Chapter 18

# Connecting through Caring and Learning Spaces

Lella Gandini

Following are children's ideas about a sense of place:

- A place is here. (Benedetta, aged 2 years, 3 months)
- You recognize a place by the air. (Matteo, aged 5 years)
- A place is a city where I scared some birds, where there are those fake lion statues. (Sara, aged 3 years, 9 months)
- You go inside the place . . . and after that your body decides whether to receive it or not. (Pietro, aged 4 years)
- You walk around a little to discover what's there. (Gabriele, aged 5 years)
- A place is my mommy. (Pietro, aged 2 years, 7 months)
- You can listen to the noise of a place; a tree, for example, tells us about the wind. (Pietro, aged 4 years)
- To listen [to a place] you have to call your brain. (Lucia, aged 4 years)
- When I make a really big silence, I can hear the silence. (Omar, aged 4 years)

—Quotations from Vecchi, Filippini, & Giudici, 2008, pp. 14–15

## PEDAGOGY AND ARCHITECTURE

### Place and Space as Essential Elements of the Educational Approach

A visitor to any institution for young children tends to size up the messages that the space gives about the quality of care and about the educational choices that form the basis of the program. We all tend to notice the environment and "read" its messages or meanings on the basis of personal experience and the knowledge we have acquired about child development; all this also shapes our own ideas about childhood.

We can, however, improve our ability to analyze deeper layers of meaning if we observe the extent to which everyone involved is at ease and how everyone uses the space itself. We can then learn more about the value and meaning of the relationship among the children and adults who spend time there.

In the entryway of a school in Reggio Emilia, we are already aware of the value given to communication and openness of information. There is an intention to make the identity of the school visible. Sometimes the history of the school itself is presented first, accompanied by photographs of each team of two teachers (those who teach the 3-, 4-, and 5-year-old children) then photos of the *atelierista,* the cook, and the auxiliary staff members, along with their names and welcoming smiles. On the same wall are posted schedules of events: professional development sessions, meetings with parents of each age group, meetings of the whole school, meetings with other schools, field trips, and celebrations.

On another wall, there might be words of the children about their rights: "We've got to have rights, or else we'll be sad." Or there might be observations that become poetic metaphors: "The leaves fall because they hold on with only one hand." We learn that, in addition to the children's words and expression through other symbolic languages, their photographs are important for the children's own identity, and their sense of belonging depends on how they are displayed.

We also realize these messages that the school space offers are addressed especially to the parents, who enter the school mornings and afternoons. Moving from the entryway, we find the spacious central area bathed in light, inviting us to explore and become involved.

Through the years, educators in Reggio Emilia have evolved a philosophy based on partnership among children, teachers, parents, educational coordinators, and the community. They have succeeded in developing their programs for children from birth to age 6, during a time period when other cities in Italy have had to relinquish their municipal programs to the national state system. For lack of funds and energy, some cities have lost the city schools they created through years of effort and political action to obtain public funding and local support.

Early in the development of their educational program, the participants in this collaboration appreciated the educational significance of space and invested a

great deal of their energy into thinking and planning about it. More and more, the educators in Reggio Emilia have given attention to the connection between pedagogy and architecture and to the power of aesthetics as a connecting principle. They have continued to develop the organization of space in their schools by considering these theoretical perspectives in continually renewed ways.

The structures, choice of materials, and attractive ways in which educators set them up for the children become an open invitation to explore. Everything is thoughtfully chosen and placed with the intention to create communication, as well as exchanges among people and interactions between people and things in a network of possible connections and constructions. This process engages everyone in dialogue and offers tools, materials, and strategies connected with the organization of space to extend or relaunch those ideas, to combine them, or to transform them.

The children also see the adults as a support through the way the adults organize and use the space to discover and learn with the children. At the same time, the wider system of organization (i.e., the cooperating system of the whole school staff, the *pedagogisti,* parents, and community) sustains teachers, directly and indirectly, in and around the environment of the school, and makes it possible for them to work at this high level of engagement.

Educators in the United States are well aware of the importance of the environment. This is evident, for example, in their imaginative use of outdoor spaces, a marvelous American resource not so readily available to, or so easily tapped by, Italian teachers, who often work in a highly urbanized environment. However, American teachers have often faced funding limitations and thus have been forced to make compromises with regard to indoor space. The unfortunate result, as seen in many child-care centers and schools for young children, has been a set of discouraging physical conditions, especially the lack of natural light and uncluttered space.

> Research in neuroscience and social science confirms that our identity develops from our experiences of the environment as well as our genetic history. We develop our senses and cognitive abilities through interaction with our environment. Children are a laboratory for the senses with each sense activating other senses. . . . As a result, the child's environment cannot be seen just as a context for learning or a passive setting for activities; it is an integral part of learning and helps define their identity. (Zini, 2005, p. 22)

## The Architecturally Planned Space and the Extended Space Around the School, the City, and Beyond

In the process of formulating and rendering more explicit the dynamic aspect of their philosophy and choices in their educational program, Reggio Emilia educators planned and worked out the structure and arrangement of space. Following

the idea that the education of young children is a community-based concern and responsibility, children's centers ideally had to be integral parts of the urban plan. Moreover, there is now a variety of schools in the city, from some newly designed and built, to some carved out from an apartment building, a restored old school, or even a villa. They have been placed in full view of neighborhoods, where the life of children and teachers would be a visible point of reference for the community. The presence of the school in the neighborhood is a pronouncement about respect for the rights of all children and families. This is a pointed statement made visible by the choice to construct places in a peripheral area of the city where there is low-income housing and workers and immigrants live. Among those are Nilde Iotti (a combined infant-toddler center and preschool) and the restoration of the Locatelli cheese factory and warehouse, which houses the Malaguzzi International Center and includes preschool and the first few primary-grade classrooms.

For each building, whether built completely anew or modified from an existing one, pedagogical coordinators, teachers, and parents met to plan with the architects. These people who were going to work and live there for so many hours had to be participants in every choice: a wall that was too high or the lack of a partition could modify the possibility or the quality of interaction in an educational approach where partnership and interaction are paramount.

In fact, as Tiziana Filippini pointed out, educators in Reggio Emilia speak of space as a "container" that favors social interaction, exploration, and learning, but they also see space as having educational "content"—that is, as containing educational messages and being charged with stimuli toward interactive experience and constructive learning (Filippini, 1990). Therefore, the structure of interior spaces tends to evolve along with everything else about the educational program in Reggio Emilia.

Loris Malaguzzi, in an interview together with Vea Vecchi in 1992 about the space in the Diana Preschool, said:

> In 1970 we were processing many things that we had not yet fully worked out. To be sure, some were in place already: the transparency of the walls, the flood of light, the continuity between inside and outside. We already had the *piazza,* but it was not until we lived in it that it acquired its full significance. The *piazza* does more than extend the classrooms, for it encourages many different encounters and activities, and we assign still other purposes to it. For us it represents the main square of the Italian city, a space where people meet, speak to one another, discuss and engage in politics, conduct business, do street theater, and stage protests. The *piazza* is a place of continuous passage, where the quality of the exchange becomes more intense, whether among children or adults. The more they meet, the more ideas circulate among adults and children. We might say that the *piazza* is a place where ideas arrive and depart.

At this point in the interview, Vea Vecchi remarked that traditional schools also have large central spaces, and the issue is not simply having space but how it is used.

**Malaguzzi:** That's right. These large spaces are used for recess, for "recreation," because between 10:00 and 10:30 there is supposed to be a break, yet in truth there are neither objects nor structures, not even any purpose, except for the hypocritical and ignorant one of handing the children a space so that they can do what they want for half an hour!

**Vecchi:** It was precisely this that I wanted to point out. If we call that central space a *piazza,* it means that we have a theory about its use. Spaces could look more or less alike, but if they are part of a culture and subject to some pedagogical reflection about their use, their significance changes completely. The objects and structures found here, in the space of the Diana School, allow purposefully for a variety of encounters.

**Malaguzzi:** The *piazza* is also a passage. In part it is structured by the objects in it, but there are also the children, and it allows them to flow through, to walk, or to linger as they wish. It is necessary to keep in mind how influential the environment is with regard to the affective, cognitive, and linguistic acquisitions. The environment becomes part of the individual so that any response to a request we make of the children or to a request children make of adults is facilitated or obstructed by the environment and its characteristics. In general, what architects ask is: "How many children do you have? Twenty, thirty? The place for the desks?" Already we know that they are thinking of a school where learning takes place sitting down. For a school where children stand up and where they learn moving around, their way of measuring is useless. We have to consider that each child is an organic unit who needs personal space for action and movement in his or her own personal way, and we have to reflect on that; we cannot use the tape measure.

**Vecchi:** An architect and a *pedagogista* could also build a beautiful school, but then if the teachers who go to work there neither reflect on nor prepare to deepen their understanding about what is the meaning of living in a space, nothing happens. One has to return to the initial ideas that determined choices about the space. For example, to inhabit the space according to philosophical choices that respect children transforms mere hygiene into genuine care and transforms interaction with objects into communication. Without a philosophical basis that gives meaning to the educational experience to be lived in a space, the identity of the space will not emerge; in fact, the risk is to try to live an experience disconnected from the space. Often one walks into a well-built building that is used for a school for young children, and one sees many things done to that space that run against its own important positive features creating a dissonance and fragmentation. (Malaguzzi and Vecchi, interview, 1992)

The teachers also value what is special about the spaces that surround their schools, considering them extended classroom space. Part of their work with children involves taking children to explore neighborhoods and landmarks in the city. One example of the extension of the school is a project undertaken for many months by several schools and also La Villetta Preschool, during which children went out to explore how the city is transformed during rainstorms. This project brought the children and teachers to explore first the reality of the city without rain, taking photographs in both familiar and less familiar places, and then making

*Piazza* of Diana Preschool.

hypotheses about how the rain would change them. Because that year the seasonal rains were so late to arrive, the children had weeks to prepare the tools and equipment they thought would help them observe, collect, measure, photograph, and record everything about the rain. In the meantime, the children's expectations grew tremendously. Every day, the teachers and children went up to the school's roof terrace to gaze hopefully at the sky, gaining much knowledge about cloud formations and wind direction.

When a good rainstorm finally arrived, the experience was feverish and exhilarating. The children noticed how people changed their speed and posture in walking, how the shining reflections and the splash from the puddles changed the streets, how the sound of the raindrops differed depending on whether it was falling on the pavement, the hoods of cars, or the leaves of trees. Then, after experiencing the rainstorm, and following the customary procedure in Reggio Emilia, the children became engaged in representing many of its aspects. This, in turn, led to more questions, hypotheses, and explorations that the teacher and the *atelierista* thoroughly documented. The whole exploration was eventually recorded in "The City and the Rain" segment of "The Hundred Languages of Children" exhibit and serves to tell us of the many ways in which the familiar space of the city can become the stage for and subject of activities and constructive explorations (Municipality of Reggio Emilia Infant-Toddler Centers and Preschools, 1996).

In recent years, there has been an intensive dialogue between pedagogy and architecture, which has oriented the thinking and design of space for young children in the educational landscape of the Reggio Emilia municipal infant-toddler centers and preschools. This dialogue has involved teachers, *pedagogisti,* designers, and architects and has contributed to a culture respectful of the rights of children by enriching the identity of their spaces. This has taken place through the consideration of learning through relationship and participation as a central aspect of education. Paola Cavazzoni (2007), *pedagogista,* stated, "An environment of daily life continually activated and modified by explorations and research by all the protagonists—children, teachers and parents—marked by traces of events, social and personal stories, becomes an empathic place, a place of learning and suggestive of actions and change."

A key aspect in the development of the dialogue between pedagogy and architecture is the relationship between the Reggio municipal government and the community of architects through their active participation and work throughout the city. This relationship is a strong factor in the development of construction and design for sites devoted to the education of young children from birth to 6 years of age in Reggio Emilia. In particular, the municipal administration has chosen to address the dilemma created by families' increasing requests for places for their children in infant-toddler centers and preschools, the number of places available, and the long waiting lists for these places in a city with an increasing birth rate (which is unusual for Italy) and also a large influx of immigrant families (which is now common throughout Italy).

The architectural design of the Reggio municipal infant-toddler centers shows the deliberate effort to create places that guarantee the well-being of children and teachers as they construct learning together and welcome family members who are considered active participants. Loris Malaguzzi characterized these places as *amiable spaces,* and in the 1970s and 1980s, new buildings began to grace various neighborhoods of Reggio Emilia. These became reference points for the community as the site of various meetings of families and citizens.

The premises for the architectural characteristics and descriptive qualities for these buildings were elaborated collectively through time by the pedagogical team, teachers, and *atelieristi* and were published by Reggio Children and Domus Academy in the book *Children, Spaces, Relations: Metaproject for an Environment for Young Children* (Ceppi & Zini, 1998). The book analyzes a series of descriptions and terms (key words and metaphors) that are all connected and have been developed by architects and teachers working together. This critical examination of the experience in the schools of Reggio Emilia helped to formulate some general criteria and situations that indicate the desirable characteristics and qualities of an environment for young children. These ideas, described in the subsequent paragraphs, are based on the fundamental principles of pursuing relationship and constructing educational experiences by observing and listening.

**Overall softness.** Softness, as a metaphor, refers here to the psychological quality of the space and the creation of an amiable place, livable and serene. Traditionally, spaces for young children have tended to be organized in a rather rigid fashion that separates the different parts for different activities throughout the school. This deliberate separation is intended to protect the autonomy of the classrooms and of the teachers, but the risk is that it can limit communication. The choice, therefore, is to consider an environment that is functional while remaining aware that different dimensions and relationships can coexist and that the people involved can communicate and work together (for example, infant-toddlers and preschoolers sharing common spaces). How is that possible? It can be realized through cooperation, organization, and a strategy of listening and welcoming. It is by being open and giving attention to others that one invites dialogue and exchange. (This is one of the values in the Reggio Emilia philosophy.) The objective is to create a context of empathy in which listening is a way of respecting children in their many different expressions (even in their silence) and of respecting the ideas and intentions of adults involved.

**A relational space.** The network of relationships and communication makes possible, through sharing creative ideas and strategies, the creation of many specialized explorations, inquiries, and constructions among adults and with the children. The different identities of adults and children can find harmony through relationship and the interpretation of what happens in the school. By learning together and exchanging points of view and ideas about new paths to explore together, these connections contribute to creating an awareness of the value of relationships and a pleasant aesthetic sense.

**Continuity with surroundings environments and social connections.** The relationship among people can be extended as a dialogue with the world of objects. (Objects "speak" with their shape or through where they are placed, for example.) Furthermore, relationship creates continuity with all that is within the space of the school and with what is outside. (Think about the impact of your outside space.) What is socially connected to the school permeates it and is filtered by the values and the educational philosophy of the school itself (a philosophy that has been shared in advance with the parents). It is important to cultivate the enriching relationship with the community, other institutions and organizations for children, libraries, parks, landmarks in the city, and so on.

**Multiple sensorial experiences.** Infants and young children discover reality through sensorial explorations and construct their knowledge and memory through them. This personal way of experiencing the world can be extended to group exploration.

How can this be supported? An environment that invites sensory experience by creating a variety of features, stimulating perceptions, and helping children become aware of them can support meaningful sensorial experiences. This attention can help children to make connections that lead to cognitive discoveries. It

is here that exchanges or conversations with children are crucial. It is important to note that the quality of a space (or environment) results from many factors: size and shape, functional organization, and sensory experience, color, light, and materials, as Michele Zini (2005) suggests:

> Design processes that have been found are those which make use of color, light, sound and smell. This is because these correspond to young children's cognitive processes. The image of the center is therefore derived not only from the layout and furnishing of the space, but also from the sensory richness of its material.
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> **Color.** For color, this means it is necessary to use a chromatic range with many shades. This is far removed from the banal and simplified red, yellow, and blue color system that adults often associate with the child. Instead the aim should be to offer children a more subtle color scheme with many colors.
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> **Light.** Lighting should offer an environment illuminated from a variety of sources: incandescent, fluorescent, vapor, halogen, etc., in order to make optimal use of the full range of possibilities. Light should be able to create shadows. This is possible when using incandescent lighting but not with fluorescent lights. Lighting should provide concentrated as well as diffuse light and different color "temperatures": warm white, cool white, rose white.
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> **Materials.** The materials used should be rich and varied. They should create a multisensory setting with surfaces which are smooth and rough, wet and dry, opaque, bright, translucent, and transparent. They should have different features

The space outdoors can become an *atelier*.

> which change over a period of time (wood, stone, flowers, fabrics) or remain unchanged (glass, steel). (p. 24)

There is not a single, optimal solution in combining these factors, however, because we all have individual differences in sensorial threshold. It is better to avoid overstimulation and instead choose a moderate tone and variety of sensorial possibilities so that one can find an agreeable niche.

**Flexibility and adaptation.** A space for learning has to be adaptable in a flexible way so that the children who live in it day by day can either signal to adults the need to modify it, or they can directly proceed to modify the space as they use it. This flexibility contributes to group learning as the children together often construct changes through action within an existing educational environment. How can respect for all the children and for the intentions of the teachers be maintained? The adults in the school have a shared responsibility to sustain an active dialogue with the children and the teachers to understand together the motivations and needs of the school community: questions, responses, and negotiations are important strategies for the children to learn.

**Community and participation.** Community in a school, inspired by relationships, respect, and participation, has the children, teachers, and parents at its center. All participate in generating the educational design and the life of the school. Often the quality of space favors dialogue, reciprocity, and exchanges by providing a sense of belonging and enjoyment in being part of a learning experience.

**Social constructivism.** The school is a workshop or laboratory where knowledge is constructed continually—not in a linear or progressive way but in a dynamic, active, and often social context. Personal knowledge is co-constructed in the exchanges with others, be it among adults, with children, or among children. Through shared experiences and exchanges, aspects of knowledge, skills, and strategies are modified, negated, affirmed, consolidated, connected, interconnected, refined, and revised. Teachers have the creative responsibility—on the basis of their observations of children—to identify or create experiences, as well as to provide a variety of materials and tools to serve as sources of exploration and discoveries. These experiences, with teachers scaffolding, then become sources of shared learning.

**Narration.** Jerome Bruner (1991, 2004) wrote that if we do not tell about our experiences, we do not exist. In the philosophical context we are discussing, there is a tendency to consider two layers of narration that a school should pursue. Communication is essential, and space offers a strong possibility to let people who enter the school know about the care teachers have for the well-being and learning of young children, for the teachers' own professionalism, and for the participation of parents. This is one layer of narrative to be found in a school. Visibility and transparency in the classroom reflect what is happening in that space. However, it is through documentation that the processes of the children's and

teachers' research and action can be seen. A variety of documentation can be prepared. Words, drawings, materials, colors, and objects can carry the voices and thoughts of children and tell about them also during their absence. This is the second layer of narrative in the classroom and school.

**Intense richness everyday.** Every day, as we observe and listen to children, we can note the wonderful inventions and discoveries they make in and around our small world of the school. There are so many opportunities for learning in an organized and well-thought-out environment. The sense of well-being comes from harmony, equilibrium, and positive interactions of different elements; in a way, it is a symphony. Rich, intense, generous, interesting normality can result from a balanced combination of many different elements, "Just as the white light of the sun is the sum of all the colors of the spectrum" (Cappi & Zini, 1998, p. 27).

The publication of *Children, Spaces, Relations: Metaproject for an Environment for Young Children* was an accomplishment that formalized a long-standing connection between the thoughtful pedagogical and aesthetic choices developed through many years in the experience of municipal preschools and infant-toddler centers in Reggio Emilia. This newly formulated and now public perspective, along with the increasing participation of others in the private and public sector in the city of Reggio Emilia (including efforts to create new enterprises), has determined the development of various projects and activities in the city that are visible in public spaces.

The relationship of the city with the schools for young children has been enriched by several gifts, and others invited and received, for architectural projects, including the restoration and refurbishing of the Loris Malaguzzi International Center, an admirable architectural feat. One example is the Villa Sessa Preschool gift of Anna and Gianni Iotti. Another case in point is the gift from the Maramotti Foundation in 2005 for the construction of an infant-toddler center through an agreement with the Municipality of Reggio Emilia and the Istituzione Preschools and Infant-Toddler Centers, with the organization and support of Reggio Children. This synergy between the public and private sectors seemed to have answered the various needs of a city with an increasing population due to birthrate and immigration.

## One New Infant-Toddler Center Is Born

The gift from the Maramotti Foundation was made in honor of Giulia Maramotti, an exemplary figure in the history of the art and craft of designing and making women's clothes. Her work in developing and teaching dressmaking methods was the origin of the design brand Max Mara.

In 2004, the Maramotti Foundation, in collaboration with Reggio Children and with the patronage of the Order of the Architects of Reggio Emilia, announced a contest for the realization of a new infant-toddler center named after Giulia Maramotti. The competition was open to architects and engineers under age 35. Its

Young children gazing at their new infant-toddler center, Giulia Maramotti.

main objective was to offer young professionals in the Emilia Romagna region the opportunity to design an educational space for children inspired by high-quality pedagogical and architectural criteria and values.

Paola Cavazzoni, the *pedagogista* who followed and supported the architectural activities related to the Maramotti Infant-Toddler Center, was interviewed with Carlo Margini in September 2009 after we visited the school together. This is what they described:

**Cavazzoni:** In the end, the project selected was the one prepared by the architects Francesca Fava and Carlo Margini. Their project demonstrated great attention to the experience of very young children. They designed a space open to the outdoors that included movable *ateliers* and could be placed close to the building in the winter and further out toward the grounds in the summer. The selection was based on the coherence of ideas about space that are part of the values of Reggio Emilia. Their proposal was for a building that contained key concepts consistent with the "Metaproject for the Environment"—mobility, transparency, and transformation—along with giving attention to the context and the physical and cultural space. We selected the project by Carlo Margini and Francesca Fava because it included careful attention to relationship, which is one of our basic values. We also found their care about including and considering the continuity between interior and exterior space to be a positive aspect of their proposal. In their plan, there was a flower garden where colors and aromas were specified and made visible, so that they could be offered to the children and adults within the

educational community. A vegetable garden to be planted with parents was also included in their design.

**Gandini:** *When listening and observing the teachers for a short time today, it was interesting for me to see how they live this space as something new and special that has to be handled with special care in a very delicate way.*

**Cavazzoni:** The teachers are all very young and find that it is an extraordinary adventure to be in this infant-toddler center.

**Gandini:** *I heard the teachers ask themselves, "If we add this or that to the space, how would the space change?" It is clear that this is a very fresh experience for them.*

**Margini:** In effect, the basic premise is the idea of continuous change. It was one of the cardinal points of our project: to create a space that is in continuous transformation with parts that are movable. Our thought was and still is that transformation should be possible through the daily use and life in the space. As you observed, we are still experimenting. We are aware that there has to be a delicate balance between a space that is reassuring and familiar and a space that can be changed by the action and interest of children and teachers.

**Gandini:** *Did you have a chance to observe the children's many types of constructions and how the teachers are documenting their processes? They are beautiful and complex, and the children seem to work together on them intensely.*

**Margini:** The children seem to be influenced by the structure of the building. It is so interesting to see how the children use the space. For example, to see what can happen in relation to the large glass windows, playing with light and shadows, or trying to capture the rain drops when the weather changes is very affirming. The way in which the children use the space is important to us. It is true that we had thought about the many possibilities, but to see them in action is so beautiful.

**Gandini:** *The materials that the teachers offer establish a relationship with the space that surrounds the children. Paola, how did the development of the various constructions begin? Was this a result of conversations among teachers? Or did they evolve spontaneously from the children within a newly constructed place?*

**Cavazzoni:** The teachers imagined the choice of materials that were appropriate for construction, and a request was made to the parents to bring a variety of construction materials to the *nido*. Children perceive the importance adults give to materials, and it is evident that the children use the language of these materials. It is an explicit invitation to them.

**Gandini:** *Certainly the children's interest in construction is not a coincidence. They know how new and amazing the building is. There are photographs in the center's documentation that show children pointing from a field in the distance to the building and its structure, which may seem to them to be a construction with blocks or a toy.*

**Margini:** The structure of the building *is* like a toy . . .

**Cavazzoni:** What has been done there serves as a reference with regard to our values. It is not that we intend to transfer an architectural project from one place to another. It is a question of values that become part of every project.

And in a later interview (December 2009) with both Carlo Margini and Francesca Fava, these concepts were elaborated.

**Gandini:** *Carlo, you said that this project is so much a part of the two of you that you feel the need to return often to see the* nido. *Which uses of space or transformations that children and teachers together do or have done surprised the two of you most?*

**Margini:** The space interpreted by the children with their color and warmth renders the place changeable and in continuous transformation. For us to always find new interpretations during our numerous visits is truly satisfying, and I think this is one of the most important reasons why Francesca and I are architects. Each detail of our project is lived in the *nido* in several modalities. We think that this is the result of architecture that is centered on listening . . . listening to the place, and to the ones who have lived in children's places currently and in the past. Listening that way sustains our relationship with the *pedagogisti,* the teachers, and the children. In preparing the project and building the *nido,* perhaps Francesca and I played as children, becoming little ones once again.

**Fava:** During a recent visit and because of the transparencies of the place, Carlo was exchanging smiles with a little girl. At first, she hid out of shyness, and then they began to play a game of hide and seek, feeling the emotion to be there and not to be there anymore, ending up with beautiful shared laughter. Space is an element that generates contact, along with evolution and transformation (Gandini, 2010).

## EDUCATIONAL AND CARING SPACES

### The Welcoming Space as a Reflection of Layers of Culture

When one enters the schools for young children in Reggio Emilia, as in the example we saw at the outset, one immediately senses a welcoming feeling, an atmosphere of discovery and serenity. Moreover, one gains an overall impression of richness in the quality and types of the activities of children, as well as of high professional standards and care on the part of adults. These impressions come from the way the environment is thoughtfully organized, and especially from seeing how children, teachers, and families move about in the schools. Yet how does all of this come about? Loris Malaguzzi (interview, June 1990) said:

> To be sure, our schools are the most visible object of our work. I believe they give multiple perceptions and messages. They have decades of experience behind them, and have known three generations of teachers. Each infant-toddler center and each preschool has its own past and evolution, its own layers of experience, and its own

peculiar mix of styles and cultural levels. There has never been, on our part, any desire to make them all alike.

The space in many ways reflects the culture of the people who create it and, on careful examination, reveals even distinct layers of this cultural influence. First of all, there is in these schools a great attention to the beauty and harmony of design. This is evident in the functional and pleasing furnishings, often invented and built by teachers and parents together. It is also evident in the colors of the walls, the sunlight streaming through large windows, the healthy green plants, and many other details, such as careful upkeep of the space. This special care for the aesthetic appearance of the environment and the methodical care for the living space of the home, along with the design of spaces that favor social interaction, are essential elements of Italian culture.

Built into the organization of the environment for activities and routines are features, such as spaces organized for small groups, that favor cooperation, a concept with strong social and political value in the Emilia Romagna Region, where a century-old organization of producers' and consumers' cooperatives is still thriving. Further regional touches can be heard in the language, seen in some of the materials and implements available, and in the typical food that the cooks prepare

Teacher and children in the 4-year-olds classroom in the Bruno Munari Preschool.

fresh each day, much to the children's delight. The culture of the city can also be detected in the documentation on the walls about outings and activities that involve city landmarks and people. One example is the famous visit to the stone lion, who sits forever waiting for the children in the market square of the city.

The next layer is the culture of the school, of each particular school. The school itself, through each and every person that directly and indirectly participates in its life, constructs a culture, starting from the particular story of how the building was chosen, designed, and built, moving on to the experience that each child and each family brings from home and the way the participation of parents is manifested in the life of the school. All this contributes to the construction of a distinct culture along with the sharing of the special events and daily rituals. In Reggio Emilia, it is considered particularly meaningful that the environment of the school, besides being welcoming, shows the traces of those children who spend so many hours in those rooms for a cycle of 3 years. There are individual and group histories carefully documented, and there is a daily weaving of routines that are meaningful stepping stones in the life of all involved. All these contribute to the creation of symbols and metaphors that are elaborated and constructed together and become part of the common discourse.

Materials that children and families bring into the school contribute to creating a particular culture. Some are natural materials, such as displays of pine cones, shells, or pebbles arranged by size, shape, or color. There are transparent boxes that contain treasures collected during a special excursion or simply exploring the garden surrounding the school. There are implements and objects brought from home, from the kitchen or the sewing box, or even the toolbox. The children bring these objects and materials to the school, but the parents help place them inside the transparent bags that go back and forth, creating a connection between school and home lives.

Furthermore, the action of the children contributes to mold the space in a specific way. The history of the children who were there before creates special characteristics, but the adults have great flexibility and interest in continuous renewal. The environment mirrors the new relationships that bring new ideas and continue to nourish the life of the school.

All this contributes to render each school different and to create a specific culture. The creative solutions, the care of the environment, the attention to details, and the reflection of the reality brought in by children and families are common elements in this system, and they leave distinct traces in each school.

## Space and Time

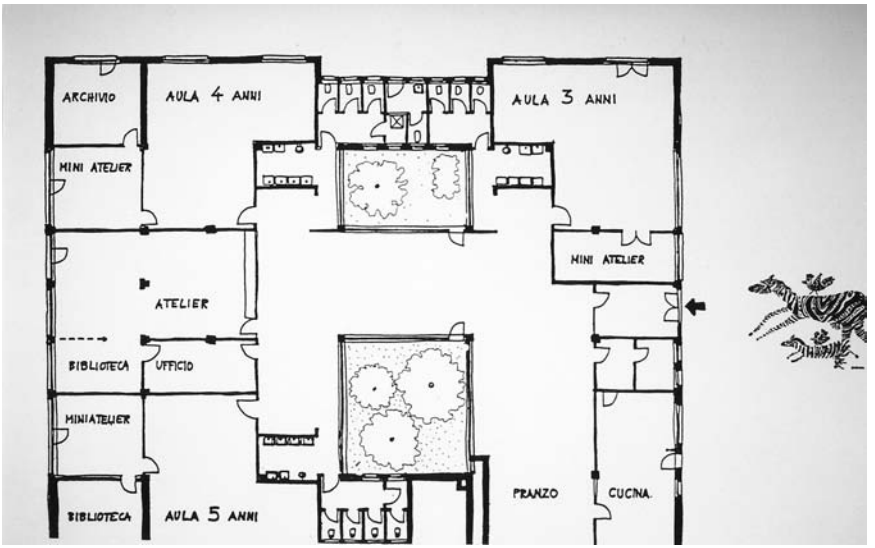
An environment is a living, changing system. More than the physical space, it includes the way time is structured and the roles we are expected to play. It conditions how we feel, think, and behave, and it dramatically affects the quality of our

lives. The environment either works for us or against us as we conduct our lives (Greenman, 1988, p. 5).

When one observes children and adults in the schools of Reggio Emilia, one perceives that there is a particular connection between time and space and that the environment truly works. The consideration of the children's own needs and rhythms shapes the arrangement of space and the physical environment, and in turn, the time at their disposal allows for the use and enjoyment, at a child's pace, of such carefully thought-out space. In fact, the way time is thought of in the Reggio Emilia approach is influenced by at least three factors. First of all, their experience has extended since 1963 when the first municipal school was established, and that in turn was based on the parent-run schools established immediately after World War II. Therefore, what we see in the arrangement of spaces is based on many changes and much learning through long experience. As a consequence, educators do not push to obtain immediate results.

Second, parents and their children establish a long-standing rapport with the program, because many start sending their sons and daughters to the infant-toddler center before age 1. When they are 3 years old, the children transfer to the municipal preschools, which take them between the ages of 3 and 6 years. The system allows teachers to be with the same children for 3 years as they move from beginning to end through the preschool. The relationships that are established during this long stay of the same groups of children, parents, and teachers shape the space, which, in turn, becomes a familiar niche for them. Because there is no separation at the end of the year, and thus no period of adjustment to new relationships, there is less pressure to reach certain goals, to finish the year's work with a clean break or start each year with a clean slate.

Third, the public programs for young children in Italy are not divided between education and day care. These programs do differ but only because they cater to children of different ages; they are all supposed to provide both care and education. The programs are considered social services, with flexible schedules. Although most of the children stay in the municipal centers between 8:30 a.m. and 4:00 p.m., there are parents who need to leave their children as early as 7:30 a.m. to as late as 6:20 p.m., and still others prefer to pick up the children right after lunch, at 12:30 or 1:00 p.m. Most of the children, in fact, spend many hours in group living. Accordingly, the educators provide a leisurely social setting for their meals; a quiet, protected environment for their naps; and several areas with a great deal of interesting and engaging proposals for their activities, which are carried out at a generally unhurried pace. Together they create a sense of security, self-esteem, and the opportunity to work through problems. Loris Malaguzzi commented, "One has to respect the time of maturation, of development, of the tools of doing and understanding, of the full, slow, extravagant, lucid and ever-changing emergence of children's capacities; it is a measure of cultural and biological wisdom" (Chapter 2, this volume).




The floor plan of the Diana Preschool.

## Social Space, Active Space, and a Space for Hands and Mind

For the educators in Reggio Emilia, social exchange is seen as essential in learning. Through shared activity, communication, cooperation, and even conflict, children co-construct their knowledge of the world, using one child's idea to develop another's or to explore a path yet unexplored. Because social development is seen as an intrinsic part of cognitive development, the space is planned and set up to facilitate encounters, interactions, and exchanges among children. The space has to guarantee the well-being of each child and of the group as a whole. At the same time, the space is set up to favor relationships and interactions of teachers, staff, and parents among themselves and with children. For example, adults can meet, work in small or large groups, discuss problems, and eat together inside the school. The well-being of the adults who work in the schools and the trust of parents, who entrust their children to the school before going about their activities, are essential for the educational project to work. As stated by Loris Malaguzzi (interview, June 1990):

> We have tried always to help and maintain strong ties between work and research, a healthy cooperation with the school staff and with the families, an unfailing faith in the potential and capacities of children, and, lastly, a ready willingness to think about and discuss what we do.

In the Diana Preschool (see photo above), the classrooms for the children aged 3, 4, and 5 years are open toward the large common space designated by the same

term used for a city square (*piazza*). The other interior spaces are open toward this *piazza* or common space. The classrooms are subdivided in two or three spaces because the teachers are convinced that smaller spaces can offer opportunities for children to work well in small groups, to listen and be listened to, and therefore to communicate. This arrangement also gives the teachers the opportunity to set up situations that invite constructive exploration and action.

Among the other interior spaces that open toward the *piazza* of the Diana School, there is the large *atelier,* a library with space for computers, an archive, and a storage room. All the children and adults in the school use the *atelier* (a workshop or studio). The teacher in charge of the *atelier,* the *atelierista,* has preparation in art education or, more and more frequently, in various aspects of expressive arts, such as dance, music, and design. The *atelierista* is co-organizer of children's and teachers' experience and serves as editor and designer of the documentation of the work done in the school. Each age group has a classroom (a large room) and next to it a mini-*atelier,* which distributes the tools and activities of the *atelier* throughout the school.

Continuing our visit to a school, we see the kitchen, which is always an important space where the cook and her helpers include a few children every day in the food preparation. Recently there has been great attention to the "languages" of taste and food and to the children taking turns with the responsibility of setting

The mini-*atelier* of La Villetta Preschool.

tables, which helps develop their mathematical and aesthetic understanding (Cavallini & Tedeschi, 2007). The dining room is an important relational space, as is the washroom with sinks for washing or water play, and the bathrooms, which are all laid out in efficient and pleasant ways. Nothing is considered a marginal space; for example, the mirrors in the washrooms and bathrooms are cut in different shapes to inspire the children to look at their image in a playful way. The ceilings are used as host to many types of aerial sculptures or beautiful mobiles, all made with transparent, colored, and unusual material, built by children and set up by teachers. There are glass walls to create a continuity between interior gardens and outside gardens; they contribute much natural light and give occasion for playing with transparencies and reflections. Glass walls also separate working spaces to create a communal feeling. However, if one desires to be or work alone or chat with one friend, there are various options, such as the space of a mini-*atelier* or other comfortable small enclosures to which one can retire and spend time.

The organization of the day and of the active space shows the attention to individual children as well as to the group of children. Every morning around 9:00, when all the children have arrived at school, each classroom has a meeting. In some schools, the meeting space is on something similar to bleachers. Then, once the children have chosen from among the activities available or to continue with one of the projects in progress, they will find the necessary materials and tools set up on tables, light tables, and easels, or placed in convenient spaces. They will be able to find everything else they need on well-organized open shelves, stocked with recycled and other materials. Those materials have been previously selected and neatly placed in transparent containers with the help of teachers.

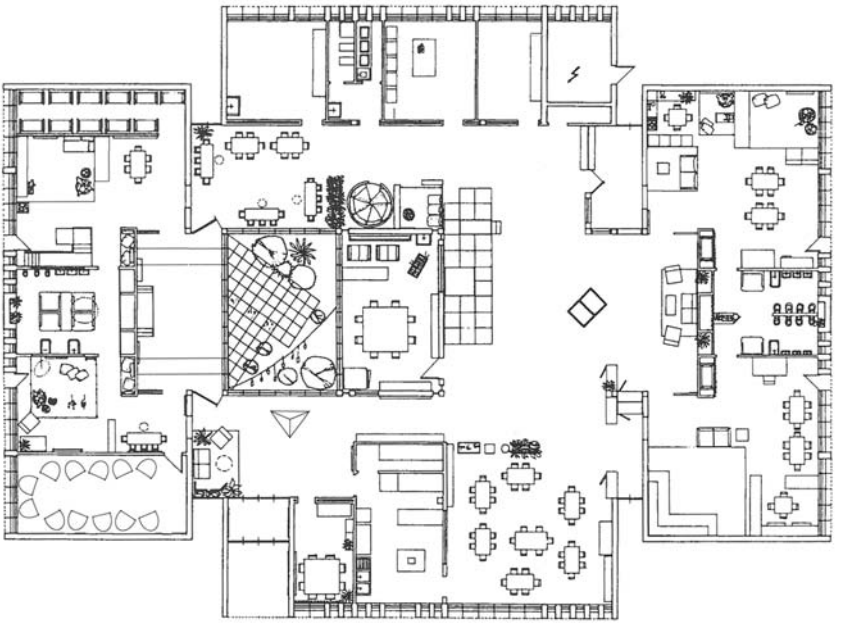
The arrangement and use of space for activities, for constructive exploration of materials, or for work on projects and themes is critical. Loris Malaguzzi said:

> What actually goes on in the schools is a basic test for all of us. The continuous activity is the most important thing for us and represents that which can contribute the most to keeping fresh (a term dear to Dewey) our interest and the continuous mobility of our thought and action. I believe that our schools show the attempt that has been made to integrate the educational project with the plan for the organization of work and architectural and functional setting, so as to allow for maximum movement, interdependence, and interaction. (Malaguzzi, interview, June 1990)

One of the images that Malaguzzi used to make a point about setting up the space for stimulating and meaningful centers of activity is that of "market stalls" where customers look for the wares that interest them, make selections, and engage in lively interactions.

## Space Appropriate for Different Ages and Levels of Development

In the infant-toddler centers, the attention given to the physical environment has a particular quality that reminds one of the need that the youngest children



The floor plan of the Arcobaleno Infant-Toddler Center.

have for closeness and nurturing exchanges. Right at the entrance, comfortable wicker chairs invite parents to take time to pause with their infants, meet with one another, or converse with the teachers. There are rooms covered with carpets and pillows where children can crawl safely or snuggle up with a teacher to look at a picture book or listen to a story. There is a large space with equipment appropriate for movement with ramps and rolling carts, built by a parent, that children can enter or push. There is a space for toileting, washing, and changing between the two rooms of the youngest children. One detail, included to invite the child's participation during change, is a mirror hanging over the changing table. But there is also an *atelier* where the children explore with paint, markers, flour, clay, and much more. The glass partitions are used especially in the infant-toddler centers, where children tend to feel a greater sense of separation. There, glass walls are used to allow one to see into the kitchen and into the room where the children's clothes are changed, or to look back and forth between the rooms where children of different age groups play. The ways that very young children come to feel a sense of belonging about their entire infant-toddler center is described in a book, which also provides a floor plan of Nido Arcobaleno and the context of the well-known story of "Laura and the Watch" (Edwards & Rinaldi, 2009).

Similarly, in the preschools, in the classroom of the youngest group, more space is left for play with unstructured materials such as blocks, Legos, toy animals, and

recycled materials. The area covered with rugs is larger to allow the children to play on the floor. Furthermore, the housekeeping space is wide and rich with small replicas of pottery and glassware commonly found at home, jars of pasta of different sizes, and beans of different colors.

Entering the mini-*atelier* in the late autumn, one might notice that the children are exploring the properties of three materials: clay, paper, and wire. They spend several weeks on each of these materials. In later months, teachers and children will return to these materials to use their higher level of skills and understanding. Through the year, as they acquire more self-assurance, these children carry out many explorations and projects in the main *atelier* as well.

## Space That Documents

According to Loris Malaguzzi, "The walls of our preschools speak and document. The walls are used as spaces for temporary and permanent exhibits of what the children and the adults make come to life" (Chapter 2, this volume).

One of the aspects of space that strikes visitors is indeed the quantity and quality of the children's own work exhibited all around the schools. In fact, this is one of the ways in which children and teachers contribute to shaping the space of their school and to constructing the culture of a particular school. They do it through the mediation of the *atelierista,* who with the teachers selects and prepares the displays with great care. Most of the time, these displays include the teachers' reflections and, next to the children's work, photographs that tell about the process, plus a description of the various steps and evolution of the activity or project. These descriptions are meaningfully completed with the transcription of the children's own remarks and conversation (often tape recorded) that went along with this particular experience. Therefore, the displays, besides being well designed and contributing to the general pleasantness of the space, provide documentation about specific activities, the educational approach, and the steps of its process.

The process of documentation itself, which is done collaboratively through observation, collecting a variety of documents, and interpreting them, gives teachers the opportunity to make informed curricular choices to assess the process and the results of the children's activities. In fact, documentation contributes notably to their professional growth. Of course, it also makes the children aware of the regard adults have for their work. Finally, to document the educational process is a way to make parents, colleagues, and visitors aware of the children's potential, their developing capacities, and what goes on in the school. Malaguzzi commented on documentation:

> Today, we would need other kinds of space. It is clear that where there is an image of the child as being active and productive, the form, distribution, size, and organization of space has to be taken into account. One thing is a school that speaks; another a school that is silent. If it is a school that speaks, we have to consider and help it to

> speak. We should create a space that includes documentation where parents can tarry or take time. I would like to set up a specific space, with comfortable armchairs, where parents can pause and receive a flow of messages that will be continuously transformed. We should organize a place where parents, visitors, and teachers have dialogues and exchange thoughts and ideas. It is not casual that an archive has become a notable element of our work. The archive has resulted from our own need to document. But if one documents, for whom does one document? I document only if I have an organization that includes the family; otherwise the messages bounce away. What I want to say is that the archive and the documentation change completely the professional stature of each person who is within the school. This complete change comes about because if one must document, one must not only record, but also make predictions—that is, think carefully about what to document and why that particular thing and not another. Our school, of course, has to be physically attached to the earth, but, as an image, it has to be a ship in movement. This means that parents will always be on board with us to see different landscapes, transformations, phenomena, and so on; that is what one sees when one follows the children's interest. Parents have to have an idea of a school in motion, because the children move around all the time and not only physically; for their minds and social exchanges are in continuous motion, just as their language is. We need to become able to have this open vision of the school. (Malaguzzi and Vecchi, interview, 1992)

## Space That Teaches

The environment is seen here as educating the child; in fact, it is considered "the third educator" along with the team of two teachers.

To act as an educator for the child, the environment has to be flexible: it must undergo frequent modification by the children and the teachers to remain up-to-date and responsive to their needs to be protagonists in constructing their knowledge. All the things that surround and are used by the people in the school—the objects, the materials, and the structures—are seen not as passive elements but, on the contrary, as elements that condition and are conditioned by the actions of children and adults who are active in it. In the words of Loris Malaguzzi (personal communication, 1984):

> We value space because of its power to organize and promote pleasant relationships among people of different ages, create a handsome environment, provide changes, promote choices and activity, and its potential for sparking all kinds of social, affective, and cognitive learning. All of this contributes to a sense of well-being and security in children. We also think as it has been said that the space has to be a sort of aquarium that mirrors the ideas, values, attitudes, and cultures of the people who live within it.

The schools in Reggio Emilia thus could not be just anywhere, and no one of them could serve as an exact model to be copied literally elsewhere. Yet they have common features that merit consideration in schools everywhere. Each school's

View from the *piazza* into the *atelier,* in the new school, Martiri di Sesso, gift of Gianni and Anna Iotti.

particular configuration of the garden, walls, tall windows, and handsome furniture declares: "This is a place where adults have thought about the quality of environment." Each school is full of light, variety, and a certain kind of joy. In addition, each school shows how teachers, parents, and children, working and playing together, have created a unique space—a space that reflects their personal lives, the history of their school, the many layers of culture, and a nexus of well-thought-out choices.

> Our hope is that a sensitive approach to our surroundings can constitute a positive element for participation and conscious solidarity with others and with that which surrounds us, an indispensable attitude for the future of democracy and humanity. (Vecchi, Filippini, & Giudici, 2008, p. 11)

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