## Social Aspects in Architecture and Urban Planning from the Beginning of Modern Movement Until the End of the Century: A Case Study in Brazil

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#### INTRODUCTION

The problems of the modern society in the 20th century, mainly in the western world, are subject of analysis where several different points of view can be found. However, in all of them, it seems there is no doubt related to one point: the failure of the promise of social progress, identified as the main result of the modern technological advance. In other words, "better life for all," an assertive of modernity, is not a belief any more.

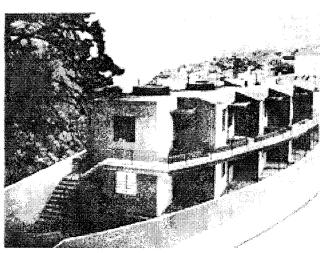
Proposals entitled with "post modern" approaches in all levels of social activities have been carried out by several authors like Andreas Huyssen, for whom the accelerated industrialization process of western society has created more problems than advantages such as lack of employment, natural resources pollution, increase of poverty, cultural disruption and others. In different perspective, Jean François Lyotard, emphasizes the failure of the totalitarian sense in the Modern Project, claiming for differences emergence. Other authors, like J. Habermas, still maintain the faith in the Modern Project inspired in the European Enlightenment of century XVIII. For him, the arguments of the so called "post-modernists" are typical arguments of the modernists: to break the tradition, to break the rules, to create the new.

In the field of architecture, similar discussion can be observed. Paolo Portoghesi, Charles Jenks and Robert Venturi are examples, during the latest decades, of architects which speech and projects have been identified as a criticism of the modern architecture. The advent of an International Style, creating a homogeneous procedure to face distinct programs, in different contexts, and the Modern Architecture pretentiousness to contemplate social problems in large scale, are some of the issues criticized by the authors.

### BRAZILIAN MODERN ARCHITECTURE BEGINNING

Different modern architecture expressions (Frank Lloyd Wright in an organic way, Mies van der Rohe, more "pure" in his formalism, or Walter Gropius, with a more functionalist approach), have influenced Brazilian architects, but the influence of Le Corbusier's ideas is identified as the more representative expression of the first moments in Brazilian modern architecture.

During the period that the architect Gregory Warchavchik lived in São Paulo and in Rio de Janeiro, (decades of 1920/30), we had a very strong influence of the modern architecture coming from the rationalism of Walter Gropius's thought: the rationalism to deal with all aspects of the projects: technical, social and artistic. Nevertheless, it was the engineering industry aspect, the most important interest of Warchavchik, inspired in theories come from Bauhaus. There is a controversy related to the Warchavchik importance in the



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Fig. 1.

first steps of the Brazilian modernism. A group of Brazilian architects from São Paulo immediately joined Warchavchik ideas and start to develop their projects taking into account the new "laws" of modernism. While that, the Rio de Janeiro group of Brazilian architects showed a ripeness in its production since the end of the thirties. This group is, since then, more identified with Le Corbusier's ideas. Lucio Costa, from Rio de Janeiro, focused his interests in an authentic Brazilian style, incorporating the new ideas of Warchavchik and modern architecture in such terms.

In 1933, Lucio Costa and Gregory Warchavchik decided to develop an enterprise and they made several housing projects in Rio de Janeiro. Oscar Niemayer has collaborated with them as student. One of these houses, "the modernist house" at Toneleros Street, in Copacabana district, was subject of public exhibition, being visited by the Brazilian "avant garde" of the period and, even, by Frank Lloyd Wright.

In Rio de Janeiro City, beyond the construction of many middle class houses, Lucio Costa and Warchavchik had also built a group of houses for low income people, as an experience to use the modern approaches for all social classes. That is the only example of their projects not demolished yet in Rio.

The Warchavchik/Lucio Costa Construction Company, has began its activities in June 1932, in Rio de Janeiro, and lasted until the beginning of 1933. During this period, there was only another modern architecture office, Marcelo Roberto's one. There is no doubt that Warchavchik and Lucio Costa association brought about

some contributions to the rationalist tendency starting in Brazilian Architecture, despite the theoretical discussion about its relevance.

In 1931, when Lucio Costa was chose as the Director of Fine Arts National School, in Rio de Janeiro, the Brazilian capital, he decided to invite Warchavchik to teach Project in Architecture Discipline. The idea was to create parallel ateliers, offering to the students the option between the traditional teaching and the new one.

His interest in Warchavchik has started after the publications about the "Modernist House," projected by Warchavchik and built in São Paulo, in 1927. Warchavchik, born in Russia in 1896, has initiated his studies in Odessa University and has concluded them in Rome, Italy, in 1926. He came to São Paulo to work at Construction Company of Santos, group involved in great enterprises all over national territory. Instead of the controversy involving the Warchavchik role in the beginning of the Brazilian modern architecture, some authors consider that as the South America representative in "Modern Architecture International Congress," from 1925 until 1929, he fomented a really "revolution" in the field of the art and the technique of building in Brazil.

Lucio Costa was looking for a genuine language of the Brazilian architecture, exploring the "neo-colonial" style, an eclectic and vernacular tendency existing that time, what means a branch of the Portuguese heritage in the Brazilian architecture. His search for a national tradition was followed by adversities. The Brazilian way of being, as Lucio Costa observed, was an adaptation of several different cultures, slowly acquired during the rich and variety process of migration in Brazil. Lucio Costa opted for a profound comprehension of Corbusier's syntax balanced by a Brazilian élite demand of modernity settled in tradition and in national identity.

Besides the influence of Le Corbusier's ideas, Lucio Costa wondered at the organist, ecological and contextual architecture of Frank Lloyd Wright. Nevertheless, in general terms, Lucio Costa considered that Le Corbusier was the only modernist who had developed a complete approach of the movement: from the social, technological and artistic points of view. In 1931, Lucio Costa organized a big exhibition of arts and architecture in Rio de Janeiro, establishing a rupture with the academic and the new-colonial style.

Although the beginning of the modern architecture in Brazil was deeply influenced by Le Corbusier's ideas, the master had also been influenced by the Brazilian architects. Through the construction of the Culture and Education Ministry building, (a Lucio Costa's project with others), in 1937/1945, in Rio de Janeiro, Le Corbusier could realize, in practice, his postulates about modern architecture in a larger scale. The construction of the sixteen floors building was the first example of a big building structured by independent columns from the walls, transparency in the façades, pedestrian and automobiles circulation on the ground level, (under the first pavement), garden-ceilings, free plan and "brise-soleils." There was an obvious interaction between Lucio Costa and Le Corbusier. Called "I'homme de couer" and "I'homme de esprit" by his colleague Le Corbusier, Lucio Costa tried to create an unique Brazil style, joining fragments and ruptures of former "Brazis."

# LOW INCOME HOUSING PROBLEM AND THE LUCIO COSTA/WARCHAVCHIK'S GAMBOA PROJECT (PHOTOS 1 AND 2)

The workers classes housing problem was put in scene. Cities like Rio de Janeiro were growing fast and the majority of urban residents had no conditions to afford debts to buy, or to rent, a dwelling unit. There was no institutional instruments or mechanisms of dealing with it. Modern architecture, as a rationalist approach, intended, in some cases, to take into account such questions in the meaning of exploring the idea of social progress for all.

The "Vila Operária da Gamboa" is an example of that. It was the first modernist building of apartments in Brazil (a total of 14 apartments), built in a narrow plot of a proletarian neighborhood.



lata extedita da kora Karcheschik da Garaten Paris.

Fig. 2.



Fig. 3.

The two pavements project aimed to use the plot as a whole, with external circulation for all apartments, taking advantage of the land curve to break the rigid prismatic forms of a modern building. Two entrances were foreseen to be located at the final sides of the plot and the superior circulation was, in part, empty to permit the lighting of the ground level.

The project presented elements from the modernist architecture vocabulary such as pure volumes, balanced pavements over doors and iron frames for doors and windows. The façade was treated with colors, inspired in Le Corbusier's project for Vila Pessac. The architecture project was elaborated by Lucio Costa and its construction had Warchavchik's responsibility. The constructive system was based in the traditional one.

The Warchavchik project at Santa Cruz Street, in São Paulo, from 1927, called "the modernist house" (once it was the first modern house in Brazil), had to use some devices to be built in desirable aesthetic result: to hide the old roof of clay tiles and brick walls. As we can see, there is a dissociation between the formal proposals for a rationalist architecture and the existent technological apparatus, in

the first steps of the modern Brazilian architecture.

The main aspect of the modernist approach in Gamboa Project was the difference in the roof treatment. The old ceilings of colonial period were substituted by the horizontal pavement treated with waterproofing, implemented by the John Mansvill system, an American company installed in Brazil during that period.

The plan was inspired in the plans for proletarian buildings of the latest century XIX: a square plan with four rooms with identical dimensions for social use. The service parts, bathroom and kitchen, were a kind of appendix in the background. The Gamboa project modified this idea: the service parts were brought to the interior of the plan. There was also a change in the corners of the rooms, transformed in a space of circulation among all of them.

Nowadays, 65 years later, the dwellers of the Gamboa building (some of them living there for more than 40 years), seemed to be very satisfied with the apartments in terms of functionality. Nevertheless, it can be verified some important modifications in the original project:

- the façade color is, now, yellow. It could be observed that the changes related to façade colors along the time, were always introduced with the use of only one color, never a moisture of them; it can illustrate the maintenance of cultural habits acquired since the colonial period.
- the former horizontal roof was transformed in a traditional roof made of clay tiles (photo 3) with eaves; it can be a solution for technical difficulties in the waterproof system or, even, a solution for a kind of "status" idea, in which a house is identified to inclined roofs; horizontal roofs would be identified to commerce or service activities.
- the two entrances of the ground floor were substituted by individual gates directly linked to the street.

The iron frames, a significant symbol of Brazilian modern architecture, are still maintained in the doors and windows.

### CONCLUSION

The changes observed in the Gamboa project can show some simple difficulties faced by the first modernist projects, in technical and planning terms, to deal with urban housing in a wider scale. In the present context, we observe there is an inexpressive number of low income dwelling units built along the time, compared to the number of homeless people living in big cities like Rio de Janeiro. That is the picture of the social situation we are in front of. The difficulties of the Modern Architecture to accomplish the social aspects of urban problems, as illustrated by the example discussed above, are only a small part of the problem. Modern Architecture pretentiousness to contemplate social problems in large scale has

revealed an empty speech, a false question. None architecture plan (modern or post modern) can solve such a problem without a relocation of the question to deeper considerations of ethics and politics. The Lucio Costa's comment about the Gamboa Project (and its limitations) can illustrate the context involving the development of it: "...there was no repercussion of the project,... there was no communication way (in terms of media), although Gregório (Gregory Warchavchik) had an obsession for advertisement. Carlos Leão and me used to feel very constrained when we inaugurated that houses and he (Warchavchik) wanted to force us to lead people..."

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