The so-called ‘social architecture’ is full of examples in which a poor design spoils well-intentioned aims. This project, however, is an exception to this rule: facing the state commission to build a system of kindergarten buildings to reach the youngest citizens of a country, the project starts from the smallest module to transform it into a combinatorial and repeatable system, thus allowing the intervention to reach a national scale.
The project consists of 21 Child Development Centers – CDI – for the District of Atlántico, Colombia, in different urban and semi-urban plots at 18 small towns. These new CDIs had to be more than a kindergarten. That is the reason why they are open to the community, becoming reference points, meeting places, and spaces for social integration.

As we all know, modern educational space has been organized based on efficiency and utility, with comb or patio-cloister typologies based on surveillance and control. For the proposal, however, we rely on the ideas of the Reggio Emilia educational method, developed by Loris Malaguzzi, which considers the school space as a learning mechanism in itself, having not only a functional purpose but also...
Sistema de colocación de módulos base y generación de patrones de asociación adaptables.

Base module placement system and generation of adaptive association patterns.
a pedagogical one. Thus, architecture seeks to consider the entire space of the school as a place for guidance, learning, and social relations.

Our proposal of an educational space for the early childhood is then committed to spaces that allow diversity and multiplicity of experiences for learning and exchange, understanding that this process does not only happen within the classroom but in every daily interaction and routine: since a child is not interested in getting faster from one classroom to another or in being more efficient, a winding corridor can become an educational tool in itself. Thus, the project offers a playful space for learning, where architecture becomes the ‘third teacher’ – as Malaguzzi suggests.

The system
Instead of a complete, closed architecture, we propose the development of an open, adaptive system, built out of modules and association patterns that allow it to adapt to diverse topographical, urban or programmatic situations. Such an approach is a critique of the idea that ‘form’ is born out of place. On the contrary, the values that interest us are those of position and disposition regarding the reading of the place.

The result is a building willing to grow, expand, change and adapt according to particular circumstances; thus, against formal or geometric composition mechanisms, we introduce a disposition strategy that allows changes, adjustments or permutations. A kind of practice that is closer to a strategy than to the finite, closed object of authorship design.

Given that closed spaces are independent, self-sufficient modules, a circulation strip is needed – tying the different programmatic modules together – suitable for different activities. That chained disposition allows facing the features of the place and the shape of the plot freely: it can be bent, curved, rotated to evade obstacles, lengthened, turned to join different parts or rolled up.

The entrance will accommodate the modules for the multiuse classroom and the largest number of bathrooms (for both adults and children) in order to serve both the cdci and the community. The management area will also be located towards the access, next to the nursery (two modules), while the dining room (three modules) will be closer to the facilities (a large module and a small one). Then, a set of 8 modules for pre-kindergarten classrooms and another 8 modules for kindergarten classrooms with two modules for children bathrooms will be placed.

Typological dispositions arise from the size and shape of the plot. Spiral or closed typologies are inserted in square-shaped plots, horseshoe typologies in rectangular plots with one narrow side, while the most extensive plots are occupied by flower typologies.

This working method implies simplicity and speed in the construction process, reducing costs and time schedules while guaranteeing that the...
Catálogo de 21 centros preescolares.
Catalog of 21 kindergartens.
project is carried out completely. By being built out of identical pieces, the system also conveys monetary advantages: massive purchase of materials, contracting processes and efficient maintenance and replacements typified protocols allow reducing costs; they also allow institutions to operate in an industrialized, rapid way (these 21 kindergartens were built in only 3 years).

Repetition and difference
We are interested in the diagram as a project. A diagram is not geometry, but a graphic structure of thought associated with an operating procedure (instructions for use), which defines physical data, relationships and basic programs behind each idea. It has no precise place or scale; it is mostly unfinished and adaptive. Its origin summarizes all of its features. The more it is upheld, the more the project operates in a diagrammatic way, the more powerful it becomes.

In turn, a repeatable system does not express its difference in the elements that compose it – as they remain the same – but in how they are arranged and related.

To think of architecture as a diagram comprising a system of pieces, in a toy-like manner, allows
A Modelo patrón herradura.  
Horseshoe pattern model.

B Modelo patrón en flor.  
Flower pattern model.

C Modelo patrón caracol.  
Spiral pattern model.
democratizing access to it. As an open-source software, each town will be able to define how to apply the system to build its own kindergartens. In fact, although we developed the system and its application in 21 different locations, other local architects are currently developing 10 more projects using the very same system.

Thus, the value of the system does not lie in its composition or its originality, but in its possibility of being replicated based on instructions and protocols for organization or disposition. Once the system is used by other architects to build multiple kindergartens, the question of who the architect is will lose its meaning. Almost nobody knows who invented the Lego pieces; what matters is how they operate and how to play with it. ARQ
21 PREESCOLARES DEL ATLÁNTICO

Arquitecto / Architect: Giancarlo Mazzanti
Equipo de proyecto / Project Team: Juan Manuel Gil, Juliana Zambrano, Simon Escabi, Natalia Canal, David Córdoba, Stanley Schultz
Ubicación / Location: Atlántico, Colombia
Cliente / Client: Gobernación del Atlántico
Materiales / Materials: Estructura de malla metálica, poliestireno, hormigón proyectado. Enchape de mosaico veneciano verde. Pisos de hormigón afinado con capa de pintura epóxica. / Metal mesh structure, polystyrene, shotcrete. Green Venetian cladding. Concrete floors with epoxy paint.
Año de Proyecto / Project year: 2016
Fotografías / Photographs: Alejandro Arango, Alfonso Manjarrez, Valentina Sáchica

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Architect, Universidad del Valle Cali, Colombia, 2004. Has a broad experience in the Colombian private and public sector, specializing in budget management, project management and timeschedules.
Massiveness is inherent to almost any state policy. Consequently, when in 2015 the Colombian newspaper El País published an article on the next public policy for early childhood education, it did so by stressing the figures given by Gina Parody, then the Minister of Education: “7,778 children drop out.” For the Colombian government, massiveness in the future law was not only desirable, but inescapable: there are more than 5 million children between zero and five years in the country, segment of the population for which the strategy “De cero a siempre” (sic) was being designed. Although the policy had been in the making since 2005, the law was not passed until 2016. Among the promises: the construction of at least a hundred new Child Development Centers (or cdi in Spanish). A clear opportunity for the architecture field.

In parallel with this process, Giancarlo Mazzanti was already rehearsing his ideas on architecture for children. One of his first published kindergartens – El Porvenir, completed in 2009 – was assertively proposed as both a system and a building seeking to be open to the community, “visible and emblematic” for the area. But the modular strategy was incipient and the floor plan was still a geometric composition of figures, in this case, fitted into an oval. The next built project – finished in 2011 – was the Timayui kindergarten: this time, the system was actually a replicable modular configuration, showing the structure of load-bearing walls and the green Venetian tiled facade that would appear later in the Atlantico kindergartens.

Interestingly enough, these explorations were limited to the Colombian context. His 2012 project for the Loris Malaguzzi preschool competition in Italy – based on the principles of the Reggio Emilia philosophy also acknowledged in his projects of 2011 and 2016 in Colombia – completely disregarded the module and its replicability. Instead of a possibility to test his earlier explorations on an international level, this building was understood as a unique piece. Reasonable: there was no massive public policy to aim for. In addition, the contest offered an opportunity to promote the ‘good architecture’ of his office and – in spite of the time invested in his other projects – the feature of choice was singularity. International recognition and massiveness appear to exclude each other: only originals are allowed.

Originality versus Massiveness
But for any architecture that aspires to be massive, repetition seems inherent. Not only for reasons such as economy of scale, but also speed, qualified workforce, efficiency in maintenance, and so on. Ideally, the architect will know to respond to these ‘big’ problems and still achieve recognition through authorship. Even so, at least in his local production, Mazzanti has tried to formulate a contemporary solution to the challenge massiveness poses: replacing standardization with flexibility; discerning between repeating and cloning. Thus, he distances himself from the typical plan (a form) to approach the diagram (a system of relations), as van Eyck did at the Amsterdam Orphanage (1960). The real interest, however, lies not in the twenty-one preschools designed by Mazzanti (undoubtedly, proposing a system within a public policy entails getting a hold of a significant number of commissions), but the ten other kindergartens that architects from different localities are currently developing based on his system. It will be, precisely, when the system is applied outside of authorship – alien to the original creative genius – when its potential, massive impact and validity are really put to the test.

Notes


2 “Desde a siempre” translates to "From zero to always," the catch being the letter ‘s’ from ‘always’ in Spanish (siempre) is switched by a 5, simultaneously signaling the age range covered by the Law (ages 0 to 5) and the lasting impact the policy should have in kids’ lives.


4 Although in the case of Aldo van Eyck, the project was on the outskirts of Amsterdam and the configuration generated by the unit aims to construct a small city, not detonate an urban regeneration as is the case of the policy and its kindergartens. See: Strauven, Francis. “Aldo van Eyck. Shaping the New Reality From the In-between to the Aesthetics of Number.” In Study Centre Mellon Lectures. cca, May 24, 2007. Also: Boer, René; van Iersel, Michiel. “Orphan City.” Harvard Design Magazine, no. 42 (Fall-Winter 2005): 177-181.