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Favela landslide in the northeaster Brazil: reconstructing sites through resident's practices

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Abstract

According to the Brazilian Institute of Geography and Statistics (IBGE,2014), 25 percent of favela houses are located on slopes and 42 percent are situated on hills. There are more than seventy percent of favela houses located in downward gradient areas attributing to a high rate of landslides in the favelas. Consequently it is common knowledge that public safety sectors are overwhelmed every winter in order to house displaced people due to tropical vigorous rains.

An ethnographic research in the Favela do Telegrafo (Maceió, Brazil) describes the preventive actions of residents to face this type of disaster. This methodological approach was chosen because residents build and repair their own houses, as a large number of residents are bricklayers working in the formal construction sector, therefore being experienced in building foundations and house structures. The article will explore the process of planning on slopes from a perspective of residents, ranging from building vocabularies up to social patterns existing in the favela. For example, from building on the top of an existing structure (bater a laje), up to how community organizes to face the rain.

The argument assumes that favelas are an unquestionable reality in Brazilian cities and that eviction is not a solution facing the problem of landslips. Albeit favelas can be considered a gray space, they can also be a viable housing solution for low-income working class. Thus, this research aims to unfold the proposition of both viable and creative preventative actions.

The conclusion of this work proposes three urban planning concepts in the event of landslides. Overall, the main actions to take are: the decentralization of local governance, the consideration of the practices of the residents and the work on the permeability of soils in the favelas. Finally, the understanding here is that by going through the architectural questions and by better understanding favela daily life, broader planning questions (such as, reconstructing favelas sites and acknowledging favela as a legitimate space in Brazilian cities) could be understood.

Keywords: (favela, landslips, self- help, slopes, prevention)

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Introduction

The distribution of poverty in Brazil can be related to its geography. The lower class usually occupy the side hills and the slopes while both the medium and the upper classes live in flat areas of the town. The difference in the case of Maceio is that, in contrast to the geography of Rio de Janeiro (where the favelas are located on the visible top of hills), slopes are located in a lower level of the town in broad craters in the middle of the city. This particular condition makes the favela more inaccessible and the poverty more invisible to both the citizens and the government. There are more than 80 craters in the town, each with approximately 3000-10000 people that live in multifamily housing units of around 25 meters square.

The invisibility of the craters exceeds its physical condition; they prevent both the inhabitants and the governance to manage situations that can occur inside them, as the disasters. This condition also seems to have created super ghettos, which are inaccessible, violent and unassisted by the state. For example, the Northeastern favelas have the worst human condition in Brazil. And also, this region has the highest demand of housing units according to MCMV (mass housing program of Brazilian Government).

Favelas emerged as a result of rapid industrialization of inhabitants migrating from the countryside and taking over the cities. As described by Friedrich Engels, the emergence of the favela is also related to the industrialization process. This was evident in Brazil after the military regime (Bonduki, 2014). The housing authorities main priority was to attract people to the cities to work in the industrial sector – facilitating the consolidation of favela.



Picture 1 –the grottos of Maceio. Cavalcanti, 2014.



Favela dynamics - from state to the state simplification

Favelas are currently the object of numerous trials of regeneration and development that stem from its existing resources. Evictions are still applied by real estate developers even after the landslide. Favelas are not analysed as a legitimate housing system and state actions still frame formality and informality under binary relation.

The informal word, which Harvey describes as a core condition of neoliberal process, is not considered here. The specific tangled relations of the formal and the informal dimensions of the city, the commodities, the lifestyle and the people are related. The binary oppositions in any field of urban studies are discussable in the neoliberal cities (Brenner and Schmidt), being urbanism as process.

According to the sociologist Jesse de Souza the condition of inequality is often reinforced by a patrimonial shaped society that led to the oblivion of the ralé (a Brazilian class without soul, living in the favelas). National programs devoted to favelas are centralized and limited by state simplifications, as James Scott describes in his analysis. Cultural aspects, politics and local practices, still see the poor as an under citizen. And this condition propels this study to investigate everyday social patterns and self help that exceed normative frames.

Beyond state simplifications, in the field - the bricklayers and the inhabitants



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Picture 2 – Photo of Favela Grota de Santo Antonio. Cavalcanti, 2014.

The reconstruction of favela depends on understanding that the inhabitants that build illegal houses in the favela are the same that work in the former construction field. A particular housing economy emerges in the favelas including skilled labour, local resources and no construction permission. There are groups of inhabitants in the favela that ask for a sum of money in order to build or reconstruct houses and some municipality agents that have illegal charges to turn a blind eye from the reconstruction.

Everyday is the wellspring of urban phenomena. Among 35 interviews and an embedded research were conducted in the favela do Telegrafo, in the neighbourhood of Mangabeiras, Maceio, Brazil.

Children have their routine divided between studying, playing and building and helping their parents to mix cement, concrete, and plaster. Lucas, a 12 year old boy, was playing with his friends when his parents asked him to work on the construction with his hands on the stove mixing the cement. His father, a mason, told that he is aware that both the foundation and the structure of the house must be well done, as well as the proportion of the cement. He said that ` there is no need for a steel frame for the inner walls and verandas, that means that the bricks are built from the flooring...the house must be safe from bottom`.

Seu Zito works with his older son in order to prepare his house for the raining season, some houses further. He covers holes in the ceiling (without underlay) while his son repairs the common stairways. He says that house owners have to provide both the services and the exceeding materials for the areas of commonality and that they have to offer repairing services for the locators. He is currently worried that his clients do not have proper shelter when the rain begins, and he is willing to go to every locator house to check if any repair is necessary. A few hours later, Dona Celina was asked by Seu Zito if everything was going well in her house. Later, he entered the house, and described that the structure is strong enough to stand the water, as he did it himself.

Peixe is currently building his second house in the favela, and he is aware of structural requirements. Baiano, an experienced bricklayer, says that bater a laje (building he structures), takes time and money, so not everyone can afford it. Also according to him, the community knows that houses built by bricklayers never fall during the rain period, in contrary to the jerry-built (those built by inexperienced people).

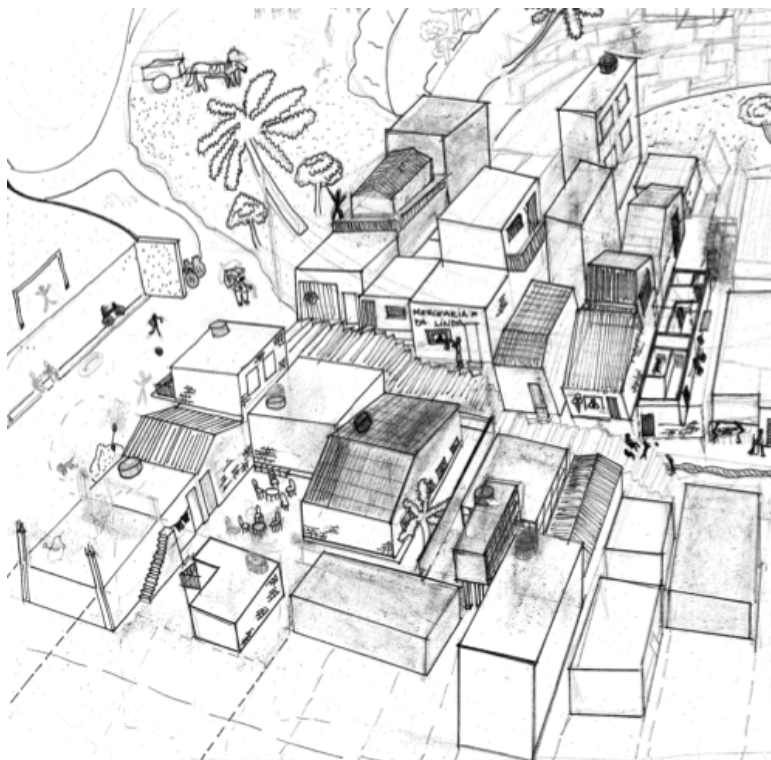
Seu Sebastiao, an elderly bricklayer and a patroller for luxury apartments, thinks that a good foundation, regardless equipment or machinery is important when building houses, especially when it comes to favela. He also mentions his experience of planting banana tree and other plants that make the land fluffy on slopes, affecting the foundation of the houses.

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All previous mentioned workers are related to field construction. The community is though constantly patrolled by skilled inhabitants, protected by their knowledge, eliminating the idea that there are no relevant aspects of regeneration in the neighbourhood.



Picture 3 –First draft on the life in the grotto of Santo Antonio. Cavalcanti, 2014.

Conclusion

The meaning of reconstruction refers to measures about of community to deal with disasters that are fully functioning. But, how realistic is this scenario? To what extend could we say that these social improvements were translated into physical improvements?

Are the physical improvements such as the laje, the foundations, the construction of roof top, the fortification of cement, the structural, the stronger concrete, and pillars, beams, and the reinforcement of the roof, more relevant than the social conglomerates for the general good?



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What can a closer observation of the informal workers (as the bricklayers in the favela) procreate to community changes, especially in the event of a disaster? Perhaps these features should be better learned from field.

Obviously, existing open design processes could be dignified from inside, instead of top down centralized actions of the state and out-dated public policies that do not legitimate favela as a mass housing system.

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Author's Biography



Ana Rosa Chagas Cavalcanti studied architecture and urbanism in Brazil (2004-2009, UFAL). Her thesis “Arquitetura da Carência”, an embedded research in the Favela Sururu de Capote, culminated with a graduation with distinction and an indication to Opera Prima 2009 (prize for best Brazilian graduation thesis). She worked at Bijari (2010) and at Triptyque Architecture (2011). In 2012, she concluded her Master (La Sapienza/ ENSA Paris-Val-de- Seine) and in 2013, she worked as guest researcher on Urban Design at University of Hamburg. She is currently a prospective Ph.D candidate at the TUDelft. Her research investigates favelas in the context of contemporary urbanism, focusing on the micro scale, on the

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everyday life, on the participation and on the process design. Furthermore, she awarded the first prize in the architectural competition 72HUA (Terni, 2012) and has exhibited urban interventions at some architecture exhibitions, such as IBA Hamburg (2013) and the Biennial of Public Spaces (Rome, 2015). The Brazilian architecture magazine "AU" published some of her collaborative design projects, in 2014. In 2014, back in Brazil, she founded "LadolabFavlab", a urban laboratory in the "Favela do Telegrafo", Maceió, where she is living and documenting architectural patterns. This work also includes an Exhibition at UCL Cities Methodologies 2014, as well as articles at EURAU 2014, at Favelissues.com and at the 15th NAERUS and a featured project in ArchitectureinDeveopment.com (2015). Recently she awarded a IJURR fellowship for "Authors meet critics 2015" (Harvard University, UCLA, Sciences Po, ETH Zurich, LSE, Vrije Universiteit Brussel, University of Manchester, University of Cambridge, Charles University, Northeastern University, University of Leeds, Uppsala University, University of Milan Bicocca, CSIC Madrid).