

# Peace is built through dignified urban spaces (First part)



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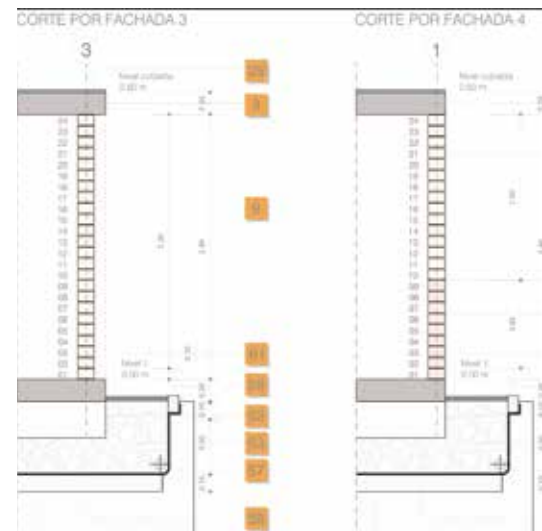
One of the problems of string theory was that Schwarz was not attempting to eliminate the problem of size.

*Leonard Mlodinow.  
Feynman's Rainbow*

**M**an becomes intelligent when he becomes aware of his hands and he connects them to his other senses and begins to build with them. What he sees in the sky brings it to the hand and discovers geometry. What he touches gives him a measurement, a weight, a texture. With his hands constructs the living space, which is what will make him dignified and different to animals.

From engineers artists<sup>1</sup>, that they will become the architects, the design of the space and materials has been a challenge that transcends techniques and becomes into create humanity. Because the architecture, as conceived from the thesis of Marcus Vitruvius Pollio, builds the

1. Many of them are made in the Augustan age and appear again in the Renaissance and, somehow, renewed by the construction of medieval cathedrals.



home of man and woman, that is, the spaces in which they will carry out their best practices as well as provide them with a place to think better and, understanding well, to make the earth a place where it's good to be alive.

Colombia, from 1970 to 1980, is characterized as a problematic country regarding the creation of urban public housing. Thousands of displaced people arrived in the cities to configured shantytowns and critically lived: overcrowding, disease, despair. And these new, messy and governed by the slum spaces, poor development of roads and the use of improper materials, a problem was created: inhumanity, the closeness between man and animal condition and all forms of illegality. So it becomes the idea of (subsidized) social housing and then (given away) priority. Housing for the poor was made in a poor way and in poor places and poverty was covered but without solving the problem. Because housing is to live, grow and not to crowd between walls and improper materials. If there is no humanity, chaos grows and the man is lost.

The housing solution emerges from a research process that involves the Pontifical Bolivarian University, the Technische Universität München, the Ministry of Infrastructure of Antioquia and the German Academic Exchange Support Service DAAD.

## The PBU<sup>2</sup> solution

The Laboratory of Architecture and Urbanism (LAUR) and the Laboratory of Technical Studies and Experimentation (LEET) of the UPB, with the support of the Department of Antioquia, consequently with a priority interest urban housing should be, they designed a modular house that not only meet structural standards but gives dignity to whom lives there. This house, built in industrialized concrete, not only has more built area

2. Pontifical Bolivarian University

than those made so far, but is cheaper and more resilient, while allowing the user to make changes and additions to their habitat to make it more complete.

With the philosophy of a flexible house, which inhabit verbs allow people to become more human, the LAUR and LEET designed modular homes with various distribution alternatives, even some with an indoor patio, more area, more economical and faster processes than traditional construction. In addition the optimization of the transport to any urban place of the department, allowing a medium truck to carry two houses at once.

The system, which starts from precast modules, also optimizes land use, because the foundations are not deep but fit the floor and integrate it, making them more resistant to earthquakes and allow extra charge up to three floors without structure damage.

Furthermore, as it pertains to the rubblework, users can adjust and paint them with materials according to their own culture. So, they are not houses that quarrel with cultural patterns but they allow to integrate the understanding of the landscape of every human group, which not only makes them more habitable but friendly to the human eye.

**These housing solutions are aimed at reducing the deficit criteria of quality and efficiency, based on reducing costs and construction time.**

The idea, which already has prototypes built in Marinilla and is under patent, not only meets current technical requirements (with added discovered in research) but they have as a goal to make the inhabitants feel they can improve as people. So it is the start of a middle-class behavior, in which the word poor is discarded. To the members of the LAUR and LEET poverty





The architects Alejandro Restrepo Montoya and Felipe Bernal Henao.

**It is a solution that part of the support structure of a free interior space and façades that can meet the conditions set from the context.**

it is not a condition but a space that, from the house, they can be overcome. I am the house I am living in.

Research and implementation of prototypes (which required to build real size houses under the requirements of the proposal and to see them work in reality), is in charge of the architects Felipe Bernal Henao and Alejandro Restrepo Montoya, who had the advice of the LEET and the Lehrstuhl für Entwerfen, Baukonstruktion und Baustoffkunde EBB.

Intelligence is the ability to solve complex problems. And one of the most complex problems is the priority interest housing, which has worked with the premise of architecture to poor people, it means, creating spaces with serious problems for habitation. LAUR and LEET are acting against this premise because they propose a new one: if you can live well, the future will be worthy. And with dignity the intelligence enhances doing good things.



### Data sheet

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