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## **Development of Social Housing in Brazil**

Project in “Ilhinha”

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Extended Abstract

**ARCHITECTURE**

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## Introduction

Nowadays, Brazil is one of the world's fastest growing countries, having become the seventh greatest economic power worldwide in 2010, according to the IMF (International Monetary Fund) and the World Bank. Despite this being a positive aspect and very important to the country's growth, it is somehow relative because it refers to Brazil in its whole. This does not represent the true Brazilian reality, shaped by great inequalities and social exclusions, responsible for most of Brazil's serious problems, such as insufficient housing for the deprived social groups, named as social housing. But to better understand this problem, it is necessary to be aware of the economic development which resulted from an unordered growth in the cities and a population increase. The economic history in Brazil has been marked by various stages, such as the colonial era, imperial era and republican era.

The colonial era was marked with the extraction of "Pau Brazil", sugar cane and mining sector, resorting to slavery. In the imperial era (1822-1889), the Brazilian economy was mainly based in agriculture and exportation of raw materials, such as cacao, coffee, sugar and other products. Until then, the large population of Brazil lived in the countryside. Besides those activities, the industry was booming but still did not have a big influence in the economy. At the beginning of the 20th century, the main product which triggered the Brazilian economy was coffee. This product was responsible for the development of various cities where it was produced, especially in São Paulo, Rio de Janeiro and Paraná, called the purple lands and was the main exporting item during almost a century (1830-1930). The industry only begins actively participating in the Brazilian economy when Getúlio Vargas reached the government, shaped by the Industrial Revolution (1930-1956). This is due to the coffee crisis of the time which ended up contributing for the rural exodus, causing a population growth in the cities. Another factor which contributed for this expansion was World War II, causing a world crisis and a reduction in imports. From the 1970's, the economy was mainly based in soya exportation, even though industry also had a great role in the GDP (Gross Domestic Product) thanks to the production of steel, cement, pig iron and oil.

All this economic development resulted in a disordered expansion of the cities, caused by rural exodus. Families migrated to the major cities searching for jobs and better living conditions but these cities had insufficient infrastructure to accommodate this population raise – there was a deficit in jobs, transports, lighting, water and sewer networks, associated to the incompatibility between the minimum wage and the average price of a house rent. This caused a lack of housing for a large part of the population, especially the underprivileged population. This deficit originated the

construction of the so-called slum-tenements and its variations, houses with terrible conditions, with no hygiene and sanitary basics, living in an area under 20m<sup>2</sup> for about four people. Since then, the government has tried to solve this serious problem, undergoing several measures, such as the Law of "Inquilinato" and social programs like "My house my life" ("Minha casa minha vida").

This being, this paper intends on studying the development in social housing in Brazil, analyzing these measures taken by the government and their consequences, as well creating an architecture project in an area of social interest chosen by the author.

## **Methodology**

The paper's main goal is to develop an architectural Project in Brazil, whose main theme is Social Housing. For this, it is necessary to understand the historical events related to this topic, going through the factors which contributed for the economic growth of the country and the various interventions made by the state.

This study was conducted in five phases which are as follows:

### **1) Library Research about the evolution of Social Housing in Brazil**

This first phase focuses on the collection of information considered important for the development of social housing in Brazil in order to better understand their characteristics, problems and relationships created between these sets, the worker and the city.

### **2) Analysis of Case Studies**

This chapter analyzed a compilation of seven housing projects considered important for developing the subject matter. The criterion which led to the choice of these seven projects was the several constructive solutions used, the materials selected and the relationship between the dwelling and its surroundings.

### **3) Choosing the location of Intervention**

For the project to be developed, it was necessary to choose a workplace considered as an area of social concern. This area must be of easy research access and with enough information. The venue is a housing estate called Ilhinha, in São Luis, Maranhão state, hometown of the author.

### **4) Analysis of the characteristics of the chosen Zone of Social Interest**

Here are present the main studies of the site in question, from its historical context, its evolution, socioeconomic data and examples of social housing located in the city. This analysis was very important to understand the characteristics of the chosen site.

### **5) Development of the Architecture Project**

Finally, a project was developed including the creation of social housing, exploring key features considered by the author, such as the construction method, the target audience and the relationship with its surroundings, as well as the construction of public spaces and facilities.

## Intervention in São Luis do Maranhão



Image of São Luís's downtown. Source: Author.

São Luis, capital city of the state of Maranhão is situated in the North-East region, delimited by the Atlantic Ocean North, by the “Estreito dos Mosquitos” South, the St. Marco’s bay West and the municipality of São José de Ribamar East. It covers an area of 834.78 km<sup>2</sup>, with a demographic density of 1.215.69 hab/km<sup>2</sup> and stands 24 meters above sea level (Source IBGE, 2010).



Brazil's Plan. Source: Google Maps

## Project

The Project is based in creating a housing model according to local characteristics, such as climate, land and target, as well as the creation of public spaces and local equipments aiming at the revitalization of the neighborhood's image, as well as providing better living conditions within the local community. The choice of this neighborhood as the object of study is due to the importance of this social interest area, being one of the first areas created for social housing in the city of São Luis. It is already a consolidated neighborhood but has nevertheless, innumerable problems, ranging from lack of public spaces and equipments to low quality in housings and local security.



Picture of Ilhinha (consolidated neighborhood on the right) and its surroundings. Source: Luciana Cavalcante

The greatest asset of this zone is its privileged localization within the city, especially when compared to the other areas of social interest, which are in the city's periphery. On the other hand, this one is close to the historical centre, to the seaside and to one of the hottest night spots in town – Lagoa da Janses – full of pubs, restaurants, sports areas and a running path.

On the negative side, it is an area with low quality living conditions because it lacks of some equipment and public spaces important to the community, such as a library or a square. The zone's image is also far from being pretty, being considered by some as a filthy place, "dark" and dangerous due to its various precarious houses, as well as some areas which are used as "garbage", whilst they could be used for other ends, like leisure public spaces. Another negative aspect is the lack of parking – there in no proper space for his matter along the avenue, restraining access.

The lack in security is the zone's greatest threat. The "Ilhinha" is considered to be one of the most dangerous areas in São Luís because of its many drug dealing places. I believe that part of this problem's solution lies in the creation of public spaces and equipments, especially related to education, revitalizing the zone and helping to improve society's perception of the neighborhood.

## **Basic Features of the Program and Goals**

According to previous analysis, the conclusion reached is that the area under focus has diverse problems, such as insufficient public space and collective equipments. Considering the socio-economic data, we may also state that the population living there is a very needy community, with scarce access to education, having a predominant age group of children and youngsters.

In this sense, the main elements and goals of this project are as follows:

### **Public Space**

After concluding the analysis, the creation of quality public spaces is considered crucial. Therefore, the project will involve the construction of squares with various characteristics. These newly spaces here proposed aim to revitalize the neighborhood, improving its image and nurturing relationships with the surroundings, creating continuity between spaces.

### **New Concept for Social Housing**

While studying the master plan of São Luis and with field tours to the "Ilhinha", it becomes clear there is incoherence amongst the current social housings, which do not obey to the predicted urban regulation. Hence, the creation of a module for housing is here proposed, one that is capable of covering the different targets and which is flexible to different plot sizes, adding value to the city.

### **Day-Care Extension**

Although there is already a day-care, this one is not capable of responding to the high number of children. It also does not offer the necessary spaces for the equipment to be well-functioned, such as dining hall, study rooms and places for entertainment activities.

### **Library**

Considering the characteristics and the lack of local equipments, this place was considered crucial for the project because it can be very well used as an attractive pole, not only for the inhabitants but also for future visitors. It also aims to serve as a complementary space for local schools, improving access to education and information.

### **Leisure Spaces for Elders and Children**

The field visits showed that many were the spaces being improvised for activities aimed at this target, such as a living room and leisure space. Taking this into account, it is wished to gather these activities into one single space, more appropriate. A possible solution could be a prefabricated module and sporting fields which will nurture a connection with the proposed public spaces.

## Offices and Services

These spaces are decisive for raising the affluence of people in the area, both during the day and during the night, as well as creating value to the surrounding spaces.

## Parking

Despite the reduced automobile flow in the area, it is important to consider the future development of the neighborhood in the project proposed. Therefore, it is necessary to envisage parking spaces along the main avenue, since the local roads do not have enough width. This measure will also be important for organizing the car flow and making the place more attractive for habitants living in nearby neighborhood.

## Concept

One of the project's goals is to propose an urban drawing for the chosen place. This lies in the fact that the place is currently in extreme fragmentation, causing unity and continuity to be lost in the way. Thus, this project seeks to redraw some specific neighborhoods, creating spaces and dynamic paths for the community. One of the project's care is the relationship with the neighborhood's urban grid, where coherence between this aspect and the suggested scale is needed.

The project lies in the creation of a typology which enables different plot sizes, simultaneously working with variations in internal spaces, allowing gathering different families in one same space. For this, it is also necessary to take into account the cost of this typology because various factors are required – it must be at a low cost, of a simple structure, but at the same time it must be modern and must add value to the region. So, a volume combination for the main façade was contemplated, varying accordingly to the plot sizes.



Plan of the Project's pedestrian paths. Source: Author





Housing perspective from the outside. Source: Author



Typologie's perspective from the inside. Source: Author



## The Public Space

The public space is shaped in consonance to the social housings, strengthening the existing relation between the house and its surroundings. This aspect has taken into consideration the security of these places, so that these did not become isolated or abandoned. This being, not only are the houses gathered around the public space, but also services and offices, offering support and an everyday life to these places, increasing security for those frequenting the area. Another explored relationship is the liveliness given to the houses, using different kinds of tiles and colors, creating a unique ambience in each public space.

## Equipments

It is crucial to consider equipments and communitarian spaces when thinking about social housing. For this, specific equipments for the area were traced, depending on the analysis of the zone. The equipments considered most urgent and most important were as follows:

### 1) Library

Due to a high group age of young people (up to 23 years old) in the “Ilhinha”, the inexistence of complementary educational equipment in the proximities and the low alphabetization from the locals, a library was designed with study rooms available for the entire community.

### 2) Day-Care

The area has already a day-care but it is however, completely damaged and incapable of assuming its functions and responding to the local demand. The project suggests an extension of the current day-care, proposing recreational spaces and study rooms, as well as a dining hall and a meeting room.

### 3) Sports Fields

Aiming at encouraging local sports and looking forward to adjoin the proposed public spaces, two sports fields were traced – an official one, which would secure the main sports and a smaller one, intended for the children, simultaneously working as a complementary branch to the proposed day-care.



Image of the 3D model. Source: Author



Perspective from the Main Square. Source: Author



Perspective from the Secondary Square II, with a prefabricated module aimed at children activities. Source: Author



Perspective from the Sports Fields. Source: Author

## Conclusion

Brazil is a country of great richness, coming from its vast territories from North to South, its wealthy population and mixture. Even so, it shows serious problems, such as the great social inequality. Half of Brazil's population lives with R\$ 375 per month (140€, IBGE Census 2010), being unable to afford enough money to even support the family, frequently living in improvised places which threaten safety and health. Throughout history, the lower class has been very much affected, suffering exploitation in many ways by private companies and public power. This has led to inhuman living conditions, such as tenements and precarious housings from the 20th century. According to the "Pesquisa Nacional de Mostra por Domicílios" (PNAD 2008), Brazil's housing deficit stands in 5,5 million houses, causing great concern to the poor families who have no place to live in. The Brazilian government has created various social programs to solve the matter but many of those houses are of low quality and do not respond to the main issues inherent in this kind of buildings. It is not enough to provide housing, these must have quality, must be organized and adequately proportionate, with leisure spaces, communitarian, near equipments, so that a working family can afford it and maintain good living conditions, eventually passing it on for the next generations. We must be aware that this social group represents more than half of the Brazilian population, being therefore responsible for a great part of the country's development. Hence, by offering them better conditions, we are improving Brazil's development, diminishing social gaps and making the country a better, more equal place for all.

The development of this work provided a better understanding of issues relating to social housing in Brazil, since the factors that led to their needs and problems covering this topic. This knowledge is fundamental for defining the architectural project conducted by the author in "Ilhinha". As architects, it is vital we understand the space in which we are projecting, analyzing their characteristics, their strengths and weaknesses, reflect on the ways of living of the local population, their daily lives, know how to select the most appropriate type of equipment and seek to maximize the relationship of the project with the city, trying to boost links with the surrounding intervention. We should also highlight the importance of public space for a project and for the architect, especially when it comes to social housing, as this is a key element in transforming of space, one of the main factors responsible for the quality of life.

The Project conducted attempted to explore all the features described above, taking into account the different needs of local families and tried to solve the main problems of the neighborhood, providing him with public spaces and homes of good quality. This project has the capacity to transform this area of social concern, improving the quality of life and making it a more pleasant place to live in.