Building for changes

strategies for expansion and flexible use of social housing in rio de janeiro

Built in the late 19th century, the first **favela** of Rio de Janeiro emerged and reproduced as a poor housing model of brazilian cities until nowadays. The expansion of these informal agglomerations for low-income people began in central areas close to work place, reaching the urban limits.

In the collective and media unconscious, favela is the territory of crime and the absence of government. Beyond such prejudiced views, this is a place of social exclusion, of surveillance and repression by the police, of human afflictions that contrast with the prosperity of the called "noble neighborhoods", of popular movements, of culture, of samba, and of hope for a better life.

In mid-20th century, brazilian government adopted a policy of favelas "clearance" in valued areas of Rio de Janeiro, moving the residents to news housing estates on the outskirts of the city. These static units were clearly built in order to keep its inhabitants far from the main urban centers, many times isolating them over urban limits. These buildings were meant to be a final model for housing issues all over the country, a symbol of how favelas can be cleared with strategic housing.

However, the model **fails** in every single way.

The transformation of the housing estate into a favela shows that authoritarian politics and non-participatory popular housing do not improve the life quality of lower classes, because these residents do not have their demands met. The low quality of the project and the construction of housing units do not meet the space needs of residents and also do not allow adjustments and changes in the rooms.

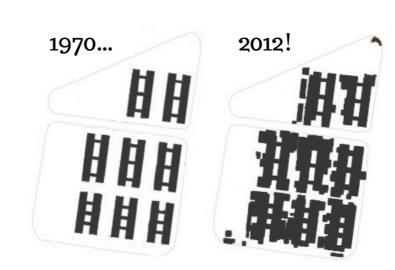
people will keep building home attachments on their own: it's not something that can be stopped by static housing. It's more than an habit, it's a cultural need deeply rooted into their heads.





first layer of case study: social housing Costa e Silva, Rio de Janeiro

residents build their own unusual solutions that transform an extremely orthogonal and apathetic housing into multifaceted and dynamic groups, even precarious and disordered.





In practice a **new favela** appears over the original project, which still serves the residents **better** than the original proposal. These adjustments made by the residents themselves are a **resistance movement** against the low quality of housing estates built in Rio de Janeiro, as an autonomous and spontaneous attempt for improvement of their lives.

case study.: pac manguinhos

the only thing about planning is that things never happen as planned... (Lucio Costa)

The team concentrated the study of viability for expansions in social housings built by the project **PAC-Manguinhos**, in Rio de Janeiro. Released in 2008 by the federal government, the program proposes advances of urban work for the region that includes health, education, entertainment, transport and habitation areas.

Manguinhos social housing units received people from favelas nearby, with the **promise** of better living conditions. However, several complaints about the **size** of the units and the **precariousness** of the built execution did not take long time to appear in the media.

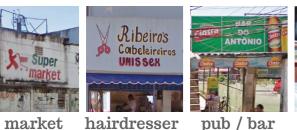
it didn't take long for newspapers to be blown with pictures of hand-made transformations in Manguinho's units. These mutations show exactly how inhabitants' needs were never considered.

> researching mutations types of using found in brazilian poor housing areas:























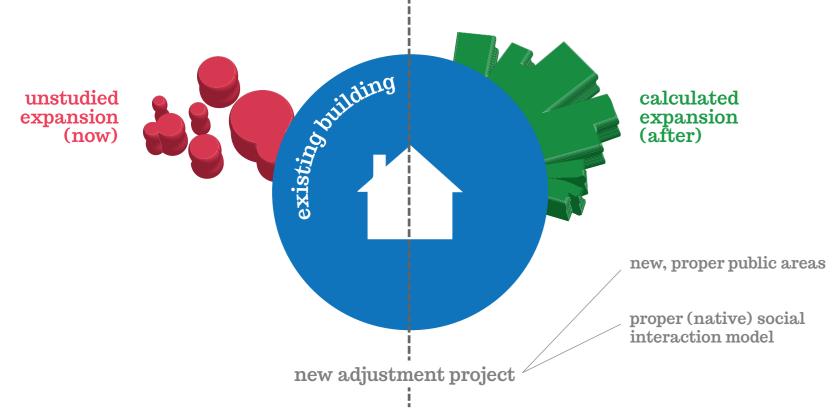
"Residents transform houses of PAC -Manguinhos in shops, bars and even butcher" Local newspaper

a chance on flexible expansion

our proposal for expansion and flexibility, a new way of thinking brazilian social housing

Based on practices developed by the low-income residents of the social housings of Rio, the team objective is to formulate a set of strategies that could enable and encourage the expansion of housing but in a neatly way, taking advantage of the existing structure and implantation and inside the constructive knowledge of the population, allowing themselves to execute the enlargement when it suits them. While well intentioned, some solutions of additions performed by the residents do not have a good space and constructive utilization, and that is what our proposal seeks to rectify.

architects should assimilate those mutations observed...



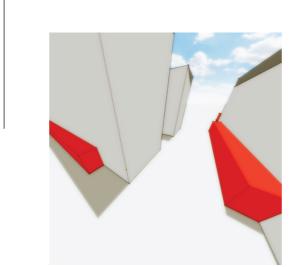




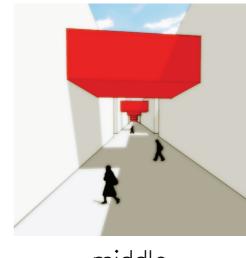


block units plan shows existing architectural barriers (circulation, technical areas) that strategically keep inhabitants from expandind their units. We're proposing turnarounds for them.

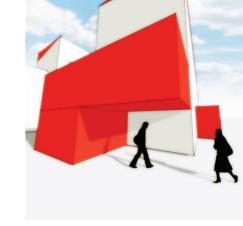
GLOBAL EXPANSION MODEL HOLDS 4 TYPES OF SINGLE EXPANSION MODULES:



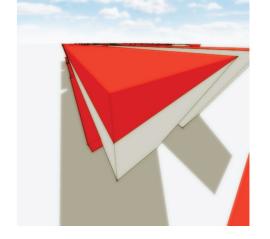
frontal ampliation



middle ampliation



corner ampliation

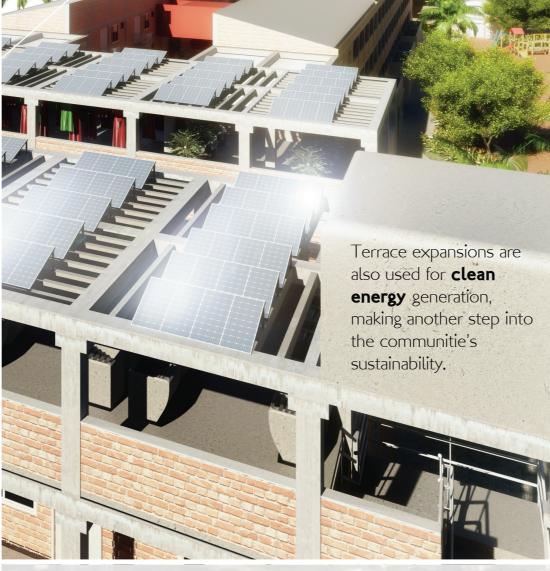


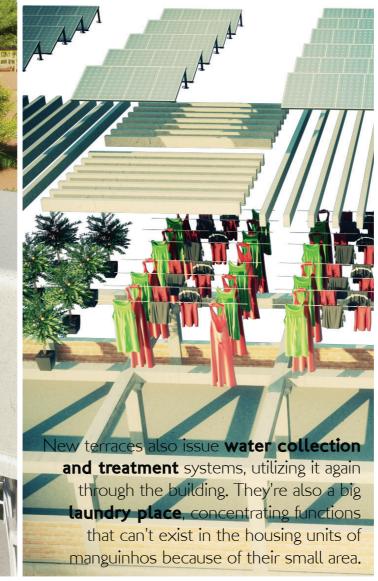
roof ampliation

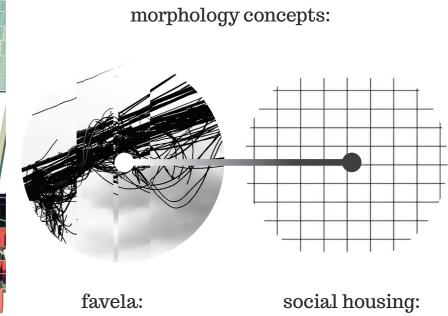












favela: metamorphic and flexible social housing: rigorous and static

The intention of this work is to recognize the **legitimacy** of usual favela interventions and propose to rationalize these expansions in terms of construction and ensure to the residents a better living condition regarding to natural lighting and ventilation of the additions made

Our intervention aims to present **a range of possibilities for expansion** to meet those needs which corresponds to a flexible use of the space that is characteristic of favelas.

