

Francesca Belloni
Les enfants nous parlent

Abstract

By admitting that the environment is the third educator, beyond the different pedagogical implications that this entails, a reflection would be necessary on how the conception that is expressed through the project in the built buildings contributes to define this specific attitude, and we should also look into the ways the architectural spatiality and its relations with a child's life can be shaped from a strictly disciplinary point of view. This is respectively due to the character that each spatial and distributive choice intrinsically contributes to define, no less than for the transitivity that architecture has in cultural terms in the construction of each one's identity.

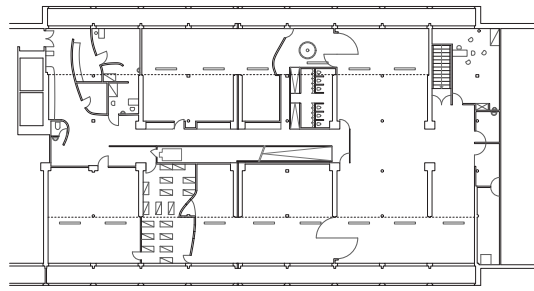
Keywords

Learning Environments — Spatial Character —
Linguistic Experimentations

Reflecting on the meaning of a *learning environment* – meaning with this expression a complex system of places, modes and actors – from a disciplinary point of view, implies asking oneself if it is possible to make a (literal) transcription in physical terms of pedagogical instances, considering the *space of the action* as a complex set of characters that are not only spatial. The title *Les enfants nous parlent* refers to the Marseille experience of Le Corbusier and to the very special story of the school *La Maternelle de Marseille-Michelet* on the roof of the Unité d'habitation, considered here as a comparison term through which to look at some recent projects.

This result was mainly based on the relations between Le Corbusier, the French pedagogue Céléstin Freinet, and Lilette Ripert (Mme Ougier), director of the nursery school between 1953 and the end of the sixties. Certainly, the experimental character and the deep correspondence between the school setting and its use, between the environment and the educational system, offer an extraordinary quality to the Marseille experience, an experience that seems interesting to analyse starting from Le Corbusier's attempt to «reconnect to the architectural vocabulary of his purist period» (Sbriglio 1992, p. 100).

Placed on the 17th floor of the Unité building, the educational environment of the kindergarten is shaped through the plasticity of architectural objects, arranged as in a pictorial composition. The articulation of the spaces is emphasized by the access ramp to the roof which, used by children as a playful object, anticipates the elements present on the roof itself: the inclined plane, the swimming pool, the artificial rocks and the famous “wall of death”.

**Fig. 1**

Le Corbusier, La Maternelle de Marseille-Michelet, Marsiglia (redrawing of the design drawing: Jardin d'enfants niveau 17, 02/02/1953, FLC 25668A).

Contrary to what was claimed by the detractors, who criticized *La Maternelle de Marseille-Michelet* for its subversive character, every element, conceived to encourage the daily experimentation of the educational principles of Freinet and used for this purpose by Lilette Ripert herself, the more it is characterized from a spatial and plastic point of view according to the dictates of purist aesthetics, the better it is able to resonate positively and show its pedagogical qualities. Through the free plan, Le Corbusier seems to be testing the possibilities of his own language by exalting the concatenation of the spaces and their ability to «convey educational models and values in a deeper and more pervasive way than a plethora of words and project documents» (Castoldi 2020, p. 140).

Exemplary in this respect is the collaboration with Freinet, promoter of the *natural method* based on the model of the *school-laboratory*, the direct experience of children, and trial and error learning. In Marseille the purist grammar, in some ways employed in the surrealist forms of the elements arranged on the roof, allows the experimentation of the *pedagogical materialism* supported by Freinet, which acknowledges that the school spaces and their material content entail a strong pedagogical value: if the educational principle is that of *thinking by acting and acting by thinking*, the space in which the action takes place is an educator agent himself.

From the Marseille experience on, it has been considered useful to look into how the educational scope of the spaces can be translated into architectural terms, what intentions they tell and how they are given shape, whether and how we can talk about *educational architecture*.

This perhaps without going as far as to say, like Leclerc de Buffon, that «le style c'est l'homme même», maintaining however that for architecture, as a physical fact, the (formal) outcome is closely linked to the concept that you want to support, it is in some way its faithful mirror and for this represents a standpoint, as demonstrated by the *La Maternelle Marseille-Michelet*.

In fact, if certain experiences are certainly significant for the experimentation of new teaching strategies, which combine the rethinking of the traditional school model with a certain innovation of spaces, it is important to ask yourself what the different meanings are, with which, in recent years, architecture has been involved in building such a reflection, not only from the point of view of interior design, in many cases used as a tool to promote alternative pedagogical models¹, but trying to identify certain specific categories.

This means going back in some way to the origins of the architectural discourse to distinguish between settlement principles, typological variations and spatial qualities in relation to the ways of life and their architectural characters. All this through some cases, not necessarily exemplary, but certainly indicative of the possibilities implied in the discipline.

A first reflection can spring from an observation of the school complex of Vila Nova da Barquinha, architects Aires Mateus. Criticized by someone for its radical design, the marked aphasia and linguistic minimalism, the

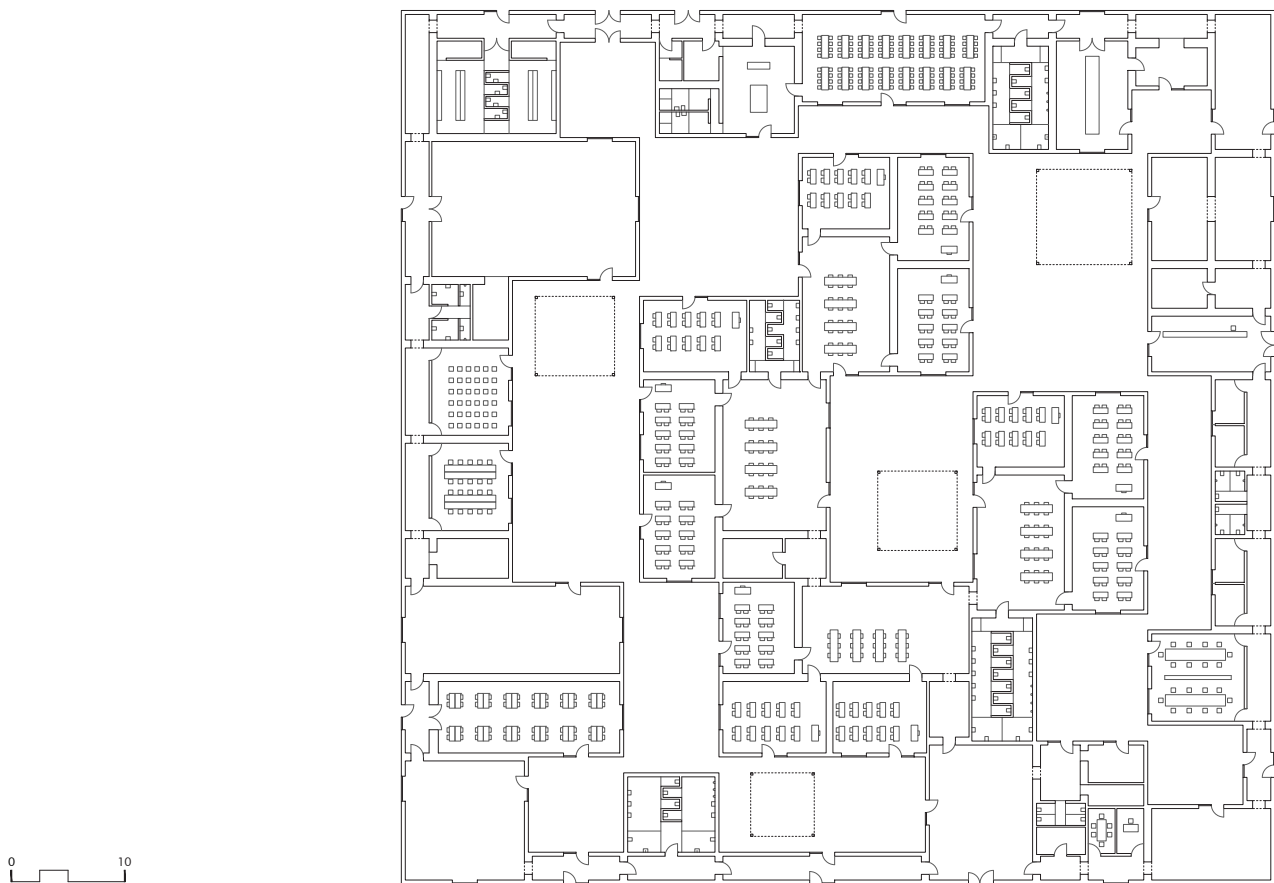
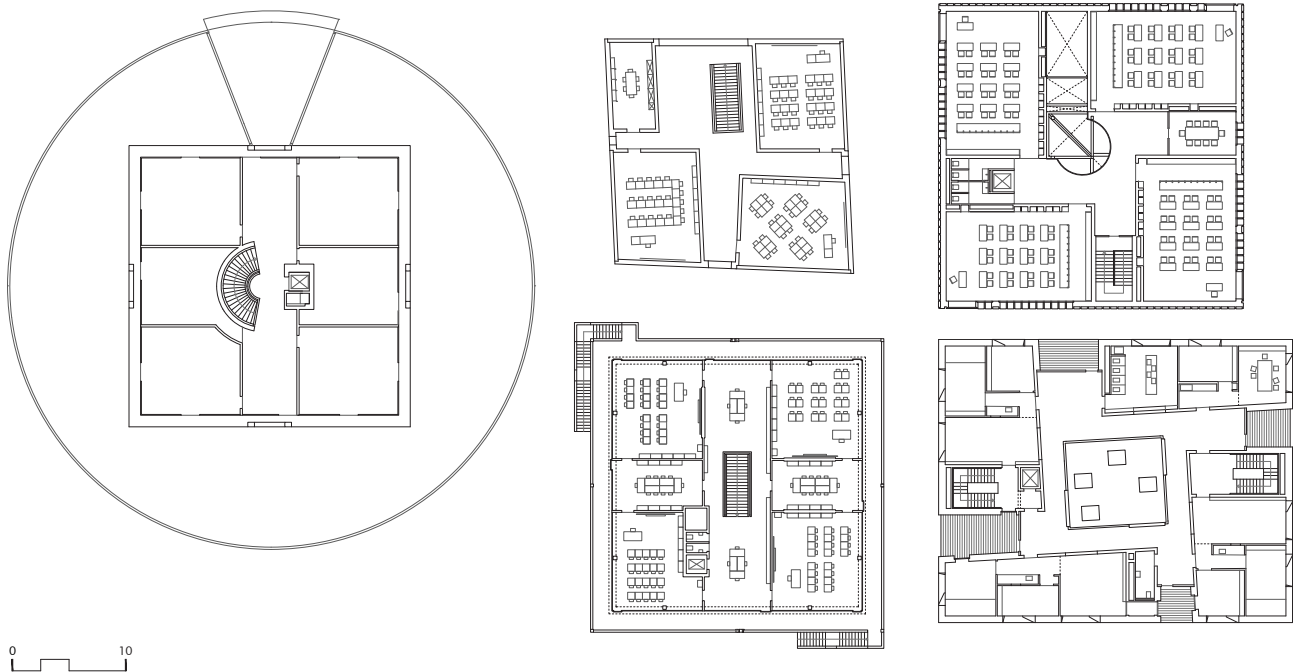


Fig. 2
Aires Mateus, School Complex,
Vila Nova da Barquinha (PT),
2006-12.

project allows to start the analysis from the relationship between the building and the city. The plan, conceived as an introverted citadel, is the result of the composition of pure solids repeated and variously assembled. The structure of the voids, obtained by omission of volumes, conforms the interior spaces, conceived in close relationship with the external patios, typical of the Portuguese tradition; the rigidity of the starting scheme and the use of a limited number of elements produces, as in games with wooden blocks of children, a conceptually infinite number of possibilities and opens up the building to the life that in it takes place:

«The universes we attend in childhood tend to linger in our memories. It's the time when we interact with architecture in a more free and genuine way. It is when we settle appropriations and intuitively hierarchize values of architecture. We are interested in identifying the assets that are esteemed by all, and design the memories that will be formed»².

Angela Deuber's school in Thal, canton of St. Gallen, is conceptually organized according to a totally different settlement principle – that of *everything under a single roof*, according to the well-known classification of Albert Demangeon. However, the relationship between classrooms and informal sharing environments is analogous to the one described in the previous case and nonetheless relevant is the importance attached to the compositional aspects and the linguistic connotation. Organized according to a tripartite scheme and a modular load-bearing structure, the building plays on the contrast between the static composition of the plan and the variety of facade design articulation. The central space, which organizes and distributes access to different rooms, connects the individual classrooms, performing a similar role to the patios of the Mateus's school. Unlike that, the relationship with light, air and landscape is left to the loggia which,

**Figg. 3-4-5-6-7**

Raphael Zuber, Kindergarten and primary school, Grono (CH), 2007-11.

Valerio Olgiati, Primary school, Paspels (CH), 1996-98.

TEd'A architectes + RapinSaiz architectes, GrangEcole, Primary school, Orsonnes (CH), 2014-17.

Angela Deuber, Kindergarten and primary school, Thal (CH), 2009-13.

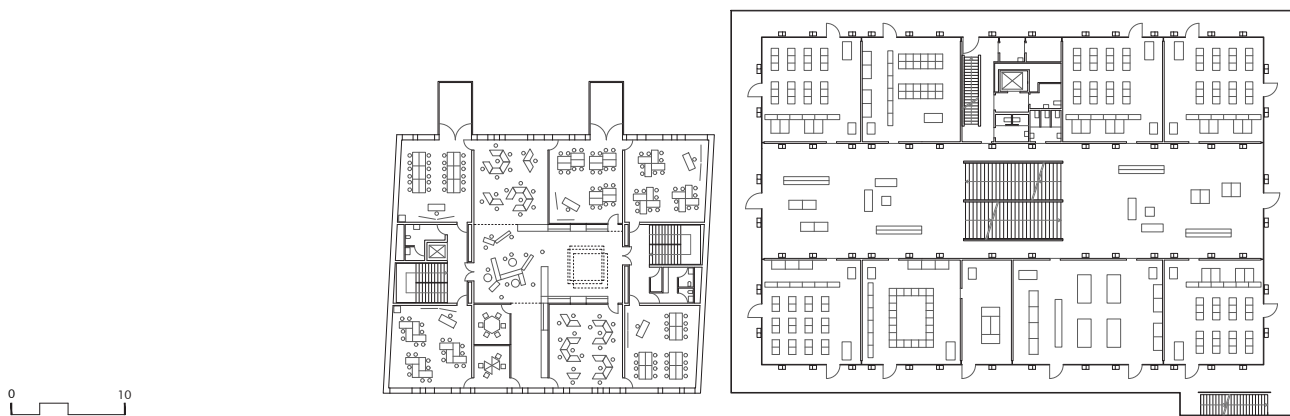
Bruno Fioretti Marquez, KinderUniversum, Karlsruhe (DE), 2010-13.

running along the entire perimeter of the building, accentuates the spatiality and compositional richness of the façade, emphasized by the unusual geometries of the structural elements, the openings and the parapet.

The specific attention in the definition of individual architectural and structural elements characterizes the spatial experience offered in the transition from the central nucleus, introverted and community, to the loggia, the place of individual contemplation, open to the landscape. Evidently the linguistic research and the attempt to specify, perhaps even in an excessively marked way, the identity of the building is a precise design aim, especially if read in reference to the school destination and the desire to produce a somewhat prossemic architecture, identifying spaces for social relations, filter and circulation areas and semi-public spaces, which allow the extension of the personal dimension to the collective and landscape.

Indebted to the tradition triggered by Valerio Olgiati and his Paspels's school, the project for Thal is certainly related to the school complex by Raphael Zuber in Grono, Graubünden. In this case, the plasticity of the architectural elements becomes a spatial and linguistic educational device. As a sculptural object placed on the ground, the parallelepiped is the result of a pure compositional exercise of primary forms: a square inscribed in a circle and the curved volume of the staircase inside it. Precisely for this reason, the multiplicity of perspective views, recomposed within a planimetric and distributive organization once again static, is certainly the most interesting architectural outcome of the attempt to build a linguistically connoted space which evokes an altered and elitist dimension, able to encourage the children who live that space to undertake a critical creative exercise, similar to that which is produced while facing a work of art.

A progressive rediscovery of the *intermediate space* is evident in Paspels, Grono and Thal, as well as in the many other buildings that adopt the same principle of distribution, where the *space between the spaces* has no other specific function than to be available for flexible and dynamic use³. The type is refined and specified from project to project and the central space inside the block is functionally coded; the frequent repetition of such scheme is evident in various projects⁴, so that it can be argued that we are witnessing a real consolidation of the type, accompanied by a plurality

**Figg. 8-9**

Cebra, Bülowsvej School, Frederiksberg (DK), 2009-13.
 Christian Kerez, Leutschenbach Schoolcomplex, Zurich (CH), 2002-09.

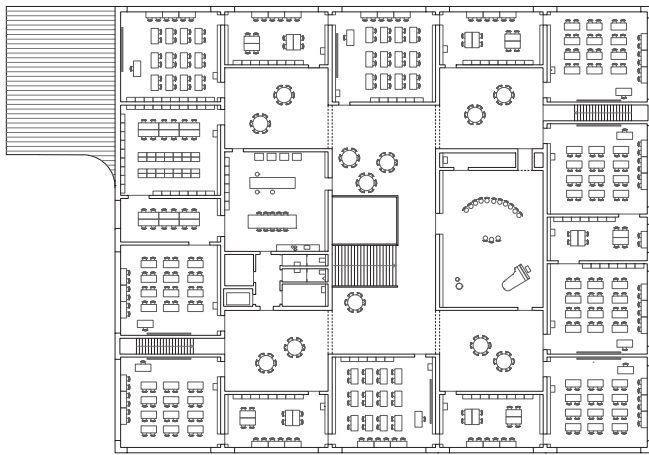
of possible linguistic connotations. In this respect, the project for the Orsonnes school complex by Ted'A architectes is a case in point worth recalling, since the *middle space* is organized in a centrifugal way, as it brings back in section the complex game of intersections between the parts, and then characterizes linguistically the entire structure and its figuration with a code that rewrites the local dialect with contemporary inflections.

However, the attention to this intermediate space, daughter of Hertzberger's reinterpretation of the Montessorian model, and its different architectural interpretations are not limited to *the block between the blocks* of the alpine landscape. It would be a mistake to think differently. The Bülowsvej School by Cebra, in Frederiksberg, Denmark, located in a block of the consolidated city, albeit under different conditions, employs the same aggregative-distributive principle, modified in relation to the block's perimeter continuous façade and the constraints that it entails.

Cebra produces a volumetric transcription of this system and distinguishes between served and distribution spaces by extruding the elements and inserting multiple connections between the rooms, both horizontally and vertically. The space is organized like a chessboard where a single module – the classroom – rules a game of different combinations on the different floors, identifying the three parts of the building: the one towards the street, with sloping roofs that allude (though contradicting it in fact) to the serial juxtaposition of elements developed in depth; the central one or distribution area, with informal spaces, and that towards the garden, where the principle of variation (volumetric, material and linguistic) finds free expression, sometimes with remarkable meanings.

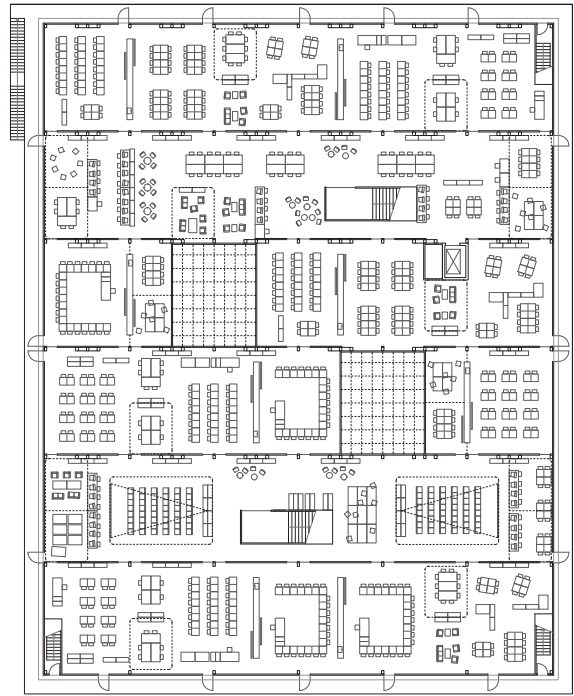
Back to the Demangeon *everything under one roof*, to comprehend the further possible variations of this settlement principle in terms of school buildings, we should consider the school of Leutschenbach in Zurich by Christian Kerez, which creates a school-tower superimposing the gym, the auditorium and the library on the floors of the classrooms and the entrance in order to minimize the occupation of soil. The multi-level structure – a *stacked school programme* – has no corridors and the individual rooms overlook, on each floor, large informal spaces.

Springing from an *intellectual minimalism* brought to the extreme structural and formal consequences, the building shows how, unlike the previous cases, the type of isolated building prevails conceptually and spatially and is not the central space to organize the relations between the parts but rather the *starke Einheit / strong unit*, a result of the coincidence between plan, form and structure: «The rooms, stacked above one another, vary in size and height. They constitute variations on the same overall spatial and architectural concept»⁵. *No more space between spaces*, but total removal of

**Figg. 10-11**

Felgendreher Olfs Köchling, Kindergarten and primary school, Azmoos (CH), 2015-19.

Thomas Fischer, Secondary school, Laufen (CH), 2017-2021.



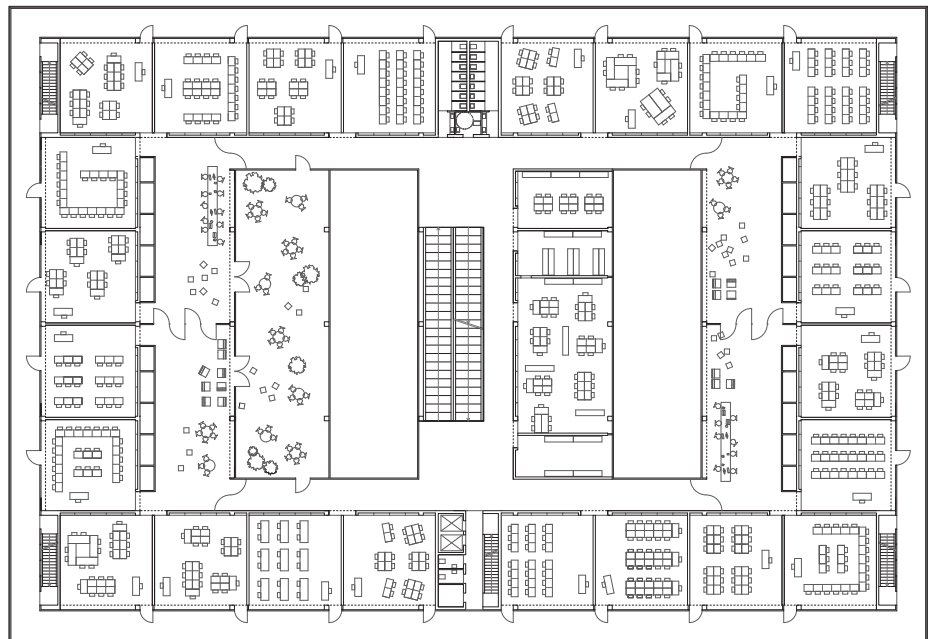
interstitial spaces. The absence of corridors, which would fragment such uninterrupted unity, translates into a dynamic centripetal organization, emphasized by the coherence of the load-bearing structure that, although varying from plan to plan in relation to the functional program, confirms its objectual character:

«I am not interested primarily in the simplicity and clarity of an idea. Ultimately, for me an idea is only a means of succeeding with a project. In the end the project exists in its own right and should be comprehensible without explanation. It was successful in the case of the Leutschenbach School. The stairs and the bearing structure turn up constantly in the children's drawings. [...] I am delighted that the children like the Leutschenbach School building, and that they can relate to it because of the frames and staircases. I am all the more pleased about this because I never set out to achieve a specifically "child-directed" architecture» (Kerez 2012, p. 34-36).

Considering the relationship between pedagogy and architecture, the school of Leutschenbach best represents the alid and not meditated use of the distributive principle characterized by a wide indistinct open space with a few classrooms or separate rooms, created on the spot thanks to movable walls even made of glass, as in the Ørestad Gymnasium by 3XN architects in Copenhagen, or in the configuration *without classes nor walls* of Vittra Telephonplan by Rosan Bosch in Stockholm, which stretches the same principle to its extreme form. Here «the environment is not only a physical space, but it is above all an attitude»⁶ and architecture can only provide a container as neutral as possible to be characterized and equipped in a versatile way.

To stick to the linguistic metaphor, while in the previous cases we can trace a sort of linguistic structuralism applied to architectural spatiality – given the content we see the order of the words used to tell it – in Stockholm it is almost as if the words disappeared or could assume any meaning depending on the eyes of who reads them or based on the changing and dynamic relationships among readers.

For this reason, the studies of Thomas Fischer seem more interesting from a strictly architectural point of view and because of the implied possibility

**Fig. 12**

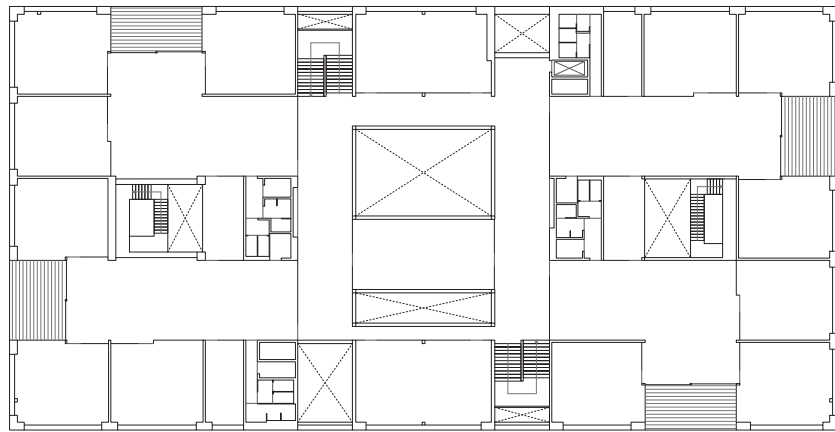
Bruno Fioretti Marquez, Oberstufenzentrum Sozialwesen OSZ Anna-Freud, Berlin (DE) 2017.

of tracing potential spatial values in the configuration of compact buildings, since Fischer has been conducting for more than a decade several experiments on the possibility of combining *under a single (multiple) roof* an uninterrupted sequence of interrelated spaces so as to shape a continuous flow between communicating rooms within a superblock. Fischer's projects, physical transcriptions of the pedagogical concept of an *open learning environment*, show how the sophisticated coincidence between compactness and flexibility is able to become architectural theme.

It is no coincidence that the slogans of the projects – *Atelier Himmelslicht* (Secondary School in Laufen), *Atelier im Park* (Freilager School Complex in Zürich-Albisrieden) – emphasize the creative dimension of space, which, although rigidly shaped, offers users different possibilities of spontaneous appropriation, favoring different and contemporary synergies of actions, behaviors and learning modes. Fischer's radical proposals, a contemporary reinterpretation of the laboratory schools of the seventies, such as the Laborschule in Bielefeld by Ludwig Leo, identify some organizational principles and order them in relation to the functional program: compact plan with matrix organization, no corridors, passing rooms, deep floors illuminated from high above by skylights or shed roofs. An uninterrupted *architectural sequence plan*, a spatial flow without hierarchy.

It is important to underline how these projects are not isolated examples, but rather part of a common experimentation field; the building for the nursery and primary school in Azmoos in the canton of St. Gallen by the Berlin studio Felgendreher Olfs Köchling is proof of this. Again, a learning landscape articulated under a *single (folded and multiple) roof* – *Alle unter einem Dach* is the projects slogan – in which scale of the village and scale of the building blend: a (large) roof between the roofs, a (large) house between the houses.

Matthias Bär's Bregenz-Schendingen school campus also employs similar principles, while organizing autonomous clusters interconnected with each other, basic units that allow the shaping of the pedagogical concept on which the project is based. Within the different clusters and between one cluster and another, the rooms are conceived in continuous sequence and semitransparent rooms define a «schematic and fluid topology»⁷; the wide and measured inputs, the central cables, the minimisation of circulation

**Fig. 13**

Matthias Bär, Schulcampus, Bregenz-Schendingen (A), 2014-17.

and the continuous visuals between one spaces and another characterize a modular organization (*Netztypologie*), within which large portions of *multifunctional white space* are identified, which best suits a flexible didactic, in order to answer the request for a hybrid functional program. All of this is organized in a single and compact isolated building, linguistically homogeneous and with a familiar character, excavated by a large central *lichthof* and by the two lateral stairwells, which mark the rhythm of the plan and accentuate the continuity between the parts.

The project for the school Oberstufenzentrum Sozialwesen OSZ Anna-Freud in Berlin by Bruno Fioretti Marquez, employs the type of the isolated building organized around a central core of distribution analogously: a Teutonic and in some ways ordinary concrete frame, typical of the industrial language more than of the aulic constructions, is transformed into an articulated building.

The use of a few elements, the attention to detail, and the accurate spatial study allow measured variations, able, within a conception of classical matrix, to contribute to the definition of the architectural character; the praise of the monotony of Schimidtian memory and the uniformity of the syntax aspire to «become artistic medium» and translate the functional program into a place rich in innovative spatial effects, of alternative learning opportunities. From the point of view of the relationship between classrooms, distribution elements and vaults, the Volta Schulhaus by Miller&Maranta in Basel is somehow the forerunner of the Bregenz building, demonstrating how, despite the constraints imposed by the project area, a precise spatial intention is capable of shaping a complex distributive and functional articulation, without apparent effort. In Basel, an enigmatic concrete building, which according to Quintus Miller, «could be anything, especially from the outside» because «there is nothing to suggest that this is a school» (Schindler 2002, p. 10), reveals an internal unitary and articulated spatiality, haughty and domestic, able to recover, even with a minimal and completely abstract language, the individual dimension of living a place, of belonging to it.

The classrooms, the learning labs and the spaces related to them are organized around narrow vaults of Gothic proportions, excavated in the compact and monolithic volume; the gaze is lost in a continuous variation of views and perspectives; natural light is diffused and penetrating, amplified by multiple viewpoints and by the treatment of some surfaces with mother-of-pearl paints; everything is unitary, coherent and severe, available to life and its unforeseen manifestations:

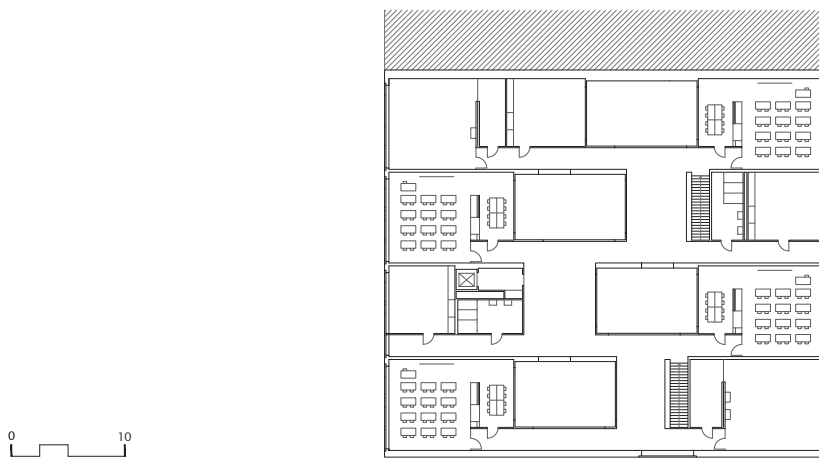
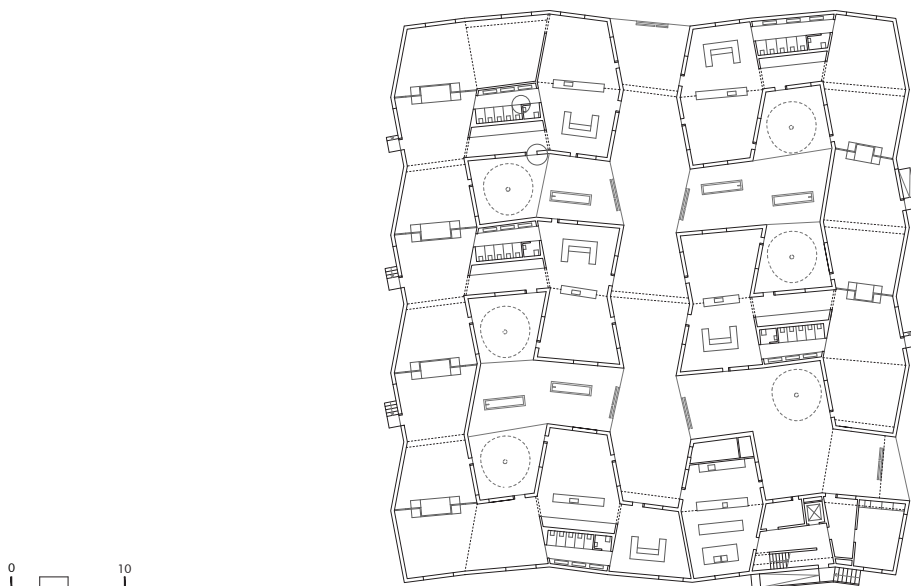


Fig. 14
Miller & Maranta, Volta School
Building, Basilea (CH), 1996-
2000.

«Only the jackets and coats that come out of the wardrobe and the drawings of the children, hung with duct tape, reveal that it is a school. While the exterior is flat, almost blind, refractory, the interior opens up on an unexpected spatiality which is difficult to grasp at first glance» (Schindler 2002, p. 10).

In the light of this partial reconnaissance the school of Vila Nova da Barquinha seems to be interpreted as an attempt to build a universe coherent in itself. The identification of an enclosure excavated inside it, free translation of the more general concept expressed by Demangeon, produces, by way of conceptually identical aggregations, a recognizable unity. Direct memory of the iconic Munkegaard school in Gentofte by Jacobsen, who organizes classrooms and corridors around large courtyards within a potentially infinite mesh. However, a difference can be traced: despite the sought-after uniformity and repetition of the classroom-courtyard module, Jacobsen characterizes the different parts volumetrically by aggregating and differentiating them, without renouncing to show the joining elements, whereas the Mateus brothers articulate the individual volumes and build an uninterrupted spatiality, effectively eliminating the traditional distribution. Thus, if externally the enclosure is reminiscent of caravanserais, the internal organization alludes to the variety of urban space, to those ancient cities built by the combination and variation of a single type.

As in Vila Nova da Barquinha, also Bruno Fioretti Marquez's childhood school in Cassarate is based on the principle of assemblage, albeit concealed, and offers a volumetric and formal transcription of it. The three-dimensional deformation of an ideal chessboard produces the alternation between solids and voids in such a measured way that it is impossible to say whether we are witnessing an addition or, on the contrary, a subtraction process. Once clarified the game rules, the identification and repetition of a single module to build a sequence of courtyards inside a series of houses – identified each by its own roof – allows to proceed for alterations and variations and to build a highly horizontal *ensemble*, with familiar proportions and contained dimensions. The organization of the five sections is characterized by a refined continuity that alludes to the grid that generated it without depending on it anymore; serving and auxiliary spaces share the same nature, outdoor and indoor are in direct relation. Abandoning Jacobsen's classical grammar, the continuum follows the rules of an unconventional syntax with juxtapositions and alterations, it speaks an allusive and completely new language as in Joyce's continuous stream of consciousness.

**Fig. 15**

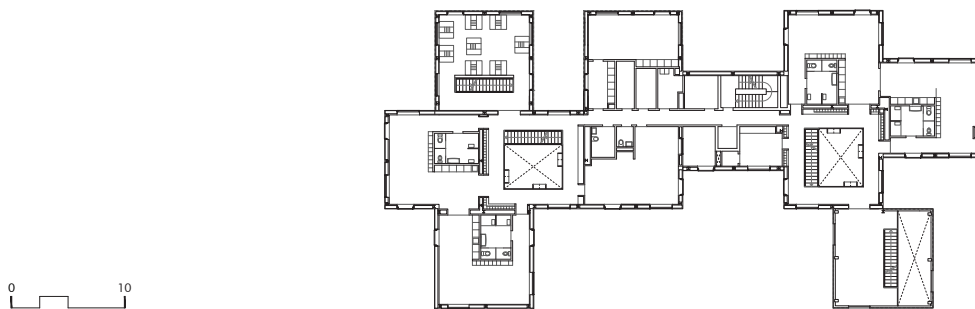
Bruno Fioretti Marquez, Kindergarten, Cassarate (CH), 2007-14.

The Kinderuniversum KIT in Karlsruhe, made by the same designers in subsequent years, demonstrates no less sensitivity in handling the type of compact block organized around a central space, employing architectural principles already present in Cassarate. Actually, the two projects do have opposite characters, but they both work on the subtle correspondences between the different spaces: natural light and irregular geometries are re-composed within a silent and monolithic volume, dug by deep openings that emphasize its compactness. The relationship with the city is direct in both cases, there is no mediation of elements that are not in themselves already present in the architectural conception of the building – urban projects by means of architecture.

Anew houses between houses, roofs between roofs, are found in Copenhagen in the Frederiksvej Kindergarten by Cobe: the functional program of a kindergarten for nearly two hundred children is broken down into eleven buildings that, instead of opting for a huge construction, brings back – *under many small roofs* – the intervention to the grain of the city. The project pivots on the formal and volumetric breakdown and shows particular care in bringing each element to a scale that is compatible with that of a child perception. The whole figuration refers to the idea of a typical childhood home – *As simple as a kid's drawing* is the project's slogan – and uses the archetype of a pitched roof house as a figurative element to produce an instinctive sense of belonging, an appropriate “feeling of space”.

The present reconnaissance could certainly go on for a long time, identifying other criteria for the classification and selection of genders, pinpointing recurrent types and configurations, examining concrete cases and comparing buildings by analogies and differences. However, the present work does not pursue any encyclopedic intention and so we have rather anthologically collected works by several authors, placed them before each other, read them in parallel, as if the one were the text in front of the previous, in order to recognise recurrent ways of translating specific pedagogical instances into architectural terms.

This reading key allows the chosen examples to acquire a meaning since their apparent arbitrariness can be conducted to a common discourse, showing that the requirement to respond to certain functional needs is not dictated by the rules of composition, but becomes part of the project itself. Therefore, it seems useful to come back to Le Corbusier in order to

**Fig. 16**

Cobe, Frederiksvej Kindergarten, Copenhagen (DK), 2011-15.

answer the question whether *educational architecture* exists and whether there is some correspondence between the configuration of buildings, their language and the pedagogical models adopted, whether, in other words, the distributive question is defined according to the pedagogical families to which it refers, and from here on to the compositional and linguistic aspects. In Marseille the definition of a linguistic space, whose architectural characteristics are able to act positively on the learning process, is produced by using perception as a tool of relationship and communication and the architectural spatiality is engaged for its ability to shape alternative ways of making and living the school.

The great *plasticienne* declines the principles of the *tâtonnement expérimental* tumultuously and sculpturally. The spatial and distributive character and the linguistic and compositional choices of *La Maternelle de Marseille-Michelet* seem even able to show the possible architectural terms of the *méthode naturelle* applied to teaching grammar and orthography which, according to Freinet, can be learned by undergoing tangible and progressive experiences and not by mnemonic-cognitive processes:

«L'orthographe, c'est comme l'habit des mots. La contexture, les particularités de ces mots s'inscrivent dans notre esprit et dans notre comportement non point par logique et mémoire, mais par des voies exclusivement sensibles, par les photographies successives dont la netteté indélébile est seulement fonction de la sensibilité des organes qui les enregistrent, de l'éclairage particulier que nous projetons sur les éléments à inscrire sur la plaque sensible» (Freinet 1963).

In this respect, the Le Corbusierian orthography applies to a purist syntax obtained by two-dimensional crushing of a composition that, for the accentuation of the space-time relationship, is of cubist matrix. As a matter of facts, as Sbriglio remarks, since the syntax is certainly purist, the spatial experience evokes the cubist code, enriching it with surrealist notes: the narrative discourse proceeds with scenes in sequence as confirmed by the marked use of chromaticism, the nudity of the concrete and the insistence on the polyphonic composition of the relationships between architecture and natural elements – between their light and the sea.

Once again, Le Corbusier demonstrates that the ability to manage and organize space is the core of the best architecture and that, in the specific case of school buildings, this capacity is linked to the memory of childhood. Wondering how we would like children to live and remember theirs is therefore essential, while being aware that childhood, as Foucault notes, comes with the innate ability to recognize and imagine *counter-sites*, that are alternative places to the monolithic vision of space itself:

«[...] and these counter-spaces, these localised utopias, are something children know perfectly well. It's the bottom of the garden, of course; it's the attic, or rather the wigwam put up in the middle of the attic, or else – on a Thursday afternoon – it's their

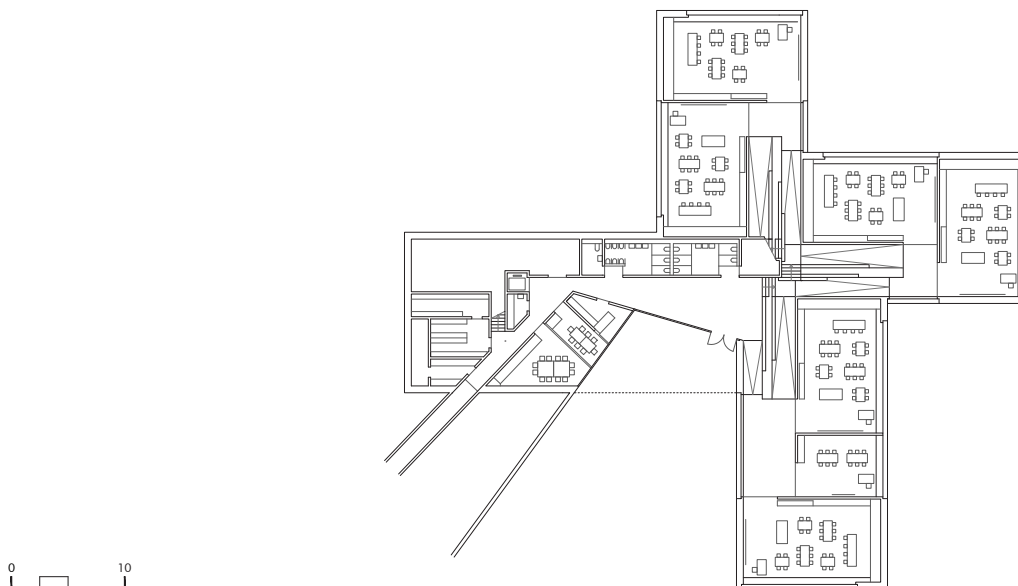


Fig. 17
Pierre-Alain Dupraz, Kindergarten,
Prangins (CH), 2013-15.

parents' double bed. It's on this double bed that they discover the ocean, as they swim between the covers; and then this bed is also the sky, as they bounce up and down on its springs; it's the forest, as they can hide there; it's night, as they turn into ghosts under the sheets» (Foucault 2018, pp. 12-13).

Why not being confident with this, then?

* The redrawing of all the plans of the different schools included in this essay was conceived and conducted by Alessandro Petroni, whose contribution made it possible to standardize the different materials, make them readable at the same scale and therefore comparable.

Notes

¹ For the sake of example, see Rosan Bosch's works, starting from Stockholm Vittra Telefonplan School.

² Description provided by the architect.

³ It would be useful to go back to the genesis of the theme of *space between spaces* in-between realm, from van Eyck to Hertzberger, to reflect on the different interpretations of Eisenman, Koolhaas, Tschumi and others and read them in relation to the artistic and philosophical declinations of this concept.

⁴ It is possible to recognize a sort of progeny which stem from the centripetal layouts of Renaissance origin, passed through the German way, between the hands of Ungers and others, or through Anglo-Saxon hands, for example through the *Houses* of Eisenman, and has arrived in Switzerland and here, for reasons related to the increasingly marked search for volumetric compactness, is declined as a recurrent type especially for school buildings.

⁵ Description provided by the architect.

⁶ Indire Ricerca, *Vittra - Telefonplan. Senza pareti e senza classi*, last cons. 25 February 2021, https://www.youtube.com/watch?v=sato4iut_vk

⁷ Description provided by the architect.

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