



*Parallels*  
**Examples from  
Latin America**



### Three approaches to address public housing and informal settlements

The opportunity to travel to Fiji, work with the Ministry of Urban Development, Housing and Environment, and visit their projects to approach the issue of informal settlements proved to be a unique experience. As we found ourselves visiting squatters and new housing relocation projects it is inevitable to think of Parallel examples in Latin America. Sidestepping the huge difference in culture, scale and geographic situation it seems useful to highlight some successful and recent examples from Latin America and consider how could their fundamental ideas be useful for the Fijian context. After all, they have a common root: immigrants from rural areas on the country looking for job opportunities in mayor urban areas.

Rural immigration into cities is a phenomenon that is taking place in the world at different scales. The problem remains the same

regardless of social and economic differences: neither government nor private sector are able to provide formal housing at the same pace as urban population grows. As squatters grow without the basic infrastructure and planning, there is no risk evaluation on the land where houses are located. Floods and landslides destroy or jeopardize the existence of squatters and make it inevitable to relocate informal houses into safer land. In other cases, land value increase lead to new high-end development plans take over slums land and houses must be relocated. On the contrary, when informal settlements become too dense it is impossible to relocate, and they have to be upgraded.

Therefore, we will focus on revising recent projects in Latin America, which can be clearly related to the informal settlements and housing projects we visited in Fiji. Our hosts from the Ministry took us through a diverse selection of projects, which had one common goal: to address the lack of public housing and to provide better living conditions for the people living in the squatters. During our

visit we classified their urban projects into three categories: relocation (from squatters to new housing), transformation (individual transformation of houses incrementally) and upgrading (improving public infrastructure in squatter). Therefore, we will classify the projects in Latin America in the same categories to make easier parallel connections.

A selection of cases from Chile, Colombia and Venezuela will be highlighted as examples of key successful strategies that have been implemented in South America. Colombia and Brazil have been pioneers in squatter upgrading in the last decade, showing the world how to solve social and physical issues while connecting the formal and informal city. Venezuela, as an example of most Latin American countries, has a long path on public housing projects dating from the fifties. Finally, Chile, has been working with incremental housing for a long time and resulted in successful and replicable projects such as Elemental.



**STARTER HOUSE**



**STARTER HOUSE INCREMENTED 1**



**STARTER HOUSE INCREMENTED 2**

## RELOCATION

### *Elemental and Moravia*

When new housing must be subsidized for relocation some relevant ideas should be considered:

1. Incremental housing. Consider building “core unit” houses that people can expand in time to make the housing process faster and relocate more families at the same time.
2. Urbanize housing relocation. The relocation place must be attractive to re-settlers. To move farther away from the city makes it harder to commute unless appropriate transportation infrastructure is guaranteed. At the same time, squatters have informal shops for basic needs; new housing should consider mix use.

## TRANSFORMATION

### *Incremental Housing Program*

Many incremental housing cases driven by the World Bank in 1970's were implemented in Latin America. The idea is that a family that starts with a basic core house given by the government will evolve with their own efforts

to transform them into bigger houses. The “core unit” can range from “site and services” and parcel definitions, to small houses where expansion can happen horizontally or in height

## SLUM UPGRADING

### *Cerro El Bobo, Petare and Community Libraries*

Medellin in Colombia has shown the world an exemplary catalogue of upgrading projects that addresses spatial, social and economic approaches to slum upgrading. They have transformed the most dangerous slums in the city into touristic sites and their citizens have been granted a better lifestyle. With the help of Colombia's best architects the local government has approached the urban issue by strengthening communities, connecting isolated settlements and providing outstanding urban landscape. Nine Parques Biblioteca (part of a network 23 municipal libraries), have been built in the last five years. Cable cars reach squatters and connect their citizens with the subway system making their daily commute much easier and faster. Finally, communities that once did not get along have started to work together for their common

environment making slums a much safer place to live.

Trying to connect all these ideas from Latin America with the projects being build in Fiji it is important to understand them as ideas to learn from. New housing projects like Lagi Lagi might be exactly a group family's dream of a house but there are many more families that won't make it to Lagi Lagi; therefore a faster housing approach shall be considered to include more families and empty the site for industrial development. The new housing projects are not including mix use and this is a natural condition of squatters, it is better to leave space for them before they are done informally. The population of Fiji's squatters might not need a cable car to access the city centre, but they do need a faster and more organized bus transportation system to connect with Suva's downtown. Public space and community centers are were community is build, churches supply this need now in Fiji, but maybe the government shall consider including cultural complexes for education and events.

## RELOCATION

Relocation of squatters at risk into multistory buildings with good connections to the transportation networks



ORIGINAL SHACKS 2008



NEW PARK 2012



RELOCATION HOUSING



CABLE CARS

## MORAVIA SETTLEMENT.

Medellin, Colombia

Local Government and

Empresa de Desarrollo Urbano Medellin

Moravia is a squatter located in Medellin. A big part of the informal housing was located in a former dump site; for sanitary reasons it had to be relocated. A new public park was proposed by the government for the site and public housing was provided for the families that had to be relocated in a new site further from the city center but **well connected through new cable cars linked to the subway system.**

As families are relocated colorful sticks are placed on their house's former site with flags containing words to describe the community's dreams for the site.

## RELOCATION/TRANSFORMATION

**High density multistory incremental housing is cost effective when building low-income housing on expensive land.**

## ELEMENTAL TYPE

**Originally from Chile and spread throughout Latin America**

Chile has been promoting incremental housing for a long time. Their reason is that they have realized that it is part of the natural process of housing. Families move in to the city to find jobs and then bring relatives and friends to live with them. Therefore they have developed a series of projects to tackle the subject, one of the most successful one has been ELEMENTAL. High-density multi-storey incremental housing is cost effective when building low-income housing on expensive land.

Elemental started has an academic initiative by the Pontificia Universidad Catolica de Chile in 2002. Its goal is to avoid relocation of families in squatter settlements in expensive land close to downtown. They proposed multi-storey incremental housing to densify the use of expensive land. Based on the fact that family houses are incremental to receive relatives immigrating to cities they proposed a core house that can be doubled in size when the family has the need to expand to accommodate relatives. The architectural design is flexible to adaptations without losing its starter aesthetics.

PARALLELS : EXAMPLES FROM LATIN AMERICA



STARTER HOUSE



HOUSE INCREMENTED

**TRANSFORMATION**

**Comprehensive Guidelines for Incremental Housing**

**INCREMENTAL HOUSING PROGRAM**

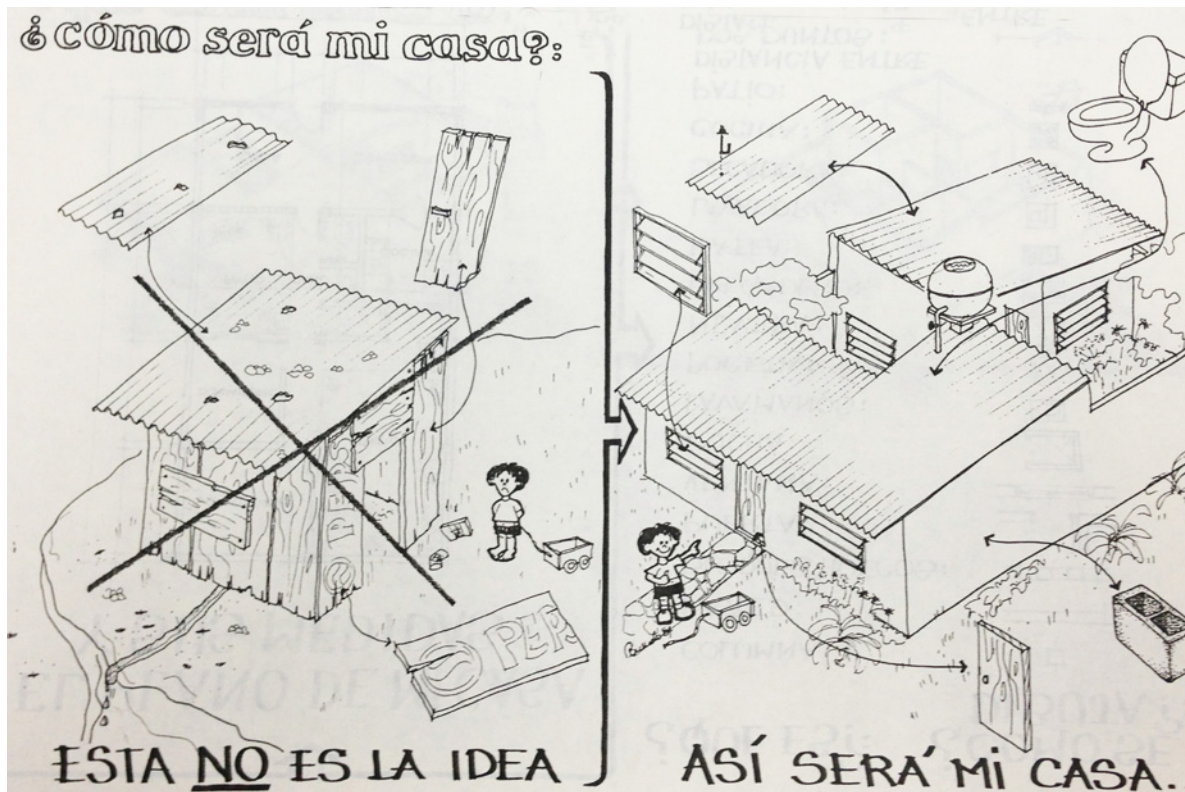
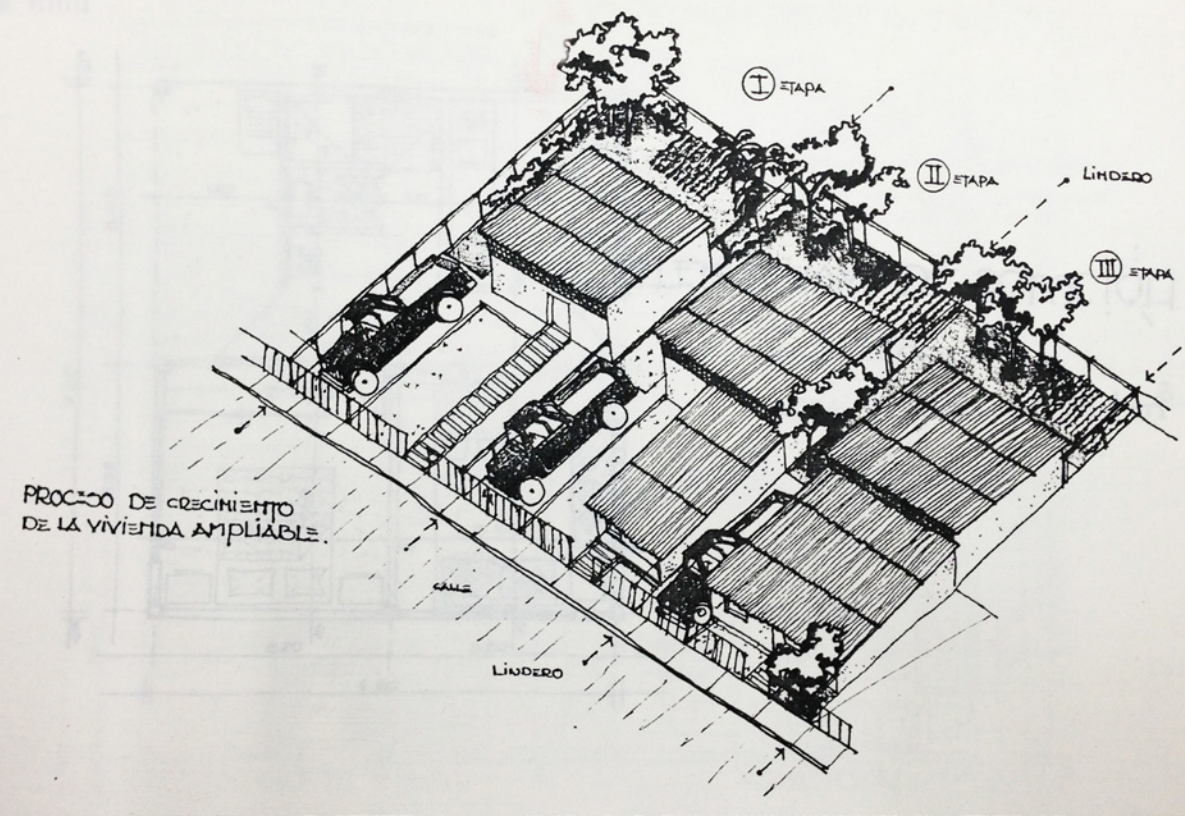
INAVI, Venezuela 1970

The Venezuelan government implemented incremental housing in the 1970's. The National Housing Institute (INAVI) published a booklet in 1984 with construction guidelines for incremental housing (Vivienda Progresiva) and self-construction techniques. The goal was to help the poorest families that could not afford to buy public housing, because housing demand was so high that most of the subsidized housing was taken by middle class. The booklet was a construction guide to help people build their own houses according to basic construction norms in a given parcel of land. At the same time the INAVI offered technical and financial support to assure that the houses were well build.

Half of the booklet is dedicated to incremental housing and the different ways that a "core unit" can grow in a given parcel respecting urban guidelines. They define which are the basic spaces needed: bathroom, kitchen and bedroom and define flexible spaces that will transform through time such as social space. It is interesting to point out that they even consider that houses will end up having small shops in the front.

The rest of the booklet explains with diagrams construction process with basic concrete and masonry blocks. Sanitary and electrical measures are explain thoroughly specifying that sewage must be connected to public sewage and if not available a septic tank must be build. They specify that shacks built with scraps of metal sheets are not an appropriate material for the house. This booklet is still a great guide for self-construction because it addresses basic issues in a comprehensive manner.

PARALLELS : EXAMPLES FROM LATIN AMERICA





STARTER HOUSES



CULTURAL CENTER



PREVIOUS CONDITION



AFTER URBAN RENEWAL



NEW CONDITION

## MORAVIA CULTURAL CENTER Medellin, Colombia

New Public facilities such as the Cultural Center designed by the architect Rogelio Salmons and a new boulevard running along the creek have brought a new development force towards Moravia. The houses that started as shacks have become three story houses suggesting that **incremental housing is directly related to public space and infrastructure.**

**UPGRADING**

**Construction initiatives strengthen community engagement**



**CERRO EL BOBO**

**Medellin, Colombia**

The Urban Integration Project in Medellin aims to work for a social urbanism that integrates the informal settlements to the formal city. One of their goals is to integrate communities by teaching the people to build and work as a community. Several bridges were built by the people living in the squatters joining different sectors and making new connections as part as a network of public spaces. Four years later the impact is evident. A squatter like Santo Domingo, that used to be composed of independent and excluded is now a bigger community that works together for a better urban environment.



**UPGRADING**

**Low-budget small interventions  
have a positive impact on the  
community**



**ART INTERVENTIONS**



**SPORTS INTERVENTIONS**

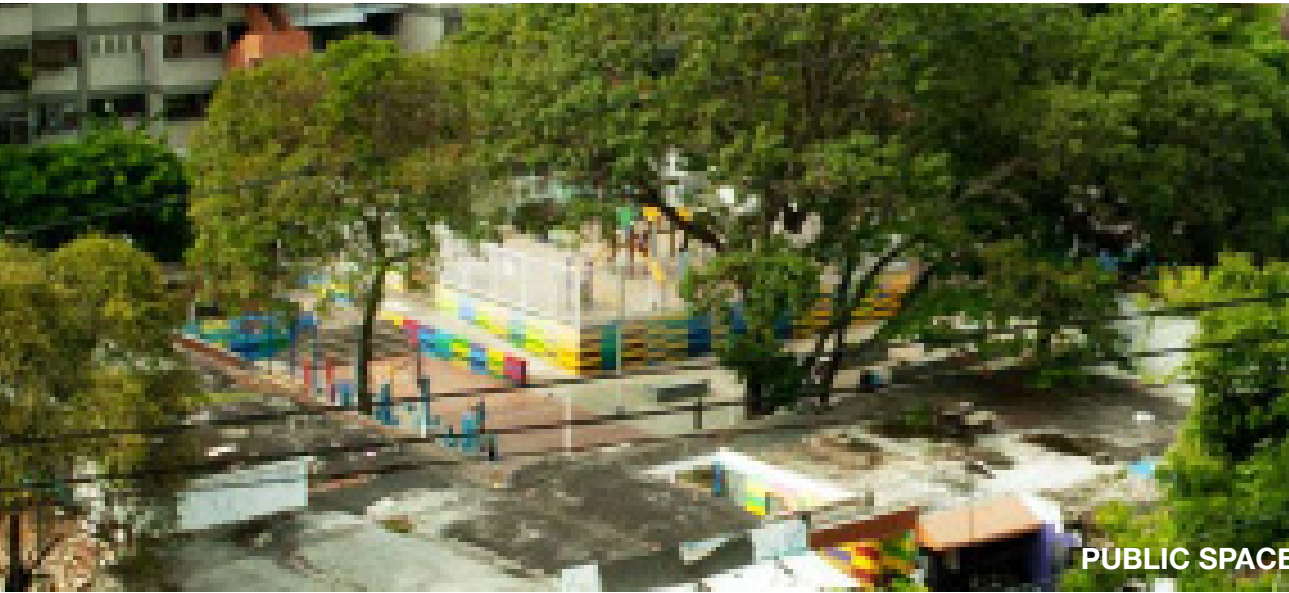


**ART INTERVENTIONS**

**URBAN INTERVENTIONS IN PETARE**

**Caracas, Venezuela**

Local municipalities have a reduced budget since 2009 and their possibilities to make mayor urban interventions have been affected. The Municipal Government, in charged of Petare (one of the city's biggest squatter settlements) has focused its resources in building small low-budget public spaces all over their squatter settlements. Their goal is to reach as many communities a possible and provide significant public spaces where many diverse activities take place. They have invited local artists to work with simple materials and add an aesthetic value to the new interventions. The idea of including small public space in upgrading projects has a big impact on the community and does not require a mayor financial burden.



**PUBLIC SPACE**



**UPGRADING**

**Stunning catalytic public facilities reinforce social inclusion and community self identity**



**LIBRARIES COMMUNITY BUILDINGS**

**Medellin, Colombia**

The Municipal government as developed a new typology called: "Parques Biblioteca" as a key part of slum upgrading. Architecture competitions are organized to choose the best project and it is build with the best architecture quality available. The positive impact of this new public building has been evidenced by reduction of crime and housing upgrading on their surroundings.

As community centers they offer computer and Internet access, library service with reading rooms, childcare, theater space and classrooms for training. They also have public space that is always open and safe. The local government has also been developing independent childcares and cultural centers.

