



IN _ FORMAL SPACES

Perspectives on Urban Development in Rio de Janeiro

Toon Stallaart
M.Sc Architecture
Delft University of Technology
Explore Lab Graduation Studio

'For those who have eaten of the tree of knowledge, paradise is lost.'

Karl Popper

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January 2011

Professors:

Sang Lee M.Arch (Architecture)

Ir. Guus Westgeest (Building Technology)

Dr. Roberto Rocco de Campos Pereira (Urbanism)

Cover image:

Tarsila do Amaral - Morro da Favela, 1924 - oil on canvas (Courtesy: Pinacoteca São Paulo)

Abstract

In this thesis I investigate, what I have called 'the paradox of urbanization', through the case of Rio de Janeiro. The paradox of urbanization is a process in which the qualitative impulses - improvements of urbanization, such as public infrastructure and facilities - are planned and implemented in central neighborhoods, while the quantitative rate of urbanization - the strongest growth of the city in terms of residents - takes place in the peripheries of the city.

In Rio de Janeiro the paradox of urbanization has resulted in a divided city, in which rich and poor neighborhoods are separated, and exist as closed and partially autonomous communities. The prosperous central neighborhoods were facilitated with parks, pavements, and public buildings, while the peripheries were developed with private means: residents paved their own sidewalks, and companies provided collective buildings and facilities.

I present three perspectives on this condition in Rio de Janeiro: the national perspective, the urban perspective, and the theoretical perspective. Based on these three perspectives, I will elucidate the causes and consequences of the paradox of urbanization. I will first present the developments in politics, land laws, and industrialization in Brazil, which stood at the basis of the urbanization process of the country. The particular causes for urban growth in Rio de Janeiro are indicated in the second part. I designate the process of urbanization as a development from modernization to modernism. The modernist dichotomies in Rio de Janeiro - such as slum/formal neighborhood, hills/flat lands, and asphalt/dirt roads - were pushed to extremes when the city experienced its largest growth rates in the mid-20th Century. The privileged central districts urbanized with public means, while the poor urban neighborhoods developed without planning on the edges of the city, and did not profit from increasing prosperity of the city. Today, in the hyper-modernized city, these extremes still exist, but they are concealed in an ambiguous domain of private and public spaces; the role of the government in the urban peripheries is limited, and the public voids that have emerged in the peripheries are filled in by private parties. Today's spaces that are perceived as public spaces in Rio de Janeiro's peripheries are shopping malls. In the final part of the thesis I have used the text 'Of Other Spaces' by Michel Foucault to provide an insight in this condition.

Based on the work of Ananya Roy, I propose a role for architects and planners that I shall indicate as 'the aesthetization of urbanity'. I propose that architects and planners should create spaces for public functions, with a substantial urban quality that transcends the interest of a particular community, and adopt the common norms of society as a standard for their representation. The aesthetization of urbanity is a response to community based, self-help projects: using similar architectural means in the peripheral zones as one would use in the centre, to give the peripheries a qualitative impulse that transcends local interests, and make the peripheries an integral and established part of the city. The qualitative improvements in the peripheries should be of substantial architectural quality as a mean of representation of state interest in the poor peripheries, should be in the interest of society as a whole and not only a local community, and should create opportunities for residents in the peripheries of the city through public means.

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INTRODUCTION

A personal note to the research, approach and methodology

Problem statement

Numerous scholars, researchers, planners, and policy-makers have addressed what is considered one of the major urban challenges for the 21st Century: urban poverty. According to UN HABITAT, one out of every three residents in the developing world lives in urban slums today. This equals approximately 1 billion people throughout the world; the number is expected to double in the next three decades (UN-HABITAT 2003, p. 55 & 2009, p. 88). Large parts of the contemporary cities in developing countries do not follow the logic of urban planning. They consist of unplanned, self-constructed, informally and illegally built neighborhoods. These neighborhoods are the result of bottom-up organization of the urban poor. The absence of planning has caused environmental, social, health, and economic concerns. The urban citizens often have no access to basic facilities, are poorly integrated into the urban network of the city, and do not benefit from social and economic opportunities the city offers.

Brazil experienced a large increase of its urban population in the mid-20th Century. It transformed from one of the most rural countries in Latin America to one of the most urban countries in two generations. This growth initially resulted in slums and informal settlements, scattered throughout the metropolitan landscapes of Rio de Janeiro and São Paulo. Particularly in the last two decades there has been a growing interest in these neighborhoods, resulting in successful and less successful approaches to overcome the complex differences between informal settlements and the formal city. Brazil is in this respect an urban laboratory for the developing world.

In this thesis I present a view on informality through a broad analysis of the urban development of Rio de Janeiro in the past century. The problem that I will describe is how irregular, largely private developments, have resulted in a fragmented urban landscape, with an unequal division of urban facilities. It is useful for architects to have an insight in these problems, as Rio de Janeiro forms a precedent for the development of rapid urbanization that countries in today's developing world will experience. By understanding the background conditions of such problems, architects can take an active role in creating buildings as stimuli for the improvement of conditions in the megacities of the 21st Century.

The objectives of this thesis are to create a theoretical basis for a design assignment. The objective of this design assignment is to find a strategic architectural representation and planning approach for informal neighborhoods in the developing world. Therefore it is necessary to understand the site, and to place it in a larger context, as the outcome of a process of urbanization. I use this thesis to understand the city and its development through the 20th Century.

Research questions

UC Berkeley scholar Ananya Roy asks herself what the challenges and paradoxes are for planners in the discourse on urban informality. She introduces three particular challenges: 'how planning can produce the "unplannable" - informality as a state of exception from the formal order of urbanization; how this state of exception can in turn be strategically used by planners to mitigate some of the vulnerabilities of the urban poor; and how dealing with informality requires recognizing the "right to the city" - claims and appropriations that do not fit neatly into the ownership model of property' (Roy 2004, pp. 147-8). Architects and planners need to take a position in this discourse, to understand how cities can be developed in the developing world. Architects work on a relatively small scale, the scale of a room, an office, a dwelling, a building, or a group of buildings. Urbanists work on the scale of a neighborhood, a district, or a city. The dialectics between the disciplines of architecture and urbanism with the involved individuals and interest groups of the city, results in a physical manifestation of urban spaces. This manifestation represents certain conditions or motives; in other words, the dialectics between planning and the city is a consequence of these conditions. Therefore it is important to understand the conditions at the heart of the city, before one can understand the position of planning, and its opportunities and limits. This brought me to the following questions:

- What are the transformations that shaped the Brazilian society and its urban conditions? And how to perceive, place, and situate these conditions?
- How did the 'informal city' emerge in Rio de Janeiro (architecture without architects; urbanization without urban planners)? What conditions allowed the emergence of informality in Rio de Janeiro?
- What role does city planning still have in informal places? What role should city planning have in informal places? How has formal city planning responded to informality in Rio de Janeiro, and were these responses successful?

These questions are not new, nor original. I am not the first person to ask these questions and I probably will not be the last. Many answers to these questions have been given; I think that not one definite answer exists, instead there are many different answers. There is, however, a lot of evidence on the streets of Rio de Janeiro. In fact, the streets of Rio *are* evidence of how both plans of urbanization, and urbanization without plans have shaped the city, hence the contents of this thesis. I will try to answer the research questions, thereby I will present my position in the discourse on urban informality. Answering these particular questions will not solve the problem. It can, however, shift the focus of the problem to a new direction: from a focus on housing to a focus on public spaces, and from a focus on central areas to a focus on the suburban zones.

Scope

City planning is the manifestation of underlying motives and conditions, the representation of political, social and economic conditions within a legal framework. But city planning is also a spatial representation of people, of individuals and groups of individuals. Therefore I will explore the conditions of urban informality through these underlying motives. The scope of the research is wide, I have therefore categorized the information on three levels, three perspectives: a national perspective, an urban perspective, and a theoretical perspective. The underlying motives and conditions will be presented through these perspectives.

In the national perspective I discuss changing policies and conditions of national interests. How did Brazil develop from its early nationhood to the current federal state? From aristocracy to democracy? How did the land come to be divided through legal policies? How did the country modernize and urbanize? And what motivation can we find for these developments?

In the urban perspective I present the manifestation of these conditions in Rio de Janeiro. How did the city manage its increasing population throughout the 20th Century? How was the city developed formally and informally? What patterns and responses can we discern between formality and informality?

In the theoretical perspective I present my position in the discourse on informality. I have used the work of several scholars and researchers, most notably Michel Foucault, to present my perspective as a future urban planner on the condition of informality. How can we position informal settlements in relation to norms, to society, to the formal body of the city? What perspectives for development toward solutions for metropolitan problems can we find within the discipline of city planning? What position to take in the dialectics between planning and the city? I take the existence of informal settlements as a given condition. This condition must be improved, but one needs to be conscious of the fact that this will take time. Residential neighborhoods can be improved step by step. A larger challenge, that requires more attention from architects and planners, is how to find a representation of governmental and public institutions. The last part of the thesis will mainly focus on that aspect. It is not about how people should live, but how to provide people with opportunities.

Methodology

In this thesis I have applied three methods of research: literature research, mapping, and field work. For the literature I have used theoretical works by influential scholars on the fields of philosophy, social sciences, and urbanism. I used works of anthropologists and of Brazilian scholars to understand the particular Brazilian conditions, and a wide range of resources and data by the United Nations and the Brazilian Institute of Geography (IBGE). For the mapping I have used public data from the municipality of Rio de Janeiro, the GIS-based program RioAtlas, and historic maps from a wide range of sources, (see included source list and appendix).

In the field work I met one major complication: time. Time for the field research was limited, and reliable information was sometimes difficult to find or to access. I regret that I can not present elaborated case-studies. Therefore I will rely on case-studies that have been performed and published by other scholars, students, and researchers, and examples that I could study without access to local resources. Also I refer to a couple of examples for São Paulo, as an interesting case to discover parallels and differences.

As a next step, I hope to have an opportunity to perform case studies of sites that have become of particular interest to me, to understand their dynamics, and to make this research applicable for academic and non-academic purposes.

A note on recent events

Recent events in Vila Cruzeiro and Complexo do Alemão, two of the largest and most violent favelas of the Rio de Janeiro, held public life in the entire city of Rio de Janeiro in its grip during the last week of November. Newspapers spoke about an 'urban war', the army was empowered to restore order in the favelas, tensions and fear spread throughout the city. I have followed these events with anxiety. As an outsider, and a future architect, I do not feel in the position to professionally respond to these events; I can only respond to these events from a gut feeling. Therefore I will not include the issue of extreme urban violence in this thesis.

The communities of Vila Cruzeiro and Complexo do Alemão were subject to social programs by NGO's and urbanization projects by the municipality. Xico Costa, professor in architecture and urbanism at the Federal University of Bahia responded to the violent events in an article on website Vitruvius, and drew a parallel between the increase of violence and segregation, and the privatization of public space.¹ He states that urbanism can provide a solution through further democratization of public space. Although I take a similar position as Xico Costa, Although certain historical parallels undeniably exist, I think extreme violence such as we saw in November 2010, is not to be directly solved by urban planning, nor is a direct consequence of it. I have, left the issue of extreme violence out of the scope of this research.

1 Xico Costa, *Urbanismo pacificador e polícia demolidora - A propósito da tomada de Vila Cruzeiro, Rio de Janeiro*. Published December 2010. <<http://www.vitruvius.com.br/revistas/read/arquitextos/10.127/3680>> [Accessed: 6 December 2010].

I A National Perspective

THE REPUBLIC: ORDER AND PROGRESS

Historical backgrounds of Brazil's political, legal and geographical transformation

Contemporary scientists who studied Brazilian culture have claimed that territorial discrimination stands at the basis of many of the country's metropolitan problems. Janice Perlman states that social exclusion of community residents is a spatial phenomenon; prejudgments are based on the residential and economic status of favela residents versus non-favela residents, rather than based on race, religion, or class (Perlman 2005, pp. 12-3). This view is also enhanced by Brodwyn Fischer: 'vulnerability and weak access to legality, rather than any more overt discrimination, were at the heart of Brazilian rights poverty' (Fischer 2008, p. 6). In their views, these - both Western - anthropologists take a different position than the prominent Brazilian historian Gilberto Freyre. In his standard work 'Order and Progress' he describes the 19th Century empire in which racial division existed, particularly in the elitist upper classes (Freyre 1986, pp. 52-88). Brazil has made enormous progress since. This is manifested in its egalitarian political system and in its laws and legislations. A geographical division still exists. Brazil's urban realm is the outcome of a constantly transforming nation. To understand the urban conditions in Brazil, I will present a brief historical insight in the country's political, legal, and geographical transformations, and how these failed to avoid a condition in which urban poverty could persist.

I would like to briefly elaborate on the term 'urban poverty'. Urban refers to the built part of the city, privately owned or public, small-scaled or large. This concept is based on the ancient Roman distinction of the concept of city into *urbs* and *civitas*; roughly said, the physical part of the city and the non-physical part of the city. Poverty refers to the lack of access, access to facilities, to legal rights, the capability to develop a decent standard of living. It is difficult - if not impossible - to define what this is, as standards of living vary in each country, culture, and condition. This concept is based on Amartya Sen's 'capability-approach', a concept that has become influential in the policies of the World Bank, and stood at the basis of initiatives such as micro-credit.¹ At first sight these two aspects may seem to stand apart from each other, as one is strictly material (urban) and the other is not (poverty). Brodwyn Fischer titled her doctoral dissertation on urban poverty in Rio de Janeiro 'A Poverty of Rights' (2008), indicating the significance of poverty as a non-material aspect (lack of rights), before the material manifestation of poverty. Yet there is a strong link between the two. The purpose of this analysis is to sketch an outline of how limited access to legal rights, space, and political influence - in literature often referred to as social exclusion - has been a dominant condition that shaped urban poverty, and its physical manifestation. Janice Perlman, as one of the first anthropologists, devoted from the 1960s onwards a long period of her academic career to researching the conditions of the urban poor in Rio de Janeiro.² She concluded that urban poverty in Brazil is a consequence of a spatial division (the separation between favelas, or communities, and the 'normal' city), rather than ethnicity, religion, race or any other cultural background of people (Perlman 2005, pp. 12-3). Hernando de Soto makes a similar account in his book 'The Mystery of Capital' (2000). He stated that cultural differences are not important in the capitalist world, yet that the poor are excluded from capital, because they can not assert their legal right to property.

1 For a short, but good overview of Amartya Sen's main ideas, and his influence on the World Bank policy, see: Frediani 2008
2 Before the 1960s anthropology focused explicitly on 'primitive', non-urban cultures.

Their possessions are therefore 'dead capital' (Soto 2000, p. 17). This claim is made from an economic perspective, but enhances a similar rhetoric as what Janice Perlman carries out throughout her publications: unrestrained freedom for the poor individual will lead to their independence, hence an improvement of their living conditions.

In this analysis, the terms 'formality' and 'informality' will be used to indicate the legal framework of the urban fabric. These terms are widely used in literature on urban poverty, but there exists a lot of confusion over the meaning of these terms. Therefore I will briefly explain my interpretation of formality and informality in the discourse on urban poverty. Historically, spatial separation is a consequence of political rights, land policy, urban planning, and development of cultural aspects. Spatial separation can be seen from two poles, the legal and the illegal, bridged by the extra-legal. Here we come across a difficult concept, the concept of rights. Illegality suggests a violation of the law, which exists to protect certain rights. Illegality in the case of urban poverty, is often a claim for certain rights by suspending the law, much more than a violation of laws. The terms legal and illegal seem to be inappropriate; how can a claim for rights, which violates the law, be illegal? Therefore the terms formality and informality are used in this analysis, to define the extra-legal. For example, a certain land law may prohibit the construction of a shelter on a particular location. The claim to build a shelter at this location, thereby violating the law which prohibits this action, may still be morally acceptable, when housing alternatives are not available. Informality, in a position of weak access to legality, is the extra-legal claim for an individual right.

In her dissertation on urban poverty in Rio's peripheral zones, Teresa de Almeida Faria cites Hernando de Soto (2000): "The urban poor have no other alternative than to live outside the law" (2004, p. 30).³ De Soto argued that the bureaucratic procedure to legality is so complex, time consuming, and expensive, that poor residents in the informal sector have no access to legality, and are excluded from property ownership. He, and many others, have emphasized the importance of the inclusive value of property in society.

From this point of departure, with regard to aspects that stood at the basis of the spatial manifestation of urban poverty in Brazilian cities, the following aspects will be discussed:

- Development of voting rights in Brazil
- Division of the land
- Urbanization

Cultural and social developments (such as industrialization and modernization) are central themes in these separate aspects. While the development of political rights and land laws followed a haphazard trajectory, modernization and industrialization followed a constant development, resulting in urbanization.

3 'Os pobres não têm outra alternativa a não ser viver fora da lei' (translation by the author)

Development of voting rights in Brazil

'Developing and establishing a democratic system is a significant component of the development-process. The importance of democracy lays [...] in three independent benefits: 1) the intrinsic significance; 2) the contribution of democracy as a means; and 3) the role in shaping norms and values.'
(Sen 2000, p. 155)

Many recent scholars have addressed the development of citizenship of the urban poor in Brazil (Holston, Caldeira, Fischer, among others). The works emphasize the complications the urban poor met, and still meet, in asserting their civil and humanitarian rights; the struggle for the 'right to rights', as Holston refers to Lefebvre's 'right to the city' (Holston 2008, p. 247). The development of egalitarian political rights in a liberal democratic system has involved the urban poor and popular classes into decision-making (point 2 in the above quote of Amartya Sen's benefits of democracy). Next to its intrinsic importance, and creating awareness among citizens about their individual capabilities, opportunities and responsibilities, Amartya Sen stresses the role of (liberal) democracy as a means in a development process: 'The assertion of elementary political rights increases the chance for response from the policy unit to certain economical needs or demands.' (Sen 2000, p. 151).

In this chapter I will historically describe the development of egalitarian political rights in Brazil. The chapter is divided into the several epochs of different political systems, which Brazil has had after its independence from Portugal in 1821. With this division in mind, we will have a better understanding when looking at the conditions that stood at the basis of the emergence of urban poverty in Brazil, and its spatial manifestation.

1821-1881: Separation through voting rights

An important aspect in the development of Brazil's land policy is the development of its democratic system. In his book 'Insurgent Citizenship', political scientist James Holston shows how separation of civil law was established in the 19th Century. Political citizenship, after independence in 1821, was based on status and on race. Only members of the elite, consisting of *homens bons*, were eligible to vote. 'Electoral laws effectively limited the electorate to those considered *homens bons*, literally "good men", men of substance.' (Holston 2008, p. 84). *Homens bons* were rich, white men, who possessed land. Working class, slaves, people of a different race or religion, and women could not be politically active. They were excluded from the electorate. The electorate was estimated at about 10% of the total population for most of the 19th Century.

Holston discerns between active and passive citizenship. 'Active citizens were those who had political rights, because they qualified to vote in primary elections. [...] They constituted of a minority of citizens. Passive citizens were all the others, who were disqualified to vote in these terms, barred as a result from holding elected office and thus denied political citizenship. They constituted the vast majority of citizens, including adult men with annual income of less than 100 mil-réis, most domestic servants and employees, all underage citizens, and all women.' (Holston 2008, p. 90). Active citizenship was a privilege, which was constitutively kept out of the hands of the majority of people.

1881-1930: Sustaining separation policy in voting rights

In 1881, at the end of Brazil's monarchic rule, voting requirements were increasingly restricted with the introduction of the *Saraiva-law*, named after president José Antônio Saraiva. This law was explained as a modernization of the voting system (Love 1970, p. 6), but effectively served to 'limiting political participation to "truly" qualified voters' (Holston 2008, p. 100). It constituted the requirement for literacy as a criterion to vote, and the rule for income was enforced. This restricted the electorate to an estimated 1% of the total population of Brazil. This last measure persisted for only 10 years. The income restrictions to qualify for eligibility to vote were dropped in 1891, two years after the founding of the First, or Old, Republic (1889-1930). Slavery was abolished in 1888 after a strong lobby of the liberal party, which made it redundant to state that only free men could vote. We will see later how the abolishment of slavery affected the Brazilian cities. It did not directly influence the voting restrictions in Brazil; the majority of qualifications which the electorate had to meet, remained in place. As a result, during the period of the First Republic, the turn-out rate exceeded 5% of the population only once; in 1930, right before Gétúlio Vargas became president, 5,6% of the total population of Brazil voted.

Politics in the First Republic were predominantly determined by the wealthy rural population. The so-called political oligarchies sustained power in the states of São Paulo and Minas Gerais, where landowners could protect their interests through political influence, while the government was seated in Rio de Janeiro. This block of power became known as the *pax oligarchica*, or more informally stated, *café-com-leite*, coffee with milk; the two most important (export) products of these regions. The name resembled the power of the major rural landowners.

1930-1945: Regime of Gétúlio Vargas

During the regime of Gétúlio Vargas, who came to power with the civilian and military supported revolt of 1930, presidential elections were not held. Vargas had established his power through the involvement of the working class. During his presidency an institutionalized form of politics was constructed. In this governmental form, the *sindicatos*¹ promoted the interests of the working class (Wolfe 1994, p. 78). This was a logical consequence of the country's industrialization. Vargas' regime gained a stronghold in cities, where the urban popular classes formed an enormous potential electorate, and thus a block of political power. The institutionalized form of politics would give Vargas the opportunity to appeal to the popular classes in the industrializing cities, while at the same time not being directly accountable. Vargas became the popular leader of the working classes. The promoted interests of industrial workers would catalyze the process of urbanization in Brazil, as the opportunities and influence of industrial workers in cities were now exceeding those of the rural workers. A political shift took place from the country to the city; politics urbanized.

Vargas ended formal democracy after a coup in 1937, supported by the military. This marked the beginning of the *Estado Novo*, the new state. Presidential elections were no longer held, but institutional elections continued. With the earlier constitution of 1932, the *Saraiva-law* of 1891 was modernized:



Painting 'Operária' (1933) by Tarsila
(source: <http://www.tarsiladoamaral.com.br/>)

¹ Syndicates; workers unions and industrialists associations. After the syndicates from the Vargas era, we see the emergence of social interest groups taking their place. Their affairs were not limited to direct workers interests, such as wages, working times, but also to providing facilities. Organizations such as SESC, which provides sporting, educational, and leisure facilities for members, have taken the place of syndicates after the Estado Novo.

Election year	President elected	Number of voters (in millions)	Voters of total population (%)	Votes for winner (%)
1894	Prudente de Morais	0.3	2,2	84,3
1898	Manuel F. Campos Sales	0.5	2,7	90,9
1902	F. Rodrigues Alves	0.6	3,4	91,7
1906	Afonso Pena	0.3	1,4	97,9
1910	Hermes da Fonseca	0.6	2,8	64,4
1914	Venceslau Brás	0.6	2,4	91,6
1918	F. Rodrigues Alves	0.4	1,5	99,1
1919	Epitácio Pessoa	0.4	1,5	71,0
1922	Artur Berardes	0.8	2,9	56,0
1926	Washington Luis Pereira de Sousa	0.7	2,3	98,0
1930	Júlio Prestes	1.9	5,7	57,7
1945	Eurico Gaspar Dutra	6.2	13,4	52,4
1950	Getúlio Vargas	8.3	15,9	46,6
1955	Juscelino Kubitschek	9.1	15,6	33,8
1960	Jânio Quadros	12.6	18,1	44,8
1989	Fernando Collor	72.2	50,1	49,9
1998	Fernando Henrique Cardoso	83.2	52,6	53,1
2002	Luiz Inácio Lula da Silva	94.7	55,2	46,4
2006	Luiz Inácio Lula da Silva	95.8	51,7	60,8

Statistics of presidential elections between 1894-2006

Sources: 1894-1960 (Love 1970, 10); 1989-2006 (Holston 2008, 92)



'Workers! Warning for Brazil! Victory for work.'

Workers propaganda in the Estado Novo (source: <http://www.almanaquebrasil.com.br/>)

'It enfranchised women, set the minimum voting age at eighteen instead of twenty-one, and required eligible citizens to exercise their right of suffrage. The literacy stipulation, however, was held over from the 1891 document.' (Love 1970, p. 16). There was one exception to this last rule, a few years before the Estado Novo; in the 1934 elections for the Constituent Assembly illiterates were eligible to vote, if they were members of one of the syndicates (Wolfe 1994, p. 79). This illustrates the political stronghold the syndicates had, and the influence which the uneducated workers (in cities) could have. A larger amount of the population was now eligible to vote. In effect voting percentages did not rise.

We can see this change in the light of Vargas' populist form of politics, an successful effort to appeal to the working classes; he was democratically elected in 1950 for one more term. Opposed to his predecessors in the Old Republic, Vargas used populist means to gain the support he needed to constitute his power. Historian Daryle Williams (1994, pp. 46-9) describes how Vargas used historical heritage to represent his loyalty to the state of Brazil (a similar kind of historicism emerged in Europe during the 1930s); he erected national museums and placed statues and monuments in the cities, to create a sort of personality cult, and to rhetorically represent the political power that was established. This 'utopian vision' of a society fitted into Vargas' model to give the state an active role in 'morally and academically educate all Brazilians' (Fischer 2008, p. 116). Simultaneously there was a focus on the traditional family model during this period; an effort to maintain rest and stability in society and to prevent revolts of the popular classes.

1945-1964: Political emancipation of the poor

The military dictatorship of Vargas would not withstand international resistance against 'totalitarian' leaders after the Second World War. Following a global tendency after 1945, there was little support to maintain the established military supported regime of Vargas. For a brief period of two decades, liberal democracy was introduced. With the earlier discussed widened voting laws, introduced by Vargas in 1932 still in place, a majority of the Brazilians could now exercise their political rights. The literacy measure remained in place and maintained a division in political citizenship. 'Not until the 1960s was the literacy provision even seriously challenged.' (Love 1970, p. 4). It did become less effective, as the tendency of urbanization in Brazil continued - which will be discussed later -, and an increasing part of the popular classes learned to read and write. Faster than ever, Brazil was turning from a largely rural country to a predominately urban country in two decades of democracy. 'In this new urban world [where the new urban population became home owners, salaried workers, and mass consumers in the peripheries], illiteracy was a distinct disadvantage and therefore diminished significantly as people taught themselves to be functionally literate. Over the next thirty years, these new and literate urban residents became new and insurgent urban citizens.' (Holston 2008, p. 105).

On the local level, too, elitist politics made place for more egalitarian political rights. The political space for the *classe popolare*, created during the first Vargas era, widened: 'Rio's popular classes were now front and centre in the urban political game; virtually no Carioca politician could get ahead without appealing to vital popular concerns regarding housing, transportation, and urban services.' (Fischer 2008, p. 50). Even right-wing politicians, such as journalist and former communist Carlos Lacerda, a controversial politician who would later support the coup-d'état, were aware of the need for support among popular classes, and

the urban poor in particular. In a campaign-rally in 1960 Lacerda visited the communities of Pavão/Pavãozinho and Cantagalo in the wealthy Zona Sul, to gain support among the urban poor in Rio (Fischer 2008, p. 60). The equal value of their votes, and therefore the individual influence on politics of the urban poor, slowly turned them into citizens influencing local and national politics. And, as a group with common interests, forming a large part of Brazil's electorate, the urban poor were becoming an inextricable group in the arena of politics.

1964-1985: Military dictatorship

Although Brazilian popular classes had gained a position in the political debate, the economic power remained in the hands of the middle and upper classes. With the revolt of Brazilian middle classes against state interventions in private organizations, such as the petroleum industry, in combination with economic decline in the 1960s, support for the left-wing government of Goulart diminished. This created room for the military regime, which was installed after the coup-d'état of 1964, and forcefully limited political citizenship. Governors, senators, mayors and the president were not elected during this period, but even during the military regime, elections were held on federal, state and council level. The elections were considered to be a farce. Both on local and on national level the military controlled institutions and organizations, 'maintaining differentiated citizenship within a brutalized public sphere that denied citizens independent participation in either political or civil organizations.' (Holston 2008, p. 235). Democracy was held up as a curtain for the military regime.

The electorate and the percentage of voters among the population increased as a consequence of obligatory voting. Despite the right and obligation to vote the electorate had little political influence, but, as voting was the safest means to manifest political influence, the turn-out rates in elections increased. At the very beginning of the second period of dictatorship 45% of the adult population was eligible to vote. By the end of the dictatorship 86% of adults were eligible to vote. The turnout increased, but many of the votes would be annulled by the voters or blank during this period. In 1970, the most repressive period of the regime, 30% of the votes were invalid; voters would tag multiple boxes or write phrases, such as 'down with dictatorship' on their ballots (Holston 2008, p. 106).²

In 1980, when the strength of the military regime was declining, Brazilian scholar Henrique Costa Rzezinski described the ability of the urban poor and popular classes to influence public decisions as 'quite limited', because of their repressed political position during this period: 'National, urban and regional plans, therefore, normally [reflected] the interests of the more privileged groups.' (Rzezinski 1980, p. 485). The military regime lost power, as a consequence of poor economic conditions and hyperinflation, and of revolts among the population, first by students, and later by political movements. Recently elected president Dilma Rousseff was among the dissidents. With widening of voting rights still in place, as a scarce positive point in the legacy of two decades of dictatorship, the popular classes were on the verge to making a claim to assert their political rights.

² I enhance this statement by Holston, but I must add a critical note: today, still, the percentage of blank or invalid votes is extremely high, as a consequence of obligatory voting. In the second round of the 2010 elections 28% of the votes were blank.



Election poster from 2008 for prefect candidate Marcelo Crivella in favela Santa Marta (source: photo by author, 5 February 2010)



CEU Butantã (source: <http://vitruvius.com.br/revistas/read/arquitextos/05.055/517>)

1985-Present: Egalitarian democratic rights and political interests

In the period between 1980 and 1984 Brazil had seen a major recession. This caused a declining support for the military dictatorship, which would fall during the 1980s. 'The inability of the military to maintain economic growth and control growing inflation rates forced them to allow a return to civilian rule and democratic elections in the 1980s.' (Chaffee 1998, p. 6)³. In the first years of the New Republic, however, Brazil had an unstable economy, with hyperinflation, growing rates of unemployment, and several changes of currency. In the new political system, the political landscape was fragmented into many small parties. Individual politicians often acted on their own title and changed between political parties regularly. There was no party strong enough to change this situation until the mid-nineties.

The new institutionalized political system in Brazil has made the involvement of popular classes in politics an important issue. Many political parties tried to gain a stronghold in the poor neighborhoods of the cities, and saw urbanism as a means to gain support: 'With the return of democracy in the 1980s, clientelist politicians again used contacts with AM's⁴ to gain access to votes. These efforts resulted in improved urban services in favelas, but weakened the AM's and their statewide interest group as the government met many favelas' most pressing infrastructural needs.' (Arias 2004, p. 3). For the first time urbanism and slum upgrading turned into an instrument for politicians to gain votes. In every period before, if politicians sought democratic support among popular classes, they did this through laws and legislations; only non-democratic politicians, such as Vargas and mayor Pereira Passos, had used building projects as a political means. Today this happens through building projects.

Someone who visits a community today will see election posters for political candidates, as well as urban improvements with signs indicating the support of the governmental body in place. In a medium-sized community in Jardim Helena, located in the eastern periphery of São Paulo, I spoke with a community leader in April 2009.⁵ He took me to the only asphalt road in the community, and emphasized that this was built right before the local elections in 2005, with the promise of more urban improvements, which never came. Holston illustrates similar examples in the neighborhoods Lar Nacional and Jardim das Camélias (Holston 2008, pp. 235-53). In Madureira, Rio de Janeiro, the current prefect Eduardo Pães, has turned the construction of a large city park into an important project to show his interest in the popular classes in the suburban neighborhoods of Rio. Pães is hoping for re-election in 2013, to hold office when the city is host to the Olympics in 2016. If the project is as successful as it is promising to be, this will be part of his political campaign rally. The success of CEU (Centros Educacionais Unificados) also thrived on the political background of the project. Initiator Alexandre Delijaicov explained in a personal conversation in January 2010 how the long term CEU-project to construct 96 schools in the periphery of São Paulo, one for each neighborhood, was a great success. This changed when mayor Marta Suplicy of the workers party (PT) was not re-elected in 2004. The project continued under the same name; after all it was promised to São Paulo's residents and had already started. But the design of buildings was altered and the budget was cut significantly, because the project was still associated with the name of the former mayor. The political interest of these

3 For an analysis of the political shift as a consequence of economics, see: Chaffee 1998, pp. 135-8

4 AM's: Associações das Moradores, residents associations in slum communities

5 April 2009: Urban Detectives CSI; student workshop on informal urbanism and architecture in São Paulo

urban regeneration projects and policies is strong, and often forms the basis for urban renewal.

If we look at examples in other Latin-American countries we see that political interests traditionally play a major role in the process of informal architecture. UC Berkeley professor Nezar AlSayyad illustrates how a political leader, Dr. Carlos Trujillos, running for presidency in 1980 for the opposition party in Colombia, encouraged the invasion of Barrio El Vergel in Cali. Shortly after the invasion he promised the squatters that they would be able to stay in the settlement if he would be elected for president. AlSayyad provides similar examples of governmental support for invasions in Peru and Venezuela (AlSayyad 1993, pp. 35-7).

Development programs such as Favela-Bairro in Rio de Janeiro, CEU in São Paulo, and nation-wide programs like PAC (Programa de Aceleração do Crescimento), which will be discussed later, have all been linked to the interests of political parties and candidates. In the new era of Brazil's liberal democracy, urban development of popular neighborhoods, and programs for the urban poor, can not be seen separately from the interests of political parties.

Conclusion: toward exertion of political rights

With the development of egalitarian political rights, political interests have followed the direction of the urbanization of the country. Political interests shifted from the agricultural lands of the wealthy land-owners, to the industrialized cities of Brazil's popular classes. Here politics began to institutionalize, a development which historian Sergio Buarque de Holanda found lacking in the 1920s, and under which circumstance a 'strong leader' could take place.⁶

The urban poor gained a voice in the political sphere. Their vote is a mean to protect their individual and collective interests. The paradox of Brazil's democratic development is that egalitarian voting rights were largely introduced during the first and second period of military dictatorship. The assertion of these rights, however, has been a result of insurgence - as Holston would name it - resulting in the reinstallation of a democratic government.

Desenvolvimento urbano, urban development, turned into an important political instrument recently, and today developments in popular neighborhoods of major Brazilian cities have become counter pillars for the interest of politicians and political parties. The democratic political system, with egalitarian voting rights, has contributed to a strong social and legal position of the popular classes and to investments in the urbanization of their neighborhoods. I am slightly sceptical about the political interests in urban development. Although this resulted in successful projects, one must be critical about the continuity of the projects. If the political significance of a project stands before its social and urban significance, such as in the case of the CEU-project, this may result in discontinuity of the projects.

⁶ 'Brazil in the shadow of Lula' (19 November 2010) <http://www.nybooks.com/blogs/nyrblog/2010/nov/19/brazil-shadow-lula/> [Accessed: 29 November 2010]

Division of the land: pre-modern land policy in Brazil

In this chapter I will briefly discuss the conditions and legal transformations in Brazil that shaped the country's land policies. Urbanization and urban planning in Rio de Janeiro will be discussed in the chapters hereafter. Before addressing the urban development and tensions of formality and informality in Rio de Janeiro, I will present some of the major transformations in the history of land policies and land laws in Brazil, preceding the epoch of urbanization.

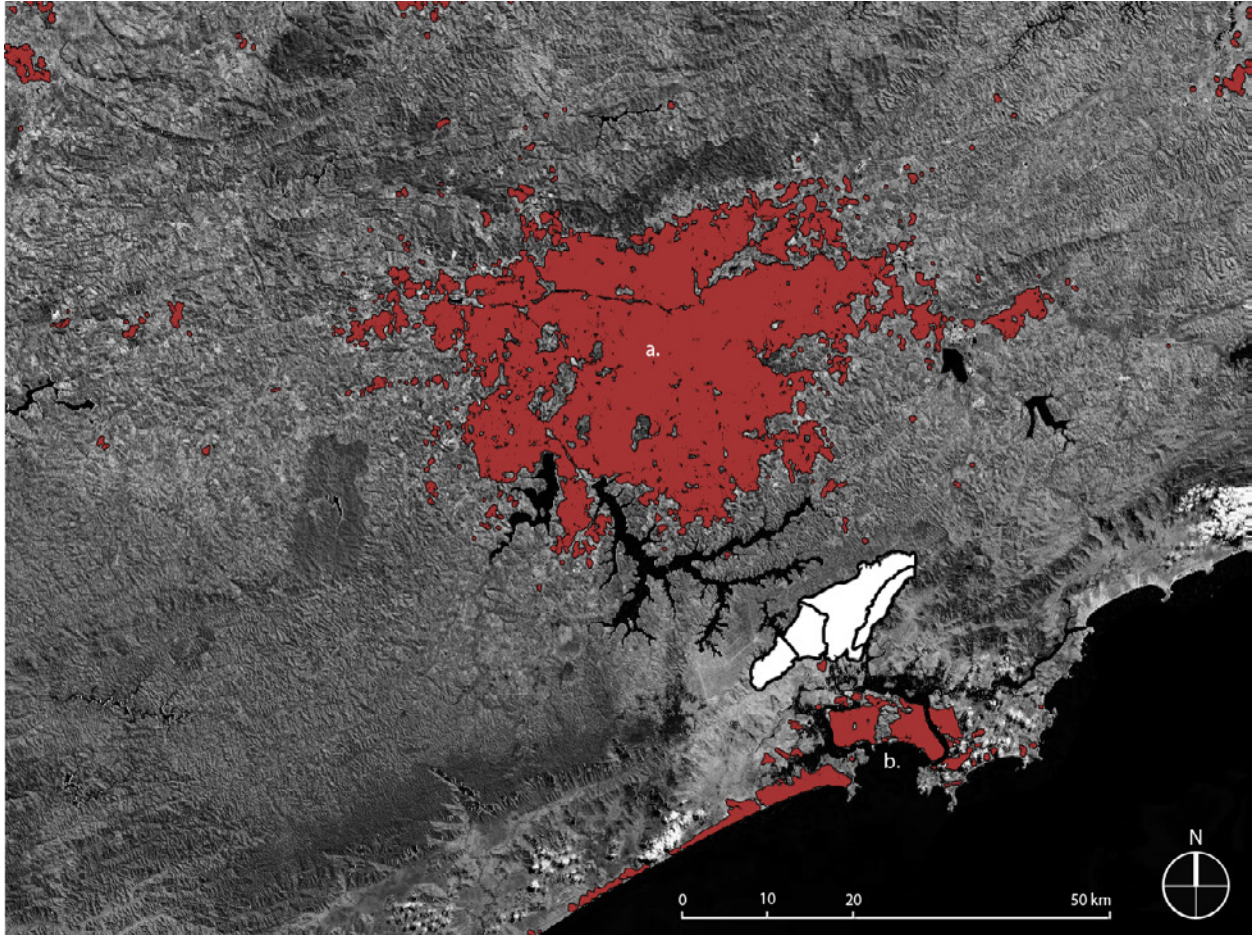
As discussed earlier, politics in Brazil were largely determined from the rural areas until the 1930s, where wealthy landowners influenced policies that mainly served to protect their own interests. The rural areas have also been the place where land policies were developed that influenced the entire country. Hence, the urban land policies in Rio de Janeiro are rooted in the legal accessibility of farm land in the rural areas of Brazil. The division of property (hence capital) originates in an exclusive policy. The land laws determined by agrarian rule, are self-evidently pre-modern. From this analysis follows a brief discussion of how these laws resulted in urban property laws.

Sesmaria law

Brazil has a long tradition of illegal land divisions, originating in the colonial period (1500-1822). Through *sesmaria law*, which came from medieval Portugal, the king of the empire regulated land division, mainly with the emphasis to increase Portugal's prosperity and strengthen its position as a trading country among other political powers. The colonial power granted rights to private individuals to obtain and possess land. In an article discussing land tenure in agricultural Brazil, sociologist T. Lynn Smith points out that this principle fits in a global trend among colonial powers until the 19th Century (Smith 1944, pp. 194-6). The sesmaria law influenced land entitlement in cities, and is exemplary for the government policies regarding land use and ownership.

A *sesmaria* is the entitlement to a large area of land rented out by the state. The lands could reach up to the size of a country as large as Italy. The included map on the next page illustrates the size of four old sesmarias in the 16th Century in the municipality of Cubatão, over a current satellite photograph. It shows that four private landowners possessed an area of land, that was similar in size to contemporary Santos, a city of over 400.000 inhabitants. The basis for obtaining land in this manner was elitist; sesmarias were only held by a minority of wealthy European immigrants. Notables who applied for land possession needed to prove that 'they were of "good" family, of noble lineage, and possessed of the slaves and capital necessary for the establishment of a sugar plantation and mill' (Smith 1944, p. 195). Slavery had a key position in sesmaria policy; the possession of slaves was a necessity to be able to work such sizes of land.

Lands that were not used or cultivated were called '*terras devolutas*' (vacant lands). Often people with insufficient means to obtain a sesmaria illegally occupied parts of these lands. Seized lands like these were called '*posses*'. Although *posses* were officially illegal, squatting on these lands was allowed on the condition that these lands would be successfully cultivated for a long time and remained productive. The land policy was aimed at exploiting occupied lands (Holston 2008, pp. 118-23). It must be noted that the *posses* were generally seized by wealthy farmers; peasants had little or no chance to obtain such lands.



Size of four land divisions by Sesmaria law in the municipality of Cubatão. In comparison with the current urbanized areas in the metropolitan region of São Paulo (a) and Santos (b).

Image composed by the author.

(Sources: Satellite image: NASA; Sesmarias: <http://www.novomilenio.inf.br/cubatao/ch102a.htm#Figura%201>)

With the independence from Portugal in 1822, the colonial system of land entitlement through sesmarias was dropped, and until 1850 no comprehensive land policy existed. During this period many landowners expanded their possessions by seizing adjacent plots of land, legitimated by squatting rights, which they then sold back to the municipalities. In this period, large-scale '*fazendas*' (farms, particularly plantations) started to dominate the rural landscape (Delson 1979, pp. 203-4).

Land-law reform of 1850

A policy shift occurred with the reform of the land law in 1850, which 'transformed land into a commodity' (Holston 2008, p. 131). As slavery was destined to come to an end following a global tendency throughout the 19th Century¹, a reform of the land law was needed. It would become too expensive to exploit such large areas of land without the means of slavery. Hence, an objective of the new land law was to permit smallholdings. One still needed sufficient financial means to obtain land, as it was only possible to acquire a plot of farmland by purchase.² Another intent of the reformed land-law was to encourage European immigration.³ The smallholdings were thus to be made attractive for purchase. One of the most important consequences of the land law was that it opened the possibility to speculate with land. After acquiring ownership over a plot of land, one could legally leave it unused, and wait for the increase of its value. The earlier squatting law had blocked this possibility. With the state losing say over the use of the land, the principle of speculation was given a legal basis.

James Holston is extremely critical about the success of the land law reform: 'While the 1850 law remained in place until 1891, there is no doubt that it failed miserably in all but one of its objectives to regulate landholding, finance immigration through land sales, supply immigrants to work on the plantations, open Brazil's territory to productive use, institute a secure legal regime of property, prevent seizure of public lands, and increase state authority. However, one intent achieved remarkable effectiveness, the consequences of which resound to this day: on a national scale the law impeded the access of poor and citizens to small-scale property.' (Holston 2008, p. 133).

We have to put into perspective the terms 'poor and citizens'. Peasants that now had access to land entitlement, were generally not former slaves, but European immigrants. As small-scale properties were still not attainable for poor former slaves or agricultural workers with little financial means, many of these people moved to the cities; the rural land policies did not offer them prospects to a prosperous life in agriculture. The agrarian lands of Brazil continued to exist of large plantations, rather than small farms. So called '*latifúndios*', large farms, determined Brazil's rural landscape.

1 As the last country in the Americas, Brazil abolished slavery in 1888

2 The land law of 1850 states (law no. 601, art. 1): 'Ficam proibidas as aquisições de terras devolutas por outro título que não seja o de compra.' (Mousse Pinto 2007, p. 217)

3 Dispõe sobre as terras devolutas no Império, e acerca das que são possuídas por título de sesmaria sem preenchimento das condições legais, bem como por simples título de posse mansa e pacífica: a determina que, medidas e demarcadas as primeiras, sejam ellas cedidas a título oneroso, assim para empresas a particulares, como para o estabelecimento de colônias de nacionais e de estrangeiros, autorizado o Governo a promover a colonização estrangeira na forma que se declara.' (Mousse Pinto 2007, p. 223)

Land laws for the urban poor

In the 1930s, as discussed earlier, there emerged a growing interest in the city under the presidency of Getúlio Vargas. The lands in the cities, or just outside of the large cities, were often possessed by agricultural landowners; these were former agricultural lands, transformed into smallholdings. The division of these lands among the new urban residents was therefore largely based on the old rural policies. As the old legal policies were not made for urban use of the lands, there was little coherence in how the lands urbanized. Private owners of the lands had say over how the lands were cultivated whether for the purpose of urbanization or agriculture. For the lands that were not cultivated for agricultural use, there was no policy at all. This resulted in haphazard, unregulated urbanization on these lands, particularly by poor workers, who could not afford urbanized land: 'The bulk of low-income families depend on the absence of legal controls, as they cannot afford the price of land with the legally required infrastructure.' (Vetter and Rzezinski 1980, p. 488). This put new urban residents in a condition where their urban situation was regulated by old rural policies. As I pointed out earlier, there was little place for peasants in the rural policy, hence there was little place for laborers in the urban manifestation of the pre-modern rural policy. They often sought refuge in the marginal lands outside the city, or, if they could afford it, purchased seemingly cheap land entitlements, which turned out to be false or have no official legal status. Vetter and Rzezinski discuss how this resulted in problematic legal situations: 'the great mass of the low-income families live in clandestine settlements in peripheral areas, in which they usually have a certain legal right to the land in the form of a land contract or promise of sale, but not the right to record their title as subdivision is not legally recognized. This type of settlement provides a much greater degree of security than the squatter settlement, or *favela*, where the family has no legal title to the land on which the housing is built.' (Vetter and Rzezinski 1980, p. 488).

Several schools of thought tried to tackle this problem, based on the intertwinement of urban poverty and land possession. I will not elaborate much on this topic as this is an extremely extensive discourse. Just to exemplify the complexities, I will briefly mention the two schools of thought concerned with property rights for the urban poor. The liberal school, departing from John Turner and later Hernando de Soto (through the policy of the World Bank), was effectively influential in several South American countries, promoting 'self-help' as a solution to urban poverty. This was a paradigm shift from the idea that slums were considered 'diseases' or 'illness'.⁴ John Turner's ideas can be explained as a *laissez-faire* policy: providing the urban poor with legislative means to solve their own problem. The role of the state was limited to the public domain at most. The urban poor would become part of the commodity market, which would increase their economic wealth. In a critical analysis of John Turner's ideas, Maarten Kool (et al.) analyzed: 'Since people have already shown themselves capable of providing and continuously improving their own habitat, even in spite of the constant threat of eviction, the expectation is that they will achieve even more when security of tenure and basic infrastructure are provided. [...] [This] will stimulate the inhabitants to invest their savings in further improvements of their housing.' (Kool et al. 1989, p. 188). Hernando de Soto continued with this idea; land entitlement would be the most successful way to allow the urban poor to help themselves, build up capital, and become part of the housing market. Critics of this school often base themselves upon Lefebvre and other leftist,

⁴ See for example Agache, 1932. I will discuss this in more detail later.

or Marxist scholars, such as Rod Burgess. He strongly criticized John Turner for his neo liberalist ideas, and proclaimed state intervention for the provision of housing. The capitalist market would not solve the housing problem.

If we look at Brazil, we can state that the land-laws, which originated in pre-modern policies, had divided the land among private parties. While there was, and still is, an active and influential socialist movement in Brazil, it had insufficient means to implement social housing on a large scale. The land was divided among private parties. Current land laws focus on the possession of property rather than on the provision of social housing as a task for the state.

It would last until 1988 until there was a legal policy on the inclusion of the urban poor in urban planning, as an amendment on the Constitution. From this moment onwards there was a long struggle for social inclusion in property rights, that would eventually be constitutionalized in the City Statute. The implementation of this document radically changed the policy in urban planning, providing the urban poor with a legal instrument to assert their right to housing, to be more specific, to property as a commodity. This will be discussed in more detail later.

Conclusion: toward equal land division

In this chapter I gave a brief outline of the legal conditions that stood at the basis of the urban land laws in Brazil. Based on this legal development, the manner in which Brazil urbanized can be partially explained. I enhance the analysis of Hernando de Soto: a part of the social and economic subordination of the urban poor, originates in their limited access to property, hence to capital. I think this analysis is broadly supported, left and right.

Recently, the legal urban development became a process toward smallholdings. This allowed small-scale developments, in the interest of the urban poor. The more influence Brazilian popular classes had in politics, the more access they had to urban land.

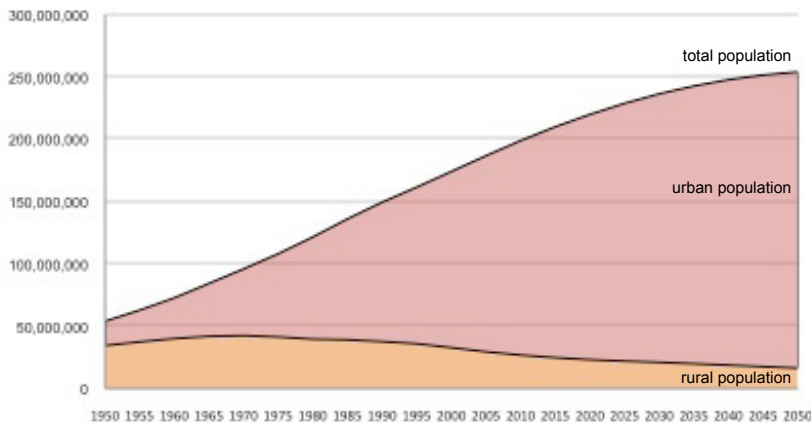
Yet there was a major delaying factor, which still resembles today. I wager to say that, rooting in pre-modern colonial policies, Brazil's land (which is today urban) was already transformed into a commodity while Brazil was taking shape as a republic, and creating its land laws. Baldly said, the modern Brazilian state initially emerged as a landless state.

Social housing has never been a realistic mean to solve the vast housing problem in Brazil, and so far has only offered relief in very precarious conditions. As politics and land laws initially were largely determined by private parties, a liberal land law policy was the only possible path that urbanization could follow; the state did not have strong legal means, nor land, to control its urban growth. When urbanization reached its height through the industrialization and shift of political power to the cities promoted by Vargas, the process of urbanization was determined by private property owners. Property, and therefore capital, remained in the hands of land owners who obtained legal entitlement based on pre-modern land laws. We will see later how this is today manifested in a privately operated public realm.

Urbanization

First a brief note on the terminology. Urbanization can be interpreted in two ways: geographically and architecturally. Geographical urbanization is the increase of urban residents, relative to the rural population; architectural urbanization is the implementation of urban facilities (such as sewage, paved roads, etc.) in a neighborhood. The latter form of urbanization will be discussed in the next chapter. In this chapter I discuss Brazil's geographical transformation.

In half a century, Brazil changed from one of the most rural countries in South America (1950: 36.2% urban) to one of the most urbanized countries (2000: 81.2% urban). The urban population is expected to continue growing in the next decades to approximately 90 percent, while the rural population continues to decrease (see table). Brazil forms in this sense a laboratory of urbanization for the rapidly industrializing and modernizing developing world. In this chapter the demographic development of Brazil will be outlined.



Population increase in Brazil
(Graphic by author, source: IBGE 2006)

Conditions of an urbanizing country

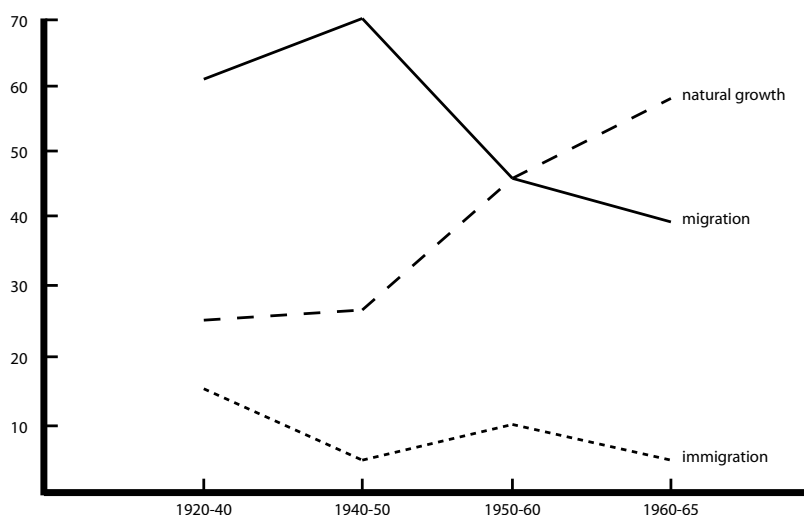
Urbanization in Brazil is strongly related to industrialization. As discussed earlier, several causes have shaped the conditions for urban growth in Brazil. Scholars speak of push- and pull-factors (or attraction and expulsion factors) for urbanization. Ananya Roy generalizes that in most developing countries there is a push from the country rather than a pull from the city (Roy in: Roy and AlSayyad 2004, p. 290). Janice Perlman states, in the case of Brazil, that the pull-factor is more important: '[T]he real pull is the image of an open door and unlimited options for the future, in contrast to the dead-end of life in the countryside.' (Perlman 1976, p. 12). I would argue that a combination of causes heralded the process of urbanization in Brazil. We have seen how limitations of political and employment opportunities in rural areas (particularly in the Old Republic) and increasing opportunities for popular classes in cities (under the first administration of Vargas) have catalyzed urbanization in Brazil. As a brief summary of the earlier chapters, the most important conditions that influenced the urbanization process in Brazil were:

- Abolishment of slavery in 1888;
- Work opportunities in the industrializing cities;
- Political reforms for the urban popular classes under Vargas;
- Land law reforms that started to permit small-holdings since 1850;
- Increasing population through (encouraged) immigration;
- Severe droughts in the North-East (not mentioned earlier);

One common factor of urbanization did not play a significant role: natural growth was never a determining factor for urbanization until the mid-20th Century. Birth rates in rural areas were far greater than birth rates in urban regions (Martine 1972, p. 202). The influx of migrants, as Rio's most important cause of growth, was only surpassed by natural increase in the 1960s. According to demographer Kingsley Davis (1965) natural increase (the difference between the number of births and the number of deaths) started contributing in the mid-twentieth century largely to urbanization in developing countries. This was also the case in Rio de Janeiro, where natural increase surpassed internal migration, making the largest contribution to the growth of the city. This is easy to explain: the poor rural residents had generally more children than the wealthy urban residents. When the rural residents moved to city, natural growth also relocated. This is still the case: 'In [1999-2004], 48% of urban natural increase can be attributable to poor people.' (UNFPA 2007, p. 40).

Immigration was in Rio de Janeiro of less importance than in rural areas. After all, immigrants came to Brazil for its major resources and opportunities in agriculture, which were scarce in Europe. An aspect contributing to immigration in Rio was the Great War, and the subsequent economic crisis in Europe. This caused a flux of immigration, mainly to the south of Brazil.

Population increase by origin of population groups in Rio de Janeiro (source: Perlman 1976)



Internal migration in the era of industrialization

Brazil's demographic development has followed its trends of labor shortage. In the beginning of the 19th Century, there was a shortage of agricultural labor force on the large coffee and other plantations. As a consequence, many workers and slaves had been brought to Brazil, particularly to the large latifúndios in the North East.

With the abolishment of slavery at the end of the 19th Century, and industrialization in the beginning of the 20th Century, I have already discussed the most important developments that transformed Brazil from a rural country into an urban country. One other immediate cause, an event catalyzing the rural to urban migration, needs to be mentioned explicitly. In the end of the 19th and beginning of the 20th Century the North East of Brazil experienced several periods of severe drought, most notably the three year drought of 1877-79. For three years in a row, the harvest was ruined, and work on the land was scarce. It is argued that this particular period of drought can not be seen as an immediate cause for the process of urbanization in Brazil as climatic fluctuations often

occur without subsequent migration (Fischlowitz and Engel 1969, pp. 40-1). The droughts in the North East appeared simultaneously with diminishing support for slave labor and modernization of large farms. This combination of factors did have an affect on migration from this area to other parts of the country.

As the droughts diminished the availability of work on the large farms, many agrarian workers were forced to move to cities to find work. According to economists Ward and Wagner, who studied the economical impacts of migration in Brazil, the drought did not only result in rural-urban migration, but also rural-rural migration. Other than the migration flux to the southern cities, there was also a stream of rural migrants to the rubber plantations - the rubber boom of the mid-19th Century - in the Amazon states (1980, p. 254). This was a consequence of new, but labor intensive opportunities to cultivate the compact forests of the Amazon states. The North East, relying the most on slave labor, saw the largest decrease in rural population in the 20th Century. The south of Brazil and the inlands saw a slight increase in rural population (Yoder and Fuguitt 1979, pp. 81-2). The process of internal migration continued as agriculture modernized and the need for manual labor diminished further. Between 1950 and 1960 internal migration accounted for 47,9% of new urban residents in Brazil, and between 1960 and 1970 this was 49,3% (Wagner and Ward 1980, p. 250).

I will be brief on the exact growth of different Brazilian cities, as numerous detailed publications have addressed this topic. Generalized we can state that the strongest urban growth occurred in Rio de Janeiro and in São Paulo and later in Brasília. Rio was the cultural and political centre of Brazil, and a major harbor-city. It therefore attracted both external and internal migrants. São Paulo transformed into the trading centre of the country and attracted many migrants to work in the new industries. São Paulo's population continued to grow longer than the population of Rio de Janeiro through its car industry, and because Rio lost its privilege of being the national capital to Brasília. The population of Rio de Janeiro grew in the 1920s and 30s from 1.2 million inhabitants to 1.8 million. Demographer George Martine estimates that in the period between 1920-40 internal migration accounted for 60% of Rio de Janeiro's population increase (Martine 1972, p. 204). Immigration accounted for 15%, and 25% of the increase was caused by natural increase.

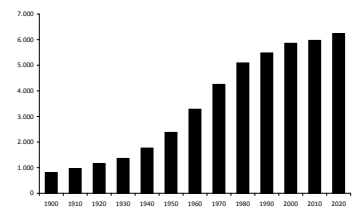
At the end of Brazil's most intense period of urbanization, Wagner and Ward elucidated some of the motives of rural migrants to move to cities (1980, pp. 250-2). They state that economical opportunities are the most important motive. Migrants move to places where they expect to find work matching with their labor skills. The distance of migration is less relevant; a construction worker from Bahía in the 1950s would have been more likely to move to Brasília, where he could find a job matching to his acquired skills, than to find a job in a different business closer to home.

In their analysis Wagner and Ward question the argument of employment as the only motive for rural migrants. Their argument is that migration continued in the 1960s and 70s whilst the availability of work was scarce in the large metropolises. Although these economic factors, at the same time push- and pull-factors, were the most determining incentives leading to urbanization, other, non-economical factors, have also played an important role. The city offered opportunities for personal development, such as education. An increase in quality of life or personal well-being is not mentioned by Wagner and Ward.

In the graphic we can see that particularly in the 1970s and 1980s small cities experienced a stronger population increase than large cities. This could indicate at a desire to avoid metropolitan problems, particularly regarding safety, which



In-migration flux in the 20th Century
(source: <http://www.geografiaparados.com.br/>)



Population growth in Rio de Janeiro between 1900-2020

turned into a major issue in the 1980s, when, according to Desmond Enrique Arias, trafficking turned into the core business of some of the AM's in slum communities (2005, pp. 18-38). Another explanation for the relatively strong growth of small cities is peripherization. In the 1980s we see a large increase of cities in the peripheries of the large metropolises. As an example, Diadema, a city in the south of São Paulo's periphery, near to the main car factories, grew from 12.000 inhabitants in 1960 to 300.000 in 1990. This is a consequence of cheaper land and houses than in neighboring São Paulo, while benefiting from its employment opportunities (Reali and Alli in: Cities Alliance 2010, p. 36).



Growth of small, medium and large cities between 1950-2010 (Graphic by author)

Urbanization and poverty

There is a clear relation between urban poverty and the influx of rural migrants. In a 1969 census of the favelas of Rio de Janeiro, it was estimated that 80-90% of the favela population was drawn from rural migrants (Fischlowitz and Engel 1969, p. 44). Of the overall population of the city, about 20% were rural migrants. Hence, we can state that the majority of migrants ended up in poor neighborhoods. This is a global trend, which is still relevant today: 'In the case of Brazil, it has been estimated that 69% of migrants to urban areas and of rural people reclassified as urban (between 1999 and 2004) can be categorized as poor.' (UNFPA 2007, p.40).

The sketched image seems negative, as rural migration causes urban poverty, which is overtly manifested in the metropolitan cities. But the influx of rural migrants to cities plays in fact an important role in overall poverty reduction. The United Nations Population Fund (UNFPA) stated that urbanization has an important role in poverty reduction. Brazil's poverty rates decreased 5.1% between 1999 and 2004. UNFPA ascribes 17% of this figure directly to urbanization as they are, and remain, the centres of economic growth and economic production (UNFPA 2007, p. 36). Although migration from rural to urban areas contributes to diminishing poverty, it is not by definition a ticket out of poverty.

When the strongest flux of migrants to cities took place, we can speak of a period of 'hyper-urbanization', or even 'over-urbanization'. In terms of offering sufficient job opportunities, urban services, infrastructure, facilities, and governmental capabilities, the major Brazilian cities were incapable to absorb the large stream of migration. In the decade 1950-60, the urban labor force in Brazil increased with 9.2 million. Of these new urban residents, more than half (5.7 million) were termed 'inactive' (Perlman 1976, pp. 5-6). This does not mean that these new urban residents did nothing; many of these people worked in the informal sector, either as wage laborers or small entrepreneurs. They were

officially unemployed. Their jobs were insecure, and their working conditions were not protected by law. Many of these people live in slums and in cortiços today.

Trends for the 21st Century

Since the 1950s the growth of the major metropolises Rio de Janeiro, and a bit later also São Paulo, started to decrease. Today we do no longer see the largest growth occurring in these metropolises, but in smaller cities. Although the population increase is not as excessive as in the mid-20th Century, Brazil is still urbanizing. Cities below 500,000 inhabitants will experience a larger percentage of growth than cities with more than 500,000 inhabitants. This is a continuing trend of the 1990s, according to professor of urban geography Brian Godfrey, who specialized on Brazilian cities: '[F]rom 1990 to 1996 the fastest-growing Brazilian cities have been 181 intermediate-sized – 100,000-500,000 residents – centers scattered throughout the country's interior' (Godfrey 1999, p. 100). However, the numerical increase in small and large cities is more or less equal.¹ The impact of the urban growth will be bigger in small cities, as they will be likely to experience more difficulties absorbing this growth.

New programs, such as PAC and Minha Casa, Minha Vida, national or state governed projects which are offsprings of the City Statute, are introduced as instruments to govern this growth, along with social programs such as Bolsa Família. The government particularly aims at Public Private Partnerships (PPP), to engage private parties the process of urbanization, both qualitatively and quantitatively.

The incentives behind the growth of smaller cities are based on the assumptions that the quality of life in smaller cities is better, and the conditions for companies are more attractive. According to Godfrey: 'After decades of rapid growth, Brazil's two leading urban centers now face the disadvantages of massive metropolitan scale, such as inadequate physical and social infrastructure, traffic congestion, pollution, fear of crime, housing scarcity, stagnant job markets, and relatively high labor costs. Industries have increasingly shown a tendency to relocate out of the two largest metropolitan areas to small cities in the interior.' (Godfrey 1999, p. 100). Both people and companies resort to smaller cities, leaving metropolitan problems behind.

Conclusion: toward inclusive urbanization

As the outcome of several trends and transformations, we have seen how the process of urbanization has geographically transformed the country. Urbanization became increasingly problematic as qualitative urbanization could not keep pace with quantitative urbanization, and the poor peripheral neighborhoods began to emerge. This is a result of the continuing pressure on cities, and the large influx of poor residents, while opportunities in the cities lacked behind. It is also the outcome of historical inequalities in politics and land laws, as we saw earlier. The challenge for planners and for policy-makers for the next decades is twofold.

One direction will be: How can we keep small cities livable? In other words, how can we successfully manage the growth of small cities, and avoid the emergence of metropolitan problems in small cities? These are important

¹ E.g. 2% growth in a city of 500,000 inhabitants is 10,000 inhabitants; 1% growth in a city of 1,000,000 inhabitants is also 10,000 inhabitants

questions to think about and to work on. The small cities offer a tabula rasa to work on successful expansion with the knowledge of rapid urban growth acquired throughout the 20th Century.

The other direction is: How can we solve the metropolitan problems in the large metropolitan cities? Does the redistribution of population growth to smaller cities offer a solution, or does it instead create new problems elsewhere? Considering the incentives of people to move to small cities, as a consequence of escaping metropolitan problems, and poor quality of life in large metropolises, we should not limit ourselves to the geographical question of urbanization. We should also ask the architectural question of urbanization. The challenge of urbanization is not limited to how to manage quantitative urbanization in Brazil, but also how to manage qualitative urbanization. Not only in the small, growing cities, but also in the metropolises which are perceived to become 'unlivable'.

I will focus in the next chapter on the qualitative development of urban space, and its manifestation in Rio de Janeiro.

II

An Urban Perspective



FROM MODERNIZATION TO MODERNISM

Developed plans and unplanned developments in Rio de Janeiro

'The Modernist dichotomies of rural/urban, traditional/modern, industrial/agricultural, religious/secular, and local/global, which long ago began to lose their footing, have been pushed into even more extreme contortions by informality.'
(Fabricius 2008, p. 16)

Brazilian cities experienced a paradigm shift in urbanism: from modernization to modernism. At first sight, the peripheries of Rio de Janeiro were left unaffected by modernist architecture. Referring to the founding father of modernist architecture: we do not find pilotis, fenêtres a longeurs, plans libres, roof gardens, or illuminated corners (this was, according to Kenneth Frampton, the unpublished sixth point of Le Corbusier), the only point where the peripheral houses show a parallel with modernism is in their flat roofs. In terms of urbanism, however, the neighborhoods are strongly influenced by modernist city planning, in the sense that Daniela Fabricius argues in the above quote from Harvard Design Magazine. I will illustrate the transformation from modernization to modernism in this chapter.

The process of urbanization influenced the way in which the country and its major cities developed. It catalyzed the development of Brazilian cities, as centers for economically and politically active citizens. In most of the 20th Century, while cities in Europe and the United States experienced relatively small growth rates and could therefore improve their urban fabric by renewing and improving existing buildings and infrastructure, Brazilian cities needed to expand their housing stock. In other words, the quantitative process of urbanization had priority over the qualitative process of urbanization. The outcome of this process was that the peripheries emerged as a blind spot for urban planning; the qualitative improvement of buildings and infrastructure lagged behind. Governmental planning in the peripheral zones of Rio de Janeiro was limited to basic facilities, such as roads and sewage networks. The majority of houses and public spaces was characterized by private developments and the absence of planning.

I will not outline the architectural history of Rio de Janeiro. Merely I would like to discuss the history of its urban development; how modernization of society resulted in modernist urban planning. Architects and planners, but also the governmental bodies in the young federal state of Brazil sought for an identity to put its colonial, Luso-Brazilian history

behind. Initially this resulted in eclectic architectural styles, inspired by the architecture in France where many prominent Brazilian architects were educated (Williams 2009). Later, influenced by Le Corbusier, Brazil developed a strong tradition of modernism in planning and architecture.

Large parts of the city remained untouched by city planning. I argue that urban planning consists solely of a formal part. Informal building was by definition never included in planning. The divergence is that formality starts with planning, while informality urbanizes without planning. Nezar AlSayyad characterizes the process of squatting as follows: 'The process can be broken down into four basic phases: (1) land invasion, (2) social formation, (3) physical consolidation and (4) urban maturity.' (AlSayyad 1993, p. 34). The last of these phases deserves particular attention from an architectural and urbanist viewpoint. Only recently it came to be incorporated in urban planning; architects and urbanist can make a contribution in the last phase.

In this chapter I present a brief history of urban planning in Rio de Janeiro. The parallels and disparities of urban planning and informal developments will be discussed, according to the following themes:

- Formal developments: urban modernization, modernist city planning;
- Informal developments: tenement housing, subúrbios, favelas;
- Social organization: bottom-up developments;
- Contemporary legislations: the Constitution and the City Statute;

The themes do not stand separate from each other. The developments emerged in response to each other. With respect for the sometimes overlapping, and sometimes haphazard development, I have tried to discern a trend in Rio's development. I will sketch the urban development of Rio as a more or less heterochronical process, departing from the late 19th Century; at the beginning of Rio's modern history.

Urban modernization and tenement housing

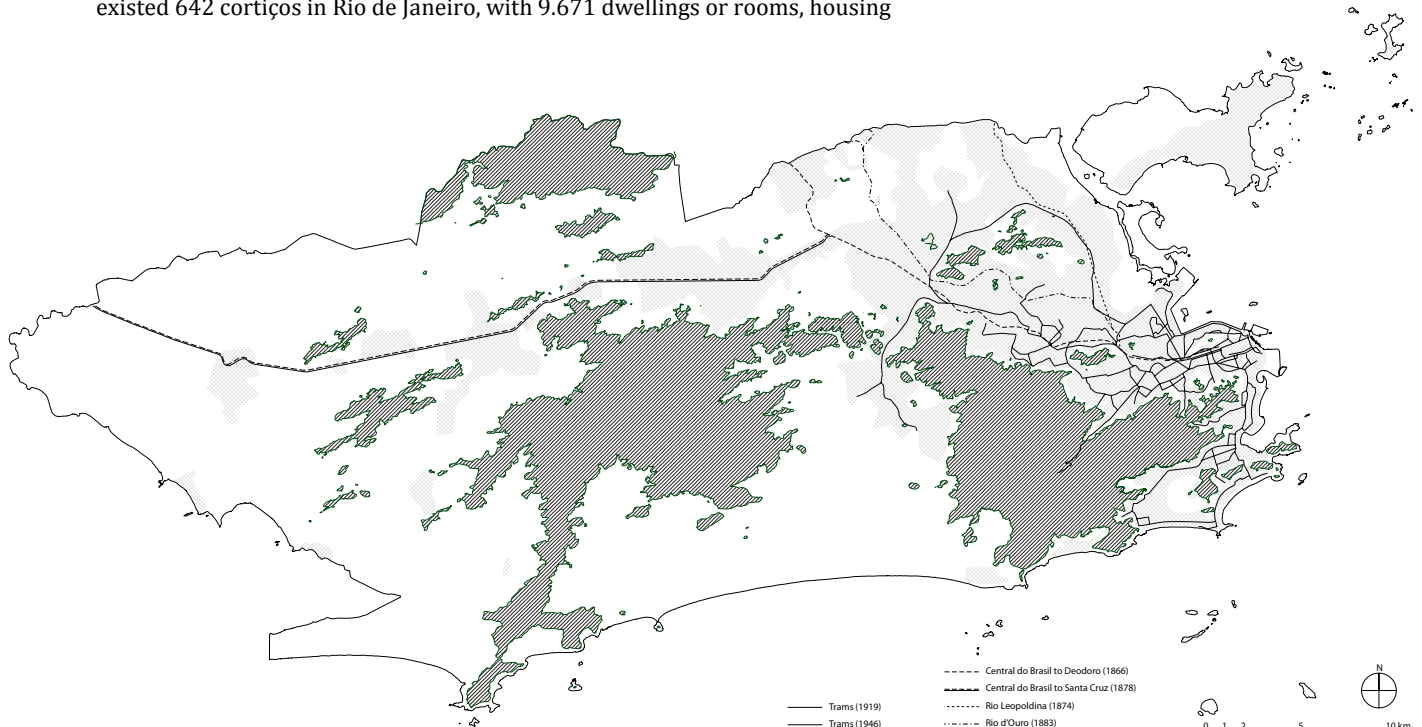
In the second half of the 19th Century Rio de Janeiro underwent a period of modernization. The conditions that stood at the basis of Rio's process of urbanization have been mentioned earlier: the development of land laws, the process of industrialization, the shift of political power from rural to urban, and agricultural modernization. The flourishing of cities was manifested in the level of urban facilities: paved streets, as well as public spaces, such as parks and theaters, modernized the city centre. The process of modernization did not reach all citizens in Rio de Janeiro; it reached merely those living in the central districts.

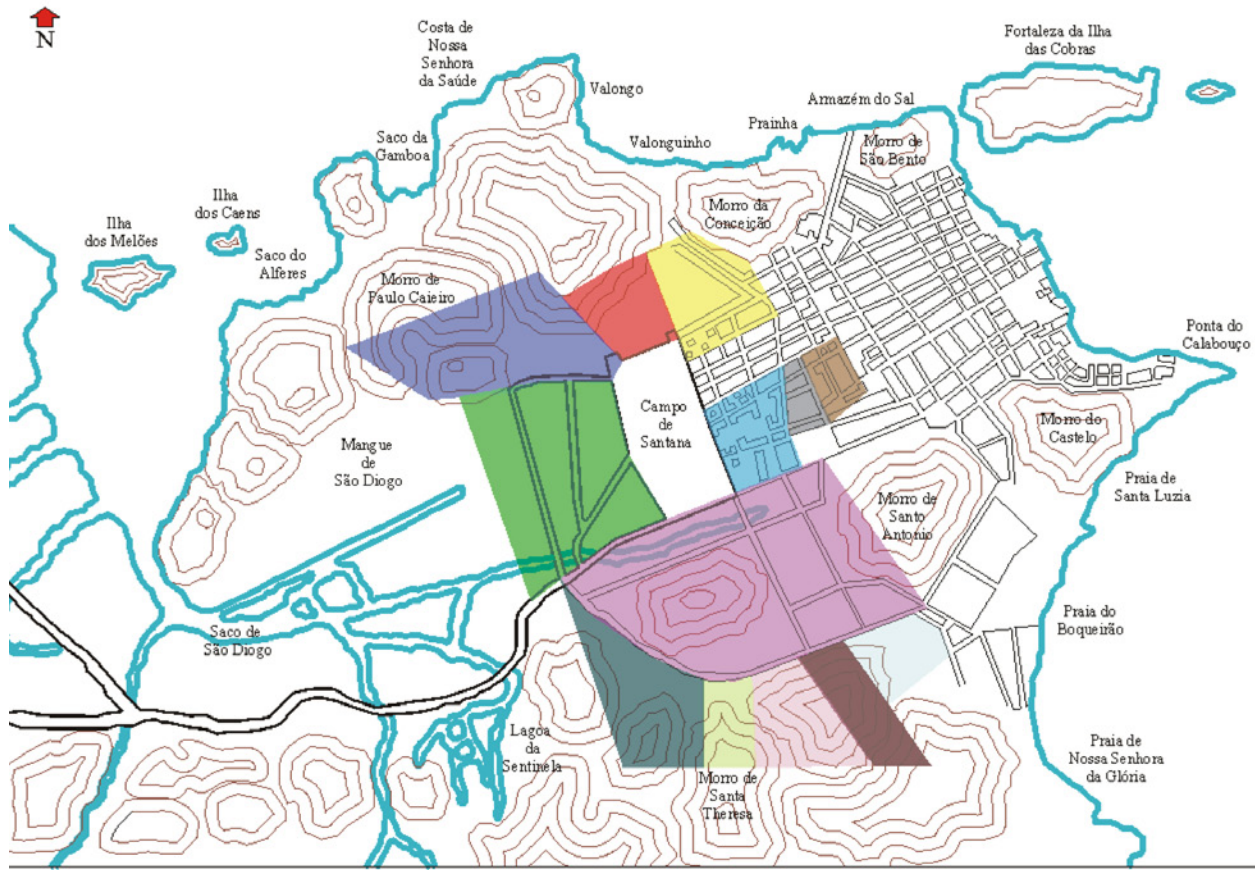
Subsequently, fish oil lamps in the streets of Rio were replaced by gas lanterns (1854), sewage pipes were installed replacing manual collection of human and household waste (1863), private houses were facilitated with running water (1876), and electrical street lights were installed (1906). From the 1860s, horse pulled and later electrical tram lines were constructed, as well as railroads (Fischer 2008, p. 26). The trams, '*bondes*', reached affluent districts, such as Glória, Catete, São Christovão and Santa Teresa. The railroads were initially used for the transport of cargo from the inlands (see map). By the end of the 19th Century, as the peripheral zones urbanized, the railroads started to offer passenger service and constructed stations in the periphery.

On the background of a modernizing city, urban poverty first manifested itself as a main actor in the central districts. The urban poor lived in *cortiços* and *estalagens*, tenement buildings that can still be found today. *Cortiços* were defined as: 'tenements created either from subdividing larger structures or from the rough-and-tumble agglomeration of precariously built wooden rooms added on to existing buildings', while *estalagens* were defined as: 'tenement rooms or shacks constructed around an open corridor or patio' (Fischer 2008, p. 335). Usually the conditions in the *estalagens* were better than those in the *cortiços*.

During the second half of the 19th Century tenements appeared in central districts, where rural migrants, freed slaves, and immigrants could rent a room to live with their family. The number of *cortiços* grew in the second half of the 19th Century, influenced by the influx of rural migrants and immigrants. In 1869 there existed 642 *cortiços* in Rio de Janeiro, with 9.671 dwellings or rooms, housing

Development of Rio de Janeiro. Trainlines and tramlines, based on a map of the urbanization in 1948 (composed by the author, see source list for data origin)





Legenda

- Pedro Caetano Portela
- Chácara do Casado
- Capitão José Vargas
- José Caetano dos Santos
- Manoel Caetano Muniz
- Feliciano da Silva Coutinho
- Pedro Coelho da Silva
- Pedro Dias Paes Leme
- Cláudio José Pereira da Silva
- José da Costa Barros
- Paulo Carvalho da Silva
- Chácara da Bica
- Padre Antônio Leite Pereira

Property ownership just outside the city of Rio de Janeiro in the 18th Century. These lands would urbanize in the 19th Century (source: Mousse Pinto 2007: 88)

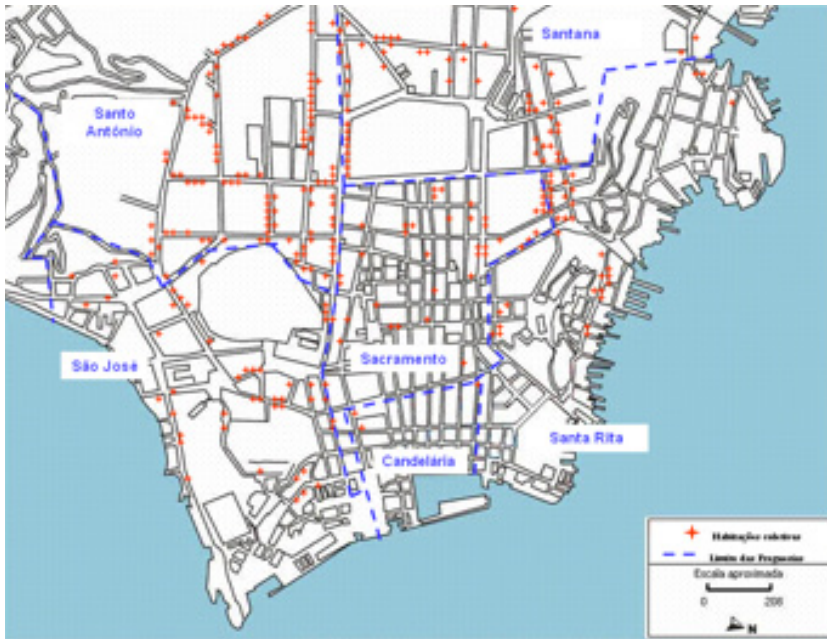


Tenements on Rua do Senado, 1906 (top) and on Rua dos Invalidos, undated (source: Prefeitura do Rio de Janeiro 2002: 8)

a population of 21.929 people. In 1888 the number of cortiços had increased to 1221, with 18.866 houses and a population of 46.680 people (Texeira 1994, pp. 573-4). This number would increase much faster in the last decade; in the 1890s, it exceeded 100.000 residents. In 1869 the cortiços housed 10% of the population of Rio, in the 1890s this would be between 20-25%. The sudden increase can be explained by the abolishment of slavery in 1888, modernization of agriculture, and the droughts in the late 19th Century, as discussed earlier.

Tenement houses were a popular form of housing, because of their immediate proximity to prosperous districts with a high number of jobs. In 1869 about 56% of the tenement residents were of foreign descent, many of whom were Portuguese immigrants (Texeira 1994, p. 576). The size of the tenements varied from a couple of rooms to over 1000 rooms; the majority of the tenements counted no more than ten rooms. Contradictory to most descriptions, available photographs from the early 20th Century show carefully organized buildings and humane living conditions. It is likely that the picture give a brightened image, showing only the most livable places. However, the tenements were often carefully planned buildings, rather than chaotic structures. They were in the hands of one land lord, who often possessed all the houses in a street, block, or even neighborhood as the map above illustrates. His entitlement to the land originated in pre-modern land laws as we saw earlier.

Many cortiços and estalagens were found near the harbors of Rio de Janeiro, where the poor working classes lived in precarious conditions: "These ramshackle structures, called cortiços or "beehives", dotted the Sant'Anna, Sacramento, São José, Santa Rita, and the hilly Santo Antônio districts adjacent



Locations of cortiços and collective housing in the city centre of Rio de Janeiro in 1878 (source: Sivla Gomes 2006: 12)



Cortiços on Rua do Senado, 1906 (source: http://www.flickr.com/photos/ca-rioca_da_gema/ [accessed: August 2010])

to the docks and commercial houses. There in dark, damp, and poorly ventilated rooms crowded Rio's laboring poor - quarry workers, day laborers on the docks, construction and municipal service workers, prostitutes, pimps, beggars, petty thieves, and others who worked downtown.' (Meade 1986, p. 306). The rooms in the cortiços were small, sometimes less than 3 square meters. The shared facilities, such as water, lighting, toilets, and also daylight and ventilation, were scarce and improper. This made the tenements hazardous and unhygienic places to live. Rio experienced periodical outbreaks of cholera, yellow fever and plague, which, particularly in the 1850s and 70s, ravaged the city. It affected the poor residents of tenement housing, and led to an increasingly stronger voice in the municipal government and population to remove the tenement buildings.

In her well-documented publication on the public health campaign in Rio in 1904, historian Teresa Meade (1986) argues that the fear of these diseases spreading from the 'urban poor' to the 'upper class' of the city was the main reason for resistance against the presence of tenement housing in the city centre. Furthermore the cortiços were undesired as they were considered as 'breeding the crime and vice proliferating in the downtown'. On the order of the municipality, construction of cortiços in central areas was banned in 1873 and in 1890 cortiços and estalagens could be closed for reasons of hygiene. The cortiço removals had reached an important point with the removal of the famous conglomeration of tenements called 'Cabeça do Porco' (the Pigs Head) on 26 January 1893. With over 4000 residents this cortiço was the largest tenement of the city. Within 48 hours all the residents were evicted from their houses and left on the streets of Rio. The buildings were demolished (Monteiro 2004). Teresa Meade further states that health campaigns created tensions between the urban poor and the government, as the health campaigns would often be followed by evictions of the urban poor from their houses. Eventually this resulted in violent resistance of the urban poor, which erupted in a large demonstration in the city centre in November 1904.

Based on the municipal regulation of hygienic control, many buildings were removed from the city centre under the office of mayor Pereira Passos (1902-1906). In the area around Avenida Rio Branco, over 590 buildings, many of which

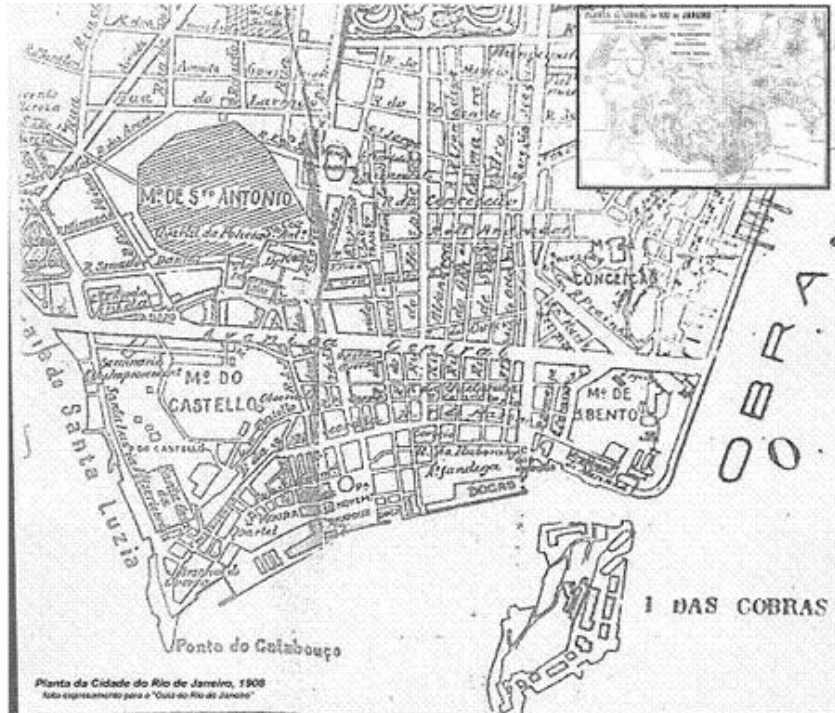


Protest cover of magazine Revista Ilustrada in February 1893 (source: Prefeitura do Rio de Janeiro 2002: 54)

New map of Rio de Janeiro, 1908. Including Avenida Central. Also indicated are Morro de Santo Antônio and Morro do Castello (source: <http://bhpbrasil.spaces.live.com/Blog/cns!CBF475499EC82673!4359.entry>)



Works in Avenida Central / Avenida Rio Branco, 1905 (source: <http://www.flickr.com/photos/11124678@N02/1885274901/in/photostream/>)



Sceptical cartoon about the demolition of the cortiços on Avenida Rio Branco, published in *O Malho*, July 1903. The cartoon says:

The properties and the avenue

- Protest! Protest! This is an outrage to this property.

- Your property is inappropriate... For the image of the avenue.

(source: Prefeitura do Rio de Janeiro 2002: 55)

were tenement buildings, were demolished to make space for the modernization and beautification of the city centre. The municipal theatre, the Academy of Fine Arts, the National Library, and many clubs and commercial businesses would be constructed here over the next decade. The buildings were designed mainly in neoclassical style, with an abundance of decorations. In a project documentation published by the municipality of Rio de Janeiro, the intervention was described as '*A Paris nos trópicos*', Paris in the tropics (Prefeitura do Rio de Janeiro 2002, p. 12). Mike Davis spoke about 'Hausmann in the tropics', referring to this project, and to different situations with a similar impact (Davis 2006, p. 95). However, the cortiço-removals could not completely exile the cortiços in Rio de Janeiro. In 1906, the number of cortiço residents had increased to over 250.000, almost 36% percent of the population. Today, still, cortiços exist in the center of Rio de Janeiro and other Brazilian cities. Although they are fewer in number, the living conditions are among the most precarious for the urban poor.

In the late 19th Century, the outbreaks of diseases in the cortiços, and the fear of spreading of these diseases to the upper class neighborhoods, created a legitimation for the removal of the undesired tenement houses and for beautification of the city centre. Meanwhile, the urban poor were left to themselves. Without money, capital, or job security, they needed to find residency elsewhere in the city. There was no governmental effort to provide an alternative location to live. The conditions were shaped for a rapid increase of (precarious) *subúrbios* and *favelas* in Rio de Janeiro in the early 20th Century.

Emergence of the subúrbios

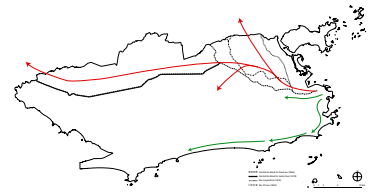
One of the places where the urban poor went, particularly the labor class, were the *subúrbios*. Fischer distinguishes between *subúrbios* and *bairros*, (poor) suburbs and (middle-class) neighborhoods (Fischer 2008, pp. 29-30). Janice Perlman, too, makes this distinction, and emphasizes that the *subúrbios* can not be confused with the American model of 'middle- and upper-class suburbs'

(Perlman 1976, p. 19). The *subúrbios* were residential areas near the industrial districts, which emerged along the different railroads; the *bairros* were more privileged neighborhoods, centrally located and serviced by the trams (*bondes*). In his analysis of Rio de Janeiro, Parisian urbanist Alfred Agache noted in the 1920s how the suburbs followed the development of the industrial quarters and of the railroads: ‘Scattered left and right, on the bottom of the valleys or on the flatlands, are the popular residential neighborhoods which rapidly crystallize around the train stations of Central do Brasil, along the route of São Paulo. A long uninterrupted suburb, and a second group of suburbs beyond the marshlands of Manguiros, shaped by the Léopoldina railway and the new route to Petrópolis. These popular neighborhoods are currently growing rapidly, but insufficient, as the workshops around the railroads, the harbor and the factories depend on them.’ (Agache 1932, p. 31).¹ He noted, already in the 1930s, the phenomenon of peripherization. The maps illustrate how, at the time of Agache’s observation, the process of peripherization was only beginning.

The *subúrbios* absorbed the largest quantitative increase of urbanization of Rio de Janeiro to the north and west, until to the geographical barriers of the mountains of Tijuca. The *bairros* expanded to the south, controlled through planning. They were subject to a qualitative improvement of urbanization. In the first half of the 20th Century this took place in the new southern districts, such as Capacabana and Ipanema. There was a notable difference in the level of urban facilities between the *subúrbios* and the *bairros*. The streets of the *bairros* were often paved, and there were services such as sewage and water pipes, while the *subúrbios* lacked these facilities; the trams were a significantly better mode of transportation than the overcrowded trains. Many of the houses in the *subúrbios* were self-help housing; housing in the *bairros* was of substantially better quality. Agache describes a third type of neighborhoods, the rural residential neighborhoods, beyond the barrier of Tijuca. He aims at the small villages in the natural surrounding of the mountains, which had a substantial environmental quality (Agache 1932, p. 31).

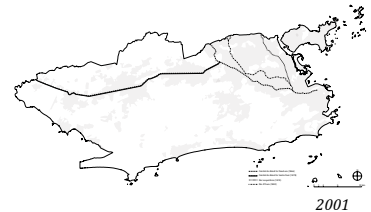
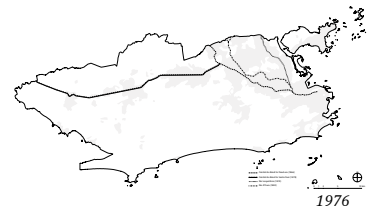
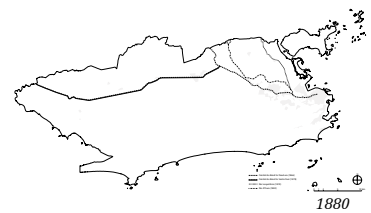
Despite their inconveniences, the *subúrbios* attracted many residents during Rio’s period of industrialization, because of their proximity to factories. They were also popular because of the low land prices and the limited building restrictions and governmental supervision: ‘The bulk of low-income families depend on the absence of legal controls, as they cannot afford the price of land with the legally required infrastructure.’ (Vetter and Rzezinski 1980, p. 488). In spite of sufficient means to provide for necessary infrastructure and facilities, the municipality took a *laissez-faire* attitude.

A part of the factory workers lived in so called ‘*Vilas Operárias*’, workers villages, in proximity of the factories. Employees gave their most skilled workers a beneficial treatment with this kind of housing, where factory workers could save up to eventually buy their house and become home-owners (de Almeida Faria 2004, p. 23). Later we see the emergence of a similar form of housing, ‘*conjuntos habitacionais*’, organized housing. These were well-equipped housing projects in the proximity of work (Holston 2008, p. 158). These projects were the result of private development and institutionalization; the developments were not restricted to only housing for employees, but also incorporated the provision of public facilities. The political institutionalization in Brazil has resulted, more



Urbanization in Rio de Janeiro. Red indicates the expansion of *subúrbios*, green indicates the emergence of the *bairros*.

(Maps by the author, based on various sources - see documentation)



¹ ‘Jusqu’ici un peu disséminés à droite et à gauche, soit au fond des vallées, soit dans la plaine, les quartiers de résidence populaire se cristallisent rapidement autour des gares du chemin de fer central du Brésil, le long de la route de Saint-Paul, en un long faubourg ininterrompu et en un second groupe de faubourgs au-delà des marais de Manguiros dessinés par le Léopoldina Railway et la nouvelle route de Petrópolis, - ces quartiers populaires se trouvent actuellement en liaison rapide, mais insuffisante, par des voies ferrées avec les ateliers de travail du port et des industries qui en dépendent.’ (translation by the author)



Conjunto residencial da fábrica Confiança in Vila Isabel, undated photo (source: http://biblioteca.ibge.gov.br/fotografias_detalhes.php?id=17232, [accessed: 27 August 2010])

than in Europe, in privatized public facilities. In many European countries similar initiatives were initiated during its period of industrialization, such as garden cities; the provision of public facilities has, however, remained predominantly in governmental hands. The definition of such public facilities in Brazil is then different from the definition in Europe; public facilities are not set off against private facilities, but instead refer to common, or shared facilities and spaces. The privately owned, but publicly used spaces can be seen as a predecessor of a later form of public spaces, described by Manuel de Solá-Morales as 'collective spaces' (Solá-Morales 1992). In this predecessor, the spaces were meant for a community of employees, rather than costumers or consumers.

Modernization and improvement of the subúrbios was initially developed around the stations. A development that intensified the establishment of self-help housing in subúrbios was the development of transportation. Rio de Janeiro's subúrbios followed in the 1930s the same development as São Paulo's peripheries, described by James Holston: 'Until the 1930s, the outward expansion of [the city] remained slow, as it followed the development of suburban rail lines.' (Holston 2008, p. 162). After 1930 it the city could expand outwards because of bus transportation. The subúrbios of Rio evolved into a vast periphery, which, although morphologically different, was architecturally similar to the periphery of São Paulo. The cores of urban development developed into a large network. The borders between the subúrbios are no longer visible, and neighborhoods in the North Zone, such as Madureira, Pavuna and Irajá have merged into an extensive suburban region, which stretches out all the way to the bordering municipalities Duque de Caixas, São João de Meriti, and Nilópolis.

Emergence of the favelas

While a part of the working classes lived in the industrialized subúrbios, the laborers who worked in the city centre and in the harbor were for their jobs dependent on living closer to the city centre. Planners like Alfred Agache, whose urban plan for Rio de Janeiro will be discussed hereafter, underlined the importance of proximity and short travel times to work. According to him, a journey from the peripheral zones to work should never take longer than one hour (Agache 1932, p. 86).

As seen earlier, the beautification and hygienic control in the city centre was used to legitimize the policy of cortiço removals of the government. The residents of the cortiços were removed from their houses in the city centre, but an alternative solution was not offered. While over 3000 houses were demolished, only 120 new houses were constructed by the government (Soares and Soares 2005, p. 2). The anti-cortiço policies concerned the central districts of the city; the hills, which were not cultivated, provided land where these laws did not apply, or were not enforced. Their proximity to the central areas, their status outside the law, and limited interest of government officials, turned the hills into a haven of residential areas for the urban poor.

Generally assumed is that the first inner city favela of Rio de Janeiro was built in 1897 on the Morro da Favella - today Morro da Providência, one of the most notorious communities in the city. It was established by soldiers, many of whom were former slaves, who had returned from the Canodus War in the interior of Bahia. Many of the soldiers arrived in Rio de Janeiro, without possessions or jobs, but no form of housing was available for the soldiers. The squatter settlement



Illegal buildings on Morro do Castello, 1920s (Source: http://www0.rio.rj.gov.br/cultura/site/fr_noticia_roubo.php [accessed: August 2010])

was named *'favella'*, after a type of plant that grew on this hill.² The name became the type name for slum settlements in Rio and in Brazil (Arias 2005, p. 22).

The phenomenon was not new; shacks and shelters already existed on the hills. Barke and O'Hare write that other slum communities already existed earlier than Morro da Providência: 'During the 1880s [...] three illegal squatter settlements, Quinta do Caju, Mangueira (Botofago), and Serra Morena appeared on the slopes close to downtown areas.' (Barke, Escasany, and O'Hare 2001, p. 262; also Barke and O'Hare 2003, p. 232). The habitation of the Morro da Providência heralded, however, the beginning of an epoch in which new squatter settlements would emerge on the hills of Rio de Janeiro. The significance of the habitation of Morro da Providência was also an immediate consequence of the beautification of Rio's city centre. Similar developments followed. The earlier mentioned developments around Avenida Rio Branco, under the office of prefect Pereira Passos (1902-1906), catalyzed the development of favelas around the city centre. Clusters of precarious housing appeared and expanded rapidly without governmental interference. Morro Santo Antônio could grow to 623 residents in 1901 already, and would continue to grow for the next decades, until its controversial demolition in the 1920s (Valladares 2000, p. 7).

The shacks in the communities were initially primitive, they were constructed of rest materials from the city and natural materials, such as wood and reed. Infrastructure consisted of mud roads and dirt paths, and basic facilities were absent. Fischer notes, however, that on photographs of the old Morro do Castello - demolished in the 1920s - electrical lights and transmission wires can be seen (Fischer 2008, pp. 26-7).

The conditions in the favelas were often better than in the tenements. Although the densities were quite high and the houses were small, the favelas offered larger spaces to live. The most crucial difference with the cortiços, however, was that the urban poor and popular classes no longer shared their neighborhoods with the middle- and upper-classes, but now lived separately.

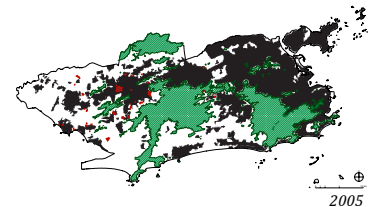
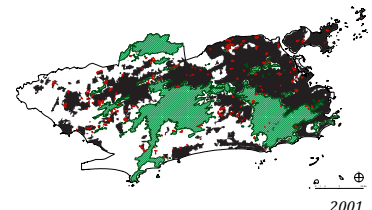
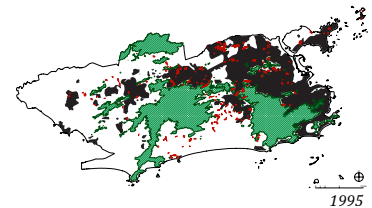
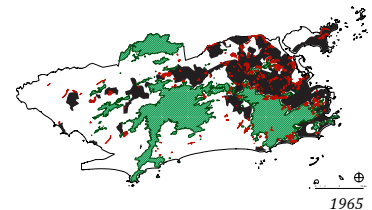
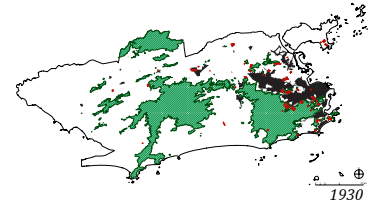
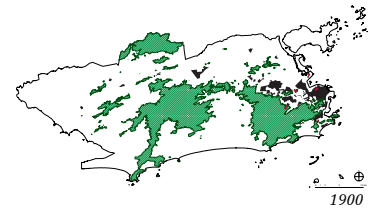
While the favelas were initially constructed on the hillsides in proximity of the city centre, they would later emerge outside of the centre as well. The parallel in their location was that they sprang up on locations where formal regulations did not apply, or were not enforced. These spaces were, and are, marginal spaces on the edge of urbanization; on marshlands, between infrastructure networks, or alongside rivers. Modernization shaped an unplanned modernist division of land.

Toward a city

'For an architect concerned with large compositions, it is a passionate task to design the transformation and the beautification of a capital, and to be peacefully armed with a pencil or a fineliner, to draw the future life of the collective being that an urban agglomeration is, to think about painting the avenues and roads on a new canvas, which distribute - following a new rhythm - the plazas, the markets, the schools, the promenades, regulating the distribution of the neighborhoods, determining the arrangement and heights of the buildings..., one becomes responsible for its economic and social future.' (Agache 1932, p. XXI)³

² In older documents favela is spelled as favella, with two l's

³ 'Pour un architecte épris de larges compositions, c'est un chose passionnante que de concevoir la transformation et l'embellissement d'une capitale et de tenir entre les mains armées pacifiquement d'un crayon ou d'un tire-lignes, la vie future de cet être collectif qu'est une agglomération urbaine, de penser qu'en dressant un nouveau canevas d'avenues et de rues qu'en distribuant - suivant un rythme nouveau - les places, les marchés, les écoles, les promenades, qu'en réglementant la distribution des quartiers, en disciplinant la répartition et la hauteur des constructions..., on devient responsable de son avenir économique et social.' (translation by the author)



Growth of favelas in Rio de Janeiro. Only the new favelas are pictured. Larger maps are included in appendix maps 5-10.

(Maps by the author, based on various sources - see documentation)



Plan Agache, the most well-known drawing of the plan for the city centre (source: Agache 1932)

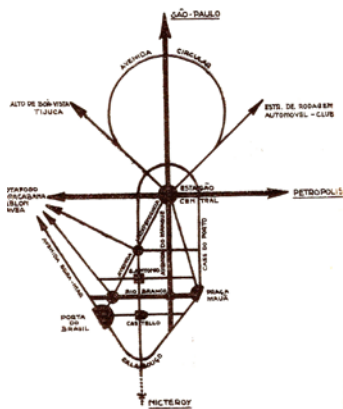
Alfred Agache writes this in the introduction of the book in which he describes his plan for the urbanization of Rio de Janeiro. He was one of the influential urban planners, who were commissioned throughout the 20th Century to sketch a holistic future for the urbanization of the city. After Agache in 1928, Greek planner Constantinos Doxiadis in 1965 gave shape to an urban development plan. These two planners had a large influence on the direction of future urban planning in Rio de Janeiro. However, one can not pass by the influence of Le Corbusier, who after visiting the city in 1929 and 1936, with a young generation of Brazilian architects and planners directed Rio toward a modernist future. These three planners, and the 1937 Building Code representing the views on urban planning in the Estado Nôvo, will be discussed.

a) Plan Agache

In 1928 the French urban planner Alfred Agache was commissioned to propose a plan to improve the urban conditions in Rio de Janeiro. The emphasis was not so much to prepare Rio for the future, but rather to fix the problems that had emerged in its past.

For this plan Agache would be criticized as his plan would increase spacial segregation in Rio de Janeiro. The division between upper class and popular classes, as it was present in politics, was already manifested in the urban geography of Rio de Janeiro, when Alfred Agache would determine the urban planning of Rio de Janeiro through the late 1920s until the mid-1950s (Soares and Soares 2005, p. 1).

The plan of Agache provided aimed at problems regarding transportation, and economic and industrial activities. Agache enhanced a pragmatic, problem-solving approach in his urbanism. He stated that gradual transition, rather than 'utopian' city planning, would be the right approach toward the grand urban problems (Agache 1932, pp. 78-9). Agache condemned the way in which Rio de Janeiro had developed for over four centuries: 'the development has not been guided by a coherent urban plan' (p. 115)⁴. His ideas to put Rio's unplanned history behind are outlined in four proposals (p. 73):



Agache's scheme for transportation (source: Agache 1932)

- 'a) To assure the existence of some particular functional elements and their best allocation (zoning);
- b) To lay out the road network in such a way that the elements are connected in a fast and easy way between each other and the rest of the city, and that they are based on the quantitative movements of a given circulation (the urban network);
- c) To assure healthy and comfortable housing for different categories of urban residents (housing problem);
- d) To create regulations in a way that they serve the general interest in the best possible way (construction policy).⁵

Zoning was of utmost important in the plan, and is still a significant planning means in Rio de Janeiro today. The zones are divided by five types of functions: (a) central zone with commercial section; (b) industrial zones and harbor; (c) residential zones; (d) suburban zones; and (e) zones of public space and nature

⁴ 'le développement n'a pas été guidé par un plan d'ensemble.' (translation by the author)

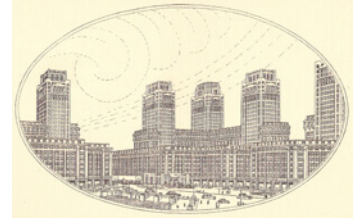
⁵ 'a) Assurer l'existence de certains éléments fonctionnels particuliers et les répartir au mieux (zoning);
b) Tracer le réseau de voies de façon à mettre ces éléments en relations rapides et faciles entre eux et avec le reste de la cité et satisfaire aux exigences quantitatives d'une circulation donnée (réseau urbain);
c) Assurer un logement sain, commode et agréable aux différentes catégories d'habitants de la ville (problème résidentiel);
d) Etibaler les règlements de voirie au mieux des intérêts généraux (police des constructions).'

reserve (p. 163). Agache's introduction of zoning can be considered the first major manifestation of modernism in Rio's history of urban planning.

In the plan, a strong focus is laid on the first zone; a clear outline for the central district of Rio is made. The center would have a commercial and governmental function, with banks, ministries, embassies and luxury hotels. Agache made a design in which he locates these functions, and proposed a basic architectural form for the main buildings within the central zone. The open public spaces, too, are designed, as large public plazas. The residential zones are divided in neighborhoods ('quartiers de résidence') and working-class neighborhoods ('faubourgs ouvriers'). The outline of the plan for their developments is focussed on expanding existing neighborhoods. The residential zones are those on Copacabana, Lagoa and Botafogo. Zones for the 'bourgeoise' are Leblon and the area surrounding Rio Comprido. The working-class neighborhoods are in the proximity of the industrial zones in the north. Hence, the division, which today is referred to as Zona Sul and Zona Norte, took shape.

Agache is very negative about the favelas and their habitational conditions. He demonstrates awareness of the weak economical position of the immigrants living in slum communities, and states that other solutions must be found in 'economic housing' in proximity of the more affluent zones of the city (pp. 137-9). Agache can be criticized to refrain from providing a proposal of how this economical housing should be planned and built. Instead he displaces the problem that he signaled to the '*Pouvoirs Public*', the department of public affairs of local and national governments. They should seek for appropriate solutions (p. 139). Although Agache favored private ownership and individual houses instead of collective housing, he makes an exception for the urban poor. Social housing could be an appropriate alternative to provide for their housing needs.

Rather than designing a solution, Agache is more explicit in describing the problem. He strongly disapproves the existence of favelas in Rio de Janeiro. He refers to them stating that they form a 'disharmony' in Rio's 'environmental, economic and social qualities', from a 'hygienic' and an 'aesthetic' point of view. Agache uses strong terms to refer to the communities and speaks about them as an illness, which must be forcefully cured: 'Rio de Janeiro currently suffers from a growing disease. [...] It is necessary to impose a rational treatment.' (pp. 75-6).⁶ He states that the growth of such 'diseases in the urban body' must be restricted, and prevented from returning in the future: 'to avoid as much as possible the return of such evils, and to prevent and control largely their extension and gradual adaptation to roles they can play in a more or less distant future.' (p. 76).⁷ The demolition of the community on Morro do Castello and Morro de Santo Antônio, a few years earlier, was for him a 'logical consequence' - not only because of their poor economic, social and hygienic conditions, but also because these favelas were an 'obstacle for the creation of a monumental centre' (p. 125). The removal of centrally located communities, coincidentally, worked out well in the plan; the interest of grand city development prevails for Agache above the well-being or housing of the community residents. Eventually there should no longer be favelas in Rio de Janeiro, and the squatted land of community residents could be developed in any desired way: 'On the hills currently occupied by favelas, urbanization will be easy, since we can smoothly create a tabula rasa



Proposal for the buildings in the city centre, on the location of the Morro do Castello (source: Agache 1932)



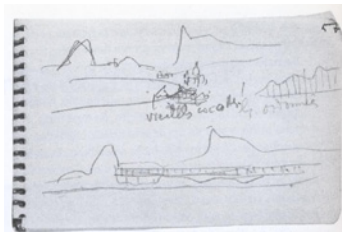
Lagoa today (source: <http://www.nazonasultem.com.br/bairro?id=7> [accessed: 26 November 2010])

⁶ 'Rio-de-Janeiro souffre actuellement d'une maladie de croissance. [...] La nécessité d'un traitement rationnel s'impose.' (translation by the author)

⁷ 'éviter autant que possible le retour de pareils maux, de prévoir et de réserver largement leur extension et leur adaptation progressive aux rôles qu'ils auront à jouer dans un avenir plus ou moins lointain.' (translation by the author)



Ministry of Health and Education
 (source: <http://www.papodearquitecto.com/2010/01/a-vida-de-le-corbusier-obras-teorias-e-projetos/> [accessed: 2 December 2010])



Sketch by Le Corbusier
 Photomontage of the plan
 (source: Tsiomis 1998)

over all of them.' (p. 139).⁸

Until the 1980s, the echoes of Agache's ideas resounded over many Brazilian cities, when he stated that the idea of private construction and ownership was favorable to the principle of social housing (p. 82). Yet, he states that this private development of residences should come with restrictions through legislation. Agache speaks of legislation that should be equal for everyone, without privileges for 'egoistic individuals' or people who bring 'disharmony' in the urban ensemble (pp. 80-1). Agache aims here, again, at the community residents. Laws should prohibit just as much for the vulnerable, as for the affluent.

Agache proved to be concerned with Rio's 'illness', and seemed to have a righteous concern about the 'diseases'. But instead of proposing a 'cure', he resorted to plastic surgery, to prevent the city centre from containment of the illnesses he saw. And - it must be said - the plans that Agache made were indeed very successful, but so were the plans he ceased to make. Beyond the sight of Agache, the subúrbios, favelas, and informal, clandestine, or irregular settlements flourished like never before.

b) Le Corbusier

In respect to the architecture of Rio de Janeiro and of Brazil, I can not pass by the influence of Le Corbusier. He was of minor significance for the development of urban planning in Rio de Janeiro, but strongly influenced the country's architecture. Of major importance for the architectural discourse were Le Corbusier's visits to Rio de Janeiro in 1929 and 1936. He directly inspired his contemporaries in Brazil, architects such as Reidy, Lúcio Costa and Niemeyer, with whom he worked on the design for the new ministry of health building in Rio. Other than his advices for this design and his numerous sketches, Le Corbusier left Rio de Janeiro no building, but he did help to shape its identity. The country had a colonial history, manifested in its architecture. Some of the colonial buildings were demolished during Rio's epoch of beautification. In search for a new architectural expression that fitted Brazil's identity, modernism became a strong influence and replaced the eclectic styles of earlier decades.

In a visionary drawing Le Corbusier sketched a building proposal for Rio de Janeiro. It was a building stretched out for six kilometers. The building connected several neighborhoods throughout the city; from the south zone to the city center. The building would be programmed with housing, and had a highway on top. Through his modernist approach and his obsession with automobiles, Le Corbusier envisioned a new urban development in Rio; cities started to develop based on a network of roads, rather than rails.

c) The 1937 Building Code

The national 1937 Building Code was, according to Brodwyn Fischer: 'the first law to impose comprehensive rules of zoning, construction and sanitary practices on Rio's entire municipal territory' (Fischer 2008, p. 45). In the Building Code the city was divided in residential, maritime, commercial, rural, and industrial zones, and rules were prescribed for the construction and aesthetics of houses and other buildings. This division in zones was based on the plan of Alfred Agache, which we saw earlier. The most significant aspect of the code was its separation of standards per neighborhood. The rules and requirements for buildings in the suburbs were not as strict as for buildings in the wealthy city centre. However, an expensive and bureaucratic procedure needed to be

8 'Alors que pour les < morros > actuellement occupés par les < favelas > l'urbanisation sera facile puisque l'on fera table rase de tout ce qui les encombre.' (translation by the author)

followed and presented to the municipal government by a licensed architect, engineer or contractor, before a license would be handed out. This significantly limited the possibilities for poor urban residents to construct a house. They would get entangled in a time-consuming and expensive bureaucratic procedure, precisely the type of procedure that Hernando de Soto agitates against.

Favelas were not indicated on the map of the Building Code (Soares and Soares 2005, p. 2). They were, however, mentioned in the code. A novelty was the municipal prohibition for the construction of new favelas (Faria 2004, p. 36). The law also changed the definition of a favela. While it used to signify a group of at least 50 shacks, from now on already two houses could be named a favela. The criteria to indicate a neighborhood as a favela were the neighborhood's legal status and the materials of which the houses were constructed (Fischer 2008, pp. 45-8). Many houses in Rio de Janeiro had obtained an illegal status through this law, which legitimized governmental interventions in the communities.

The Building Code also made notion of '*Parques Proletários*',⁹ housing projects for the poor labor-classes. They were implemented by mayor Henrique Dodsworth. Three of these projects would be realized between 1942 and 1943, in Gávea, Leblon and Cajú. A total of 4000 people would be relocated from central areas to the Parques Proletários (Faria 2004, p. 36; Valladares 2000, p. 15).

Throughout the 1940s, 50s, and 60s, several Parques Proletários were built in the area of Maré. Projects like Parque Maré (1953), Parque Proletário Rubens Vaz (1954), and Parque Proletário União (1961), together with later unplanned developments, formed what is today considered as a large conglomeration of slum communities, exceeding 100,000 residents (Vaz & Jaques 2004). Other Parques Proletários, such as Vigário Geral, Acarí and Grotão are today also indicated as favelas, and are all 'urbanized' in Favela-Bairro. It is noteworthy that already in 1950, in a municipal census, the first three Parques Proletários in Gávea, Leblon and Cajú were indicated as favelas (Monteiro 2004). Apparently this classification was insufficient as a warning to relocate community residents to Parques Proletários, as more Parques were built in the 50s and 60s.

The idea behind the parks was simple: to provide residential space outside the city center, as a replacement for the removed houses in central areas. Little attention was paid to how these places should be organized. The lay-out of the neighborhoods was limited to a regularized urban plan, based on a grid, and sometimes included the construction of housing. As the increase of residents was not taken into account, and the residents expanded their houses on their own occasion, the number of inhabitants soon grew out of proportion to what the lay-out was designed for. For example, Parque Maré today counts 4000 houses, with approximately 30,000 inhabitants.

Many Parques Proletários, such as in Maré still exist, while some others have been demolished, such as in Leblon. The image shows an aerial photograph of the demolished Parque Leblon, and a proposal for high rise buildings on this location.

d) Plan Doxiadis

The Guanabara Urban Development Plan, made by Greek planner Constantinos Doxiadis, was published in 1965. Doxiadis was commissioned by Carlos Lacerda, governor of the state of Rio de Janeiro (then the state of Guanabara). He was strongly criticized for choosing a foreign planner, and ignoring established planners such as Niemeyer and Lúcio Costa, and the national planning department (Dulles 2010, p. 152). Doxiadis made an urban



Parque Proletário Leblon, and proposed housing
(source: http://www.favelatemmemoria.com.br/publicue/cgi/cgilua.exe/sys/start.htm?infolid=70&from_infa_index=11&sid=7 [accessed 8 November 2010])



Guanabara Urban Development Plan
(Source: <http://urbanidades.arq.br/imagens/2008/> [accessed: 9 November 2010])

development plan for the period 1965-2000, with the goal 'to elaborate an urban project that integrated the city and its development in the North Zone' (Czajkowski et al. 2000, p. 21). As a consequence of political and economic instability, it would last until 90s before the main parts of the plan of Doxiadis were realized. These parts were the highways, Linha Vermelha, Linha Amarela, and Avenida Brasil, which were constructed to connect the suburban parts of the city with the city center (see appendix map 1).

The plan foresaw a population increase from 4 to 8.4 million inhabitants by the year 2000 for the city of Rio de Janeiro, and an increase from 5.8 to 18.2 million inhabitants in the metropolitan area. The growth would only be half as large as Doxiadis predicted. Although he underestimated the number of community residents, Doxiadis spoke about the 'alarming proportions' of the increasing number of slums (Dulles 1996, p. 153). According to Doxiadis' report there were 430,000 people residing in favelas, while the just founded COHAB,¹⁰ the Guanabara housing corporation estimated the number at 950,000 in a total of two hundred favelas, while growing at a rate of 3.3% (Frankenhoff 1967, pp. 29-30). Frankenhoff, a scholar from University of Puerto Rico, pointed at the presence of the community residents in the economic sector, stating that eighty percent of the domestic helpers in Copacabana were community residents. He also pointed out that in 'many favelas rehabilitation would be economically more feasible than eradication of the favela followed by resettlement housing' (Frankenhoff 1967, p. 32). However, in the years following plan Doxiadis, rehabilitation of communities was rare; the urban poor would help themselves and construct their own houses. This idea prevailed in the work of John Turner, who was said to be inspired by Doxiadis, and one of his associates, Jacob Crane, and who published in Doxiadis' magazine on Ekistics (Hardman 2006).

Instead of directing the attention of city planners to the North Zone, the plan was used in the 1960s and 70s to start developments in Barra da Tijuca by governor Negrão de Lima (Czajkowski et al. 2000, p. 21). While Lacerda favored the establishment of AM's (neighborhood associations) in communities and improve these communities - a way to gain popular support for his political ambitions -, COHAB made plans for relocation low-cost housing projects. Except their glorious names, such as Cidade de Deus, Vila Kennedy, Vila Aliança, and Vila Esperança, they were of poor quality. The residents of the neighborhoods complained about their new houses; the constructions were of poor quality, they were located far from work and in damp places with lots of mosquitoes (Dulles 2010, p. 155).

Social organization of the urban poor

During the second dictatorship the interests of politicians to find support among the urban poor diminished. Hence, other groups took a position in protecting the interests of the urban poor. What emerged was a fragmentation of institutions protecting the interests of the urban poor, functioning independently from governmental efforts. We can distinguish three trends. Already mentioned is the establishment of neighborhood associations (AM's). Furthermore religious groups and NGO's started to gain a stronghold in communities to protect the interests of the urban poor.

a) Associações das Moradores (AM's)

Desmond Enrique Arias states that in the 1940s and 50s the consolidation

efforts of community residents had started to get organized (Arias 2005, pp. 24-5). Residents had united themselves in AM's (Associações das Moradores) in several communities. The AM's established (often illegal) services in the favelas, such as electricity and water, and controlled safety within the communities. In 1963 the AM's in Rio de Janeiro organized themselves into the statewide Federação de Associações de Favelas do Estado de Guanabara (FAFEG, later FAFERJ), to resist removal efforts of the state (Arias 2005, p. 25). This was a direct response to the governmental efforts to construct neighborhoods such as Cidade de Deus.

Seeing their wishes and demands often unanswered by politicians, many AM's found support among criminal gangs from the 1970s and 80s onwards, causing the communities to function independently of, and even in conflict with the state. Arias describes how 'years of neglect and broken promises have caused the Brazilian state to appear to lose control of these communities to gangs of highly organized drug traffickers who enforce order, provide social services, and adjudicate disputes.' (Arias 2004, p. 1). This happened initially during the period of military dictatorship, and continued as a consequence of 'neo-liberal reforms' in the 1980s and 90s. According to Arias, the services the AM's initiated and supported were meant to gain support among community residents. This has created not only a state of hostility between the AM's and the government, but also enforced the divide between residents and the government.

Arias takes the position that 'network links' between AM's or popular interest groups in communities and the local government 'can restructure the relationship between state and society to extend the rule of law to favelas' (Arias 2004, p. 8). This could happen through the initiation of popular programs and social and urban facilities in the communities.

b) Church

Another institution that stood up for the interests of the urban poor was the church. Traditionally the catholic church has a strong position in Brazil. Although still the majority of Brazilians is catholic, the evangelical church is growing (IBGE 2000, p. 55). The growth of the evangelical church can largely be ascribed to the popular classes, but the evangelical church is visibly present in communities today. In favelas such as Santa Marta, biblical verses are recited through loudspeakers, making the evangelical church impossible to avoid. Many smaller churches are founded as private initiatives, resulting in a vastness of small churches in sometimes precarious buildings. Churches particularly are involved in social programs for poor residents.

c) NGO's

The third trend that we can distinguish is the uprise of a wide range of NGO's, Non Governmental Organizations. There exists a variety of organizations, working on various scales from local to regional, city-wide, national and international. Some scholars speak about 'NGO-ing the Third World'. It can be said that the position of NGO's in Brazil is not as strong as it is in other countries in Latin America.

The NGO's find their origin in religious institutions, humanitarian organizations, or individual well-doers. The most important NGO in Rio de Janeiro is Viva Rio. It is not uncommon that multiple NGO's work simultaneously in the same community. Mostly they divide their work. While *Medicins Sans Frontiers* provides medical support, Viva Rio provides urban facilities and social programs.

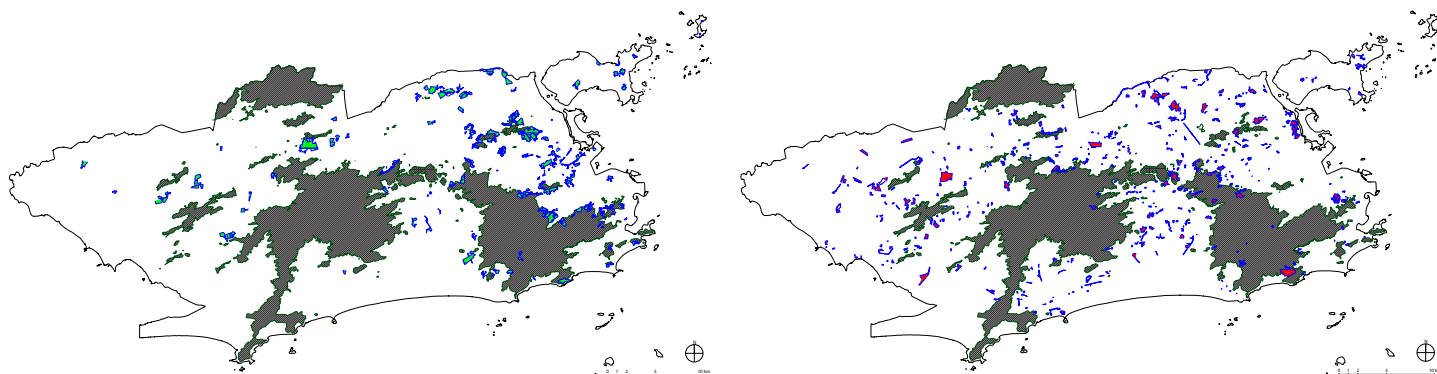


Examples of evangelical churches in slum communities in Paraisópolis, São Paulo (top and middle) and in Santa Marta in Rio de Janeiro (photos by the author, April 2009/ February 2010)

The 1988 Constitution

The Constitution was the first legal document that recognized the social value of property. Although it did not include an outspoken legal policy on property rights for the urban poor, it did constitutionalize the social value of property and the struggles in which the urban poor were embedded to make a claim on this value. In the words of Brazilian lawyer and city planner Edísio Fernandes: 'The 1988 Constitution [...] did not address the question of the right of property but rather the right to property'; the interest of the law was no longer to fulfil certain requirements before one could assert his right to housing, but instead focused on the social value of access to land' (Fernandes in: Cities Alliance 2010, p. 59).

After decades of urban plans with a particular interest on the city center the constitution provided an instrument for the municipal government to include the subúrbios in urban planning. The suburban areas had developed without a coherent urban plan. Responsibility for urban management was now put in the hands of the municipalities, instead of national or state-wide initiatives. This has resulted in a variety of approaches toward urban planning with regard to the urban poor. In the case of Rio de Janeiro this most notably resulted in the 'Favela-Bairro' program, and two spin-offs: 'Grandes Favelas' and 'Bairrinho'.¹¹



Favelas where favela-bairro, Bairrinho, or Grandes Favelas was implemented (left), and where it was not implemented (2008) (Map based on municipal sources, see documentation)

Favela-Bairro

Favela-Bairro was executed by Sergio Magalhães. He described the main goals of Favela-Bairro (Conde and Magalhães 2004): 'Integration of slums into the city', 'strengthening the (existing) spatial relationship with the city' and 'adding new formal and symbolic ones', as well as providing for 'essential basic facilities and sanitation' and infrastructure. The following design aspects had attention in Favela-Bairro:

- creating interconnections with surrounding neighborhoods;
- building new accesses and expanding the connection with the regular neighborhood public services;
- focussing on pedestrian flows, rather than roads for cars;
- clearly defining public spaces;

An important architectural consideration was that: 'streets, squares, day care centers, and buildings were designed according to contemporary trends, without resorting to a 'simpler' communication language, without simplistic semantics.' (Conde and Magalhães 2004, p. 15). This consideration adds a layer of quality to the communities, equivalent to the qualities of the formal city. To architecturally treat the favela in the same way as a neighborhood, with the same means, is seen



Favela-Bairro project, by architect Jorge Mario Jauregui (Source: <http://www.jauregui.arq.br/> [accessed: 2 December 2010])

¹¹ 'Favela-Bairro' stands for 'slum to neighborhood', Grandes favelas and Programa Bairrinho focus on respectively large and small slums

as the best way toward architectural integration in the city. Magalhães calls this: 'tearing down material and symbolic barriers between slum and neighborhood' (p. 15). These qualities in combination with thorough neighborhood analyses, problem-solving programs, the successful designs of Rio-based architect Jorge Mario Jaregui, and grassroots participation have turned Favela-Bairro in a celebrated project.

Three UCL Bartlett scholars praise the urbanist and architectural qualities of the project, but are critical about the project regarding its success in contributing to solving poverty: 'Favela-Bairro will doubtlessly lead to real improvements in the lives of favela residents, giving them access to a wider range of services and infrastructure than ever before, yet as it currently stands, the programme does not fulfil its potential to act as a catalyst for broader processes of democratization which are essential to ensure long-term and substantive poverty reduction.' (Riley, Fiori, and Ramirez 2001, p. 531). If the stigma is purely geographical and based on community resident, rather than other discriminations - as we saw earlier in the analyses of Brodwyn Fischer and Janice Perlman - we can not conclude otherwise than that successful urban integration of slums in the urban domain would lead to social opportunities, such as employment. However, the economical and social backgrounds, such as economic inequality on a broader scale, will not be solved with an urban design; favelas are a consequence of many external influences which are not overcome with an urbanization project. Ananya Roy's warning for the 'aestheticization of poverty' - the romanticization or enchantment of the vernacular - has to be taken into account: 'While the aestheticization of poverty can be seen as an attempt to return dignity to the urban poor, it must also be seen as a geopolitical enterprise that ignores the terribly difficult conditions under which the poor struggle and survive and aspire.' (Roy in: Roy and AlSayyad 2008, p. 303).

I think aspiration offers a prospect for the integration of the urban poor, not only in urbanization, but also in city planning. Aspiration is not limited to urbanization, but also requires a form of representation for these facilities. When Ananya Roy speaks about the aestheticization of poverty, she means the romanticization of primitive ideas, such as the water-well as a place for social gathering (she refers to a housing project in India), while houses are built without their own water pipes. I think the aestheticization of poverty should be replaced by an aestheticization of urbanity. The facilities of the city must have a representation that is a celebration of urbanity, for which Favela-Bairro is a good, but modest, example.

Favela-Bairro is a successful project in its attempt to urbanize slums, and to give this urbanization a representation. I think it lacks the ambition of city planning at a larger level. It is restricted to the community itself, and provides qualitative facilities for the community. Despite the emphasis on infrastructure connections, I think this may conceal, particularly for larger slums, a threat that would disconnect them from the surrounding city, by making the neighborhoods independent, that would turn the larger slums into autonomous neighborhoods. One must look for representations with larger, city-wide significance too.

Favela-Bairro was made possible by the implementation of the Constitution, which encouraged grassroots participation and municipal initiatives; the instrumental value of the Constitution. What was the most remarkable outcome of the Constitution, is that it provided a legal basis for a struggle toward an equal division of land and access to property, leading to the formation of the City Statute.



*Examples of the Favela-Bairro project
(Source: http://www.smconsultoria.com.br/portfolio_FavelaBairro.asp [accessed: 2 December 2010])*

The City Statute

Of utmost important for the policy on the treatment of different types of informal communities is the City Statute, 'Estatuto da Cidade'. The City Statute is a national policy implemented in 2001, after years of struggles for property rights by the urban poor and the support of organizations who represented their interests.

James Holston describes in four points what the value of the City Statute is, emphasizing the unique status of the City Statute not only for Brazil but worldwide (the italics are added to extract the key points): 'First, [the City Statute] defines the *social function of the city and of urban property* in terms of a set of guidelines that are substantive in nature. Second, on that basis, it frames its directives from the perspective of the poor, the majority of urban residents, and creates mechanisms to redress some of the most evident patterns of illegality, inequality, and degradation in the production of urban space. Thus *it establishes social equality as a principal objective of urban planning and turns planning into an instrument for social equatization and justice*. Third, the statute requires that local master plans and policies be developed and implemented with *active popular collaboration*. Fourth, it is not framed as a total plan (as in the paradigm of Brasília) but instead as *a series of innovative legal instruments* that allow local administrations to realize and enforce social function.' (Holston 2008, p. 292). This fourth point is also addressed by Evaniza Rodrigues and Benito Barbosa who refer to this approach as 'piecemeal' interventions (Rodrigues and Barbosa in Cities Alliance 2010, p. 29), a term derived from Karl Popper's idea of 'piecemeal engineering'. In this idea, which is one of the key arguments in Popper's book 'The Open Society and its Enemies', social engineering (and I think we can in this case extend this to city planning) is not used as an utopian goal but as a problem-solving instrument. This is a fundamental change from earlier perceptions of city planning in Brazil.

The City Statute is characterized by a strong emphasis on housing. One of the main problems that was tried to bridge with the implementation of the City Statute, was the condition in which private owners of land, often speculating on the increase of the land value, were able to make a stronger claim on the use of public facilities than people who could not afford to legally own land. The City Statute is used to create a more equal balance in land distribution, and in the distribution of urban facilities. This is achieved by departing at the level of the federal government. Whereas earlier the creation of social housing was an issue on municipal level, this responsibility was now shifted back in the hands of the federal government. This shift has resulted in policies such as 'Minha Casa, Minha Vida', and PAC (Programa de Aceleração do Crescimento) and many others¹². We have seen earlier how the neighborhood of Santa Marta in the South Zone of Rio de Janeiro, subject to PAC, was not only an urban revitalization, but also a political manifestation.

A consequence of this policy shift, in which the national governments takes the direction of the housing policy over from the municipal governments, is, or will be, that municipal governments will have a stronger engagement with the public realm of the city. I think that on a local scale there will emerge a renewed interest in the urbanization of public places, such as streets, plazas and museums. The municipalities will have to seize this opportunity to strengthen their presence in the public domain.



Football field in Santa Marta, inaugurated in 2009 as a result of PAC (photo by the author, February 2010)

¹² PAC (2007), the accelerated growth program, is Brazil's largest development program, and is used for a variety of projects, from housing to energy issues. Minha Casa, Minha Vida (2009) is a funding program to provide for affordable houses and properties for urban poor (up to three minimum wages). For other programs in Rio, in which Sergio Magalhães was involved, see: <http://www.smcconsultoria.com.br/portfolio.asp>

New favela locations today

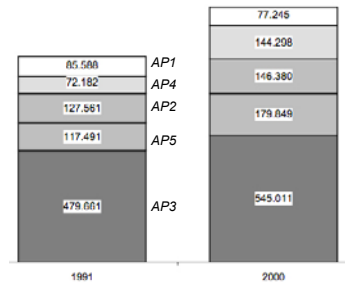
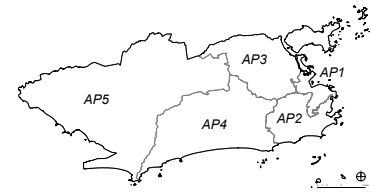
A major shift, in more than 120 years since the first favelas emerged in Rio de Janeiro, is their location. Favelas initially sprang up on the hillside in proximity of the city centre, later in the proximity of factories, and after that on marginal spaces, such as the spaces between infrastructure elements.

Slum communities today are flourishing in the far suburban regions, such as Barra da Tijuca and Santa Cruz. Teresa de Almeida Faria, in her doctoral dissertation at the planning institute of UFRJ, states that urban poverty moves to the edges of the city, 'far from the city centre, from work, and from collective facilities and services'. Here the residents expect to find better social and economic conditions than in the central favelas. The poor do not only move to communities on the edges of the city, but also to regular popular neighborhoods, where they are able to buy their own property with legal entitlement. De Almeida Faria calls this process 'peripherization', and partly relates this back to the theory of John Turner, who saw 'autoconstruction as a solution for urban poverty' (de Almeida Faria 2004, pp. 22-5).

We can state that the appearance of new favela locations has followed a parallel development as formal city planning. This is a consequence of the proximity to work. Janice Perlman enhances the position that new favelas today are continuously constructed in the proximity of service and construction jobs in more affluent areas (Perlman in: Roy & AlSayyad 2004, p. 109). Today these areas are not only concentrated in the city centre, or near factories, but ever more found in the peripheries. The proximity to individual economic opportunities is a more important motive to move than the proximity to urban services, schools, or an improved quality of life. It is not a coincidence that we observe the largest increase in community residents near Barra da Tijuca, the city's major expansion area. In this area there is a great demand for laborers and work force, ranging from construction to domestic work.

Communities in the West Zone show the strongest growth rates today. The expansion of the existing communities - particularly in Zona Sul - often does not manifest itself through more land occupation. Rather we can observe vertical growth. People sell their roof rights to friends or family, permitting them to construct another one or two floors on top of their house (Neuwirth 2006, p. 56). Often the houses are prepared for this, steel bars of the reinforced concrete stick out at the top of the columns to allow vertical expansion. In favelas such as Rocinha many buildings are at least six floors tall. As these buildings are often improperly constructed of low cost materials, this leads to hazardous conditions. The road networks and urban services have insufficient capacity for the increasing density of inhabitants.

Despite all efforts in the past two decades, the number of favelas and community residents is still increasing today. Besides their political backgrounds, the legal status of slum communities seems to be a political instrument. As an example I will briefly discuss the community of Nova Cidade, in the lower class neighborhood Inhoaíba in the West Zone. Nova Cidade is in terms of land occupation the second largest favela of the city.¹³ The community is indicated on the 2008 census map of favelas by the municipality of Rio de Janeiro, but was not yet indicated on the map of the 2005 census. Using dated photos from Google Earth it is clear to see that the neighborhood already existed in 2005; it has, in fact, barely changed nor expanded since 2005. The only thing that changed was its legal status. How this neighborhood emerged as a 'new'



Growth of community residents 1991-2000 per AP (Area de Planejamento). The growth is numerically the strongest in AP3 (Zona Norte) and AP5 (Zona Oeste), but in percentage the growth in AP4 (Barra da Tijuca) is the strongest. The number of community residents doubled in one decade. (Source: Rio de Janeiro, 2002)



Verticalization in the favela Rocinha (photo by the author, February 2010)

13 After Fazenda Coqueiro and before Rocinha, <http://oglobo.globo.com/rio/mat/2009/02/06/fazenda-coqueiro-a-maior-favela-da-cidade-754309108.asp>



Nova Cidade, Inhoaíba, Rio de Janeiro in 2005 (neighborhood) and 2010 (favela) (source: Google Earth)



Favela Vila das Torres, Madureira (photo by the author, February 2010)

favela is unclear. Further research needs to be performed on whether this kind of numerical increase of favelas is informal, and unplanned. I can only suggest some possible explanations for this case, assuming that the houses have been constructed without legal entitlement on land owned by the municipality¹⁴:

- The municipality indicated the community as favela, so that it can invest in improvements of the neighborhood and implement a project such as Favela-Bairro or PAC (which seems to be not the case¹⁵);
- The municipality has plans to use, sell, or exploit the land, and needs to relocate the residents currently occupying the land;
- Increasing violence or circumstances have raised awareness and interest in this community;

Either way, the condition in which the legal status of a neighborhood can change, without the neighborhood changing, raises concerns. The level of urbanization seems to stand separate from this characterization, as adjacent houses, just outside of this area, are constructed along an unpaved street, while all the streets in Nova Cidade are paved.

Hernando de Soto describes the complications of legal property rights in developing and development countries. He uses examples from Haïti and Peru, and also refers to Brazil. De Soto states that once property rights are obtained through formal, legal means (which is often a process of years, if not decades), it is often as difficult to sustain the legal status of the property rights as it was to obtain them (Soto 2000, p. 29). This appears to be the case in Nova Cidade.

The City Statute has provided favela residents with legal means to entitlement of the land where they live after five years of occupation.¹⁶ This does not automatically expell the indication 'favela' after five years. There are still possibilities to remove the favelas, but in this case the residents can make a stronger claim on the value of their house, and have a stronger position in the legal issues and plans, and relocation. I will illustrate this with the example of the community Vila das Torres in Madureira. This favela was constructed in the 1960s, on a long strip of undefined land between the transmission lines and the railroad. The community exists of one long street, with houses on both sides. It is approximately four kilometers long and forty meters in width. The municipality has proposed a plan for a park on the adjacent area of the transmission lines, Parque Madureira, making relocation of the community residents necessary. The community residents have been offered three possibilities: partly sponsored relocation to regular houses in the neighborhood (R\$ 10.000,- + 20% funding for the new house), relocation to a new building sites in proximity of the park with temporary housing during construction works (part of the Minha Casa, Minha Vida program), or a sum of money for their house of R\$ 10.000.¹⁷ The latter option is discouraged by the municipality as it is neither in the interest of the residents, nor that of the municipality, for they would loose sight of the residents and their new living conditions. The City Statute and its offsprings, such as Minha Casa, Minha Vida, offers the community residents these opportunities. A condition like this, in which the residents are offered three choices, was unlikely before the implementation of the City Statute.

I believe that the City Statute is a successful instrument for residents of slum

¹⁴ The term favela indicates that the houses must be illegally constructed on public land

¹⁵ On the official municipal website there was no indication of any planned or running improvement project in Nova Cidade (most notably: <<http://www0.rio.rj.gov.br/habitacao/>> [accessed: 27 November 2010], but also other websites)

¹⁶ This regulation is particularly intended for the urban poor. One can only make a claim on this right after five years of uninterrupted occupation on the same place, if one does not possess land elsewhere.

¹⁷ In a personal conversation with Gisele Raymundo, planner at the planning department of Rio de Janeiro, and project leader of Parque Madureira, February 2010.

communities, as the social value of their property is recognized. The Statute offers a legal instrument for residents to more appropriate housing. It stood at the basis for several programs in the interest of the urban poor. The availability of nationally financed programs, such as PAC, will stimulate municipalities to search for innovative solutions for slum communities in cooperation with private parties. But the problems are far from solved. With the city in the spotlights of the world press, at least until 2016, Rio still has a long way to go. It must not limit its scope to large projects in the established central areas, but also recognise the increasing metropolitan problems in peripheral zones.

Conclusion: urbanity through urbanism

In this chapter I have sketched a brief history of Rio's process of modernization. In the efforts to overcome problems that were the outcome of rapid urbanization and industrialization, modernist ideas stood at the basis of the major urban plans in the 20th Century.

Initially the problems were approached from one side: urban poverty as a threat and obstacle for the economic and urban development of the city. Subsequently, beautification and zoning resulted in an urbanized city center, while the hinterland emerged without coherent city planning and a lack of facilities. The central zones were effectively urbanized, but planning dichotomies were enhanced; think of North Zone versus South Zone, hills versus asphalt, and urbanization along the trains versus urbanization along the tram lines. It has not been my intention to criticize modernism as a means of urban planning, but its implementation did not solve the major urban problems with regard to urban poverty during the period of industrialization, it sometimes pulled these problems to more extremes. I think this is the consequence of a failure to recognise the problems that stood at the basis of urban poverty. Simply describing slum communities as 'illnesses' or 'diseases', and assuming that a rigorous removal would 'cure' the city, may have solved local problems, but caused the same problems elsewhere. It has resulted in relocation and uncontrolled transformations of poor neighborhoods, and suspicion to urban planning of the urban poor, which was, in many cases, legitimate, as top-down planning attempts to house the urban poor in projects such as Parques Proletários failed. In peripheral zones, out of reach of coherent urban planning or the implementation of planning, a variety of (private) parties have taken over the role of governmental bodies in providing for public facilities. I think that in many cases this resulted in disintegration from the city, and alienation from the state.

Over the last two decades a political shift stood at the basis of a policy shift. I think that an important step has been made, namely legal recognition of the social value of housing and property. Modernist urban planning is replaced by 'piecemeal' urban planning. The urban poor are no longer subject to decision making, but part of the decision making process. This increasingly results in urbanization efforts in poor neighborhoods, and the state provision of urban facilities. I think the future task for planners is to use the strengthened legal position not only for urbanization, but also for city planning, and to find a representation of urbanity that encompasses the entire city. A representation that exceeds the interest of a community, and has an urban significance. Architects should approach urbanity in the poor neighborhoods not as a necessity, but as an opportunity for development.

III

A Theoretic Perspective

OF INFORMAL SPACES

A discussion based on Foucault's text 'Of Other Spaces'

'I think we have to refer to more remote processes if we want to understand how we have been trapped in our own history. [...] To find out what our society means by sanity, perhaps we should investigate what is happening in the field of insanity. And what we mean by legality in the field of illegality. And, in order to understand what power relations are about, perhaps we should investigate the forms of resistance and attempts made to dissociate these relations.'

(Foucault 1982, p. 780)

'A map of Rio de Janeiro can be drawn showing its favelas, and this map will resemble a sea filled with islands large and small, a city with many smaller cities and overlapping sovereignties. This map could render the favelas not as blind spots in the psychological and epistemic charting of the city, but as places of spatial and urban consequence.'

(Fabricius 2008, p. 6)

The discourse on urban planning in Rio de Janeiro is often perceived as a polemic dichotomy of the formal city versus the informal city. In reality, the urban developments in Rio de Janeiro have resulted into a plurality of cities, a vastness of neighborhoods in which the dividing line between formal and informal is often vague and indistinguishable. Parts of the city were shaped by urban plans and zoning, while other parts urbanized without planning. This resulted in a variety of different places; each of the *bairros*, *favelas*, *loteamentos*, and *comunidades* had its own degree of sovereignty, of conformation to the norms of the surrounding society. They are shaped by external factors; as Daniela Fabricius calls it, 'places of spatial and urban consequence'.

To obtain an understanding of urban informality, and its manifestations in relation to urban formality, I present a close reading of Michel Foucault's text 'Of Other Spaces', which was written in 1967 as notes for a lecture. It was published in 1984, briefly after Foucault's death. The text was not reviewed, and therefore remains abstract in some of the ideas that it represents. Yet the text contains some of the key-thoughts of Foucault, and provides a lead to understanding the formation of space in relation to society.

As the text was written more than forty years ago, it is important to note that some aspects of the text today seem outdated. Foucault makes references to aspects of modernity, such as the significance of religion, which had a stronger grip on society in the 1960s than it does today. 'Of Other Spaces' is, however, still relevant. The text is an offspring of an era of revolution, in the 1960s, when the revolts of social movements paved the road for individual freedom throughout the Western world and created conditions in which conceptions of today's society are rooted. In this era Brazil was governed under the rule of a military dictatorship; the revolutionary ideas of the 1960s initially reached only a small group of intellectuals in Brazil, but could only become part of the common good. The students who revolted against the military regime were unable to mobilize other layers of society until the resistance against the regime grew in the end of the 1970s. In the 1960s we saw John Turner investigating the problem of urban poverty from an architect's perspective. For the first time in history the interests of the urban poor became an issue in urban design. It was also the decade when the strongest growth of informal settlements occurred in Rio de Janeiro; the number of favela residents grew by almost one hundred percent during the 1960s (Perlman, 2005, p. 3).

My main incentive to use this particular text is that Foucault introduced the 'heterotopia' as a place outside the codes and norms of society. These norms were in Western Europe inspired by the Christian Church, which looked over the salvation of all individuals (Foucault 1976a, pp. 67-71), or by the state, making law the 'fundamental manifestation of power' (Foucault 1976b, pp. 59-65). He wrote the text not to understand otherness, but to understand the norm, to reveal power structures and hierarchies in society, and how these structures influenced individual actions in relation to society. As Foucault stated it: 'My objective [...] has been to create a history of different modes, by which in our culture, human beings are made subjects. [...] Finally, I have sought to study [...] the way a human being turns himself into an object.' (Foucault 1982, pp. 777-8). I need to emphasize that a heterotopia is not a space of choice, not a celebration of individual liberties. The heterotopia is a place of spatial and urban consequence of the organization of a society. Foucault sought for a mode of 'governmentality' - the art of governance - of this society. He had no intention to propose an 'ideal model' for society, nor to revolt against governmental institutions, but Foucault was critical about the emergence of a class-society constituting power through private institutions: 'I think that political power is also exerted by a few other institutions which seem to have nothing in common with the political power, which seem to be independent, but which actually are not. [...] I think that the real task in a society such as ours is to criticise the workings of institutions that appear to be both neutral and independent; to criticise and attack them in such a manner that political violence has always exercised itself obscurely through them will be unmasked, so that one can fight against them.' (Foucault 1971).

Furthermore it is important to note that heterotopias exist through actions, not through their existential being. Foucault is often placed in the philosophical movement of structuralism (with Derrida, Lévi-Strauss and others). Foucault states that this term is too broad, and therefore denied to be part of this movement. In his work he placed individual actions as determined by a holistic structure of time and space, rather than being defined from existential truth.

I will maintain the original structure of Foucault's text. It consists of six chapters, describing thematic characteristics of heterotopias, preceded by an introduction and an elaboration on the terminology. Additionally I will add a conclusion, a part that is not included in the original text of Foucault.

All unreferenced citations are taken from the text 'Of Other Spaces' (1968) by Michel Foucault, translated by Jay Miskowiec (1986).

Introduction

Foucault starts his text by addressing 'time' and 'space', the realms in which to define 'site'. The word site¹ is used as a condition, it is not by definition a place or physical location. A site can be a moment in time, or a place in the realm of space.

According to Foucault the nineteenth century was the epoch of history. One's site was defined as a moment; the moment as a position in the realm of time. People developed their lives through time. The concepts are not clarified by Foucault. He contemplates that certain actions or influences on people's lives were determined by their age (e.g. the age on which to have children), or the time that certain acts would take (think of the eight-hour workday, the harvest season, or the travel time to places). Time exists beyond human influence, while space is alterable.

The twentieth century heralded a shift in mentally positioning oneself: one's life became determined by place. People would determine their situation through their physical place in the realm of space, rather than time: 'Our epoch is one in which space takes for us the form of relations among sites.' This is a consequence of scientific discoveries and developments. Foucault uses Galileo Galilei as a point of departure for this shift, who determined the position of the earth in relation to the sun. No longer could days and seasons be explained solely through time, but through space. Moreover Galileo revolted against the ideas of the Church, about the realm in which people's lives developed. I want to stress the importance of innovations in communication and transportation, and thereby the advances of industrialization. Telecommunication made time an utterly insignificant factor in communication, as subsequently railroad transportation, the combustion engine, and aviation did for travelling. Foucault then states that places are relational, and are 'defined by relations of proximity between points or elements'.

I would like to extend this argument to determining one's position in society. One can be simultaneously entangled in several spaces, the space of the family, the space of work, the space of politics, and shape the connection between these realms through one's place. Opposed to time, these relations are within the sphere of influence of individuals, or of the group or system they are part of.

Foucault is interested in the way in which place lays certain codes of conduct upon the individual, determined by the norms of society, and states that these are still influenced by the Church; space is not yet entirely 'desanctified'. If one deviates from these codes, one disrespects society. Foucault seeks the boundaries of society, he seeks for a way in which actions that deviate from the norms of society by the individual, are situated outside society, and how these are influenced or shaped by society.

Heterotopias

Foucault then comes to the main content of his essay. He starts with a brief notion of the utopia: 'Utopias are sites with no real place. They are sites that have a general relation of direct analogy or inverted analogy with the real space of society. They present society itself in a perfected form, or else society turned upside down, but in any case these utopias are fundamentally unreal spaces.' Foucault lived in an era when the idea of the utopia was dismantled by Karl Popper, Bertrand Russell, Hannah Arendt, and others. Utopianism in the Western culture was seen to stand at the basis of the rise of fascism and communism. The pursuit for an ideal society, in which no actions or spaces deviating from

1 related to the word 'situation' and 'position'

the norm were tolerated, was replaced by an endeavor for the manifestation of the individual liberties, and the representation of governmental bodies through institutions.

In the constitutional state, the norms of society were no longer determined by ideals, but by law; a set of separate norms, serving to protect the individual liberties. People were not judged by what they were or what they believed, but by their actions. 'Utopian engineering' was replaced by a form of social engineering, which Karl Popper called 'piecemeal engineering'. I will use a citation to illustrate this vision of Karl Popper, which has been of great significance in shaping the Western society into an 'open society', in which 'critical dualism' prevailed as a method of reasoning, over 'tribal (or closed) societies'. Popper states about piecemeal engineering: 'The politician may or may not have a blueprint of society before his mind, he may or may not hope that mankind will one day realize an ideal state, and achieve happiness and perfection on earth. But he will be aware that perfection, if at all attainable, is far distant, and that every generation of men, and therefore also the living, have a claim; perhaps not so much a claim to be made happy, for there are no institutional means of making a man happy, but a claim not to be made unhappy, where it can be avoided. They have a claim to be given all possible help, if they suffer.' (Popper 1947, p. 158). The utopian idea was no longer believed to be valid, because when the ideal society as a holistic ideal would fail, all the efforts made toward this goal would be lost, and because every aspect that did not fit into the ideal, or ultimate goal, would suffer from the achievements made toward this goal. Piecemeal engineering instead attains to solve particular problems. These problems are within control of society, as they are political, judicial, or spatial, and therefore possible to solve, instead of time-bound and therefore impossible to influence. Utopians, according to Popper, rooted in historicism. They tried to stop all changes, and return to an existential truth, rooting in history. Popper revolted against Plato, in particular Plato's Republic, which stood at the basis of many political utopianists, such as Hitler and Marx, but also at the basis of Thomas More, who placed the utopia in an architectural perspective.

Heterotopias, describes Foucault, are 'something like counter-sites' of utopias. Heterotopias are sites which do exist and do have a location that exists in space. But 'places of this kind [heterotopias] are outside of all places'. Foucault states that heterotopias are not part of the normal society; they are 'other places'. In these places, things that are abnormal, outside the norm and therefore do not fit into society, are situated. In other words, society still rests upon ideals, originating in the Church or in the constitutional state. Certain actions, which exist in conflict with the principles of the constitutional state, or with the norms of society, are placed in heterotopias.

I would like to stress that heterotopias are not only different from the norm of their counter-sites (society), but also in self-reference. The otherness of heterotopias accounts for the heterotopias themselves too. The fact that Foucault describes both the cemetery and the mental institution as heterotopias, does not mean that they are essentially the same, nor does it mean that every cemetery or every mental institution is the same. This accounts for urban neighborhoods as well, whether they are formal or informal. Ananya Roy states that the organizing divide in urban informality 'is not so much that between formality and informality as the differentiation that exists within informality' (in: AlSayyad and Roy 2003, p. 5).

Foucault describes six principle characteristics of heterotopias. I will indicate the position of squatter settlements in Brazil, favelas or slum communities,

in relation to society, according to these six principles, but also other types of places in the contemporary city. It is not my intention to compare the described places to all these points, to determine if they 'match', or can be characterized as heterotopias; it is my intention to understand the position of informal settlements in relation to the formal society, and vice versa.

1.

First there are two types of heterotopias: 'heterotopias of crisis' and 'heterotopias of deviance'. These places are for individuals in a 'state of crisis', and places 'in which individuals whose behavior is deviant in relation to the required mean or norm are placed'. Foucault indicates the location of such places as 'nowhere', meaning nowhere in society; they are places that exist outside the norms of society. While everyone is aware of the existence and of the locations of such places, they only exist as blind spots. Their existence is not denied, their presence is. Such heterotopias function as a mirror: as a 'counteraction' to the real. A mirror is in essence a utopia, it pictures an object there where it is not, but it is at the same time a heterotopia, as it does exist in reality, and allows the observer to determine his place through the reflection, the 'counteraction', of the real space.

Where are the informal spaces in the contemporary metropolis in Brazil situated in relation to society? The Brazilian Institute for Geography and Statistics describes favelas as 'subnormal agglomerations',² below the norm (IBGE 2000). The favela is in a 'state of crisis' with the norms of society. Giorgio Agamben wrote extensively on this topic. In his essay 'A State of Exception' (2003) he tries to define the political function of states beyond the norm. He describes the state of crisis as follows: 'this state is essentially an empty space, in which a human action with no relation to law stands before a norm with no relation to life.' (Agamben 2003, p. 86). Agamben defined law as an instrument to achieve justice, in which 'study' and 'play' are instruments to determine what justice is (Agamben 2003, pp. 63-4). In a society we can say that justice is a norm. Study and play, as instruments to determine these norms, take place in the political space, possible invoking 'suspension of the law'. The legal position of a place is determined by its social position, it is the outcome of a process. In other words: Agamben's 'study and play' represent the same as Foucault's 'mirror'.

I will extend this argument further with regard to informal communities in Rio de Janeiro. According to Sérgio Magalhães, people who live in favelas, or communities, are no different from people who live in formal housing (Conte and Magalhães 2004, p. 13). He states that there is an absence of 'practical barriers', such as racial segregation or cultural differences. The diverse social nature of the country does not enable these differences to affect one's social position. Social differences originate, according to Magalhães, foremost in a geographical, or spatial condition.³ This position is shared by anthropologist Janice Perlman, who argues that social exclusion of residents in slum communities is a spatial issue; prejudgments exist about community residents based on the legal status of their living condition, rather than about their race, religion, or class (this argument runs throughout Perlman's work; for a particular description see: Perlman 2005, pp. 12-3). The view is endorsed by Brodwyn Fischer, who sees social and

2 Aglomerações subnormais

3 The spatial problem is apparent; informal areas of the city lack adequate urban facilities and property rights, and are located on vulnerable and hazardous areas. But the material problem is not the same as the state of crisis, about which Foucault speaks. The state of crisis, the way in which the inhabitants of the favela differ from the inhabitants of the city, exists upon the concept of marginality. By stating that this condition is 'subnormal', below the norm, one is able to recognize this as a problem, and to improve this condition.

economic problems rooting in a historic legal division: 'vulnerability and weak access to legality, rather than any more overt discrimination, were at the heart of Brazilian rights poverty' (Fischer 2008, p. 6). But instead of mirroring the real space of society, thereby shaping society into an inclusive form, the informal city existed in large contrast with the formal city. The norms of society and the norms outside of society grew further apart. Recently we saw improvements in this paradoxical condition. The instigation of inclusive policies through the City Statute creates a bridge between the different norms. It is now case to integrate these in one space.

2.

Secondly Foucault describes the example of the cemetery to clarify how 'a society can make an existing heterotopia function in a very different fashion'. The heterotopia is subject to constant change, determined by society. The manifestation of heterotopias is dynamic; it is constantly changing. Hence, the status of a heterotopia is permanent, while its state is temporary.

Foucault explains how cemeteries were until the 18th Century centrally located in European cities, alongside the church. Death was considered a sacred state of being, the end of all change; it had a 'site' in society as a permanent state in time. The place of the death needed to be close to society, allowing for mourning and concern of the living over their relatives. The site in space was defined by the site in time. As, with the subsiding position of religion in society, the site of the dead in relation to society changed, cemeteries in the proximity of society were no longer desired or needed. Society chose to relocate the cemeteries to the 'suburbs', and their manifestation was altered. The cemetery indeed was subject to fashion, determined by the dominant norms of society. While the state of the dead did not change, their state in relation to society did. One can read the development of cultural values of society through studying its counter places.

If we extend this argument to the position of the urban poor, we also see a transformation. Neighborhoods of the popular classes were always located in proximity to the prosperous city. When industrialization became the motor of Brazil's economy, *cortiços* and *estalagens*, *favelas*, and *subúrbios* sprang up close of factories and the harbor of Rio de Janeiro. While the city started to develop around the current center in the period of industrialization, the hills in proximity to the center turned into the communities of the urban poor. The labor classes who resided on the hills profited from job opportunities, while factories benefited from the presence of cheap labor. The condition was far from ideal, formal and informal existed in great tension with each other. Currently the strongest increase of slum communities occurs in the proximity of the increasingly prosperous neighborhood of Barra da Tijuca.

This paradoxical state of being has always been subject to change. Rather than emphasizing on poverty, regulations were shaped to move or adjust the form in which poverty was present in the urban society. When Haussmann prepared Paris for the age of modernization, aiming to make the city a desirable place to live, he had set an example for many other cities, Rio de Janeiro among them. He gave rise to a new, global trend of slum clearance. Surely this was for the better of the city, but the urban poor were left to themselves. In the words of David Harvey: 'Haussmann tore through the old Parisian slums, using powers of expropriation in the name of civic improvement and renovation. He deliberately engineered the removal of much of the working class and other unruly elements from the city centre, where they constituted a threat to public

order and political power' (Harvey, 2008). The urban renewer of Rio de Janeiro, Afred Agache, described the city of Rio as an urban body, a 'corps urbaine', which could, just like the human body, develop, become sick, and eventually even die. Agache saw a role for the urbanist as a doctor, 'un clinicien', who needed to 'eliminate the city's defects caused by intoxication' (Agache 1932, pp. XVII-XXII). Industrialization and modernization collided. Agache's plan was limited to the city centre. He could not tolerate the hygienic and social problems of the informal neighborhoods in the city center, of the cortiços and favelas. This noble intolerance limited itself to the city center. Urban poverty was tolerated in the blind spots of society; while the center was engineered into a utopia of the upper class, the urban poor were pushed outside. Fashion only matters where it is visible.

3.

Third Foucault describes how the heterotopia is 'capable of juxtaposing in a single real place several spaces, several sites that are in themselves incompatible'. Foucault speaks about the spirituality of such spaces, about how in ancient Persia the space of the garden, with the fountain in its center, represented the relation between society and the universe. Foucault uses this example as a strictly formal aspect: the juxtaposition of the spaces (or realms) is an accurately planned representation of cultural values.

The juxtaposition can be formally planned, but it can also be a juxtaposition of unrelated aspects. Within a heterotopia an inherent tension with the norms of society exists. The spaces on which the heterotopia distinguishes itself from the norms of society, is autonomous (has its own norm) or even anomos (has no norm), determines the characteristics of heterotopias. It encompasses conditions in which separate domains can emerge, that are disconnected from the norms of society. These spaces can be very concrete objects or systems - a residence, a sewage system, garbage collection -, or abstract actions - policing, religion, political hierarchy. The juxtaposition of these spaces shapes the aspects in which a heterotopia is distinguished from the norm, a degree of autonomy or anomy. Autonomy can extend to a degree where a slum would create its own financial system. Architects Hubert Klumpner and Alfredo Brillembourg noted in a lecture how there are slums in Africa where the residents have created a credit system, using the credits of their phone as an alternative currency, outside the regular financial system.⁴ These kinds of systems do not only exist outside the norms of society, but are in conflict with those norms. The juxtaposition of such realms can lead to holistic systems, to closed definitions for an initially open or public space.

It would be somewhat shortsighted to state that such systems exist only in 'subnormal agglomerations'. In some condominiums, the extreme opposite, we find similar conditions. The public space between the separate, individual domains (houses), can reach a degree where it is entirely detached from the society around it. Alphaville, for example, has its own sports centres, supermarkets, nurseries, and elementary school. The neighborhood has the same name as the film *Alphaville* (1965) by Godard, picturing a computer-dominated city which exists entirely outside the regular society. Alphaville is a manifestation of autonomy.

In juxtaposing several spaces within a single (real) place lays an architectural task; it concerns the domain where different interests, different actors, and different spaces come together. The architectural task is not to create a new

⁴ Brillembourg and Klumpner (Urban Think Tank), lecture organized by NAI/Berlage Institute at Schieblock Rotterdam, 11 November 2010

norm, distinct from the norms of society, but to create these domains within the norm of society, as a representation of a common interest.

A single place can at the same time embody heterogeneous realms, public or private. They can be the sacred architecture of the cathedral, the public architecture of the library, or private architecture of the shopping mall. In many informal areas these spaces have come to stand separate from society. Sérgio Magalhães spoke of the 'predominance of private areas over public spaces' as one of the key problems in Rio's communities. There is a vague area of defining which spaces are private, and which are public. The streets - in essence the places where common interests of different layers of society can be juxtaposed and connected to the larger society - but also other types of places which are intrinsically public, became detached from the larger structure of society. It is important to clearly define private spaces, and to juxtapose such spaces in a public domain.

4.

Fourth the time of heterotopias is disconnected from the 'traditional time' of their parallel spaces, the absolute and measurable time of society. Heterotopias exist in their own time, the 'heterochrony'. This heterochrony can either be in a 'temporary' state, or in an 'eternal' state. Foucault illustrates the temporary state by describing the festival; an event which exists only for a limited period of time, and then disappears. Another form for the temporal heterotopia is the 'vacation village'. Although it is permanent as an object, it exists within its own time; it offers only a limited period of relief from society to its visitors. The eternal is, again, illustrated by the cemetery. In the eternal state, the absolute and continuous state of time in which society is situated, is replaced by an eternal state of time. The evolution of society in absolute time is of no influence on the existence of the eternal.

By no means I compare the condition of the vacation village, the festival, or the cemetery with the condition of residential zones such as squatter communities, but one can draw certain parallels with regard to their temporal existence. The French anthropologist Marc Augé (1995) describes non-places, 'non-lieux'. He, too, tries to define the 'other' and refers to slums, which are 'destined to be demolished or to decay into eternity'. According to David Harvey (2008), the trend in Rio de Janeiro tends to turn toward the former; the favela would be a temporary state, destined to be demolished: 'I wager that within fifteen years, if present trends continue, all those hillsides in Rio now occupied by favelas will be covered by high-rise condominiums with fabulous views over the idyllic bay, while the erstwhile favela dwellers will have been filtered off into some remote periphery.' As discussed earlier, the favela as a heterotopia is perceived as a temporal place, subject to the imposed fashion of society. At any time it can be removed without leaving any trace of its existence. In extension of Harvey's statement, I wager to say that urban poor will find a different manifestation elsewhere. The state of urban poverty may be temporary, the status is permanent.

5.

The **fifth** principle of heterotopias is that they are not freely accessible like public spaces. To enter a heterotopia one must always have a form of 'permission' and 'make certain gestures'. In other words: heterotopias have norms that differ from those of society, to which one has to conform. Access to heterotopias is either 'compulsory', like in the case of a prison, or one has

to perform certain 'rites or purifications', like in the case of a church. Access to heterotopias is never unconditional. Heterotopias create a system which determines the conditions under which one can enter. This system 'of opening and closing both isolates them and makes them penetrable'.

This aspect is a particular characteristic in regard to the tension between formal and informal spaces in Rio de Janeiro. This point of heterotopias illustrates the tensions between private and public places, operated through collective codes, restricting or protecting individual liberties.

For some heterotopias there is again a parallel with the concept of 'non-places' by Marc Augé, who speaks about places for which one has to purchase an entrance ticket, thereby conforming oneself to certain rules and codes: 'the user of a non-place is in a contractual relation with [this place].' This contractual relation protects the interest of the heterotopia from non-conforming interests of the individual: 'The space of non-place creates neither singular identity, nor relations; only solitude, and similitude.' (Augé, 1995, pp. 101-3). For residential neighborhoods one could rather think of a 'social contract', a conformation with certain rules of a closed community, which lays obligations or restrictions upon individuals in the interest of the community. Favelas and condominiums function with a similar logic. In essence they are exactly the same in how they relate to society: closed residential communities, with their own code of conduct.

As accounts for residential areas, a similar trend occurs in the public sphere (the places between the private spaces), and even determines its logic. In the modernist city private and public spaces were pushed to extremes. In the 'hyper-modernized' city, in the words of Augé, private and public spaces operate in a vague domain, their borders have become vague and undefined. Manuel de Solá-Morales speaks about 'collective spaces'; privately owned and operated spaces which have a public function. Aiming at the absence of public spaces, and the appropriation of public functions in privately managed places in the peripheries of modern cities, de Solá-Morales states: 'The metropolitan periphery, - paradoxically - real centre of the future life of the cities, will be made from these spaces that, without the rhetoric of the formal significance, will stand for the places of common interest.' (Solá-Morales 1992). The ambiguous position of the public domain in relation to the private conceals a threat, namely that in which the private interest prevails over the public interest, at cost of its independence. Taking a similar position, anthropologist Joshua Barker who researched the slums of Bandung, Indonesia, called this phenomenon 'urban enclosure' (Barker 2009). His contribution to the debate is the notion that the enclosed urban spaces, such as (collective) residences, malls and office towers, are not only privately managed, but also privately policed.

The result is a privately operated public realm, in which private owners of 'collective spaces' or 'enclosed urban spaces' can determine the code of conduct of what is perceived as the public space. The public realm is thereby detached from the norms of society, and exists out of all separate private places. What Lefebvre described as 'the right to the city', is determined by the owner of a place. Foucault warned about this in a debate with Noam Chomsky, where he stated that universities, or psychiatrists, in any case private parties, shape the norms of the public space and the perception of these norms (Foucault 1971).

For marginalized people it is often difficult to fit into a private code of conduct, hence to be part of the public spaces in the city. Moreover, the critical, intellectual positioning of residents in peripheral areas based on their own perception is influenced by this use of space. Ermínia Maricato, FAU-USP professor in urban design and former deputy minister of cities, states: 'it has

proved difficult for people living in [peripheral areas] to gradually accumulate and use knowledge based on their own experiences, given that these have suffered frequent interference from external sources' (Maricato in Cities Alliance 2010, p. 12). In other words, Popper's 'critical dualism' (for which he relies on Kantian critical reasoning) is subject to devaluation, as it is strongly influenced by private forces, standing outside the realm of the law through a more or less autonomous appropriation of place.

The access to heterotopias is regulated by norms, rights, not only in the public domain, but also with regard to private spaces. Amartya Sen states that 'rights' are never unconditional, and always require 'correlated duties' (1999, p. 230). The requirements to obtain rights to the irregular settlements, loteamentos irregulares, are quite similar to those of the city. They are shaped by the market. But within the community, too, there are certain requirements one has to meet, as closed communities are often places which function as tight societies. In this society the earlier mentioned norms deviate from the formal laws that apply in the city. It requires specific knowledge to understand what these norms are, and how these norms work in different closed communities. It is useful to illustrate this point with the example of so called 'roof rights'. While living in Rocinha in 2002, one of Rio's largest favelas, journalist Robert Neuwirth (2006) observed one of the typical processes of urbanization in the favela. Rocinha is built on the hillside in the area of Gávea. As it is very difficult to construct a house on the steep hillside, people would prefer to build on a flat surface. After people finish building their house, they would sell the rights to construct an additional floor on their roof to friends. On their turn, when their house is finished they would pass on their roof rights, resulting in constructions of up to ten floors tall. Vertical expansion would always be negotiated with the neighbors, and if someone would object, they would usually not go ahead with the plan. Another example Neuwirth stresses is the fact that 'some Rio favelas have imposed their own restrictions on new construction and height regulations on new buildings, so as not to create overcrowding and infrastructure problems.' (2006, p. 56). The autonomous principle behind this form of rights is self-evident: people who try to find a place in this society need to meet certain conditions outside the norms of society. There exists a closed system of norms outside the public realm of law. Like in the formal city, access to the community is usually not free, and definitely not unconditional.

Moreover the urban poor could find no place in relation to all 'communication, information, and transportation networks' of the global city (Lefebvre 1972, p. 469). Ever since Rio de Janeiro's urban growth started to increase in the late nineteenth century, there has been a large housing-deficit. There were not sufficient residential areas which were well-connected to networks of services, infrastructure, or communication. The formal market shaped certain norms which residents would have to meet, based on income, as norms for entrance to live in the formal city. There was no formal response to these demands, such as social or economic housing. The only formal alternatives for those who did not meet the conditions that society laid upon them, were limited private initiatives, such as tenement housing or factory housing. Hence the urban poor gradually shaped their own responses through favelas or irregular settlements; one could see entrance to these informal settlements as 'compulsory', but at the same time 'restrictive'.

This brings up a question in the perception of the formal/informal debate: one could wonder which is the true heterotopia. The city, the place where everyone can live if they meet certain prerequisites, or the favela, where one

is obliged to live if one does not meet these prerequisites? We have seen an improvement on this issue with the introduction of the City Statute, which righteously responds to the assumption that 'it is the market, rather than the law and the various associated judicial norms, which defines where poor people can live or invade land for housing purposes.' (Maricato in: Cities Alliance 2010, p. 9). Still the market determines a great part of the tension between formal and informal spaces, and Ermínia Maricato warns against a return to the market-regulated division of land (p. 21).

The tension of the market-regulated property has determined the accessibility of space, both at the level of what is private, and what is public. The historical outcome is a vastness of heterotopias, all with their own codes, or norms, sometimes in conflict with or detached from society.

6.

In his **sixth** and final point Foucault argues that the heterotopia is either a space of 'illusion', like a brothel, or a space of 'compensation', like a colony. In both examples Foucault describes the space as an escape from reality. The brothel is described as the space for people seeking an illusion, where one can escape to, away from society. The colony is described as an organized place, where one can escape to, away from the disorganized world of one's country of origin. Places, such as the colonial villages and the houses, but also realms, such as the space of the organized society and the position of the family within that society, all are spaces within this concept of the heterotopia, spaces shaped by the normative rules of society.

Foucault exemplifies the colony with the Puritan societies founded by the English in America, where a strict order would guarantee an organized life, away from the disorganized cities in Great Britain. This utopian goal stands in sharp contrast to the goals of the urban poor who squatted on the hills of Rio. These new urban residents did not seek for organization in the first place. I refer to Nezar AlSayyad, who distinguished four phases of squatting: (1) land invasion, (2) social formation, (3) physical consolidation, and (4) urban maturity (AlSayyad 1993: 34). The first phase solely concerns finding a place to reside, either in small groups or individually.⁵ When this place is invaded, there comes a form of organization. This form of organization – social formation – serves the individual interests of the squatters rather than the common interest, namely establishing a basis for the third phase, physical consolidation. Only in phase four, the squatter settlement becomes an organized urban space. It may or may not conform to the norms of society around it. It may or may not adopt particular norms of society and respect or disrespect its laws. It may or may not turn into a regular neighborhood or sustain its status as a squatter settlement.

What I argue is that, in contrast to this characteristic of Foucault's heterotopia, the squatter settlement is not by definition a direct counteraction to the formal city; it may emerge without the incentive to be a counterpart or to be the other place set off against the formal city. It emerges as a space of consequence; a consequence of a bare necessity for housing. Only after this it can evolve into a place which is more or less connected with its surrounding society. The spatial and organizational divide of the squatter settlement - its urban manifestation - becomes a consequence of both internal and external influences, rather than a reaction to these influences.

On the opposite side, a different type of heterotopia - the condominium - is

⁵ I do not speak about organized squatting as a political act. I speak about squatting as a spatial consequence of urban poverty.

a response to its surrounding. These are spaces of choice, built as a response to the conditions of society, as a rejection of its form, and as a way to create a place in which the norms of this society (or the enforcement of these norms) are compensated. Some of the condominiums go beyond the characteristic of 'compensation'. The norms of society are not compensated, but replaced. Once more I refer to Alphaville, which exists as an anti-urban space. It no longer forms a dialectic with the formal norms of society; it abandoned these norms and creates its own codes which replace the norms of society. This is spatially manifested with its own sports fields, its own nurseries, grocery stores, and security. We can observe that the same trend takes place in some of the most extreme squatter communities, which also have their own security, their own supermarkets, and their own schools, independent from that of the surrounding society. One could wonder to what degree these places are still heterotopias, as a mirror for society, or have become utopias, places that exist outside of society.

Conclusion

Based on the characteristics of heterotopias, I outlined the complexities in the discourse on formal and informal settlements in Rio de Janeiro, in their relation to society. Lieven de Caeter states that Foucault's text would require a third part (in: Heynen et al. 2004, p. 725). This part would contain a conclusion in which the six principles would be linked back to the network city. De Caeter states this would fit the logic of the text; the six chapters would be seen as heterotopias within a network.

Foucault thought about 'governmentality', the art of government, which came to be a spatial affair through the emergence of the nation-state. Governance turned into a geographical affair, it became based on one's nationality rather than cultural or religious background. Foucault stated that a population under a certain government is simultaneously 'subject of needs, of aspirations, but it is also the object in the hands of the government' (Foucault 1978, p. 100). Ananya Roy too, in her thesis on the 'aesthetization of poverty', speaks about aspiration, about the difficult conditions under which the urban poor struggle to survive, and to aspire (Roy in: Roy and AlSayyad, 2004). I think the concepts of 'needs' and 'surviving' on one hand, and 'aspiring' or 'aspirations' on the other hand, are bridged in Amartya Sen's capability-approach. One can only aspire if one is able to connect to the world of aspiration. The urban poor live in self-governed - autonomous - parts of the city, where their needs and aspirations are outside the realm of government. In a lecture Ananya Roy poses forward the following questions: 'If one had the opportunity to set up an alternative world, an other world, how would one organize it? How would one distribute rewards and resources? How would this world be managed and ruled?' (Roy 2008). These questions are in many more or less autonomous communities never asked. I would like to add to these questions: How would one connect this world with the normative world of society? How can this alternative world contribute to shaping the normative world? And what threats does this conceal?

To summarize, the characteristics of heterotopias that Foucault has brought forward are:

- (1) A heterotopia is in a state of crisis with, or deviant from the norms of society;
- (2) Society may let the heterotopia function in a different fashions as a consequence of the norms of society;
- (3) A heterotopia can juxtapose in a single real place, several spaces;
- (4) A heterotopia is disconnected from the real time: heterochronic time;

(5) Heterotopias are not freely accessible like public spaces, entrance is never unconditional;

(6) A heterotopia functions as a space to escape from reality, like a space of illusion or compensation;

The relation between these points, and the network in which to position these individual points, is twofold. First there is the realm of physical space. This realm is addressed by Foucault in his introduction, and can be seen as the network in which to position the separate heterotopias, as opposed to the realm of time. It is clearly argued by Foucault how the characteristics of heterotopias rely on their autonomous places.

The second network, which Foucault does not explicitly mention as a network, but which is the more apparent realm throughout the text, is the network of norms, the norms of society. The heterotopias that are put forward by Foucault do not fit into the norms of society; society is not capable to deal with their actions. Therefore the heterotopias require other places, outside of society. Their existence is not denied, only their presence is. This division allows for categorization. Without exactly knowing what actions take place in a specific place, one is able to position these outside society. The places offer space for actions in conflict with the norm. Foucault sought for places where these actions took place without disrupting society in its ideal form. The places are spaces of consequence; at the same time they are shaped by the norms of society, and function as a mirror for society to shape its norms, to determine its position.

A problem occurs when it is not a certain action that exists outside society, but a collective being. When an autonomous community emerges, which is detached from society, or even replaces it with its own set of norms. I am not speaking of NGO's, or of resident associations, which stand for certain goals. These organizations have proved to be able to accomplish certain goals following the principle of piecemeal engineering, striving for the inclusion in the existing urban domain. Think of urban facilities - such as water, garbage collection, or public transportation - or laws - such as the city statute -; Agamben would refer to this process as 'suspension of the law', emerging from a tension between 'nomos' (norms) and 'anomos' (without norm; a social disorder), a process for inclusion in the law and in society. The problem of which I am speaking is a collective being which shapes its own urban domain, separated from the city around it. Suspension of the law turns into abandoning of the law, resulting in autonomy.

Therefore it is important that in the four stages of squatting which I referred to earlier (land invasion, social formation, physical consolidation, and urban maturity), this fourth aspect deserves particular attention. A strong relation with society needs to be developed. Architecture can be one of the means for this, through representing public functions. The elements of urbanization must be manifested through representational means that not only fit the community, but fit the city and society as a whole. Based on Ananya Roy I would like to call this an 'aesthetization of urbanity'. This does not only account for squatting, but for the emergence of any type of new neighborhood.

Investigating the urban situation in Rio de Janeiro, we see the emergence of a dichotomous city. The principle formal/informal or bairro/favela derives from this categorization. Several scholars (Fischer 2008, Perlman 1976/2005, Magalhães 2004) have stated that it draws away the attention from the problems within the informal neighborhoods. Such a categorization may not lead to stigmatization, but can be used to overcome certain practical problems of these neighborhoods and the conditions that stand at the basis of these conditions. It

allows for partial solutions that can be implemented, which can be individually successful.

I stated that the heterotopias do not only differ from their surrounding, but also among themselves. I also stated that formal neighborhoods can be perceived as heterotopias, in a similar way as informal neighborhoods can be. If we take these two statements we can see that all neighborhoods, whether formal or informal, are increasingly seen as more or less autonomous neighborhoods from their surrounding, disregarding their legal status, with their own norms. These may or may not be in conflict with the norms of the surrounding society. In this sense, a specific condominium, which for example has its own sports centre, its own school, and its own supermarket, may be more autonomous and disconnected from the surrounding norms of society, than a community which relies for these facilities on the surrounding neighborhood. Hernando de Soto pulls this view to an extreme: 'In fact it is the legal world that is marginal; the informal sector has become the norm.' (Soto 2000, p. 33). What he passes by is that, in his view, the urgent problems that are now marginal and not tolerated by society - such as neighborhoods without proper sewage systems or precarious houses - then become the norm. This would result in an abandonment of these norms by those who can afford it; places of choice, such as gated communities, would become the autonomous neighborhoods of a privileged class, a class that - paradoxically -, through private institutions, governs the public space (to come back to Foucault's warning for a class-society, discussed in the introduction of this text).

Among the most urgent spatial problems, in my opinion, is that of the public domain. Privatization of public spaces, in the discourse of de Sola-Morales, is creating small, autonomous heterotopias on the place where the society needs to manifest itself, thereby permitting self-determined norms to prevail over the public norms of society. These heterotopias do not exist in a dialectic with society, but take the form of closed systems that completely abandon society. They do not present a mirror to society, but exist merely in self-reference.

The architectural challenge is to create an urban space as a mediator between private spaces, places shaped by the study and play with the norms of society, fundamentally real places that represent the norms of society, and step by step develop these norms and their manifestation. In essence: to present an architecture, toward an aesthetization of urbanity.

Sources

Books:

AGACHE, Alfred, 1932. *La Remodelation d'une Capitale, Amenagement, Extension, Embellissement*. Paris: Société Coopérative d'Architectes.

AGAMBEN, Giorgio, 2005. *State of Exception*. Chicago: Chicago University Press.

ARIAS, Demsond Enrique, 2005. *Drugs and Democracy in Rio de Janeiro; Trafficking, Social Networks, & Public Security*. University of North Carolina Press.

AUGÉ, Marc, 1995. *Non-Places: Introduction to an Anthropology of Supermodernity*. Translated by John Howe. London/ New York: Verso.

CHAFFEE, Wilber A., 1998. *Desenvolvimento: Politics and Economy in Brazil*. Boulder (CO): Lynne Rienner Publishers.

CITIES ALLIANCE, 2010. *The City Statute: A Commentary*. [pdf] São Paulo: Cities Alliance and Ministry of Cities – Brazil. Available at: < <http://www.citiesalliance.org/ca/node/1947> > [Accessed: 7 November 2010].

CONDE, Luiz Paulo; and MAGALHÃES, Sérgio, 2004. *Favela-Bairro, Rewriting the History of Rio*. [pdf] Rio de Janeiro: Viver Cidades. Available at: < http://www.cades.be/uploads/Favela_bairro_english.pdf > [Accessed: February 2010].

CZAJKOWSKI, Jorge; TAVEIRA, Alberto, eds., 2000. *Do cosmógrafo ao satélite, mapas da cidade do Rio de Janeiro*. Rio de Janeiro: Centro de Arquitetura e Urbanismo.

CZAJKOWSKI, Jorge et al., 2000. *Guia da Arquitetura Moderna no Rio de Janeiro*. Rio de Janeiro: Prefeitura da Cidade do Rio de Janeiro.

DAVIS, Mike, 2006. *Planet of Slums*. New York: Verso.

DULLES, John W.F., 2010. *Carlos Lacerda, Brazilian Crusader: The Years 1914-1960*. Austin TX: Texas University Press.

DULLES, John W.F., 1996. *Carlos Lacerda, Brazilian Crusader: The Years 1960-1977*. Austin TX: Texas University Press.

FERNANDES, Edésio & VERLEY, Ann, eds., 1998. *Illegal Cities: Law and Urban Change in Developing Countries*. New York: Zed Books Ltd.

FISCHER, Brodwyn, 2008. *A Poverty of Rights: Citizenship and Democracy in Twentieth Century Rio de Janeiro*. Stanford, CA: Stanford University Press.

FRAIHA, Silvia; and LOBO, Tiza, 1998. *Bairros do Rio: Madureira e Oswaldo Cruz*. Rio de Janeiro: Editoria Fraiha.

FREYRE, Gilberto, 1986. *Order and Progress, Brazil from Monarchy to Republic (Original title: Ordem e Progresso)*. Translated by Rod W. Horton. [e-book] Berkeley: University of California Press. Fully available through: Google Books [Accessed: November 2010].

HEIJNEN, Hilde et al. (HEIJNEN, Hilde; CAUTER, Lieven de; LOECKX, André; and HERK, Karina van; eds.), 2004. *'Dat is architectuur', Sleutelteksten van de Twintigste Eeuw*. Rotterdam: 010 Publishers.

HOLSTON, James, 2008. *Insurgent Citizenship: Disjunctions of Democracy and Modernity in Brazil*. Princeton NJ: Princeton University Press.

IBGE, 2006. *Seculo XX: Estáticas do Século XX*. Rio de Janeiro: IBGE. [pdf] Available at: < <http://www.ibge.gov.br/seculoxx/> > [Accessed: 3 September 2010].

MEULDER, Bruno De; and SHANNON, Kelly, eds., 2010. *Human Settlements; Formulations and (re)Calibrations*. Amsterdam: SUN Architecture Publishers.

NEUWIRTH, Robert, 2006. *Shadow Cities – A Billion Squatters, A New Urban World*. New York: Routledge.

PERLMAN, Janice, 1976. *The Myth of Marginality; Urban Poverty in Rio de Janeiro*. Berkeley (CA): University of California Press.

POPPER, Karl, 1947/1973. *The Open Society and its Enemies, Vol. I: The Spell of Plato*. London: Routledge.

POPPER, Karl, 1947/1973. *The Open Society and its Enemies, Vol. II: Hegel and Marx*. London: Routledge.

PREFEITURA DA CIDADE DO RIO DE JANEIRO, 1996. *Rio Cidade, o Urbanismo de Volta as Ruas*. Rio de Janeiro: MAUAD.

PREFEITURA DA CIDADE DO RIO DE JANEIRO, 2002. *Memoria da Destruição*. Rio de Janeiro: Secretaria das Culturas, Arquivo da Cidade.

ROY, Ananya; and ALSAYYAD, Nezar, eds., 2004. *Urban Informality: Transnational Perspectives from the Middle East, Latin America, and South Asia*. Lanham (MD): Lexington Books.

SEN, Amartya, 1999. *Development as Freedom*. Oxford: Oxford University Press.

SOTO, Hernando de, 2000. *Het Mysterie van het Kapitaal (Original: The Mystery of Capital, Why Capitalism Triumphs in the West and Fails Everywhere Else)*. Translated by Joost Zwart. Utrecht: Spectrum.

TSIOMIS, Yannis, 1998. *Le Corbusier, Rio de Janeiro 1929-1936*. Rio de Janeiro: Prefeitura da Cidade do Rio de Janeiro.

UN HABITAT, 2008. State of the World's Cities 2008/2009, Harmonious Cities. [pdf] Nairobi: UN HABITAT. Available at: < <http://www.unhabitat.org/pmss/getElectronicVersion.aspx?nr=2562&alt=1> > [Accessed: 29 October 2009].

UN HABITAT, 2003. Slums of the World, the Face of Urban Poverty in the New Millenium? [pdf] Nairobi, UN HABITAT. Available at: < <http://www.unhabitat.org/pmss/getElectronicVersion.aspx?nr=1124&alt=1> > [Accessed: 28 September 2009].

UNFPA, 2007. State of the World Population 2007, Unleashing the Potential of Urban Growth. [pdf] UNFPA. Available at: < http://www.unfpa.org/swp/2007/presskit/pdf/sowp2007_eng.pdf > [Accessed: 29 October 2009].

WILLIAMS, Richard J., 2009. *Modern Architectures in History: Brazil*. New York: Reaktion Books Ltd.

Publications:

Articles, Book Chapters, Dissertations, Papers, Internet, Others

ALSAYYAD, Nezar, 1993. Squatting and Culture, A Comparative Analysis of Informal Developments in Latin America and the Middle East. *HABITAT INTL*. Vol. 17 (1), pp. 33-44. Available through: Elsevier Science Direct Database [Accessed: 30 September 2009].

BARKE, Michael; ESCASANY, Tony; O'HARE, Greg, 2001. Samba, A Metaphor for Rio's Favelas. *Cities*, Vol. 18 (4), pp. 259-270. Available through: Elsevier Science Direct Database [Accessed: 6 January 2010].

BARKE, Michael; and O'HARE, Greg, 2003. The Favelas of Rio de Janeiro: A Temporal and Spatial Analysis. *Geojournal*, Volume 56 (3), pp. 225-240. Available through: Springerlink database [Accessed: 31 August 2010].

BARKER, Joshua, 2009. *The Tycoon and the Thought: Toward a Comparative Anthropology of Urban Marginality*. [lecture] At: LSE Hong Kong Theatre, 7 May 2009. Available at: < <http://www.lse.ac.uk/resources/podcasts/publiclecturesandevents.htm/> > [Accessed: August 2010].

BURGESS, Rod, 1978. Petty Commodity Housing or Dweller Control? A Critique of John Turner's Views on Housing Policy. *World Development*, Vol. 6 (9/10) pp. 1105-1133. Available through: Elsevier Science Direct Database [Accessed: 2 October 2009].

DAVIS, Kingsley, 1965. The Urbanization of the Human Population. *Scientific American*, Vol. 213 (3), pp. 10-12. Available through: JSTOR Database [Accessed: August 2010].

DELSON, Roberta, 1979. Land and Urban Planning: Aspects of Modernization in Early Nineteenth-Century Brazil. *Luso-Brazilian Review*, Vol. 16 (2), pp. 191-214. Available through: JSTOR Database [Accessed: 22 August 2010].

FABRICIUS, Daniela, 2008. Resisting Representation – The Informal Geographies of Rio de Janeiro. *Harvard Design Magazine*, Spring/Summer 2008, pp. 4-17.

FARIA, Teresa de Almeida, 2004. Favelas na periferia: (re)produção ou mudança nas formas de produção e acesso à terra e moradia pelos pobres na cidade do Rio de Janeiro nos anos 90. PhD, UFRJ, Rio de Janeiro. Available at: < <http://www.ippur.ufrj.br/download/pub/TeresaCristinaDeAlmeidaFaria.pdf> > [Accessed: 18 October 2010].

FERNANDES, Edesio, 2007. Constructing the 'Right to the City' in Brazil. *Social Legal Studies*, Vol. 201 (16). Available through: SAGE Publications Database [Accessed 16 February 2010].

FISCHLOWITZ, Estanislau; and ENGEL, Madeline H., 1969. Internal Migration in Brazil. *International Migration Review*, Vol. 3 (3), pp. 36-46. Available through: JSTOR Database [Accessed: 3 September 2010].

FOUCAULT, Michel, 1982. The Subject and Power. *Critical Inquiry*, Vol. 8 (4). pp.777-795. Available through: JSTOR Database [Accessed: 24 November 2010].

FOUCAULT, Michel, 1978. Governmentality. In: BURCHELL, Graham; GORDON, Colin; and MILLER, Peter, eds., 1991. *The Foucault Effect, Studies in Governmentality*. Chicago: University of Chicago Press. Ch. 4, pp. 87-104.

FOUCAULT, Michel, 1976a. Security, Territory, and Population. In: RAINBOW, Paul, ed., 1997. *Ethics, Subjectivity and Truth*. New York: The New Press. pp. 67-71.

FOUCAULT, Michel, 1976b. Society Must Be Defended. In: RAINBOW, Paul, ed., 1997. *Ethics, Subjectivity and Truth*. New York: The New Press. pp. 59-65.

- FOUCAULT, Michel, 1971. Justice Versus Power. *Dialogue with Noam Chomsky and Fons Elders*. Available at: < <http://www.youtube.com/watch?v=mj2VJ7oexKc&feature=related> > [Last accessed: November 2010]. Notes available on: < <http://www.chomsky.info/debates/1971xxxx.htm> > [Last accessed: November 2010].
- FOUCAULT, Michel, 1967. Of Other Spaces (Original: Des Espaces Autres). Translated by: Jay Miskowic. *Diacritics*, Vol. 16 (1), pp. 22-27. Available through: JSTOR Database [Accessed: September 2009].
- FRANKENHOFF, C.A., 1967. Elements of an Economic Model for Slums in a Developing Economy. *Economic Development and Cultural Change*, Vol. 16 (1), pp. 27-36. Available through: JSTOR Database [Accessed: 9 November 2010].
- FREDIANI, A. A., 2008. *Planning for Freedoms: The Contribution of Sen's Capability Approach to Development Practice*. [pdf] Available at: < http://www.ucl.ac.uk/dpu/people/frediani/briefing_ca > [accessed: 18 August 2010].
- GODFREY, Brian J., 1999. Revisiting Rio de Janeiro and São Paulo. *Geographical Review*, Vol. 89 (1), pp. 94-121. Available through: JSTOR Database [Accessed: 4 September 2010].
- GOMES SILVA, Marcus Vinicius, 2009. *O cortiço e a cidade: discutindo e re-construindo a geografia das habitações coletivas no Rio de Janeiro oitocentista*. [pdf] Available at: < http://egal2009.easypanners.info/area05/5260_Gomes_Marcus_Vinicius_Silva.doc > [accessed: 1 November 2010].
- HARVEY, David, 2008. The Right to the City. *New Left Review*, Vol. 53. Available at: < <http://www.newleftreview.org/?view=2740> > [Accessed: January 2010].
- KOOL, Maarten; VERBOOM, Dik; and LINDEN, Jan van der, 1989. Squatter Settlement Improvement and Displacement - A Review of Concepts, Theory and Comparative Evidence. *HABITAT INTL*, Vol 13 (3), pp. 187-199.
- LOVE, Joseph L., 1970. Political Participation in Brazil, 1881-1969. *Luso-Brazilian Review*, Vol. 7 (2), pp. 3-24. Available through: JSTOR Database [Accessed: 19 August 2010].
- MARTINE, George, 1972. Migration, Natural Increase and City Growth: The Case of Rio de Janeiro. *International Migration Review*, Vol. 6 (2), pp. 200-15. Available through: JSTOR Database [Accessed: 3 September 2010].
- MEADE, Teresa, 1986. Civilizing Rio de Janeiro, the Public Health Campaign and the Riot of 1904. *Journal of Social History*, Vol. 20, (2), pp. 301-22. Available through: JSTOR Database [Accessed: 22 March 2010].
- MONTEIRO, Marcelo, 2004. *Morrendo na Praia*. [online] Favela tem Memória. Available at: < <http://www.favelatemmemoria.com.br/publica> > [accessed 7 November 2010].
- MOUSSE PINTO, Fernanda, 2007. *A Invenção de Cidade Nova do Rio de Janeiro: Agentes, Personagens e Planos*. PhD, UFRJ, Rio de Janeiro. Available at: < <http://www.ippur.ufrj.br/download/pub/FernandaMoussePinto.pdf> > [accessed: 1 November 2010].
- PERLMAN, Janice, 2005. The Myth of Marginality Revisited, the Case of Favelas in Rio de Janeiro, 1969-2003. In: World Bank IPAE, Third Urban Research Symposium: *Land Development, Urban Policy and Poverty Reduction*. Brasilia, 4-6 April 2005. Available at: < <http://www.worldbank.org/urban/symposium2005/papers/perlman.pdf> > [accessed 4 January 2010].
- RILEY, Elizabeth; FIORI, Jorge; and RAMIREZ, Ronaldo, 2000. Favela Bairro and a New Generation of Housing Programmes for the Urban Poor. *Geoforum*, vol. 32, pp. 521-31. Available through: Elsevier Science Direct Database [Accessed: February 2010].

- RIO DE JANEIRO, 2002. *Evolução da população de favelas na cidade do Rio de Janeiro*. [pdf] Prefeitura da Cidade do Rio de Janeiro. Available through: < <http://www.armazemdedados.rio.rj.gov.br/> > [Accessed: 17 August 2010].
- RIO DE JANEIRO, 2001. *Evolução da ocupação das favelas na cidade do Rio de Janeiro*. [pdf] Prefeitura da Cidade do Rio de Janeiro. Available through: < <http://www.armazemdedados.rio.rj.gov.br/> > [Accessed: 19 October 2010].
- ROY, Ananya, 2005. Urban Informality; Toward an Epistemology of Planning. *Journal of the American Planning Association*, vol. 71 (2), pp. 147-58. Available through: Routledge Informaworld Database [Accessed: September 2009].
- ROY, Ananya, 2008. *Ideal Last Lecture - Golden Apple Award for Outstanding Teaching*. [lecture] At: UC Berkeley, 24 April 2008. Available at: < <http://www.youtube.com/watch?v=Alb8p7dCLXw> > [Last accessed: 6 December 2010].
- SEN, Amartya, 2000. What is the Role of Legal and Judicial Reform in the Development Process? In: World Bank: *Legal Conference*. Washington DC, 5 June, 2000. Available at: < <http://siteresources.worldbank.org/intjustlawinst/resources/legalandjudicial.pdf> > [Accessed: 19 August 2010].
- SILVA GOMES, Marcus Vinicius, O cortiço e a cidade: discutindo e re-construindo a geografia das habitações coletivas no Rio de Janeiro oitocentista, 2009. In: *12 Encuentro de Geógrafos de América Latina*, Montevideo, Uruguay, April 2009. Available at: < http://egal2009.easyplanners.info/area05/5260_Gomes_Marcus_Vinicius_Silva.doc > [Accessed: 1 November 2010].
- SMITH, T. Lynn, 1944. Land Tenure in Brazil. *The Journal of Land & Public Utility Economics*, Vol. 20 (3), pp. 194-201. Available through: JSTOR Database [Accessed: 22 August 2010].
- SOARES, Fabio; and SOARES, Yuri, 2005. The Socio-Economic Impact of Favela-Bairro: What do the Data Say? [pdf] *Interamerican Development Bank*, Washington D.C., August 2005. [unpublished] Available at: < http://ww2.itaub.com.br/itausocial/site_fundacao/Biblioteca/Apresentacoes/apresentacao_fabio_veras.pdf > [Accessed: 31 August 2010].
- SOLÁ-MORALES, Manuel de, 1992. De Transformatie van de Metropool (Original title: Public and Collective Space: The Urbanization of the Private Domain as a New Challenge). *OASE*, Vol. 32.
- TEXEIRA, Manuel C., 1994. A habitação popular no século XIX — características morfológicas, a transmissão de modelos: as ilhas do Porto e os cortiços do Rio de Janeiro. *Análise Social*, vol. xxix (127), pp. 555-579. Available at: < <http://analisesocial.ics.ul.pt/documentos/1223377114L3bQW0kz8Jm12CZ8.pdf> > [accessed 17 August 2010].
- VAZ, Lilian Fessler; and JAQUES, Paola Berenstein, 2004. Morphological Diversity in the Squatter Settlements of Rio de Janeiro. In: Stanilov, Kiril; and Scheer, Brenda Case, eds., 2004. *Suburban Form, an International Perspective*. New York: Routledge. Ch. 3, pp. 61-73.
- VALLADARES, Licia, 2000. A gênese da favela carioca, a produção anterior as ciências sociais. *Revista Brasileira de Ciências Sociais*, vol 15, (44), pp. 2-34. Available at: < <http://www.scielo.br/pdf/rbcsoc/v15n44/4145.pdf> > [Accessed: 17 August 2010].
- VETTER, David M.; and RZEZINSKI, Henrique Costa, 1980. The Brazilian Case: Land Policy for Whom? *HABITAT INTL*, Vol 4. (4/5/6), pp. 485-498. Available through: Elsevier Science Direct Database [Accessed: 5 October 2009].
- WAGNER, F. E.; WARD, John O., 1980. Urbanization and Migration in Brazil. *American Journal of Economics and Sociology*, Vol. 39 (3), pp. 249-259. JSTOR Database [Accessed: 30 August 2010].
- YODER, Michael L.; and FUGUITT, Glenn, 1979. Urbanization, Frontier Growth, and Population Redistribution in Brazil. *Luso-Brazilian Review*, vol. 16 (1), pp. 67-90. Available through: JSTOR Database [Accessed: 4 September 2010].

Resources for maps:

[GIS] RioAtlas. GIS-based basic mapping software, available at: < <http://portalgeo.rio.rj.gov.br/rioatlas/rioatlas.htm> >:

- Current roads
- Current railroads and stations
- Bairros
- Regões administrativas
- Zonas de planejamento
- Facilities
- Favelas 2005, 2008

[software] Google Earth:

- Transmission lines

[book] Agache, 1932:

- Urbanization 1932

[book] Czajkowski, 2000:

- Urbanization 1880
- Urbanization 1922
- Urbanization 1949

[book] Perlman 1976:

- Urbanization 1976

[publication] Rio de Janeiro, 2001:

- Favelas 1900, 1930, 1965, 1995

[PhD] Faria 2004:

- Favelas 2001

[website] Bondes Electricos do Rio de Janeiro. Available at: < <http://usuarios.multimania.es/emidiogarde/images/riomapab.jpg> > [Accessed: 22 October 2010]:

- Tramways 1907, 1946

Websites:

Prefeitura da Cidade do Rio de Janeiro. Available at: < <http://portalgeo.rio.rj.gov.br/morei9100/default.htm> >

Arquivo Geral da Cidade. Available at: < <http://www0.rio.rj.gov.br/arquivo/> >

Instituto Pereira Passos. Available at: < <http://www.rio.rj.gov.br/web/ipp/> >

Arquivo Público do Estado do Rio de Janeiro. Available at: < <http://www.aperj.rj.gov.br/> >

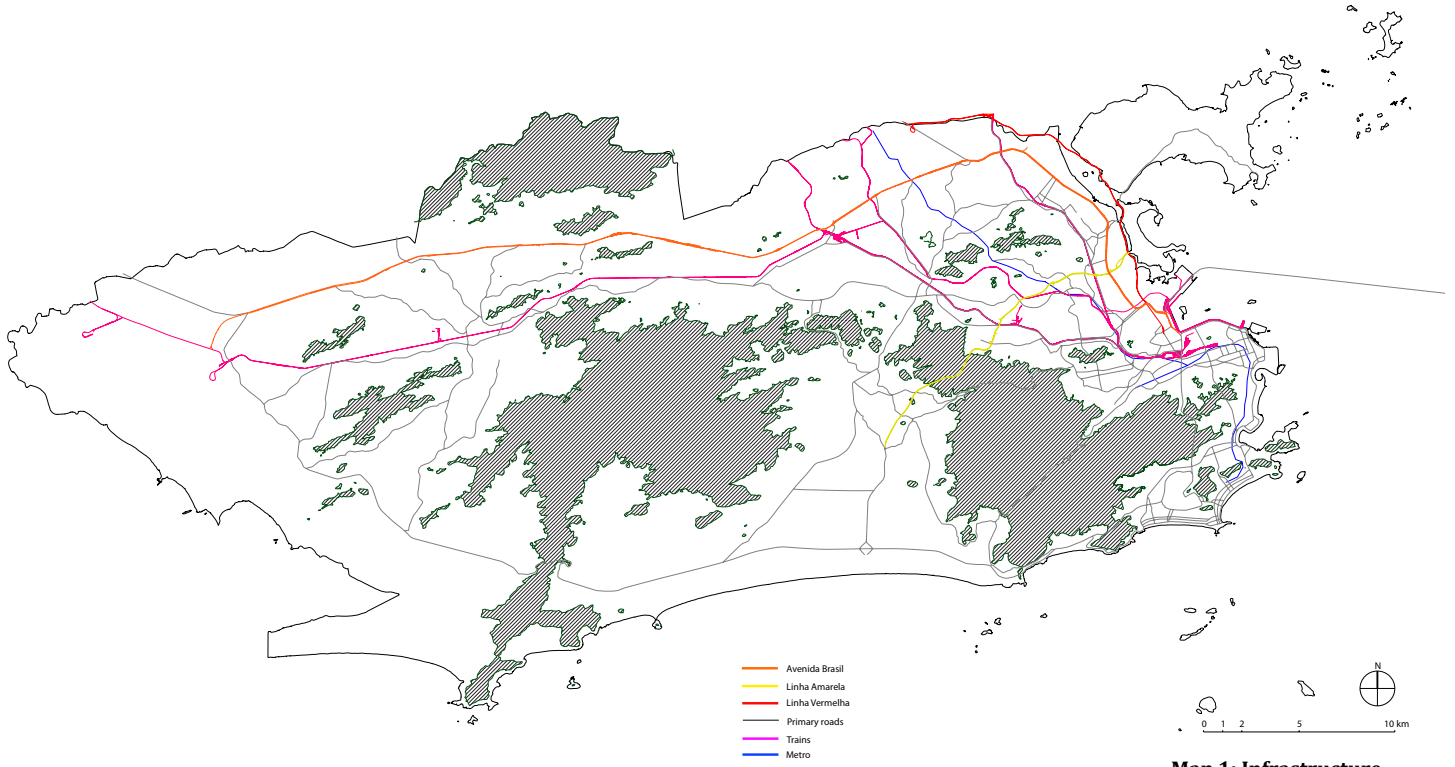
Vitruvius Arquitextos. Available at: < <http://www.vitruvius.com.br/revistas> >

Viva Favela. Available at: < <http://www.vivafavela.com.br/> >

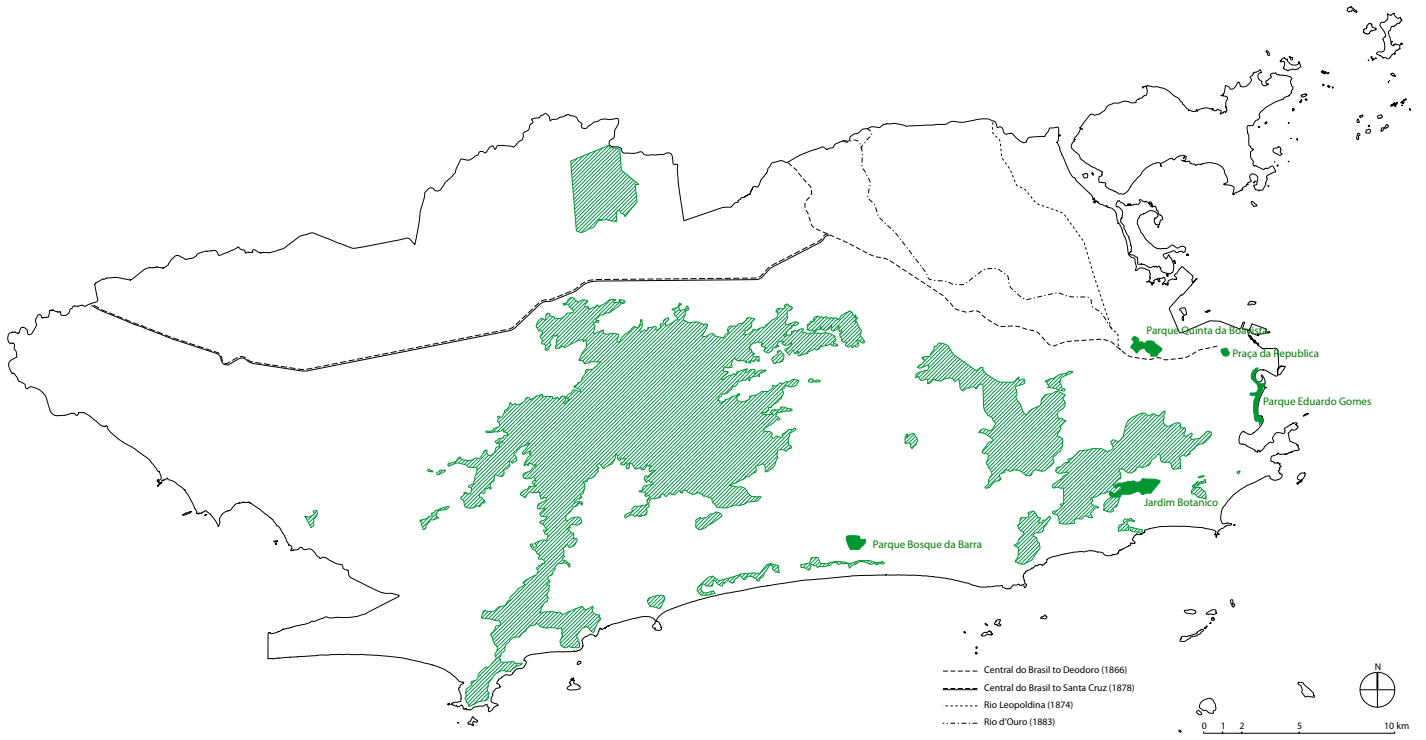
Observatorio de Favelas. Available at: < <http://www.observatoriodefavelas.org.br/> >

PROURB UFRJ. Available at: < <http://www.prourb.fau.ufrj.br/cidades/favela/secretariaIN.html> >

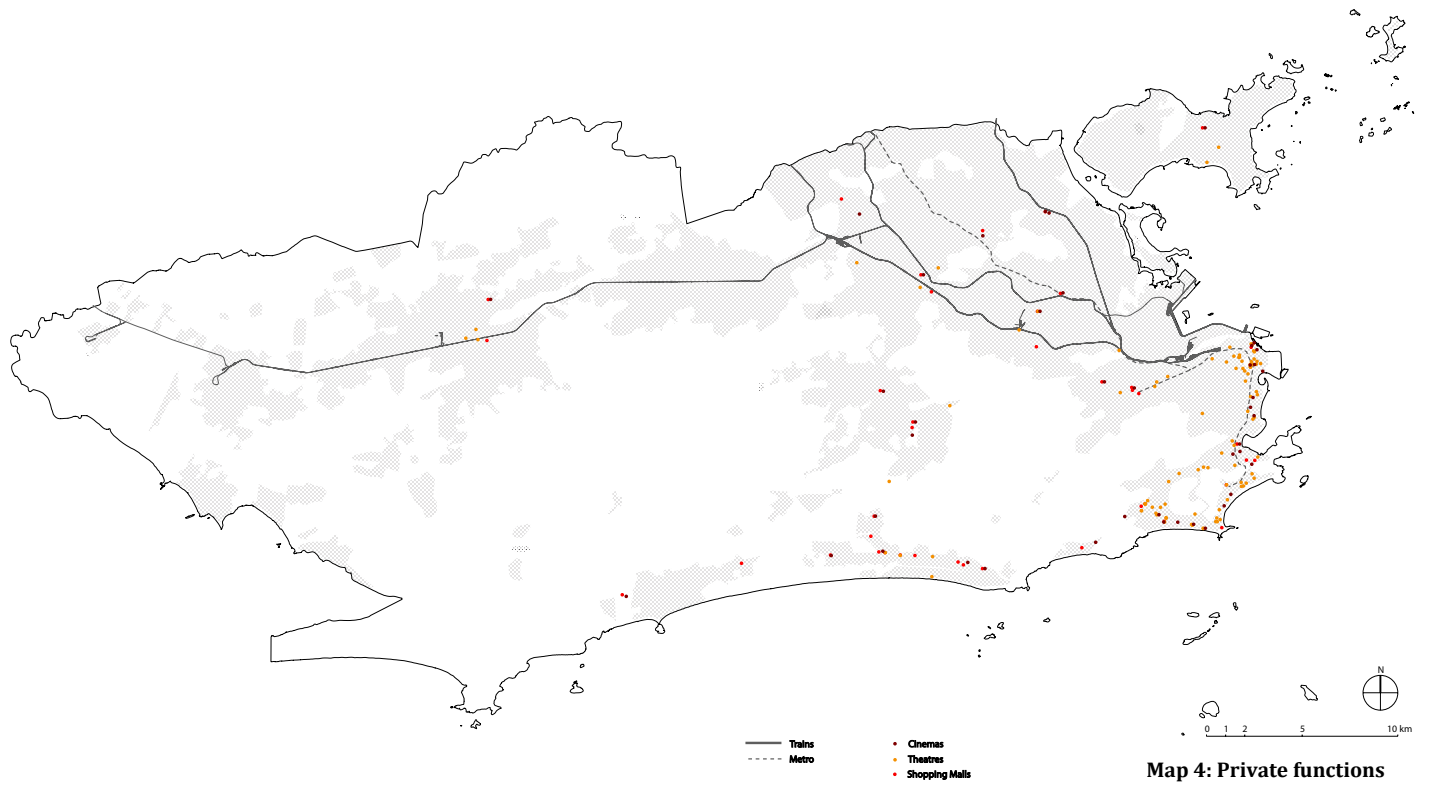
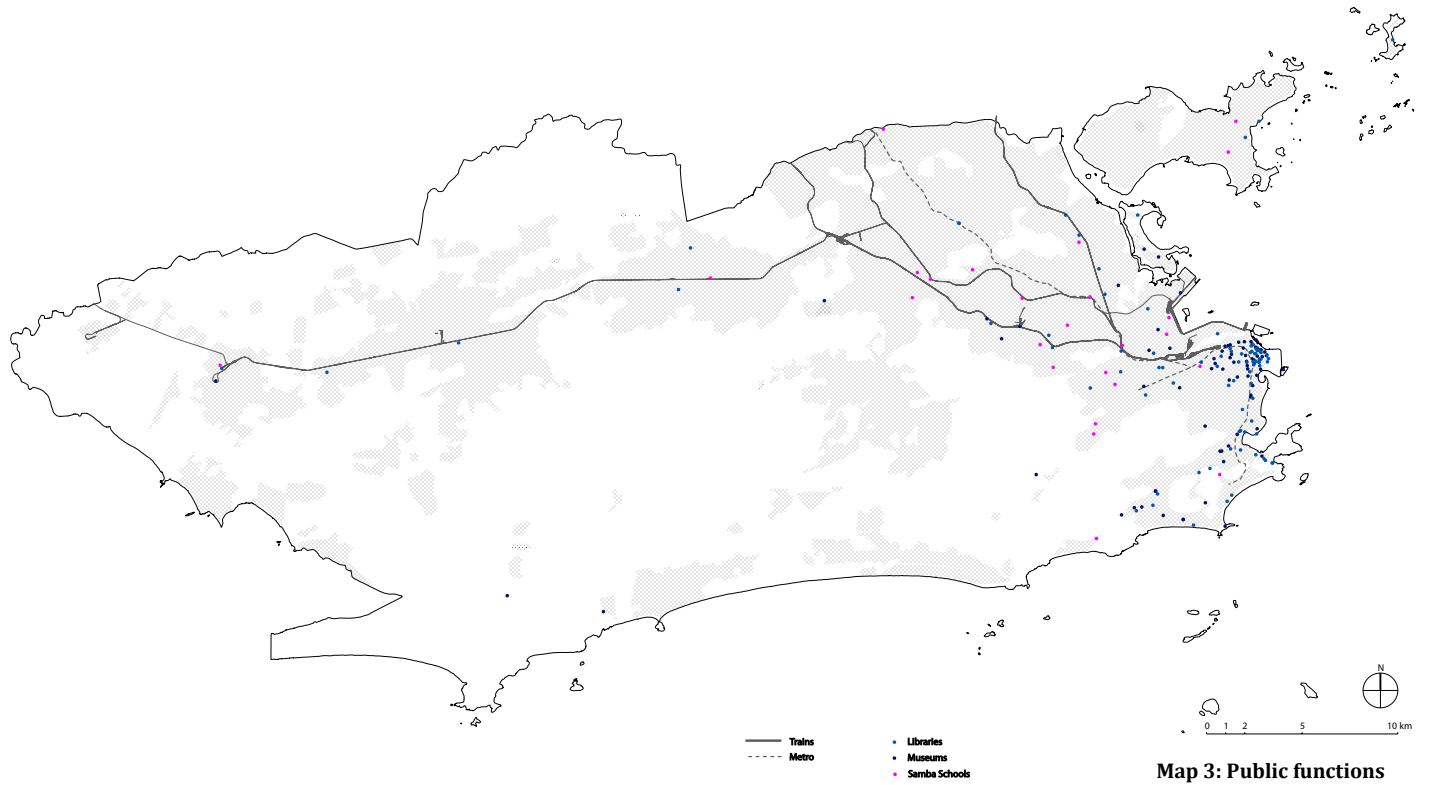
Appendix: Maps



Map 1: Infrastructure



Map 2: Parks
Urban parks and nature reserves



Maps 5-10: New favelas in relation to urbanization pattern

