Reggio Children
Domus Academy Research Center

children, spaces, relations
metaproject for an environment for young children

edited by
Giulio Ceppi
Michele Zini

Andrea Branzi
Carla Rinaldi
Vea Vecchi
Antonio Petrillo
Jerome Bruner
Paolo Icaro
Alessandro Sarti
Alberto Veca
Relational forms

Over the years, the municipal infant-toddler centers and preschools of Reggio Emilia have developed a valuable experience of collaboration between educators and architects in the construction of schools for young children.

This experience has led to a number of understandings and points of reference related to both the distribution of space and the planning and organizational decisions, providing indications for constructing environments according to criteria with a strong identity from the pedagogical point of view as well as that of the physical organization of space.

A series of precise guidelines have thus been developed for architects and designers which also have a strong theoretical and pedagogical connotation.

Here we will take a look at some of these criteria, though they should not be considered as a recipe for how to organize a school building, but as points of reference for reflecting on how to adapt a school environment to specific educational and de-

recognizability

Recognizability means creating an architectural language and an environmental atmosphere with a precise identity.

Though a school must be highly flexible and able to relate continuously with the new "languages" of the society—and thus also to change in appearance over time—it is important that it continues to maintain its own specific identity. This does not mean simulating a home or representing a school in the traditional sense, but a new identity with recognizable elements that make it possible for the school to be immediately identified as such.
horizontality

A horizontal layout of the school building highlights the conscious choice of not creating hierarchies among the various spaces: the service areas, the work areas for adults and children, the classrooms and offices all have an important and shared role. Horizontality is thus the physical manifestation of a democracy of functions, equal dignity, and sociality.

In the Reggio Emilia infant-toddler centers and preschools, this choice has been maintained over time and remains valid, though it has been integrated with a new sensitivity and attention to the volumetric complexities of the different spaces, with the aim of offering further learning opportunities.

the central piazza

Another important feature is the presence of a large central area called the piazza (town square), onto which the main spaces of the school face. The piazza is a place of meeting, a public place of the school which plays the same role in the school building as the piazza does in the town. Here, too, the choice in terms of spatial distribution and layout has a pedagogical connotation: the piazza supports the formation of relationships, symbolizing the “pedagogy of relationships” in the sense that it fosters encounters, group interaction, stories,
social relations, and the children's assumption of a public identity.

In parallel, the use of a central piazza eliminates the need for corridors, and this is another distributive aspect based on a precise pedagogical choice: the refusal of spaces dedicated exclusively to distribution and connection, and thus those which are not easily usable for children's activities, spaces which have been used traditionally as a method of order and control over children, a way to impose the disciplinary rules of the adults.

**transformability and flexibility**

The school environment must lend itself to manipulation and transformation by adults and children alike, and be open to different ways of use. The school should be able to change during the day and during the year, to be continuously modeled and re-designed as a result of the experimentation of children and teachers.

Where possible, the design of a school building should take into account both short- and long-term transformations.

Transformability in the short term can be achieved by using:
- partitions,
- furnishing elements that can contain other equipment and materials,
- moveable wall panels,
- screens for shadow play and projection,
- furniture that is movable, revolving, or on wheels.

Transformability in the long term involves:
- the potential for physical modification of the spaces; i.e. technical systems (electrical, heating, plumbing) and structures that enable changes over time;
- expandability, which means the possibility to enlarge the school, adding spaces over time (ateliers, classrooms, other spaces) and to construct the overall project by successive refinements and adjustments;
- varied use of the spaces. In the Reggio Emilia preschools, the choice has been to value the continuity of the group over time. This means that each group of children (divided by age) keeps the same teachers throughout their infant-toddler center or school experience but changes classrooms, each year using the room set up for their age group. In this way, the spaces can have characteristics specifically dedicated to the different ages of the children.
atelier

Each infant-toddler center and preschool is equipped with a studio space called the atelier which is viewed as complementary to the classrooms and adult work spaces rather than a substitute for them. The atelier is used for research, experimentation, and manipulation of a variety materials.

In the preschools, a special teacher called the “atelierista”, with a background in the visual languages, works in collaboration with the classroom teachers with a focus on observing and supporting the children’s learning and creative processes.

The atelier and classrooms together become a hands-on workshop and center for observation and documentation.

Over the years in the Reggio Emilia preschools, this concept has been further developed by introducing “mini-ateliers” in each classroom.
school as workshop

Though certain spaces are specifically organized for direct investigation and experimentation (like the atelier), the entire school is viewed as a workshop for children's autonomous learning. Each space is organized with this basic premise in mind, and is thus equipped with materials that foster exploration. It is important that all the spaces in the school, according to their specific characteristics, be open and accessible to the children to inhabit and use, including the kitchen and the offices.

school and community

The close relationship between the school and the town is a fundamental concept of the Reggio Emilia infant-toddler centers and preschools. School architecture and design should embody this principle in terms of osmosis with the surrounding aesthetics and culture as well as in the distribution of space.

The school building should be equipped for use outside school hours and for various activities which may not be strictly "schoolastic": from teachers' meetings and professional development seminars to parent-teacher meetings, parties and special events, parent advisory council meetings, and neighborhood activities.
inside-outside relationship

Another important element is the strong relationship between the inside and outside of the school building. A school should be a place that "senses" what is happening outside—from the weather to seasonal changes, from the time of day to the rhythms of the town—precisely because it exists in a specific place and time.

There are a number of elements that foster this inside-outside relationship:

- "filter" spaces (porches, verandahs, canopies)

- conservatories and interior courtyards (open or covered), with plants and other natural elements

- the particular use of the outdoor spaces: hillocks, play equipment, pathways, specially equipped areas

- installations for making visible the behavior of physical forces (wind, water, etc.)

- an entrance that provides information on the school and its activities, a place for welcoming and greetings.
transparency

The concept of "transparency" has evolved over the years in the Reggio Emilia schools for young children. The term was initially connected to the visibility of the building elements and technologies, to a declaration of the static role of the individual parts, giving a positive value to these elements. The value of the concept of transparency continues to be underscored, but more on the spatial level, in terms of a succession of visible spaces; i.e. the possibility of looking through from one space to another which is at least partially comprehensible. Transparency does not exclude opacity, but focuses on ensuring a sense of the depth of field and the perception of the space.

communication

Communication, both inside the school and with the outside, is a fundamental premise for any activity that involves research, the exchange of ideas, and discussion, and is thus an important element of the educational project in the infant-toddler centers and preschools of Reggio Emilia. The pedagogy of projects, listening, subjectivity, and collaboration is based on the relationship between three subjects: children, teachers, and parents. With the inclusion of parents as active participants of the school, this "pedagogy of relationships" was developed which increased the need for large spaces for communication and documentation on both the inside and outside, involving adults and children, parents and teachers, the city and other cities and cultures, and the places where culture is produced and developed.

The role of the teacher has evolved over the years along with the changing concept of teaching, which now involves extensive systems of observation and documentation (viewed as interpretation and narration). These systems form the basis on which teachers reflect and develop their understandings of the children's individual and group strategies in the learning and affective processes, and provide an effec-
drawings, children's work, videotapes, computer printouts, objects, posters, images, sculptures. The classroom doors, an important place of passage, also serve as a support for communication and the children's explorations (e.g. mirrors hung at child height).

Within this system of continuous communication, a number of particular characteristics should be kept in mind:

- The walls should permit extensive displays of different types (two-dimensional and three-dimensional), so that the environment reflects and communicates the life of the school and the activities carried out with the children.
- Certain areas need specific types of communication, such as the entrance, the staff room, and the kitchen, where the display structures should be modifiable according to need.
- Filter zones are also needed, situated outside but near the classrooms to permit an easy and unhurried exchange of information in the daily communication with the families.
- In-depth observation and documentation require adequate instruments: tape recorders, cameras, videocameras, slide projectors and overhead projectors, instruments which have become indispensable for working and communicating.
- The space should be organized efficiently for archiving the documentation of the work and projects carried out with the children, to ensure easy consultation for teachers and create administrative and didactic archives.

As the embodiment of these needs and functions, communication has evolved to become a "second skin" that covers the school, a sort of architecture overlaying the basic architecture, including photographs,
Images

Relational forms
- p. 36

Interior of the 5-year-olds' classroom at the Diana Municipal Preschool, Reggio Emilia

Interior of the 4-year-olds' classroom at the Diana Municipal Preschool, Reggio Emilia

- p. 37

Interior of the 3-year-olds' classroom at the Villetta Municipal Preschool, Reggio Emilia

Children in the kitchen with the cook, Arcobaleno Municipal Infant-toddler Center, Reggio Emilia

Plan of the Diana Municipal Preschool, Reggio Emilia

Central piazza of the Diana Municipal Preschool, Reggio Emilia

Central piazza of the Balducci Municipal Preschool, Reggio Emilia

- p. 38

Sculpture, Balducci Municipal Preschool, Reggio Emilia

Groups at work in the 4-year-olds' classroom, Diana Municipal Preschool, Reggio Emilia

Shadow constructions, Villetta Municipal Preschool, Reggio Emilia

Jean Nouvel, "inx 01", for stainless steel, 1992, design of expandable moving space

- p. 39

Monument in progress, atelier of the Neruda Municipal Preschool, Reggio Emilia

Designs with light, Diana Municipal Preschool, Reggio Emilia

Atelier of the Diana Municipal Preschool, Reggio Emilia

Large fresco, atelier of the Diana Municipal Preschool, Reggio Emilia

- p. 40

Fountain, designed by 5- and 6-year old children at the Villetta Municipal Preschool, Reggio Emilia

"Kalidoscope of self", central piazza at the Diana Municipal Preschool, Reggio Emilia

Water play on the wall of the bathroom, Villetta Municipal Preschool, Reggio Emilia

Metal sculpture, atelier of the Balducci Municipal Preschool, Reggio Emilia

"Multiplication of self", Arcobaleno Infant-toddler Center, Reggio Emilia

Central piazza of the Diana Municipal Preschool, Reggio Emilia
evening use: dinner with children and families

Central piazza of the Diana Municipal Preschool, Reggio Emilia
daytime use

- p. 41

The Big Dinosaur, painting by 5- and 6-year old children at the Anna Frank Municipal Preschool, Reggio Emilia

Wall of the interior courtyard, Diana Municipal Preschool, Reggio Emilia

Life drawing with child model in the garden at the Diana Municipal Preschool, Reggio Emilia

Fountain designed by 6-year old children in the garden of the Villetta Municipal Preschool, Reggio Emilia

Painting in the interior courtyard, Diana Municipal Preschool, Reggio Emilia

Tree-house at the Diana Municipal Preschool, Reggio Emilia

Entrance, Diana Municipal Preschool, Reggio Emilia

Glass wall between toddlers' room and bath-changing room, Arcobaleno Municipal Infant-toddler Center, Reggio Emilia

- p. 42

Transparencies on glass, Diana Municipal Preschool, Reggio Emilia

Glass wall between kitchen and dining area, Arcobaleno Municipal Infant-toddler Center, Reggio Emilia

Glass wall between the piazza and interior courtyard, Diana Municipal Preschool, Reggio Emilia

Wall in the big toddlers' room, Arcobaleno Municipal Infant-toddler Center, Reggio Emilia

"The school yard", painting on clear plastic, Diana Municipal Preschool, Reggio Emilia

- p. 43

Classroom door, Diana Municipal Preschool, Reggio Emilia

Mirrors in the entrance space, Diana Municipal Preschool, Reggio Emilia

'Message boxes' in a classroom, Diana Municipal Preschool, Reggio Emilia

Documentation of a project on the wall, Diana Municipal Preschool, Reggio Emilia

Documentation on the classroom wall, Diana Municipal Preschool, Reggio Emilia