Favelas spatial distribution patterns in the city of Rio de Janeiro

by Sungik Kang

Issues and Polich in Urban and Regional Planning in Brazil

Professor: Johanna W. Looye
School of Planning, University of Cincinnati

Keywords: favelas, history of Rio, history of favelas, districts in Rio

Introduction

This paper concentrates on favela distribution patterns and the reasons have an influence on the distribution patterns in city of Rio de Janeiro. I was curious about phenomenon that there are spatial movement features of favela housing distribution according to time and regions. Also, each movement pattern has some background, events, force causing relocation of favelas. The city of Rio de Janeiro has five districts which are the Center Zone, the South Zone, the North Zone, Barra da Tijuca, and the West Zone (city expansion order). Figure 1 illustrates the five
districts spatially with a map. The city of Rio has expanded outward from the Center Zone, and favelas growth pattern has also followed the city expansion in a row in the order of the center area (1940), the south area (1950), the north area (1970), Barra da Tijuca coast area (1980), and recently the west area (1990) (Perlman, 2010). At that moment, some question emerged why the favela have had features of distribution patterns spatially in Rio, how has the spatial formation of favelas changed since the 1950s, and what were the major political and socioeconomic factors affecting the distribution? The paper examines the each factor economically, politically, and socially in order to get answers from the questions.

[Figure 1] Rio de Janeiro planning areas with the five districts

(source: Courtesy of Institution Perreira Passos, 2008)
And the paper mainly used and based on this map of figure 2 illustrating distribution changes of favelas. By comparing each year map, it reveals that favela movement has distribution patterns spatially according to time passing.

[Figure 2] Growth in number and size of Rio’s Favelas from 1940 to 1960 to 1990 to 2008

(source: Image from the municipal archives, produced by the planning and research department, Pro-Urb)

**The Center & South Zone (~1950)**

*Abolishment of slavery*

The significant event which caused the urban poor was the emancipation of slaves. The act had brought about numerous slaves who lost jobs and wandered on Rio and other cities to try to find
their settlements. On May 13, 1888, Brazil government declared the law of abolishing slavery after more than 300 years (Perlman, 2010). A great number of them had no choice but to find their own housings around the areas immediately after the law of emancipation of slaves. As a result, they had had to construct shantytowns in vacant lots and hills where general people did not build buildings owing to natural hazards and unattractive land use values.

*Population Growth*

When it comes to population situation before early industrial (~1930), there were explosion of population growth and migration during the time of economic crisis in Rio. The rapid population growth with a lot of job opportunities led to the urban poor, causing more lots of rentier mode housing and favelas in urban center. In between 1872 and 1890, population growth increased from 274,972 residents to 518,272 with an average annual growth rate of 2.62%. In between 1890 and 1906, the population growth rates increased consistently illustrating an average annual rate of 2.84% in Rio de Janeiro. Moreover, at the same time, migration from other cities of Brazil came to follow better life in city of Rio. However, Rio de Janeiro suffered from economic crisis in agriculture field bringing about the loss of employment during the period (Ribeiro, 1993). Combination of economic difficulties with quick population growth had stimulated inhabitants to become the urban poor who were required to construct their own housing like favelas and corticos illegally in vacant lots as well as hills.
Migration

The abolition of the slavery in 1888 had caused them to leave the coffee plantations, encouraging movement for migrants to the city of Rio de Janeiro. At that time, as they had difficulty find job and living places in the city, the first favelas residents appeared in the Center Zone where job opportunities had. Migration was highest in 1940s and 1950s with 38 percent of population originating from outside the city (Xavier and Magalhães, 2003). In those days, because Rio government had a no housing plan and could not manage the population migration, favela towns were generated by them without control. These days, the city of Rio still continued to attract migrants from other parts of the country as an important cultural and service center.

Political

As the political view, undesirable government policies led the poor to construct their houses illegally in Rio de Janeiro city center at that time. Moreover, at the moment, administrations had more focused on wealth-oriented implementation as a project of city beautification, causing the more poor people to build shanties widely. The Pereira Passos Administration (from 1902 to 1906) brought about significant improvements, in terms of infrastructure and appearance to the central area of the city. On the other hand, through the opening and widening of streets and avenues, a great number of poor colonial houses, where the low-income communities used to live, were demolished. Nearly three thousand such dwellings were razed to the ground his administration (Finep, 1985). The widespread tenement demolition led the evicted population to build their own houses in the vacant surrounding areas. The homeless quickly occupied the
previously deserted main hills located in the city center in a very precarious way, giving rise to the first shantytowns which are known in Rio as favelas (Brandão, 2006).

**South zone with birth of capitalism**

Favelas expansion to the south area had a different story, period, and social background from center area. Transition to capitalism in Brazil society had made a contribution to emergence of land market in the peripheral suburban large areas. The new land market targeted residents who could live in villas as higher income and stable people, in particular south zone. Therefore, a large number of villa constructions required constructions workers. Moreover, with villa construction, urban renewal projects contributed to construction of favelas and corticos because the project provided pieces of building materials like wood to the inhabitants in favelas to be able to build their own houses on the hills of the city (Ribeiro, 1993).

**The North Zone (1960~1970)**

**Background**

Major industrial activities had begun to relocate from the South and Central Zone to suburbs and metropolitan municipalities (Xavier and Magalhães, 2003). At that time, the major city policy was for focusing on industrial development in order to boost economic growth in the state of Rio de Janeiro, in particular the North Zone. The government decision had led to industrial
concentration in the North region and job opportunities for employees as well as the urban poor.

The figure 3 illustrates how many favelas occupy the North Zone in 2004.

[Figure 3] Favelas distribution in 2004

(source: Instituto Municipal de Urbanismo Pereira Passos - IPP)
Industrialization

Industrialization has provided job opportunities for low income people, in particular the north areas in Rio de Janeiro, including Nova Iguacu, Duque de Caxias, Nilopolis, Paracambi, and so forth. Favelas followed the industrialization in the North Zone in order to get better life with lots of job opportunities (Perlman, 2010). In order to wealthy develop Rio de Janeiro state, the state had introduced industrialization actively with high level of industrial concentration, especially in the North Rio de Janeiro, causing increasingly urban concentration as well in 1970s. As a result, the Rio de Janeiro Metropolitan Area (RJMA) was emerging as the majority of the industrial area and the region officially defined in 1974. The table 1 demonstrates industrial and economic concentration through comparing RJMA with Rio de Janeiro state. There are 56 industrial zones, 11 of which are strictly industrial usage zones, and 45 of which are predominantly industrial usage zones in accordance with Rio de Janeiro Federal University and Brazilian Institute of Municipal Administration in 2000. In addition, there are 21,787 industries according to Rid de Janeiro Information and Data Center in 2005. Therefore, highly industrial concentration has brought high and largely unregulated unban population as well as the urban poor concentration (Veiga, Elabras, Bechara, and Magrini, 2009).
[Table 1] A comparison between RJ state and RJMA

<table>
<thead>
<tr>
<th></th>
<th>RJ State</th>
<th>RJMA</th>
<th>RJMA/RJ State (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Municipalities</td>
<td>92</td>
<td>17</td>
<td>18.5</td>
</tr>
<tr>
<td>Area</td>
<td>43,864.3 km²</td>
<td>4,688.5 km²</td>
<td>18.5</td>
</tr>
<tr>
<td>Population</td>
<td>14,961,513</td>
<td>11,078,208</td>
<td>74</td>
</tr>
<tr>
<td>GDP</td>
<td>R$ 220 million</td>
<td>R$ 145 million</td>
<td>65.9</td>
</tr>
</tbody>
</table>

(source: CIDE. Dados de Referência, Fundação CIDE, Centro de Informações e Dados do Rio de Janeiro, Rio de Janeiro; 2005)

Transportation

Transportation system also made a contribution to causing favelas closed to Rio de Janeiro Metropolitan Area at that time. The low income employees who had their own transit had no choice but to construct favelas nearby workplaces because the lack of a well-developed transportation system were not able to carry them to workplaces from Center or South favelas to North workplaces (Ribeiro, 1993).
The Coast zone of Barra da Tijuca (1980)

Background

It is easy way to understand reasons why favela areas have expanded to coast zone if we understand characteristics of the areas, in particular Barra da Tijuca. As a recently formed wealth gated community zone, Barra da Tijuca has brought about more favelas and mutual assisted with the favela communities by maintaining symbiosis relationship between them. It is said that that physical appearance of gated communities with favelas in Barra da Tijuca seems like ‘islands of wealth in an ocean of poverty’ (Coy and Pohler, 2002).

“Enormous postmodern skyscrapers built with highly sophisticated materials, apartment-hotels and private condominiums herald the emergence of new lifestyles and illustrate a vigorous construction movement that has changed the landscape of the great Brazilian metropolises (Ribeiro, 1993).”

[Figure 4] Favelas closed to Barra da Tijuca

(source: www.google.com/image)
Gigantic individual construction projects

Mega construction housing projects have attracted the urban poor in Barra da Tijuca as a construction worker. The first generation of huge condominium construction began with population explosion from about 6,000 to approximately 150,000 since 1970s. At that time, real estate companies made a contribution to rapid development of condominium constructions. In the mid 1970s, the real property market was crowded for the higher income residents (Coy and Pohler, 2002). The projects of construction were “gigantic individual projects” (Abramo, 1988). These days, Barra da Tijuca has expanded the areas from Atlantic Ocean to in inland approximately 20 km consistently. Consequently, there are about 160 condominiums with approximately 100,000 residents (Coy and Pohler, 2002). These a huge number of construction projects have brought about the urban poor. Without private transit and convenient public transportation system, the poor construction workers built their own residents on the vacant hills nearby construction areas in Barra da Tijuca.

Support Barra da Tijuca officially

A lot of condominium projects have produced many employment opportunities inside and outside of the condominiums for high income residents. These job opportunities have made a contribution to movements of the urban poor from north areas to Barra da Tijuca, providing chance to get a job such as domestic servants, security guards, gardeners, and cleaning personnel for the poor (Coy and Pohler, 2002). These areas have large shopping centers, leisure facilities, luxury hotels, and so on, requiring workers, in particular for service domain (Garreau, 1991).
And, as the gated communities pursue “lifestyle communities and security zone communities”, there are various facilities demanded service workers (Blakely and Snyder, 1997). Therefore, because of an attractive employment market and the existence of undeveloped areas, Barra da Tijuca has brought about a migration for the urban poor from the northeast in Brazil to Barra da Tijuca. As a result, the urban poor have occupied in the vicinity of Barra da Tijuca in order to function coexistence with the wealth residents, building numerous new favelas (Coy and Pohler, 2002).

Support Barra da Tijuca unofficially

Interestingly, residents who live in gated communities have supported the urban poor who live in favelas closed to Barra da Tijuca unofficially. As Middle and high classes are main consumers of drug, favelas are locating in location where they are able to contact upper classes more easily (de Souza, 2005). As a result, drug trafficking between favela residents with gated communities is a main source of revenue to the urban poor by supporting them. This unofficial relationship has maintained favela communities and attracted more favelas as well as the urban poor who have hardship to fine jobs.
The West Zone (1980–current)

Background

Deindustrialization was the key factor for favela inhabitants in the North Zone to move forward to the West Zone as well as Barra da Tijuca. The move of the national capital and its related jobs to Brasilia had caused several job loss, the movement of business, and decline in tourism due to fear of violence beginning in the mid 1980s (Perlman, 2010). Therefore, the urban poor had more suffered from hardships of life and needed to look for jobs.

Barra da Tijuca also causing favelas in West Zone

Barra da Tijuca also has had an influence on favela growth in West Zone, starting in the 1980s as a Rio’s newly wealthy expanded area (looked like gated community areas as if “little Miami” owing to architecture style and land use). Huge construction projects had brought about a lot of movement and demand for labor like construction workers, maintenance employees, and domestic servants. The table 2 illustrates that favela population growth in West Zone from 1980s as a result of Barra da Tijuca projects with a growth of the new clandestine and irregular loteamentos. According to the new economic pattern, a lot of migrants were coming from the Northeast to the West Zone which is a convenient access point. In accordance with Perlman, the West Zone favelas have “the starting-from-scratch atmosphere”, which means the region is a newly emerged a favela region (Perlman, 2010).
Table 2] Historic expansion of the favela population in Rio de Janeiro

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>South + Center (old wealth)</td>
<td>58%</td>
<td>42%</td>
<td>34%</td>
<td>29%</td>
<td>24%</td>
<td>20%</td>
</tr>
<tr>
<td>North (low/middle class)</td>
<td>38%</td>
<td>54%</td>
<td>60%</td>
<td>58%</td>
<td>54%</td>
<td>50%</td>
</tr>
<tr>
<td>Southwest (new rich/upper middle)</td>
<td>1%</td>
<td>4%</td>
<td>8%</td>
<td>13%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>West / periphery (new poor)</td>
<td>4%</td>
<td>4%</td>
<td>5%</td>
<td>9%</td>
<td>13%</td>
<td>16%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>


Exceeded Population Density

In between 1980 – 1992, 109 new favelas emerged in the West Zone while only one favela was built in the South Zone and only three new favelas were built in the North Zone. Favela population growth rates of the South and North zones kept increased, exhibiting high densification. On the other hand, the new pattern favelas distribution was sprawling to the new settlements in to the West Zone. At that time, while population density of Rio de Janeiro is high, at 4.7 per square kilometer, favela density had higher density, at 31.7 per square kilometer. Moreover, density in the South Zone is still going up to 100,000 per square kilometer (Perlman, 2010). These saturated high population density in the South favela communities made a contribution to some problems like competition between them, built space, living condition, and so on. Therefore, this situation of high density has encouraged favela residents to settle in the
West Zone where the flat terrain and moderate population density has from the other favelas zones.

*Demolition of favela areas*

Clearance projects of favelas by government have contributed to favela distribution pattern toward the west zone. Continuously growth rates of favelas have exceeded the general population growth rates for every decade in Rio de Janeiro. However, in 1970s more than 100,000 favela inhabitants were expelled with 62 favelas demolition in from 1970 – 1973 (Perlman, 2010). Residents who lived the favela areas had felt fear to live favelas in the Center and South Zone and had needed to wander to fine living place outside of those areas.

Moreover, another favela demolition happened nearby Olympic stadium in order to achieve successful the Pan American Games in Rio de Janeiro in 2007. There were two reasons of favelas population toward to the West Zone at the preparing period of sport mega-games. The first reason is the clearance of favelas areas closed to the main stadium and highway roads linked between airports with each arenas. Residents who live in those favelas were forced to relocate outside the areas in order to retain highway structure which is required by International Olympic Commission. Approximately 3,000 favelas were demolished without consensus measure, but just for showing the city of Rio de Janeiro beautifully to other countries through sightseeing and media. Furthermore, second reason is speculation by specialists. They had spurred and aggravated favela situation especially the center and south zone where the main Olympic event
spot were. These speculations had caused more demolition projects of favela areas, compelling favela residents to go further the outside the areas (Martin, 2012).

“There is a clear process of gentrification under way, where the poor are being pushed further out of the city to make way for the growing middle class who can pay top prices for new luxury developments built where the slums used to be (Lustig, 2011).”

**Conclusion**

At the introduction, I suggested several question that why the favela have had features of distribution patterns spatially in Rio, how has the spatial formation of favelas changed since the 1950s, and what were the major political and socioeconomic factors affecting the distribution? Through analysis of this paper, I figure out that there are three widely reasons for why favelas favela distribution has moved from the Center and South Zone following the North Zone, Barra da Tijuca coast Zone, and the West Zone in the city of Rio.

The first reason is that favela residents have followed job opportunities to maintain their life. By the movement forward to places nearby Barra da Tijuca, we are able to estimate that how job opportunities have attracted the urban poor with a lot of favelas, in particular the coast area. And the introducing capitalism and industrial concentration have encouraged favela residents to relocate according to circumstance at that time. The Second reason is that favela distribution has been affected by political decisions such as demolition, transportation, land use zoning, and so forth. Clearance of favelas had forced favela residents to relocate further to outside of city. And
transportation system has limited for favela residents to move. The last reason is that favela distribution is affected by the city expansion and population fluctuation. The rapid migration had forced them to settle the vacant hills in the Center Zone, and continued population growth has made a contribution to causing more favelas in the city of Rio de Janeiro.

Reference


Rio de Janeiro.


Brookings Institution Press. Washington. DC.


