adeguata, cioè organismi funzionali, flessibili alle complesse esigenze d'un metodo educativo il quale non s'accontenta di considerare gli allievi come una massa indiscriminata, ma vuol favorire lo sviluppo d'ogni individuo] (Rogers 1947a).

In this possible tendentious reading, the contemporary world can only be read in its close connection with the past and topics already addressed,



Fig. 3
The “South Tyrol Case” on the subject of Schools: five thematic issues of the magazine *Turris Babel* published in the last 20 years.

in light of an inherited synchronous difficulty between research on pedagogical thought, the teaching project, and architectural representation, and with an awareness of the frequent friction between political directions and social applications. For this author, it still seems complicated to trace the specific path towards which current research – balanced or poised between architecture and pedagogy – is directing its efforts. So perhaps it is better to cautiously underline a possible array of good actions understood as a virtuous dialogue between pedagogical practice, space, and the city. Again, this does not imply a single, distinctive direction, which is perhaps impossible, but solid, profound singularities that by comparing them, create a common cultural and interdisciplinary practice.

In the events described above, the “Alto Adige case” has been unique in Italy for more than ten years². It stems from a local reflection that began in the 1970s. It represents a pilot case favoured by a special Charter that makes an autonomous region exceptional. Italy has looked at this model with admiration for a while due to its practical attempt to build a new disciplinary and interdisciplinary dialogue aimed at the world of education and the formation of personal identities – children – within a single collective cultural identity. This practical push first encouraged a positive pedagogical drive promoted by the school director of Monguelfo, Josef Watschinger, by exploring new spatial configurations where the innovation of a “laboratory school” or “active school” environment becomes a proper pedagogical device.

This varied landscape of research in Alto Adige, is enthusiastically supported by Beate Weyland³, architects and educationalists, school directors, administrators, and teachers, parents and children, who have worked together courageously to experiment. There has been a conscious degree of risk and undoubtedly limited financial and legislative means. Nevertheless, at times the work has indicated credible directions for defining virtuous procedures and, as a consequence, innovative spaces for learning.

This laboratory is still a work in progress. Still, it holds the exceptional merit of re-emphasising – by transforming existing schools and building new ones – many constant themes that have become essential in the contemporary interpretation of this type of architecture. Such themes that are now common include the school buildings’ possible urban and collective role, necessary flexibility of interior spaces to overcome traditional teacher-centred classroom, careful relationship with technological innovation or responsible adherence between pedagogical orientation and the organisational concept of the school body. In the time covered by the research, these general topics and possibilities have found, through numerous international competitions and as many quick constructions in this border area, specific solutions in which architecture has once again become a key player in the quality of the school space.



Fig. 4
Modus, Architects, School complex and district library, Firmian, Bolzano, 2014.

The revolution in Alto Adige – not far from Alberto Samonà’s idea of coincidence between the educational programme and architectural organism for a 1964 competition for a compulsory school in Bologna – perhaps lies in the possibility of placing the relationship between “space and learning” before the more canonical preparation of an architecture competition aimed at defining a school. In this way, architects are forced to shape the teaching plans or moments, general thoughts about a possible educational idea, before responding to dimensions or regulatory requirements. The result is an idea of an extended school, an idea of a community and, in a sense, an idea of a city.

It is primarily a reflection on urban possibilities and the idea of community that makes the Firmian primary school, designed by MoDus Architects in 2014, a bridge between the school and city, between cultural places and the neighbourhood. It is the forerunner of a series of “village” school building projects conceived in the area as a pivot for organising community activities, overcoming the rigidity of strictly educational actions.

At the Firmian school, where the neighbourhood square is named after Maria Montessori, the project’s defining idea lies in the measured composition of two courtyards combined to form a double figure. The first is open and faces the city and citizens with the juxtaposition of a library and gymnasium. The more protected second courtyard is dedicated to children and faces the natural open environment with connected spaces that cross more traditional places with individual or informal exploratory workshop spaces. This represents an initial attempt at a pedagogical reflection on space, but especially the possibility of questioning the school system’s complete closure to the city’s collective life. As it has become more precise over the years, it has become a practice, generating many innovative institutes, including San Martino in Val Casies, Bressanone, Bolzano and Vipiteno⁴. Here, municipal libraries, gyms, theatres, workshops, and meeting areas have infiltrated the traditional school space, making it an open place intertwined with the citizens’ lives.

New structures with high architectural quality and transformations and expansions of existing schools have involved reflection on interior spaces

for learning. As in the case of Walter Angonese's project for the school in Egna⁵, they have shown how a few simple actions – small openings between traditional classrooms, a roof used as a place for engagement, or the juxtaposition of service areas – create renewed opportunities to apply an updated teaching process.

The broad attempt to export the “Alto Adige model” through surveys and direct interaction with the leading figures of this phenomenon has so far generated an exciting process of methodological influence, from the *Progetto Iscola* promoted by the Sardinia region to *Torino fa scuola* stemming from a meeting between the City, Fondazione Agnelli, and Compagnia di San Paolo, to recent competitions promoted by the City of Milan. The final results of such experiences, at times uncertain, nonetheless question the impossibility of entrusting the transformation of our school system solely to the competition process and “bespoke” faculty training to define an appropriate learning environment for today and the future.

In parallel with this consolidated experience, which is increasingly open to the possibility of defining a national network driven by academic research and the INDIRE ministerial institute⁶, the closer contemporary world provides other possible individual landscapes that align experiences deriving from specific situations. These are strongly defined by an optimistic wager based on a specific pedagogical slant, such as a strong international influence, the centrality of technological innovation, or the *outdoor education* model.

Such radical choices include Hcampus⁷, Europe's largest innovative centre, which opened in September 2020 in Roncade, not far from Treviso. This is the most recent example in Italy of an Apple Distinguished School, an integrated, international, and technologically advanced educational model. As a small founding city, it houses on a single campus all levels of schools, from primary to university, accompanied by collective services and special residence halls.

This is an actual experiment for a future school immersed in the rural landscape of the Veneto countryside, where architecture and educational objectives, “space and learning”, seek conscious interaction and the concurrence of performance objectives. The latter are places capable of evoking the usual systems – measured open courtyards, large usable yards, uniform collective spaces – achieving high architectural quality that is often underestimated and overlooked in Italian school buildings, even recently. It is a city of education model, or rather a prototype yet to be tested. This model takes us to the revolution brought about by Jefferson in 1817 with his design for the University of Virginia, in which a precise idea of community and possible model of society, together with architecture, changed university education forever.

Yet a different chapter of this episodic survey is occupied by “business schools”. These are more correctly attributable to private foundations, which invest generously in culture and education and school architecture in the face of an increasingly detailed pedagogical profile capable of imagining future managers.

Overlooking the better-known experience of this type of experimentation in the 20th century⁸, one precursor to this approach is the Benetton nursery school built in 2007 in Ponzano Veneto by Spanish architect Alberto Campo Baeza. With its precise geometry that protects and encloses the vibrant life of the children, it accepted the challenge of close contact” using the Reggio Children pedagogical approach from the preliminary design.

Fig. 5 a-b

ZAA Zanon Architetti Associati, H-Campus, Roncade, Treviso, 2016-2020.



Fig. 6

Alberto Campo Baeza, Benetton Daycare Center, Ponzano Veneto, Treviso 2007.



**Fig. 7**

Made Associati, Marco Zito, Primary school and extension of Danielli & C. company kindergarten. Officine Meccaniche, Buttrio, Udine, 2019.

Measured spaces of light and shadow –A round box open to the sky like a secret garden, which attracts and directs the air inside». These were created as the highest expression of an experimental educational service that focuses on interaction, research, and the well-being of children and the community. Likewise, the most recent primary school for the Danielli company, built near Udine based on a design by Zito+MADE associati and the winner of an invited competition, illustrates a straightforward path to investigate the feasibility of an innovative educational model based on the importance of an environment imagined in a symbiotic relationship between inside and outside. It consists of a spacious open courtyard surrounded by large covered arcades, immersed in a poplar stand where the different educational experiences can use intertwined places, with space and nature coexisting in the desired quality of life for children.

There has been much fragmented research, at times constructive and others imprisoned in the proposed simulations, possible solutions, and standing issues of a time that is slow but necessary to give space and body to the school.

Notes

¹ In particular, the Montessori school in Delft, built between 1960-1981. Hermann Hertzberger (1932) lived in the Netherlands and dedicated his architectural work to designing public buildings, particularly schools. He attended Montessori schools as a child.

² Starting with the Provincial Law of 2009.

³ Her work can be seen at <https://pedarch.unibz.it>.

⁴ For more information, see the journal *Turris Babel*, and particularly issues 83, 97, 119.

⁵ Expansion of the Emperor Franz Joseph I elementary school, (project: 2009 – 2010, implementation: 2010 – 2012).

⁶ For more information, see the publication *Dall'aula all'ambiente di apprendimento* (edited by Giovanni Biondi, Samuele Borri, Leonardo Tosi) Altralinea Edizioni, 2017.

⁷ Project by Zanon architetti associati in partnership with RSHP Rogers Stirk Harbour + Partners (2016 project pending completion).

⁸ In particular, see the experience of Olivetti in Ivrea.

References

- AA. VV. (1960) – *Casabella-Continuità - Rivista Internazionale di Architettura e di Urbanistica* - n. 245. Special issue dedicated to school, 1960.
- CICCONCELLI C. (1952) – *Lo spazio della scuola*. Rassegna Critica di Architettura, 25, Rome.
- CODIGNOLA E. (1947) – “Scuola. Palestra di vita”. *Domus*, 220 (June).
- FERRARI M. (2015) – *Di ogni ordine e grado. L'Architettura della Scuola*, Rubettino Editore, Catanzaro.
- LODI M. (1977) – “Scuola come liberazione”. In: *Cominciare dal bambino*, Einaudi.
- MALAGUZZI L. (1971) – *Esperienze per una nuova scuola dell'infanzia* - Proceedings of the study seminar held in Reggio Emilia on 18-19-20 March, 1971. Editori riuniti.
- MINISTERO DELLA PUBBLICA ISTRUZIONE (1953) – *Scuole minime. Studi schemi progetti*, edited by Centro studi del servizio centrale per l'edilizia scolastica, Florence.
- MONTESSORI M. (1991) – *Educazione per un mondo nuovo*. Garzanti, Milan.
- READ H. (1954) – *Educating with art*. Edizioni di Comunità, Milan.
- ROGERS E. N. (1947a) – “La Casa dell'uomo”. *Domus*, 220 (June).
- ROGERS E. N. (1947b) – “Architettura educatrice”. *Domus*, 220 (June).

Claudia Tinazzi (Verona 1981) architect, graduated in Architecture in 2005 at the Faculty of Civil Architecture of Politecnico di Milano with Antonio Monestiroli. She is currently Researcher in Architectural and Urban Composition at the Department of Architecture, Construction Engineering and Built Environment of the Polytechnic of Milan. Ph.D. at the University IUAV of Venice with a thesis entitled “Aldo Rossi, reality and imagination. The house, expression of civilization”, is editor of publications and essays on architecture. In her research activity she has deepened the theme of school architecture and the figure of some architects of the twentieth century in particular the work of Aldo Rossi and Ignazio Gardella, she has curated numerous exhibitions and is a speaker at national and international conferences.